

THE FUTURE OF WATER STORAGE IN CALIFORNIA: WORKSHOP 1

September 14, 2011

SPEAKERS

Anthony Saracino,
Director, California Water Program
The Nature Conservancy



Mr. Saracino is the Director of the California Water Program for The Nature Conservancy, and is responsible for the development and implementation of statewide water policies to support the Conservancy's conservation objectives. He represents the Conservancy in planning efforts for the Sacramento - San Joaquin Delta, and provides technical and policy consultation to a number of Conservancy projects. Mr. Saracino is a widely recognized expert in water management and the author of numerous papers and presentations on water policy, including co-author of California Groundwater Management, a groundwater reference and planning guide. He was appointed to the California Water Commission in 2010, and currently

Mr. Saracino was a founding member of the board and past president of the Groundwater Resources Association of California, and is currently on the Board of Directors of the Water Education Foundation. Before coming to the Conservancy in 2005, Mr. Saracino was the founder and president of Saracino-Kirby-Snow, a consulting firm specializing in water resource planning and management. He holds a Bachelor's degree in Geology from California State University, Fresno and an M.S. degree from Colorado State University, Fort Collins.

Tim Quinn, Executive Director
Association of California Water Agencies



As executive director of the Association of California Water Agencies (ACWA), Timothy Quinn leads the largest water organization of its kind in the nation. Quinn, who became ACWA executive director in July 2007, has more than 25 years of experience in California water issues. Prior to joining ACWA, Quinn served as deputy general manager of the Metropolitan Water District of Southern California. He joined MWD in 1985 as principal economist, and became deputy general manager in 1994. Before coming to MWD, Quinn was a project manager at the Rand Corporation, specializing in research on natural resources and environmental policy issues. He earned his bachelor's degree in economics from the University of Colorado in 1974 and his master's and doctorate degrees in economics from the University of California, Los Angeles in 1976 and 1983.

Jay R. Lund

Director, Center for Watershed Sciences

Ray B. Krone Professor of Environmental Engineering, Department of Civil and Environmental Engineering, University of California, Davis



Dr. Jay Lund is a Professor of Civil and Environmental Engineering. He is on the editorial board of several water resources publications, has been a member of the Advisory Committee for the 1998 and 2005 California Water Plan Updates, and has served as Convenor of the California Water and Environment Modeling Forum and President of the Universities Council on Water Resources. His principal research is applying systems analysis, economic, and management methods to water problems. He has written of water storage theory and applications in the context of larger water system performance, including extensive use of simulation and optimization modeling in California. He is a lead author of *Comparing Futures for the Sacramento-San Joaquin Delta* (UC Press 2010) and *Managing California's Water: From Conflict to Reconciliation* (PPIC 2011).

MODERATORS

Maurice Hall, Ph.D., P.E.

Associate Director, Integrated Water Management

California Water Program, The Nature Conservancy



Dr. Hall is Associate Director of The Nature Conservancy's California Water Program, where he is responsible for integrated water management strategies that combine ecosystem sustainability with water supply reliability for people. Some of his current priorities include demonstrating multi-benefit water management strategies in places where The Nature Conservancy's conservation efforts depend on water, improving our understanding of how groundwater and ecosystems are connected, and encouraging improved management and policies that appropriately reflect the connection of groundwater with streams, rivers, and wetlands.

Maurice's technical background is in Hydrology and Water Resources Engineering. Prior to joining The Nature Conservancy in 2008, he practiced for more than 12 years as a scientist, engineer, and project manager, both as a consultant and at the California Department of Water Resources. Prior to consulting, Maurice was an assistant professor of engineering geology at Radford University in Virginia, where he taught courses in watershed management, water quality, and groundwater modeling. Maurice received his B.S. in chemical engineering from the University of Tennessee at Chattanooga and his Ph.D. in hydrology from Colorado State University. He is a registered Professional Civil Engineer in California.

