



## 2020 FMA Annual Conference Awards



### Floodplain Manager of the Year Award

*This award seeks to recognize outstanding individual or team efforts and contributions to floodplain management. The Floodplain Manager of the Year is designed to honor an individual or team responsible for the development or implementation of a distinguished local program or activity. This award is given by the Association to individuals or teams who are highly instrumental in carrying forward the goals and objectives of floodplain management.*

#### Edwin D. James PE, MS, MBA, General Manager, Carson Water Subconservancy, Carson City, Nevada

Edwin James has led the Carson Water Subconservancy District (CWSD) since 1998. During his 22- year tenure, he has strived to promote the broad values of floodplains and their beneficial uses which balance the municipal, agricultural, and environmental needs of the Carson River Watershed. Ed has created a collaborative environment working with watershed partners using an integrated planning process to reach goals of a sustainable, healthy watershed. To achieve this balance, Ed has integrated planning, coordinating, collaborating, and management activities to support projects associated with floodplain management, streambank restoration and stabilization, water quality, outreach and education, and recreation.

Under Ed's leadership and guidance, the CWSD has achieved notable accomplishments including:

- Developed and updated integrated watershed-wide planning documents including the Carson River Watershed Adaptive Stewardship Plan;
- Coordinated the Carson River Coalition (CRC), a stakeholder group comprised of members of federal, tribal, state, local government agencies, non-profits, and the general public;
- Organized the Carson River Watershed Management Forum;
- Hosted "Get on the Bus Tours" of the Carson River Watershed;
- Implemented Carson River Watershed Boundary Signage;
- Developed a Healthy Watershed Campaign.
- Updated Watershed-Literacy Action Plan;
- Completed online interactive mapping;
- Conducted Hydrology/Geomorphology 101 course for elected officials;
- Created "Floodplains as Community Assets" Videos;
- Led FEMA NFIP hydrologic restudy and remapping of Goni Canyon, Ramsey Canyon, and Saliman/Voltaire;
- Coordinated with Nevada's Floodplain Manager and Nevada Silver Jackets Program; and
- Prepared the Regional Flood Management Plan adopted by all six watershed counties which utilizes a "Living River" approach.

As part of Ed's efforts to engage stakeholders, he has served on the Carson -Truckee Water Conservancy District and the Nevada Water Resources Board of Directors for many years.

## Communications and Outreach Award

*This award was established to acknowledge exemplary efforts in communications and outreach on the part of communications media (written and/or visual), the incorporation of new technologies, or the novel use of existing technologies to increase information and/or awareness of flood issues with the general public.*

### Nevada Flood Awareness Team: Elizabeth Warnock, State Floodplain Manager, Nevada Division of Water Resources; Carlos Rendo, Public Outreach Manager, Nevada Division of Water Resources and Bunny L. Bishop, Water Planning and Drought Resiliency Manager, Nevada Division of Water Resources

Following devastating floods in Northern Nevada in 2017, the Nevada Flood Awareness Team embarked on an effort to dramatically increase their flood awareness outreach program. The Team includes state, local, and federal partners and uses innovative outreach tools to appeal to a wider audience. The Flood Awareness Team uses tools including a Physical Flood Model, an Educational Video Game, a Virtual Reality video, Story Maps, Radio Public Service Announcements, Billboards, Social Media, and the NevadaFloods.org website.

From 2017 to 2019, the number of individuals the outreach program was able to reach on a person-to-person scale, rose from 1,600 to nearly 5,000 in 2019.

The Nevada Flood Awareness Team uses an educational video game, Flood Fighter: Nevada, to introduce an array of flood-related concepts to students. Flood Fighter: Nevada was built to offer an exceptional level of educational content and features a culmination of many years work in which USACE created practical simulations for dam operators. The Team also uses a newly developed Virtual Reality (VR) product created by the Clark County Regional Flood Control District. Using a VR headset, the user experiences a simulation of driving in a vehicle while getting caught in a monsoonal flash flood which highlights the dangers of driving through flooded roadways.

