

BIOs of Moderators, Panelists, and Commentators

Robert Adler — is the James I. Farr Chair and Professor of Law at the University of Utah S.J. Quinney College of Law, and from 2006-2009 served as the Associate Dean for Academic Affairs at the College of Law. He is also an Adjunct Professor in the Department of Pediatrics in the College of Medicine, where he is collaborating on a study of children's environmental health issues. Professor Adler's books include Restoring Colorado River Ecosystems: A Troubled Sense of Immensity (2007), Environmental Law: A Conceptual and Pragmatic Approach (with Driesen and Engel, 2007, second edition) and The Clean Water Act: Twenty Years Later (with Landman and Cameron, 1993). He has written and spoken widely on the subjects of environmental and water law and policy, with a focus on water pollution and aquatic ecosystem restoration and protection.

Adler has been invited to appear before congressional committees and other forums to discuss clean water policy, and has represented members of Congress and former EPA managers in amicus briefs before the U.S. Supreme Court and other courts. He has also represented Utah and national environmental groups in *pro bono* litigation, and has served on the boards of a number of local and national organizations and advisory groups, including FRIENDS of Great Salt Lake, Hawkwatch International, EPA's Federal Advisory Committee on TMDLs, and a Taskforce on Unfunded Federal Mandates for the U.S. Advisory Commission on Intergovernmental Relations. For his work, Adler has received an Outstanding Service Award from the Utah Chapter of the American Water Resources Association, the Pfeiferhorn Award for environmental leadership in Utah, teaching and service awards from the College of Law, and a National Performance "Hammer" Award from Vice President Al Gore.

Sarah Bates — has written and spoken extensively on western water law and policy through university research appointments, conservation advocacy positions, and consulting work. She currently works as a senior fellow with the Center for Natural Resources and Environmental Policy and adjunct professor of law at the University of Montana, and maintains an active law and policy consulting practice. She is a member of the advisory board of the Natural Resources Law Center at the University of Colorado Law School, where she previously worked as the associate director. Sarah recently completed two terms as a member of the governing board of the Montana-based Clark Fork Coalition and the advisory board of the Ruckelshaus Institute of Environment and Natural Resources at the University of Wyoming. She is a project team member of the Carpe Diem West network of practitioners concerned with climate change and western water policy. Sarah's publications include six books and many articles and research reports. Her most recent work includes:

- Bridging the Governance Gap: Strategies to Integrate Water and Land Use Planning (May 2011), http://cnrep.org/documents/montana_policy_reports/26910-Public-Policy-Water-Land-Use-Report-2011.pdf
- Water in the West: The Evolving Prior Appropriation Doctrine," in Megan Baroni, ed., Whose Drop is it Anyway? (Amer. Bar Ass'n, 2011).
- Thinking Like a River Basin: Leaders' Perspectives on Options and Opportunities in Colorado River Management (2011), http://www.carpediemwest.org/colorado-report
- Sarah Bates & Lawrence J. MacDonnell, eds., Evolution of Natural Resources Law and Policy (Amer. Bar Ass'n, 2010).
- Sarah Bates, "Forests in Hot Water: Climate Change, Water, and our National Forests," *Your National Forests* (Winter-Spring 2009).



<u>Drew Beckwith</u> — is Water Policy Manager of Western Resource Advocates (WRA) in Boulder, Colorado. As WRA's water policy manger, Drew works closely with water utilities, state officials, and partner organizations around the region to find sustainable ways to meet human water needs. He is responsible for WRA's research, legislative, and policy efforts that aim to advance water conservation efforts and non-traditional water supply development across the Interior West. Prior to WRA, Drew worked in the private sector, performing water supply reliability analyses for utilities in California, and for the University of California Cooperative Extension, helping agricultural growers reduce nutrient and pesticide loading into local waterways. Drew holds a Master of Environmental Science and Management degree from University of California - Santa Barbara, and a Bachelor of Arts degree in Geology from Colorado College.