Robert Shibatani, CEO & Consulting Hydrologist
The SHIBATANI GROUP Inc.



Robert Shibatani is an empirical snowmelt hydrologist and long-time consultant for the California water industry. He is on the Editorial Review Board for the Journal of Water & Climate Change (London, UK), is an IWA Specialist Group Member on the Committee on Climate Change and Managed Adaptations and Water, Energy & Climate Working Group (Den Haag, NL), Task Force Member on Retreating Snowpacks and Glaciers (Amsterdam, NL), Task Force Member on Arid Landscapes (Sydney, AU), climate change editorial peer reviewer for IWA World Water Congresses and the International Water Resources Association (Montreal, CAN), Committee member for the 2012 IWA Climate Change World Congress (Dublin, IE), and 2012 World Water Congress (Busan, KOR), is the current Vice Chair of the

Environmental & Water Resources Institute/ASCE Norcal Chapter and ongoing participant in the IAHS/IUGG Predictions in Ungaged Basins (2003-2013) Decade. He is the CEO of The SHIBATANI GROUP, Inc., a water resources specialty firm based in Sacramento, California, working with public/private water interests and infrastructure investors in SE Asia, Central Asia, EU, and North America.

PANELISTS

Mark W. Cowin, Director
Department of Water Resources



Mark W. Cowin was appointed Director of the California Department of Water Resources (DWR) in 2010. He has extensive experience with California water resources management and has worked at DWR for over 29 years. As Director, Mr. Cowin heads a Department that protects, conserves and manages the state's water supply, including operation of the California State Water Project (SWP). The SWP is the largest state-run, multi-purpose water and power system in the United States. It provides a supplemental water source for 25 million Californians and about 750,000 acres of irrigated farmland. In previous assignments, Mr. Cowin served as Deputy Director of Integrated Water Management and Chief of DWR's Division of Planning and Local Assistance program. He also served as an Assistant Director for

the CALFED Bay-Delta Program. He received a B.S. in Civil Engineering from Stanford University in 1980.

Donald R. Glaser, Mid-Pacific Regional Director
Bureau of Reclamation



As Regional Director for the Mid-Pacific Region, Don Glaser oversees the management of the Bureau of Reclamation's water and power projects in an area encompassing the northern two-thirds of California, most of western Nevada, and part of southern Oregon and is responsible the Central Valley Project . Mr. Glaser's experiences include 20 years with Reclamation in several positions including Assistant Commissioner for Resources Management and Deputy Commissioner. Before returning to Reclamation in 2008, he managed several non-profits engaged in water education, open space preservation, and fish and wildlife conservation and restoration. Prior to that, he was a water resource consultant, the Executive Director for the Presidential Commission on Western Water Policy, and the State Director for

the Bureau of Land Management in Colorado. Mr. Glaser earned a B.S. in Business Administration and Economics from Eastern Montana College.

**Paul Robershotte, Special Advisor
U.S. Army Corps of Engineers**



Selected in October 2008, Mr. Paul Robershotte serves as Special Advisor to the Division Commander for Integrated Water Resource Planning (IWRP). As the Corps' South Pacific Division point of contact, Mr. Robershotte is responsible supporting and collaborating with each state in the development of comprehensive and integrated state specific plans in support of the Water Resource Initiatives for the States of California, Arizona, Nevada, Colorado, New Mexico and Utah. Mr. Robershotte has also served as the President, CEO, and Vice President of multiple companies. He was a Captain and Lieutenant for the Army Corps of Engineers between 1976 and 1981. He earned an M.B.A. from Harvard, an M.S. in Mechanical Engineering from Massachusetts Institute of Technology (MIT), and a B.S. in Mechanical Engineering from MIT.

