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Michael Anderson is state climatologist in the California Department of Water Resources (DWR). Before he joined DWR's flood management forecasting section in 2005, he did extensive graduate and post-graduate work in hydroclimate system modeling and monitoring. He holds a PhD and MS in civil and environmental engineering from the University of California, Davis, and a bachelor's degree in civil engineering from Colorado State University.

Charlton "Chuck" Bonham is director of the California Department of Fish and Wildlife (previously known as the Department of Fish and Game). The department maintains native fish, wildlife, plant species, and natural communities for their intrinsic and ecological value and their benefits to people. Before he joined the department in 2011, he worked for more than ten years at Trout Unlimited in a number of roles, including California director and senior attorney. He has served on the board of directors of the Delta Conservancy, whose mission is to conserve, sustain, and enhance the resources of the River Delta region and develop and promote sustainable protection, management, and stewardship through research and education. He holds a JD and environmental and natural resources law certificate from the Northwestern School of Law at Lewis and Clark College.

Mark Cowin is director of the California Department of Water Resources. He heads a department that protects, conserves, and manages the state's water supply, including operation of the California State Water Project. Before he became director, he served as DWR's deputy director of integrated water management. His primary responsibilities included overseeing DWR's flood management and dam safety programs, implementing Integrated Regional Water Management, coordinating DWR's efforts related to climate change, and updating and implementing the California Water Plan. Previously, he served for five years as chief of DWR's Division of Planning and Local Assistance, responsible for strategic planning of water management and for providing technical and financial assistance to local agencies and communities. He was also assistant director for the CALFED Bay-Delta Program. He holds a BS in civil engineering from Stanford University.

Jane Doolan is a professorial fellow of natural resource governance at the University of Canberra Institute for Applied Ecology in Canberra, Australia. She is also a member of Australia's National Water Commission. She has driven key policy initiatives at the state and national levels in river health policy, environmental water allocation, institutional arrangements for catchment management, and water management during drought and climate change. She has extensive experience in intergovernmental policy development and negotiations, particularly in relation to the management of the Murray-Darling Basin and the oversight of major water projects and programs. Throughout her career, she has focused on integrating advanced science with water policy and management, and her expertise has been sought in international arenas. She was an expert for the World Bank on the Lesotho Highland Development Project and has participated in a number of delegations and conferences in South Africa, Israel, and India. She holds a PhD and bachelor's degree in zoology from the University of Melbourne.

Jill Duerig is general manager for Zone 7 Water Agency in eastern Alameda County (Livermore). Before she joined Zone 7 in 2005, she was general manager and chief engineer for the Scotts Valley Water District. In her 25-plus years in the water industry, she has also worked as an attorney at Wendel, Rosen, Black and Dean and as an engineer and production manager for the Alameda County Water District. She began her career as a microbiologist. She has operator T5 certification and is an active member of the California Bar. She holds an MS in civil engineering from the University of Pittsburgh, a JD in public interest law from Santa Clara University, and a BS from Lehigh University, where she majored in biology/chemistry.

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Andrew Fahlund is deputy director of the California Water Foundation. He In addition to providing strategic direction and collaborating on project development and implementation, he serves as a spokesperson to external audiences and manages relationships with key partners. Previously, he was the executive director of the Water in the West program at Stanford University and worked for 12 years in the Washington DC office of American Rivers, where he was senior program director and senior vice president for conservation. He received his MS in natural resource policy from the University of Michigan's School of Natural Resources and Environment and his BA from Colorado College, where he majored in anthropology.

Jean Fuller represents California's 16th Senate District, which includes portions of Kern, Tulare, and San Bernardino Counties. First elected in 2010, she currently serves as vice chair of the Rules Committee and the Energy, Utilities, and Communications Committee. From 2006 to 2010 she represented the 32nd District in the state Assembly. In 2009, she was part of the bipartisan group tasked with constructing a comprehensive water bond to fund new storage and consistent supplies of clean water throughout the state. She continued her leadership role during the negotiations that led to the passage of the Water Quality, Supply, and Infrastructure Improvement Act of 2014. Her other legislative priorities include reducing regulations that burden California's businesses and supporting cost-effective energy policies. Before she was elected to public office, she was an educator for more than 30 years, and served a term as superintendent of the Bakersfield City School District. She holds a PhD from the University of California, Santa Barbara and an MPA from California State University, Los Angeles.

Brian Gray is a professor of law at the University of California, Hastings College of the Law in San Francisco. His academic writings and professional work have focused on various aspects of water policy, including instream flow protection, water transfers, federal reclamation reform, endangered species, groundwater management, and water rights and environmental regulation. He has served as chair of the California State Bar's Committee on the Environment and as a consultant to a variety of state and federal agencies. He has appeared before the California Supreme Court and the U.S. Court of Appeals in cases involving the Wild and Scenic Rivers Act, federal reclamation reform and takings, the Central Valley Project Improvement Act, and the CALFED Bay-Delta Program.