Bonnie Colby — Bonnie Colby is a professor at the University of Arizona where she has been a faculty member since 1983 in the Departments of Resource Economics, Geography, and Hydrology and Water Resources. Her expertise includes evaluating economic tradeoffs in competing uses of water and energy, climate change adaptation, valuing unique water assets, incentive-based conservation strategies and water acquisition programs to improve supply reliability. Dr. Colby has authored over one hundred journal articles and eight books, including Risk And Resilience: The Economics Of Climate-Water-Energy Challenges In The Arid Southwest (2011), Water Markets in Theory and Practice; Arizona Water Policy: Management Innovations in an Urbanizing, Arid Region; Braving the Waters: Resolving Dispute Over the Rivers of the American West and Negotiating Tribal Water Rights. She has provided invited testimony on these matters to state legislatures, Native American tribal councils, state and federal courts and the U.S. Congress.

Professor Colby has taught at Harvard's Kennedy School of Government, in continuing education programs for U.S. judges and in an intensive leadership training program for conservation professionals from over 30 countries. Over the past 20 years, she has developed dozens of water and habitat acquisition programs and climate change adaptation plans for cities, states, tribes, private firms and non-profit advocacy groups. In her free time, Bonnie can be found on the rivers, trails and beaches of favorite remote areas, worldwide.

<u>Mike Connor</u> — was confirmed Commissioner of the Bureau of Reclamation by the United States Senate on May 21, 2009. Connor has more than 15 years of experience in the public sector, including having served as Counsel to the U.S. Senate and Natural Resources Committee since May 2001. At the committee, Connor has managed legislation for both the Bureau of Reclamation and the U.S. Geological Survey, developed water resources legislation and handled Native American issues that are within the Energy Committee's jurisdiction.

From 1993 to 2001, Connor served in the Department of the Interior, including as deputy director and then director of the Secretary's Indian Water Rights Office from 1998 to 2001. In this capacity, he represented the Secretary of the Interior in negotiations with Indian tribes, state representatives, and private water users to secure water rights settlements consistent with the federal trust responsibility to tribes.

Before joining the Secretary's Office, Connor was employed with the Interior Solicitor's Office in Washington, DC and in Albuquerque, New Mexico. He began his Interior career in the Solicitor's Honors Program in 1993.



Connor received his J.D. from the University of Colorado Law School, and is admitted to the bars of Colorado and New Mexico. He previously received a Bachelor of Science degree in Chemical Engineering from New Mexico State University and worked for General Electric.

The Bureau of Reclamation is a contemporary water management agency and the largest wholesale provider of water in the country. It brings water to more than 31 million people, and provides one out of five Western farmers with irrigation water for farmland that produces much of the nation's produce. Reclamation is also the second largest producer of hydroelectric power in the western United States with 58 power plants.

<u>Joe Feller</u> — is a Professor of Law at Arizona State University, where he has taught Water Law, Natural Resources Law, Environmental Law, and Property since 1988. Before undertaking the study of law, Professor Feller earned a Ph.D. in physics from the University of California at Berkeley and taught physics at Columbia University. After graduating from Harvard Law School in 1984, Professor Feller served as a law clerk to Judge Joseph Sneed on the U.S. Court of Appeals for the Ninth Circuit and as an attorney for the U.S. Environmental Protection Agency. From 2008 until 2011, Professor Feller was on leave from Arizona State and served as Senior Counsel for the National Wildlife Federation in Boulder, Colorado, and a visiting professor at the University of Colorado Law School, where he taught the Natural Resources Law Clinic, Water Law, and Land Use Planning.

Professor Feller's work focuses on public land management and water use in the western United States. He has represented environmental interests in litigation before administrative boards, federal district courts and courts of appeal, and the U.S. Supreme Court. He is an avid runner, hiker, photographer, and cross-country skier, and he served as a coach for the Brazilian national cross-country ski team in 2008.

Steve Fitten — is Chief Counsel for the International Boundary and Water Commission, accepting the position in March 2010. He served previously as Chief, International Law Division, Office of the Staff Judge Advocate, Seventh Air Force, Osan Air Base, Republic of Korea. Mr. Fitten garnered substantial civil and criminal law practice experience in private practice and as a prosecutor (from 1978-1983) before entering federal civilian service as a contract negotiator (GS 1102 series). Air Force Base assignments included McClellan, Norton and Vandenberg. He worked for the Army from 1997 until 2006, with assignments in Panama, Puerto Rico, and S. Korea, before joining the Electronic Systems Center Legal Office at Hanscom Air Force Base.