**Jeffrey Kightlinger, General Manager
Metropolitan Water District of Southern California**



Jeffrey Kightlinger is General Manager and Chief Executive Officer for the Metropolitan Water District of Southern California. As General Manager, he is responsible for directing the activities of the District to fulfill Metropolitan's mission of delivering high-quality water to 19 million residents in Southern California. Prior to his appointment in 2006 as General Manager, he was General Counsel for the District. Before joining Metropolitan in 1995, Mr. Kightlinger was in private legal practice representing a number of public agencies on environmental issues. He is a Governor's appointee to California's Bay Delta Vision Blue Ribbon Task Force – Stakeholders Committee and a board member on the UCLA Continuing Education Sustainability Advisory Board. Mr. Kightlinger earned a bachelor's degree in history from the University of California, Berkeley and a law degree from Santa Clara University School of Law.

**Kirk C. Rodgers, Senior Project Manager
HDR Engineering**



Kirk C. Rodgers joined HDR in 2007 as a Senior Project Manager after 35 years of federal service in water resources management. For the previous eight years he led the Bureau of Reclamation's Mid-Pacific Region as the Director. During his tenure at Reclamation, he was responsible for managing the Central Valley Project (CVP), one of the largest water projects in the United States. In the years that he held the positions of Regional and Deputy Regional Director at Reclamation, he provided testimony and briefings to the U.S. Congress and California State Legislature, provided oversight on construction of major water and power projects, and helped to modernize CVP environmental capability with projects such as the Shasta Temperature Control Device, fish screens, refuge water conveyance and supply, fish friendly water transfers, and major river restoration projects.

**Carl Hauge, Former Chief Hydrogeologist
Department of Water Resources**



Mr. Carl Hauge is Chief Hydrogeologist, retired, for the California Department of Water Resources (DWR). Mr. Hauge began his career as a scientific aide at the U.S. Geological Survey, and shortly thereafter he joined DWR and worked on groundwater studies and dam sites in San Joaquin Valley. Later, Mr. Hauge worked for the California Department of Conservation, Division of Mines and Geology on earthquakes and urban geology and with the Department of Forestry on forest practice rules for timber harvesting. Mr. Hauge returned to DWR where he studied water supply and demand, groundwater and land subsidence, and well construction and destruction. Mr. Hauge was involved with the Association of California Water Agencies Groundwater Committee and the California Groundwater Association. He earned his Bachelor of Arts in Geology from the University of California, Riverside and is a Professional Geologist and Certified Engineering Geologist.

**William R. Swanson, P.E.
MWH**



Bill Swanson is a civil engineer and water resources planner for MWH with over 20 years of experience in water resources planning in California. His expertise includes multiple-objective water supply planning, with emphasis on the integrated management of surface and groundwater supplies for irrigation, municipal and industrial, flood management, hydropower generation, and ecosystem restoration purposes. Since the early 1990s, he has been involved in large-scale water management issues related to Central Valley water supplies, including the implementation of the Central Valley Project Improvement Act and other related actions. More recently, he led Upper San Joaquin River Basin Storage Investigation and now serves as the MWH Program Manager for the CalFed Storage Program. Since 2007, he has served as the consultant team program manager for implementation of the San Joaquin River Restoration Program.

**Ellen Hanak, Senior Policy Fellow
Public Policy Institute of California**



Ellen Hanak is currently a Senior Policy Fellow at the Public Policy Institute of California (PPIC). Ms. Hanak specializes in natural resource management, including water policy, flood control, land use policy, and ecosystem management, climate change policy, and public investment strategies. Prior to her current role, Ms. Hanak also held the positions of Director of Research, Associate Director of Research, and Research Fellow. Prior to coming to the PPIC, she was a Research Economist at the Center for Cooperation in International Research for Agricultural Development in Paris, France. She has also served as a Staff Economist for the Council of Economic Advisors and a Consultant at World Bank. Mr. Hanak earned a Ph.D. in economics from the University of Maryland and a M.A. in economics from the University of Dar es Salaam in Tanzania.