David J. Guy is president of the Northern California Water Association. With support from an interdisciplinary team, he brings together diverse interests to foster sustainability for farms, cities, wildlife refuges, fish, and recreation in the Sacramento Valley—the northern part of the Central Valley. In 2014, he worked closely with a drought team from the Sacramento Valley that engaged with various policy leaders in an effort to provide water for all these purposes. He has worked with policymakers to showcase California's special places: the Sacramento Valley, Yosemite National Park, and Redwood National Park. He serves on the Water Education Foundation Board of Directors and the California State University Water Resources and Policy Initiatives Advisory Committee; he previously served on the University of California Advisory Committee for the Water Resources Center in Berkeley. He holds a JD from the University of Colorado School of Law, where he was a fellow at the Natural Resources Law Center, and a BS in geological sciences from California State University, San Diego.

Martha Guzman-Aceves is deputy legislative affairs secretary for Governor Brown. From 2004 to 2011, she lobbied on behalf of the California Rural Legal Assistance Foundation, focusing on community health, farm worker health and safety, environmental justice, and education. She has also worked in both the political and research departments of the United Farm Workers (UFW), covering a range of labor and environmental issues. Her regulatory and legislative victories include emergency and permanent heat illness prevention standards and the Pesticide Drift Exposure Response Act (SB 391). She is a cofounder of Communities for a New California and Cultivo Consulting, a political consulting partnership. She serves

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on the board of the Ag Innovations Network, which aims to restore food and food production to people's lives. She holds an MS in agricultural and resource economics from the University of California, Davis, and a BS in international economics with a certificate in Latin American studies from the School of Foreign Service at Georgetown University, complemented by her studies at La Pontificia Universidad Católica de Chile in Santiago.

Ellen Hanak is a senior research fellow at the Public Policy Institute of California. Her career has focused on the economics of natural resource management and agricultural development. She launched PPIC's research program on water policy in 2001 and has published numerous reports and articles on California's water management challenges and opportunities. Other areas of expertise include infrastructure finance and climate change. Before joining PPIC, she held positions with the French agricultural research system, the President's Council of Economic Advisers, and the World Bank. She holds a PhD in economics from the University of Maryland.

Marc Levine represents California's 10th Assembly District, which includes communities in Marin and Southern Sonoma Counties. He is chair of two committees: Water, Parks, and Wildlife and Agriculture and the Environment Committee. In addition to representing his district's local interests, he is focused on protecting the environment, supporting schools and university, and working to foster the long-term functionality of California government. Before he was elected to the Assembly in 2012, he served on the San Rafael City Council. Before he was elected to public office, he developed technology for human rights organizations, and in the process raised millions in funding from government and private sources. He holds a master's in national security affairs from the Naval Postgraduate School in Monterey and a bachelor's degree in political science from California State University, Northridge.

Jay Lund is an adjunct research fellow at PPIC. He is also a professor in the Civil and Environmental Engineering Department and director of the Center for Watershed Sciences at the University of California, Davis. He specializes in the management of water and environmental systems. His research has included system optimization studies for California, the Columbia River, the Missouri River, and several other systems—as well as studies of climate change adaptation, water marketing, water conservation, water utility planning, nitrate groundwater contamination, and reservoir operations. He served on the advisory committee for the 1998 and 2005 California Water Plan Updates, is a former editor of the *Journal of Water Resources Planning and Management*, and has authored or coauthored more than 300 publications.

Joe MacIlvaine has been president of Paramount Farming Company since 1987. He is responsible for general management of the company's operations, including the management of 100,000 acres of agricultural properties. The company is the largest grower of almonds, pistachios, and pomegranates in the world. He has served as chairman of the Almond Board of California and chair of its Production Research and International Marketing Committees; he has also been treasurer and director of Western Growers Association and a member of the USDA Advisory Committee for Trade. He holds a PhD from the Massachusetts Institute of Technology, an MBA from the University of California, Los Angeles, and a bachelor's degree from the University of California, Berkeley.

Felicia Marcus is chair of the State Water Resources Control Board. Before being appointed to the board by Governor Brown, she served as western director of the Natural Resources Defense Council, a nonprofit dedicated to preserving the earth's natural systems. Previously, she was executive vice president and chief operating officer of the Trust for Public Land. She served as regional administrator of the Environmental Protection Agency during the Clinton administration, forging unlikely alliances and making the agency more responsive to the communities it serves—particularly Indian tribes, communities of color, and local government and business. Before that, she headed the Los Angeles Department of Public Works,

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as the city was moving from facing multiple lawsuits to earning national environmental awards. She has extensive experience as a public interest lawyer and community organizer in Los Angeles. She is an Obama administration appointee to the Commission on Environmental Cooperation-Joint Public Advisory Council, and has served on many nonprofit boards, including Sustainable Conservation and the Center for Diversity and the Environment.

Sandi Matsumoto is director of the Nature Conservancy's Migratory Bird Program. She leads efforts to protect and enhance habitat for migratory birds along the Pacific Flyway. Over the past two years, she led a team that launched BirdReturns, which uses precision science to identify locations, timeframes, and types of needed bird habitats, and then selects participants through reverse auctions. She is also the conservancy's lead in the Migratory Bird Conservation Partnership, a collaboration with Audubon California and Point Blue Conservation Science that aims to increase the pace, scale, and effectiveness of migratory bird conservation in California. In her ten years with the conservancy, she has helped acquire almost 2,000 acres of wetlands and floodplains that are critical for native species. She also serves on the board of the Central Valley Joint Venture. She holds an MBA from the Anderson School of Management at the University of California, Los Angeles, and a BA with a major in economics from Yale University.