For flood awareness outreach, the Team also highlights Story Maps, a recently completed NV Silver Jackets project, featuring the six main rivers in Nevada. The Story Maps are an excellent, cross-disciplinary approach to recounting the history of flooding in our major watersheds. The Story Maps can be found on the Team website NevadaFloods.org.

Project: Nevada Flood Awareness, 2018 - 2020

Links:

- Educational Video Game- Flood Fighter: Nevada
- Nevada Story Maps:
  - Carson: <https://arcg.is/18jrHC>
  - Truckee: <https://arcg.is/0fe1G9>
  - Walker: <https://arcg.is/15iLSK0>
  - Humboldt River: <https://arcg.is/OLPu590>
  - Muddy River: <https://arcg.is/1C5vaW>
  - Virgin River: <https://arcg.is/1TiCaH>
- Water Always Wins Virtual Reality Experience- <https://floodvr.com>

## Hogg-Owen Award for Meritorious Achievement in the Floodplain Management Association

*This award recognizes individuals who have achieved success in a significant activity that benefits the Floodplain Management Association. The activities shall include, but not be limited to, education, government, policy, research, litigation, outreach, implementation or other actions which demonstrate the advancement of the Association.*

### Marty J. Teal, Senior Vice-President, WEST Consultants, Inc.

Marty, an internationally acclaimed H&H/sediment expert, has passionately served the field of floodplain management and the Floodplain Management Association throughout his distinguished career. Marty is a leader in NFIP mapping, dam breach inundation analysis, sediment transport impacts, alluvial fan analysis, and development of flood warning systems. Author of numerous publications, Marty often serves on blue-ribbon panels, peer-reviews, and co-authored the 2020 "Spencer Dam Failure Investigation Report." Marty demonstrates technical leadership in floodplain management projects around the world. He actively serves leadership roles in FMA and related organizations. Years ago, he traveled to Central America as a volunteer to develop a flood warning system in Honduras.

Marty has been a member of FMA since 1998, served as Southern California Director from 2005 to 2007, Secretary from 2007 to 2009, Vice-Chair from 2009 to 2011, Chair from 2011 to 2013, Past Chair from 2013 to 2016, and led over 15 FMA training classes. Marty represented FMA on the California Alluvial Fan Task Force from 2007 to 2010.

Marty has also served in various capacities with the US Society of Dams, International Council on Large Dams, American Society of Civil Engineers, and the Association of State Floodplain Managers. Based on his leadership roles in FMA, US Society of Dams, ICOLD, ASCE, and ASFPM, Marty sets a high bar for FMA officers and members that we all should emulate

### Karl Mohr Distinguished Service Award for National Activities

*This award is given to recognize individuals who, through their long term efforts, have clearly influenced the realm of national floodplain management policies or activities, such as education, government, research, litigation, outreach, implementation or other actions.*

### John High, Retired Hydrologic Engineer, Sacramento District, United States Army Corps of Engineers

Mr. John High's thirty-year career with USACE culminated with his retirement from federal service on January 31, 2020. His lengthy and distinguished career has been marked by a commitment to technical excellence, leadership of several influential hydrologic engineering studies, and selfless devotion to the success of his staff and colleagues.