During his undergraduate and post graduate education, Steve worked as an engineer for radio and television stations and doubled as an announcer, hosting news, sports, R&B, classical and jazz music programs. He attended Miami University, Oxford, Ohio, graduating in 1973 with a Bachelor of Arts degree in English and Philosophy. This was followed by a law degree from Ohio Northern University College of Law, Ada, Ohio, in 1976, and MBA program at Baldwin-Wallace College of Berea, Ohio in 1979. Mr. Fitten served on active duty as a direct commission law specialist with the Coast Guard from 1989-1993, a reservist with the Army from 1976-1978, and the Air Force Reserve as a Judge Advocate following active duty with the Coast Guard in 1993.

<u>John Fleck</u> — has been a staff writer at the *Albuquerque Journal* for 20 years, covering science and environmental issues. New Mexico is home to Los Alamos National Laboratory and other major nuclear facilities, and nuclear weapons and waste technology and policy questions are a special focus of his reporting. In the past decade, he has made aridity, climate change, drought and the resulting water policy questions a central topic of his newspaper work. As Albuquerque and Santa



Fe, northern New Mexico's two largest metro areas, have shifted in recent years to using water imported from the Colorado River Basin, his journalism has emphasized the relationship between New Mexico's water and broader regional water science, politics and policy questions.

John is the author of "A Tree Rings' Tale," a book for young people about climate, science, water and the West, and is working on "Moving Water", a book about Colorado River water policy in the 21st century.

<u>Terry Fulp</u> — Terrance (Terry) Fulp, Ph.D., is Deputy Regional Director of the Bureau of Reclamation's Lower Colorado Region. Working closely with federal and state agencies, Native American tribes, environmental organizations, and other stakeholders, he oversees programs including water delivery, accounting, contracting, and conservation. Fulp also oversees the implementation of the Lower Colorado River Multi-Species Conservation Program - a multi-agency effort working to recover populations of endangered species and protect and maintain ecosystem habitat in the Lower Basin.

Prior to his appointment as Deputy Regional Director, he served as Area Manager of the Boulder Canyon Operations Office where he managed and administered the successful Basin-wide effort to develop additional operational guidelines for Lake Powell and Lake Mead in response to recent drought and declining reservoir levels. Dr. Fulp is currently the Study Manager of the "Colorado River Basin Water Supply and Demand Study", funded under Reclamation's <u>Basin Study Program</u>. The comprehensive Study will define current and future imbalances in water supply and demand in the Colorado River Basin and the adjacent areas of the Basin States that receive Colorado River water for approximately the next 50 years, and will develop and analyze adaptation and mitigation strategies to resolve those imbalances.

Dr. Fulp holds a Ph.D. in Mathematical and Computer Sciences from the Colorado School of Mines; a Masters degree in Civil Engineering from the University of Colorado; a Masters in Geophysics from Stanford University, and a B.S. in Earth Sciences from the University of Tulsa.

Katie Yellowhorse Gilbert — teaches math at Kirtland Central High School in Kirtland, New Mexico, and has taught math for 21 years. She claims working with Algebra students is just as rewarding as working with Calculus students. With an active interest in water education, Ms. Gilbert spends time testing and analyzing river water with her students; and advocates for tribal water rights outside school time. She was appointed by the Speaker of the Navajo Nation Tribal Council and served as a Water Rights Commissioner for the tribe (2004-2008). She worked with the tribal council, the local communities, and the tribe's water attorneys, hydrologists, and geologists to negotiate with state and federal officials in New Mexico, Utah, and Arizona for the Navajo Nation's rights to use waters in the Colorado River Basin. Before her appointment as water commissioner, she spent summers assisting in research at various U.S. DOE Laboratories: the Lawrence Berkeley National Laboratory, Sandia National Laboratory, National Renewable Energy Laboratory, and the Lawrence Livermore National Laboratory.

