



# FACING EL NIÑO:

## CHALLENGES AND OPPORTUNITIES

*A Water Sciences and Policy Discussion*

Wednesday, November 18, 2014

UC Davis Alumni Center

*Sponsored by the Roy J. Shlemon Endowed Chair*

### PANELIST BIOGRAPHIES



**MICHAEL ANDERSON** works for the California Department of Water Resources and is currently serving as State Climatologist for California. Michael began working in the Department of Water Resources Division of Flood Management (DWR-DFM) Forecasting Section in July 2005. He came to DWR after extensive graduate and post-graduate work at U.C. Davis in the area of hydroclimate system modeling and monitoring. He received his Ph.D. in 1998 and M.S. in 1993 in Civil and Environmental Engineering from UC Davis. He received his Bachelor's degree in Civil Engineering from Colorado State University in 1991.



**JOHN CAIN** is Conservation Director for Central Valley and Bay-Delta programs at American Rivers. His program focuses on the nexus between river restoration, flood risk reduction, and water supply management in California's Central Valley. Mr. Cain is currently working to integrate flood plain restoration for sensitive species into updates of the Central Valley Flood Protection Plan and the Bay Delta Water Quality Control Plan. Most recently, American Rivers has partnered with flood and water management agencies across the valley to advance several multi-benefit flood management projects that will reduce the states flood liabilities, restore endangered species, improve water quality, and recharge depleted aquifers.



**JOE COUNTRYMAN** was appointed to the Central Valley Flood Protection Board by Governor Brown on April 2, 2012. He is a Registered Civil Engineer in California and Nevada, a Diplomat with the American Academy of Water Resource Engineers, and recipient of a Lifetime Achievement Award from the American Society of Civil Engineers. Joe comes to the Board after a career with the U.S. Army Corps of Engineers, MBK Engineers, and consulting in the fields of hydrology, hydraulics, flood control, flood operations and floodfight management, water supply, water resources development, engineering analysis, and design of flood control and multiple purpose projects.



**MICHAEL DETTINGER** is a research hydrologist for the U.S. Geological Survey, National Research Program, Western Branch, a resident scientist at the University of Nevada Reno, and a research associate of Scripps Institution of Oceanography. Dettinger has monitored and researched water resources of the West for over 30 years, focusing on regional surface water and groundwater resources, causes of hydroclimatic variability, and climatic influences on western water resources. He has a masters in Civil Engineering from MIT and a PhD in atmospheric sciences from UCLA.



**GRAHAM E. FOGG** received a B.S. in Hydrology from the University of New Hampshire, an M.S. in Hydrology and Water Resources from the University of Arizona, and a Ph.D. in Geology from The University of Texas at Austin. He has more than 40 yrs experience researching and teaching about subsurface water flow and pollutant transport processes and water resource sustainability. He teaches courses at UC Davis in groundwater hydrology, groundwater modeling, applied geostatistics, and water resources.



**CHRISTY JONES** is the Chief of Water Management at the Sacramento District U.S. Army Corps of Engineers. She has been working in water management/reservoir operations and emergency operations with the Corps for the last nine years, and is responsible for leading a team of engineers and hydrologists that manage the operations of California's largest flood control reservoirs. Christy graduated from Cornell University with her Bachelor's Degree in Civil and Environmental Engineering in 2003 and worked in the water resources and flood control consulting sectors before joining the Corps. Christy recently returned to school to get a Master's Degree with a focus in flood control, and studied under Dr. Jay Lund here at the Center for Watershed Sciences.



**JAY LUND** is Professor of Civil and Environmental Engineering, Director of the UC Davis Center for Watershed Sciences, and the current Ray B. Krone Chair of Environmental Engineering. Prof. Lund's principal specialties are simulation, optimization, and management of large-scale water and environmental systems, the application of economic ideas and methods, integrated water resource management, reservoir operation and water demand. He is an author of over 250 publications and has supervised over 90 graduate students, including 11 university faculty members. He has long been involved in water management problems and policy in California.