John started his USACE career in the Hydrology and Reservoir Regulation Sections of the Los Angeles District in 1990. He moved to the Sacramento District's Water Management Section in November 1998, and immediately began working on the Sacramento and San Joaquin River Comprehensive Study. Though "The Comp Study" didn't produce a new project authorization, its legacy was nonetheless extraordinarily fruitful, through the state-of-the-art hydrology products that John and his teammates generated. These outputs were directly used in the development of many flood risk management projects and floodplain modeling and mapping efforts throughout California's Central Valley for years to come. In 2006, John was entrusted to lead the Sacramento District's groundbreaking Central Valley Hydrology Study (CVHS) on behalf of the California Department of Water Resources. The CVHS is unprecedented in its level of sophistication and robustness and has become the new gold-standard for defining flood risk in the Central Valley. It was the first large-scale application of the new procedures that became the federal standard for defining flood frequencies, known as Bulletin 17C, and it also led to the adoption of updated regional flood peak and volume parameters (regional skew coefficients) by the federal authority on flow frequency characteristics, the US Geological Survey. More recently, John oversaw the hydrologic engineering efforts and led the completion of the Folsom Dam Water Control Manual update, which is the first of its kind to prescribe forecast-based flood risk management operations at a federal reservoir. This effort has resulted in significantly lowered flood risk to the Sacramento area, and is a major achievement in the field of integrated water resource management due to its technical innovations and multipurpose benefits.

John was selected as the first Sacramento District Hydrology Section Chief of the Hydrology and Hydraulics Branch in 2009. In this role, John assured an exceptional quality of work from his organization in support of some of the most urgent and challenging projects in the Corps' civil works program. As a supervisor, he devoted himself to the learning and development of his staff. As a manager, he welcomed the responsibilities of his role, and proved to be an outstanding collaborator and steadfast supporter of his peers and chain of command.

John High has brought credit upon himself, the Sacramento District, the US Army Corps of Engineers, the federal government and he has left a lasting-legacy through his long service, technical achievements, and significant contributions to regional flood risk reduction and the field of hydrologic engineering. John has also been recognized by his peers at the California Department of Water Resources as an outstanding hydrologic engineer.

## Andy Lee Award for Extraordinary Public Service for State Activities

*This award is given to individuals who have made extraordinary proactive flood management contributions benefiting the public, especially in the area of encouraging multi-benefit projects and/or flood education. The award is given to honor public sector recipients. This award honors Andy Lee who retired from state service after 41 years and initiated and strengthened many California floodplain management programs, including the mapping and outreach programs.*

## Stephen Cowdin, Economist, Statewide Multi-benefits Initiative, CA Department of Water Resources

Steve Cowdin has served over 40 years as a water resources economist for the Department of Water Resources as a state employee, consultant and currently as a retired annuitant.

Before retirement in 2010, Steve was DWR's Division of Flood Management's "Flood Economist." His involvement in flood began when Andy Lee, DWR's Floodplain Manager in the mid-1990's, recruited him for an EPA Wetlands Protection Development Grant to evaluate multi-objective approaches to floodplain management on a watershed basis. This study identified the various benefits that could be associated with floodplain management projects on-site and elsewhere in the watershed. In particular, the study focused on how to monetize ecosystem benefits for inclusion in benefit/cost analyses. During this study, Steve gave presentations at ASFPM and FMA conferences focusing on floodplain functions and societal values and how to include those in benefit/cost analyses. The creation of the new Division of Multibenefit Initiatives perhaps reflects some of these early ideas of Andy Lee's FPM team in the 1990s.

Following the EPA study, Steve contributed to economic analyses for several significant Central Valley flood risk reduction studies including:

- Sacramento and San Joaquin River Basins Comprehensive Study (2001)
- Hamilton City Flood Damage Reduction and Ecosystem Restoration Feasibility Study (2004)
- 2012 CVFPP risk analysis
- 2017 CVFPP Update risk analysis (David Ford Engineers)

Other projects Steve participated include:

- CA Floodplain Management Task Force (2002)
- CA Alluvial Fan Task Force (2007)
- Lead author for California's first NFIP Quick Guide (2007)
- Lead author for DWR's Economic Analysis Guidebook (2008)
- Review of local agency benefit/cost analyses for the DWR Division of Flood Management Early Implementation Program (2008)
- CA Flood Futures Report (2013) while an employee of David Ford Engineers
- Lead author for the DWR Handbook for Assessing Value (2014) (David Ford Engineers)
- Lead author for the NFIP Quick Guide Coastal Appendix: Planning for Sea Level Rise (2016) (David Ford Engineers)

In December 2016 Steve returned to DWR as a retired annuitant providing economics related input for several flood management programs:

Through his exemplary skill and dedication to public safety through flood risk management, Steve Cowdin has set a very high standard for Flood Management employees in state service.