Jennifer Gimbel — As the director of the Colorado Water Conservation Board, Jennifer carries out the policies and directives of the Board relating to the conservation, development and utilization of the state's water resources, and works closely with the State Engineer, General Assembly, the Executive Director of the Department of Natural Resources, and the Governor on water resource issues for the State of Colorado. She acts as the representative for the state on interstate and intrastate water issues, including issues relating to flood control, water conservation and drought planning, water information, river restoration and environmental aspects of water



management. As Director, she is involved with federal and state legislation pertaining to water resources and represents the State of Colorado on commissions and entities such as the Arkansas River Compact Administration, the Upper Colorado River Commission, the Colorado River Basin Salinity Control Forum, the Western States Water Council, and the Missouri Basin States Association.

Jennifer has over 20 years' experience as a water attorney, working first for the Wyoming Attorney General and then for the Colorado Attorney General on water, natural resource, and environmental issues. Before accepting the Director position, Jennifer worked for the Department of the Interior and the Bureau of Reclamation on Indian water rights, collaborative efforts on the Middle Rio Grande in New Mexico, and state and federal water rights issues.

Holly Hartman — is Director of the Arid Lands Information Center (ALIC) at the University of Arizona (UA) and a co-investigator within the Climate Assessment for the Southwest (CLIMAS), one of NOAA's RISA projects. Holly's current research projects focus on combining environmental models and climate change projections in scenario planning and risk management frameworks; improving communication and verification of probabilistic climate and hydrologic forecasts; and collaborative development of decision support tools.

Holly is a member of the National Research Council's Committee on the Assessment of the National Weather Service's Modernization Program, and a member of the NOAA Science Advisory Board's Climate Working Group. She is also a member of the American Meteorological Society's (AMS) Committee on Climate Services, the Board of the International Environmental Modeling and Software Society, the Editorial Board of the journal *Environmental Modeling and Software*, and Carpe Diem West Management Team.

Holly led the scenario development team within the NSF-UA Science and Technology Center for the Sustainability of Semi-Arid Hydrology and Riparian Areas (SAHRA). She co-edited the monograph, "Water: Science, Policy, and Management", published by the American Geophysical Union. For the U.S. Climate Change Science Program, Holly was a contributing author for SAP 5.3 and chapter author for SAP 5.1, both addressing decision support in the context of climate and water resources. Holly received her MS degree in water resources management from the University of Michigan and her PhD in hydrology and water resources from the University of Arizona.

Taylor Hawes — serves as the Colorado River Program Director for The Nature Conservancy (TNC). The Program's goal is to conserve the freshwater biodiversity of the Colorado River Basin while also meeting human demands for water. Her responsibilities include coordinating TNC's freshwater conservation efforts across the Colorado River Basin, synthesizing priority strategies, and working with key stakeholders who are critical to conservation success across the Colorado River Basin. Taylor has worked on Colorado River issues for more than 14 years and practiced water, local government, water quality, and land use law before joining the Conservancy. She currently serves on the Colorado Foundation for Water Education and the Colorado Water Trust boards and is a member of the Inter-basin Compact Committee in Colorado. Originally from Atlanta, Georgia, Taylor received a B.A. in political science from University of North Carolina in 1991 and her *Juris Doctorate* degree from Vermont Law School in 1997.

Doug Kenney — is a Senior Research Associate and Director of the Western Water Policy Program of the Natural Resources Law Center, located within the University of Colorado Law School. He has written extensively on several water-related issues, including law and policy



reform, river basin and watershed-level planning, the design of institutional arrangements, water resource economics, and alternative strategies for solving complex resource issues. Among his publications are *In Search of Sustainable Water Management: International Lessons for the American West and Beyond* (2005, Edward Elgar Publishing), and *The Water-Energy Nexus in the Western United States* (in press, Edward Elgar Publishing). He also teaches in the University of Colorado Environmental Studies Program, and is affiliated with the CU/NOAA Western Water Assessment, exploring the link between climate change/variability and western US water management.