**JEFF LUSK** is Division Director of Mitigation for FEMA's Region IX office, covering Arizona, California, Hawaii, Nevada, American Samoa, Guam and the Northern Marianas Islands. Mr. Lusk is responsible for management of National Flood Insurance Program, Map Modernization, Hazard Mitigation Assistance Grants, Planning, National Earthquake Hazards Reduction Program, Environment and Historic Preservation Program, and other mitigation activities. During declared disasters, Mr. Lusk serves as a federal responder and has assisted with hurricanes in Mississippi, Texas, Alabama and New Hampshire, super typhoons in Guam and CNMI, tsunami in American Samoa, and earthquakes, flooding and fires in California and Hawaii.



**MICHAEL MIERZWA** is 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. Previously, he served as a water management and flood policy advisor to DWR's Deputy Director for Integrated Water Management. His expertise includes: planning and design of large-scale water resources systems, supporting and conducting real-time emergency operations, and communications and coordination of water management issues.

**DEMETRI POLYZOS** is a Senior Engineer in the Water Resources Management Group of the Metropolitan Water District of Southern California. He received his B.S. in Civil Engineering from UC Davis. Mr. Polyzos joined the Metropolitan Water District of Southern California in 2006 and is currently focusing on Metropolitan's two imported water supplies from the State Water Project (SWP) and the Colorado River Aqueduct (CRA). Mr. Polyzos chairs the State Water Contractors (SWC) Water Operations Committee, where he leads the coordination between the Department of Water Resources and the 27 participating SWP Contractors and discussions on key issues and decisions impacting water supplies.



**JOHN STELLA** is a senior scientist with The Nature Conservancy of California, working on freshwater ecosystem conservation. His area of focus for the last 15 years has been riparian ecosystem function and management in water-limited regions, including California, the U.S. Southwest, and southern Europe. Most recently he was Associate Professor of Forest and Natural Resources Management at State University of New York College of Environmental Science and Forestry (SUNY-ESF), and holds an Adjunct appointment (Geography) in the Maxwell School at Syracuse University. His research methods include dendroecology, plant ecohydrology and stable isotope biogeochemistry, and restoration ecology. More information is available at <http://www.esf.edu/fnrm/stella/>



On the Friends of the River staff since 1987, **RON STORK** has served on the DWR California Floodplain Management Task Force, on working groups of the Corps/Reclamation Board Sacramento & San Joaquin Basins Comprehensive Study, and the interagency Yuba Feather Workgroup.

He has served as a liaison to the National Research Council's Committee on Flood Control Alternatives in the American River Basin, the DWR Independent Review Panel on Central Valley Flooding the Citizen's Advisory Committee to the Governor's 1997 Flood Emergency Action Team, and continues to serve as a member of SAFCA's Lower American River Task Force.



**TIM WASHBURN** served as the chief counsel for the Sacramento Area Flood Control Agency (SAFCA) from 1990 to 2009 when he was appointed the Agency's Director of Planning. SAFCA is authorized under Sacramento Area Flood Control Agency Act of 1990 to plan and execute flood risk management projects and programs aimed at providing developed floodplains in the Sacramento Metropolitan Area with at least a 200-year level of flood protection. The Act directs the Agency to carry out its flood risk management responsibilities in a manner that provides optimum protection to the natural environment especially riparian habitat and natural stream channels. Mr. Washburn has represented SAFCA in all aspects of project planning, finance, legislative advocacy, land acquisition, and environmental compliance. Before joining SAFCA, Mr. Washburn served for two years as a Deputy City Attorney for the City of Sacramento, following two years in private practice with the firm of Weintraub, Genshlea, Hardy, Erich & Brown in Sacramento. He graduated as a History major from the University of California in 1983 and received his law degree from the University of California, Davis in 1986.