Jeffrey Mount is a senior fellow at PPIC. He is also an emeritus professor in the Department of Geology at the University of California, Davis. A geomorphologist who specializes in the study of rivers, streams, and wetlands, his research focuses on integrated water resource management and the effects of and responses to climate change. Before he joined PPIC, he was principal at Saracino & Mount, LLC. He is the founding director of the UC Davis Center for Watershed Sciences, California's premier water policy and resource management institute. He has served on many state and federal boards and commissions that address water resource management issues in the West. He has published more than a hundred articles, books, and other publications, including the seminal book *California Rivers and Streams* (UC Press). He holds a PhD and MS in earth sciences from the University of California, Santa Cruz.

Peter Moyle is Distinguished Professor in the Department of Wildlife Fish and Conservation Biology and associate director of the Center for Watershed Sciences at the University of California, Davis. He has been researching the ecology California's freshwater and estuarine fishes since 1969. He has coauthored numerous papers on the ecology, status, and trends of California's diverse and endemic fishes, including salmon and trout. His present research focuses on climate change, effects of drought on fishes, and strategies for ecological reconciliation. He is lead author *Suisun Marsh: Ecological History and Possible Futures* (2014, UC Press), which reflects his 40 years of study of fish and water issues in the San Francisco Estuary. International experience includes studies of fish and water issues in Botswana, Sri Lanka, and Spain.

Susan Mulligan is general manager of Calleguas Municipal Water District, a wholesale supplier of imported water to 630,000 people in Ventura County. Working to provide water reliability in an economically and environmentally responsible manner, she operates 250 miles of large-diameter pipe, a lake, a surface water treatment plant, an aquifer storage and recovery project, recycled water systems, a regional brine line, and an ocean outfall. Before she became general manager in 2010, she was manager of engineering, with responsibility for design and construction of capital projects. Before she joined Calleguas in 1993, she worked for the City of Pasadena in the field of water quality and supply. She is a registered professional engineer and a Grade 5 water treatment plant operator. She holds an MBA from the University of California, Los Angeles, and a bachelor's degree in civil engineering from Stanford University.

Timothy Quinn is executive director of the Association of California Water Agencies (ACWA), a statewide group with 450 local public water agency members that are responsible for about 90 percent of the water delivered in California. He became executive director in July 2007 and has more than 25 years of

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experience in California water issues. Before he joined ACWA, he served as deputy general manager of the Metropolitan Water District of Southern California.

Anthony Rendon represents California's 63rd Assembly District, which includes several communities in southeastern Los Angeles County. In his first term, he served as chair of the Water, Parks and Wildlife Committee and authored Proposition 1, the state water bond passed in November. Now entering a second term, he chairs the Utilities and Commerce Committee and continues to serve on Water, Parks, and Wildlife and several other committees. Before he was elected to the Assembly in 2012, he was executive director of Plaza de la Raza Child Development Services, which provides comprehensive child development and social and medical services to children and families in Los Angeles County. From 2009 to 2009 he served as interim executive director of the California League of Conservation Voters (CLCV). From 2001 to 2008 he served as adjunct professor of political science and criminal justice at California State University, Fullerton. He holds a PhD in political science from the University of California, Riverside and an MA from California State University, Fullerton.

Barton "Buzz" Thompson is the Robert E. Paradise Professor in Natural Resources Law at Stanford Law School and the Perry L. McCarty Director of the Woods Institute for the Environment at Stanford University. He also serves as Special Master for the United States Supreme Court in *Montana v. Wyoming*. His research focuses on the role of law, institutions, and markets in effective water management, as well as the law of regulatory takings and biodiversity protection. A former member of the Science Advisory Board for the US Environmental Protection Agency, he is the author of numerous books on water and the environment, including *Legal Control of Water Resources* (5th ed., 2013).

Lois Wolk represents California's 3rd Senate District, which includes all or part of four counties in the Sacramento–San Joaquin Delta (Contra Costa, Solano, Sacramento, and Yolo), as well as Sonoma and Napa Counties. She is Majority Whip and chair of the Budget Subcommittee on Resources, Environmental Protection, Energy, and Transportation. She also serves on several standing committees, including Agriculture; Energy, Utilities, and Communications; and Natural Resources and Water. She was a lead author of Senate Bill 866, the Water Quality, Supply, and Infrastructure Improvement Act of 2014. She also serves on the Senate Standing Committee on Natural Resources and is a liaison advisor to the Delta Conservancy Board. In 11 years of service in the state legislature—including 6 in the Assembly—she has authored more than a hundred laws. Notably, she led efforts in 2007 to strengthen flood protection in California's Central Valley and Sacramento–San Joaquin Delta region, authoring two of the bills in the legislative package.