Dr. Kenney has served as a consultant to a variety of local, state, multi-state, and federal agencies, including several Interior Department agencies, EPA, the US Forest Service, and special commissions (e.g., the Western Water Policy Review Advisory Commission); the states of Georgia, Alabama and Florida; and national governments and NGOs in Asia and Africa. Additionally, he has made presentations in (at least) 17 states, 6 nations, and 4 continents. He has a B.A. in biology from the University of Colorado, a M.S. in Natural Resources Policy and Administration from the University of Michigan, and a Ph.D. in Renewable Natural Resource Studies from the University of Arizona.

Eric Kuhn — In July 1996, Eric assumed his current duties as General Manager of the Colorado River Water Conservation District. From 1994 through 2001, Eric served on the Colorado Water Conservation Board representing the Colorado River mainstem. In 2006, Eric was appointed by Governor Owens as an at-large representative on the Colorado Interbasin Compact Commission. Eric is currently serving as one of the technical panel co-chairs of the Colorado Climate project.

Eric started employment with the River District in 1981 as Assistant Secretary-Engineer. His responsibilities since then have included technical management of River District activities such as Taylor Draw Dam and Reservoir, Wolford Mountain Reservoir, water marketing, interstate water issues, and integrated project operations. He has served on the Engineering Advisory Committee of the Upper Colorado River Compact Commission since 1981.

He earned his Bachelor's degree from the University of New Mexico in 1972 and a Masters degree in Business Administration from Pepperdine University in California in 1980. Prior to working for the River District, he served as an engineer officer aboard nuclear submarines in the U.S. Navy and worked as a nuclear start-up engineer for Bechtel Power Corporation.

Eric has authored a number of papers and technical presentations on the Colorado River system. Eric, his wife and two daughters live in Glenwood Springs.

<u>Les Lampe</u> — has more than 38 years of experience in the field of water resources, specializing in all aspects of integrated water supply planning. He is a Vice President of Black & Veatch Water and the Global Water Resources Practice and Technology Leader. He has been responsible for the technical aspects of numerous river basin studies, municipal and regional water supply plans, and evaluations of yield and quality for both surface and groundwater supplies.

Dr. Lampe has authored and presented over one hundred technical papers at national and international industry venues. In addition, he has chaired many committees, including AWWA Total Water Management Task Force, Ad Hoc Committee on Water Reuse Policy, and the Water Resources Division Board of Trustees.

Major recent projects managed by Dr. Lampe include the Colorado River Long-Range Augmentation Project, various projects for the Water Corporation of Western Australia, the Industrial Heartland Water Supply Project in Canada, and the East Central Region Water Supply Plan for Puerto Rico.



Jim Lochhead — was appointed Denver Water's Chief Executive Officer/Manager effective June 2010. Prior to joining Denver Water, he was a shareholder at the Denver law firm of Brownstein Hyatt Farber Schreck, LLP, where he worked on issues relating to water rights, interstate and international water matters, Endangered Species Act, public lands and natural resources, state and federal public policy, zoning, land use and real estate development. He also served as the Executive Director of the Colorado Department of Natural Resources from 1994 to 1998, where he oversaw departments that included the Colorado Water Conservation Board, Minerals and Geology, Water Resources, Oil and Gas Conservation Commission, Parks and Outdoor Recreation, Soil Conservation Board and State Land Board and Wildlife.

Mr. Lochhead currently serves on the State Board of Great Outdoors Colorado. He has served on the Colorado Water Conservation Board, Colorado's Roadless Area Task Force, the Board of Directors for Colorado Conservation Trust, the Board of Trustees for Colorado Water Trust, the Legal Aid Foundation of Colorado and The Nature Conservancy Colorado Program.

Mr. Lochhead received his bachelor's degree in environmental biology from the University of Colorado in 1974, and his law degree from the University of Colorado Law School in 1978.

Lawrence J. MacDonnell — has been a Professor of Law at the University of Wyoming College of Law since 2009. He teaches courses on water law, natural resources law, public lands, and other subjects. Prior to joining the UWYO faculty, MacDonnell worked in private law practice and as a consultant. Between 1983 and 1994, he served as the first director of the Natural Resources Law Center at the University of Colorado Law School.