## Integrated Flood Management Award

*This award is given to individuals or project teams who have prepared and/or implemented a locally-approved, state-approved, or federally-approved multi-objective flood management plan. Candidate projects should demonstrate innovative advancements in water management as well as collaborative partnerships with community groups and the general public. Project outcomes should benefit many stakeholder interests such as environmental, flood control, recreational, and emergency planning and responsiveness.*

### Julie Retner, President, River Partners, Dos Rios Ranch Preserve Floodplain Restoration Project

River Partners' Dos Rios Ranch Preserve represents the largest public-private floodplain restoration project in California and was collaboratively funded by 11 local, state, and federal partners over 10 years. The 2,100-acre preserve is at the confluence of the Tuolumne and San Joaquin Rivers, which is an internationally recognized area in the Pacific Flyway migration corridor. The Dos Rios Ranch Preserve on-site habitat conservation has led to the delisting of the endangered Aleutian cackling goose. The project provides valuable and necessary floodplain storage on the San Joaquin River and Tuolumne River confluence.

The Dos Rios Ranch Preserve also provides access to over 1,000 acres of seasonally flooded lands for the riparian brush rabbit, riparian woodrat, Swainson's hawk, Central Valley Chinook salmon, steelhead trout, least Bell's vireo, yellow warbler, sandhill crane, and neo-tropical migratory songbirds. Expanded floodplains such as the Dos Rios Ranch Preserve have been identified in the Central Valley Flood Protection Plan and Governor Newsom's Water Resilience Executive Order as important to prepare for the effects of a warming climate and this project is a leading example of a climate-smart, water management solution. The Dos Rios Ranch Preserve project balances the needs of ecosystems and Central Valley communities. The project uses real-life lessons to guide restoration actions, supports local economies through job creation and competitive grants, and revitalizes our river landscapes for future generations. The Dos Rios Ranch Preserve is a multi-benefits project and is consistent with the Central Valley Flood Protection Plan's Conservation Strategy.

## Mentorship Award

*This award recognizes individuals who have contributed to the emerging professional community and/or academia.*

### David Ford, HDR Engineering Inc.

David Ford is a senior vice president with HDR Engineering in Sacramento. David came to the Sacramento Valley in 1978 after graduating from the University of Texas, Austin, with a doctorate in civil engineering. David began his engineering career working at the United States Army Corps of Engineers Hydrologic Engineering Center in Davis. David also began serving at the University of California at Davis as an adjunct professor and thesis committee member.

While maintaining a busy work and travel schedule at the USACE HEC and UC Davis, David soon began teaching graduate water resources graduate engineering courses at California State University Sacramento focusing on water resources statistics and modern hydrologic modeling techniques. At CSUS, David mentored many knowledge-hungry engineers who worked for the growing water resources job sector in the Sacramento metro area representing local, state, federal agencies and the growing water resources consulting sector. David's ability to teach graduate students how to solve complex hydrologic problems through advanced computer programming and modeling, motivated many students to serve as technical experts in hydrologic and hydraulic modeling and analysis within their agencies and companies.

David Ford has the gift of being able to explain to working level engineers, complex issues related to rainfall-runoff analysis, hydrologic statistics, flood damage estimation, system level of flood protection, and a wide range of topics under the umbrella of "risk and uncertainty." David eventually started his own engineering firm providing consulting services across California, the USA and many foreign countries. David spent time at FEMA in Washington DC teaching FEMA staff how floodplains are defined and delineated. In India, David passed on his knowledge on the planning and implementation of automated flood warning systems. In Portugal, David served as a Fulbright Scholar assisting government officials better understand watershed runoff modeling to support floodplain management and flood risk reduction. David also facilitated government to government connections between Portugal and the USA.