<u>Guy Martin</u> — is a partner in the DC office of Perkins Coie and a leader of its Environment, Energy and Resource Group. He has worked on natural resources and energy issues as a Congressional staff member, as director of the first state office for Alaska in Washington, DC, as Commissioner of Natural Resources for the State of Alaska, as Assistant Secretary of the Interior for Land and Water, and as a private attorney. He was a founding member of the Natural Resources Law Center 25 years ago, and is now back on its Board of Advisors again. He has been involved, in one way or the other, in most of the major land and resources is land issues in the West and in Alaska throughout his career, including many western water issues, the Alaska Native Land Claims Settlement Act, and the Alaska Lands Conservation Act. As an attorney, he now serves as the national counsel to the Western Urban Water Coalition, an organization of the general managers of the West's largest urban water utilities, and is involved in most of the major water, public land and Indian policy issues before the Congress and the executive branch.

Sharon Megdal — Sharon B. Megdal is Director of The University of Arizona Water Resources Research Center and C.W. and Modene Neely Endowed Professor. She is Professor in the Department of Agricultural and Resource Economics and the Department of Soil, Water, and Environmental Science and serves as Director of The University of Arizona Water Sustainability Program, which is funded by the Technology Research Initiative Fund (TRIF). In 2010, Dr. Megdal was named Distinguished Outreach Professor.

Her work focuses on state, regional and transboundary water resources management and policy, on which she writes and frequently speaks, and places particular emphasis on how to achieve desired policy objectives in terms of institutional structures and possible changes to them. She authors a water policy column for the WRRC's newsletter. Current projects include: water planning and management in growing, arid regions; mechanisms to secure water for environmental needs; water pricing; and transboundary aquifer assessment. Dr. Megdal teaches



the multi-disciplinary graduate course Arizona Water Policy. She serves as an elected member of the Central Arizona Water Conservation District Board of Directors, which oversees the Central Arizona Project. Dr. Megdal has served on numerous state boards and commissions, including the Arizona Corporation Commission, the Arizona State Transportation Board, and the Blue Ribbon Panel on Water Sustainability. Sharon B. Megdal holds a Ph.D. degree in Economics from Princeton University.

Keynote 1: Pat Mulroy — oversees the operations of the Las Vegas Valley Water District, which serves over 340,000 customers, and the Southern Nevada Water Authority, which is responsible for acquiring, treating and delivering water to local agencies that collectively serve 2 million residents and nearly 40 million annual visitors. Mulroy joined the District more than 20 years ago and began serving as its general manager in 1989. She was a principal architect of the Authority, which has served as a model for other Western water agencies since its creation in 1991.

As general manager of one of the country's most progressive water agencies, Mulroy is exceptionally active in regional and national water issues. She currently serves on the Board of Directors of the Association of Metropolitan Water Agencies and the National Water Resources Association, and on the Board of Trustees of the Water Research Foundation. Additionally, she was the original chairperson of the Western Urban Water Coalition and served on the Colorado River Water Users Association's board of directors. Before joining the District, Mulroy served as Special Assistant to the Clark County Manager and as Clark County Justice Court Administrator

A resident of Southern Nevada for more than three decades, Mulroy is equally active in the community. She currently chairs the University of Nevada, Las Vegas College of Sciences Advisory Board, and has served on the Nevada Public Radio Board of Directors. Mulroy is also actively involved with the Diocese of Las Vegas. Her honors include National Jewish Medical and Research Center's *Humanitarian Award*, the University and Community College System of Nevada Board of Regents' *Distinguished Nevadan Award*, and the Public Education Foundation's *Education Hero Award*. She and her husband, Robert, have two children. Mulroy's recreational interests include skiing and reading.

Don Ostler — is the Executive Director and Secretary for the Upper Colorado River Commission that was created by Federal Compact and the states of Colorado, New Mexico, Utah and Wyoming. The Commission is responsible to administer appropriate Federal laws respecting the uses and deliveries of the water of the Upper Basin of the Colorado River. Don has been heavily involved during this time in negotiations with the 7 Basin States of the Colorado River and the country of Mexico to develop a drought management plan including shortage management, improved efficiency of operations and augmentation of the water supply.

Prior to joining the Commission, Don served in a politically appointed position as the Director of the Utah Division of Water Quality and Executive Secretary to the Utah Water Quality Board. In this capacity he was responsible for protection of the quality of all surface water and ground water within the state of Utah. He was involved with the legislative branch of government in passing needed water legislation. Under his leadership the first programs to protect ground water quality in Utah were developed. Don worked to improve coordination of water quality and quantity issues on a watershed basis. Don has been involved in many policy issues with many opposing stakeholders where collaboration was the only mechanism to progress.

Don earned his B.S. and Masters Degrees in Civil Engineering from the University of Utah. He is a licensed professional engineer in the state of Utah



<u>Mario Lopez Lopez Perez</u> — Engineering and Technical Standards Manager, National Water Commission of Mexico. *See "Addendum" – last page of this document*

Bill Rinne — became Director of the Surface Water Resources Department in November 2006. In this capacity he is responsible for Southern Nevada Water Authority (SNWA) water resource programs and activities on the Colorado, Virgin and Muddy Rivers. Key activities on the Colorado River include:

- Working with representatives of the Seven Colorado River Basin States, the U.S. Department of the Interior and Bureau of Reclamation (BOR) on implementing Lower Colorado River Basin shortage guidelines and coordinated reservoir operations for Lakes Powell and Mead.
- Binational Colorado River cooperative actions with the Republic of Mexico and the BOR
- A variety of projects to increase the efficiency, conservation and augmentation of the Colorado River.
- Management and s guidance on SNWA's water resource portfolio and use of Nevada's share of Colorado River water.
- Lead for planning efforts to identify and implement actions that will help SNWA
 provide a sustainable water supply to meet current and future water demands for
 SNWA and throughout the Colorado River Basin.
- Oversees projects that enable SNWA to develop and bring its owned or leased pre-1929 water rights from the Virgin and Muddy Rivers into the Las Vegas Valley.

Prior to joining SNWA, Bill had more than 28 years of water resource management experience with the BOR. Key positions held during the last 12 years with the BOR included Acting Commissioner for Reclamation; Deputy Commissioner for Operations in Washington DC; Deputy Regional Director of Reclamation's Lower Colorado Region in Boulder City, Nevada; and Area Manager of Reclamation's Colorado River Operations in Arizona, California and Nevada.

Lynn Scarlett — former Deputy Secretary and Chief Operating Officer of the U.S. Department of the Interior from 2005-2009, is a senior Visiting Scholar at Resources for the Future in Washington, D.C. and an environmental analyst working on climate change adaptation; ecosystem services, energy and water issues; landscape-scale conservation; and science and decision making. Some project partners include the US Forest Service, US Army Corps of Engineers, US Department of Agriculture's Office of Environmental Markets, Central Arizona Project, and research for the Oil Spill Commission. In 2009, Scarlett served as a Distinguished Visiting Lecturer on climate change at the University of California Bren School of Environmental Science and Management and is an Adjunct Faculty with the Carnegie Mellon School of Public Policy. She is a Fellow of the National Academy of Public Administration. Scarlett became Deputy Secretary of the Interior Department, which manages 507 million acres of public lands and offshore waters, after serving for 4 years as the Department's Assistant Secretary for Policy, Management and Budget from 2001-2005. She served as Acting Secretary of the Department for two months in 2006. Ms. Scarlett initiated Interior's Cooperative Conservation Task Force in 2002. The Task Force, comprising all of Interior's bureaus, focused on building Interior Department capacity to engage in collaborative partnerships in landscape-scale and crossboundary conservation. Scarlett also chaired the Department's Climate Change Task Force. She is author of numerous publications on environmental policies, including "Urban Greening: Green, Clean, and Dollar Smart," published in February 2010 by the Environmental Defense Fund.



Mark Squillace — is Professor of Law and the Director of the Natural Resources Law Center at the University of Colorado Law School. He teaches environmental law, water law, administrative law, and advanced natural resources law. Before coming to Colorado, Professor Squillace taught at the University of Toledo College of Law where he was the Charles Fornoff Professor of Law and Values, and at the University of Wyoming College of Law where he served a three-year term as the Winston S. Howard Professor of Law. In 2000, Professor Squillace took a leave from law teaching to serve as Special Assistant to the Solicitor at the U.S. Department of the Interior. In that capacity he worked directly with the Secretary of the Interior, Bruce Babbitt, on variety of legal and policy issues. Professor Squillace previously served as the Director of Litigation for the Environmental Policy Institute in Washington, DC and for three years was Attorney Advisor for the Office of the Solicitor, U.S. Department of the Interior. He is a former Fulbright scholar and the author or co-author of numerous articles and books on natural resources and environmental law including (with J. Rasband & J. Salzman), Natural Resources Law and Policy (2nd ed, 2008).