Through his long career in hydrologic engineering, David has received many awards and national recognition. David's former students, clients, and government officials know they can send him an email or call him on the phone and soon get

a response with valued advice and consideration. David's enthusiasm in education and mentorship has left an imposing legacy in all the organizations he has touched.

## [Award for Excellence](#)

*This award seeks to find and recognize outstanding floodplain management projects, programs and/or activities. Eligible entries include local, regional, and national government (such as cities, towns, counties, State, and Federal agencies), special districts, and private consulting engineers/firms. Eligible entries include either an overall program or a specific project or activity which epitomizes the best in floodplain management.*

### [William Edgar, President, Central Valley Flood Protection Board, California Natural Resources Agency](#)

Bill Edgar's career in government service spans almost 50 years, having served as Assistant City Manager and City Manager for the City of Pleasanton from 1965 to 1977, as Assistant City Manager for the City of Sacramento from 1977 to 1992, City Manager from 1993 to his date of retirement in 1999, and then called back as Interim City Manager in 2011. While in Sacramento, Bill Edgar developed a successful record of inter-agency cooperation during his separate assignments as the Executive Directors for the Sacramento Housing and Redevelopment Agency, the Sacramento Transit Development Agency, the Sacramento City/County Office of Metropolitan Water Planning, and the Sacramento Area Flood Control Agency. Bill Edgar led the implementation of Sacramento's Light Rail System and as director of SAFCA, represented the local sponsors for the first set of levee improvements along the Sacramento River in the Pocket Area and the Natomas Basin including the Natomas Cross Canal after the 1986 flood.

Mr. Edgar also served as the first Executive Director for the Sutter-Butte Flood Control Agency. In 2012 the Governor appointed Bill to the Central Valley Flood Protection Board.

Under Bill's leadership, the Central Valley Flood Protection Board adopted the Central Valley Flood Protection Plan in 2012 and its update in 2017. The Board, under Bill's leadership, has been instrumental in furthering the implementation of the Central Valley Flood Protection Plan, while encouraging a conservation strategy and supporting work on multi-benefit projects. Bill is known for bringing people of diverse backgrounds and ideas to work together for flood safety and environmental stewardship.

The Board has also made great strides in its enforcement of removing problematic encroachments and reviewing and approving projects that reduce flood risk in the Central Valley. Bill's contributions to the community have been honored by the American Society of Public Administration, the League of California Cities, the League of Women Voters, and the Modern Transit Society of Sacramento.

## [Emerging Professionals Award](#)

### [Megan LeRoy, Kjeldsen, Slnno9ck and Neudeck Inc. and Wendy Wang, California Department of Water Resources](#)

This past year, Megan LeRoy (KSN) and Wendy Wang (DWR) have jointly spearheaded the FMA Emerging Professionals committee and have overseen its extensive growth in numbers and value to the FMA membership. Their extensive work with this committee has included hosting monthly lunch-and-learn sessions that increased to bimonthly or weekly webinars during the pandemic and actively engaging the FMA community in searching to link together mentors and emerging professionals in meaningful ways.

The content of these lunchtime sessions has focused on career development, relationship building, compassion, appreciation, and community assistance. Members who have participated in the FMA Emerging Professional program report that the EP efforts are unlike any others in terms of both the impressive program and assortment of dedicated individuals who participate in the EP meetups.

An active mentor reports "having personally given two lunchtime talks to the EP, participated in many of the meetings, and successfully encouraged and secured ongoing participation from 5 to 7 emerging flood management professionals from my company, I have seen firsthand how meaningful and impactful this group has become under the steadfast and strategic leadership of Megan and Wendy."