Tanya Trujillo — is a Senior Counsel for the Democratic Majority of the Senate Energy and Natural Resources Committee's Subcommittee on Water and Power. In that capacity she oversees the legislative and oversight function of the subcommittee relating to the Bureau of Reclamation, the U.S. Geological Survey's water functions, the Department of Energy's water functions and the Federal Energy Regulatory Commission's hydropower functions. These responsibilities include the Bureau of Reclamation's irrigation projects and their related flood control purposes; the Department of Interior's WaterSMART programs; power marketing administrations (e.g., Bonneville Power, Southwestern Power, Western Area Power, Southeastern Power); the nexus between energy development and water resources; impacts of climate change on water resources and implementation of the SECURE Water Act; groundwater resources and management; hydroelectric power and issues relating to Indian water rights settlements. Prior to her work with the Subcommittee, Ms. Trujillo served as General Counsel to the New Mexico Interstate Stream Commission and before that was a partner with Holland & Hart in Santa Fe, New Mexico. She is a native of New Mexico and also works on New Mexico-related water issues for Senator Bingaman.

Pat Tyrell — Mr. Tyrrell is a Wyoming native who grew up in Cheyenne but has also lived in Casper, Gillette and Laramie, Wyoming, and in Minneapolis, Minnesota. His experience was entirely within the private sector until taking the appointment as State Engineer in January 2001. In his role as State Engineer, Pat serves as Wyoming's Commissioner to the Upper Colorado River, Bear River, and the Yellowstone River Compact Commissions, and he represents Wyoming on the North Platte Decree Committee, the Colorado River Basin Salinity Control Forum, and the Western States Water Council, among other groups. He is past board member and past President of the Wyoming Water Association. Mr. Tyrrell has a B.S. in Mechanical Engineering and an M.S. in Civil Engineering (emphasis in hydrology and hydraulics), both degrees from the University of Wyoming.

<u>Bill Travis</u> — is Associate Professor within the University of Colorado Department of Geography and serves as Director of the Center for Science and Technology Policy Research of the University of Colorado. Travis' research examines the interaction of environment and society, in two main realms: social response to climate change and extreme events, and coupled social and natural systems, including land use and anthropogenic transformations of land cover, with a focus on the American West. His current projects are driven by an interest in decision-making in the face of



potentially extreme climate change, including adaptation, warning systems, and geo-engineering interventions, as described in a recent article: "Going to Extremes: Propositions on the Social Response to Severe Climate Change" (*Climatic Change* (2010), v. 98, pp. 1-19. His web page is at: http://spot.colorado.edu/~wtravis/

Robert Wigington — joined The Nature Conservancy's program for the State of Colorado in 1986 and has since supported western water marketing and instream flow protection in other western states and served on the Conservancy's Global Freshwater Team. He is currently assigned to water policy and strategy development for the Conservancy's program on the Colorado River. He received an undergraduate degree in economics from The Colorado College and his law degree from the University of Colorado.

<u>Kimery Wiltshire</u> — is CEO & Director of Carpe Diem West, a non-profit dedicated to finding smart, science-based solutions to the impacts of the growing climate crisis on water in the American West. For over twenty years, Kimery's work has focused on building strategic, solution-oriented partnerships to meet environmental challenges.

She is the former Director of the Kenney Foundation, where she worked on initiatives to protect and restore river systems in the western United States. Kimery has led the development of a number of successful projects, including the Diversity Network Project, supporting social justice and housing in the context of urban environmental health; Resources for Community Collaboration, which provided funding and training for western rural communities to more effectively engage in resource decision making; the Sustainable Business Ratings System, an innovative means of assessing companies' environmental, economic and social performance; and Girl Scouts Save the Bay, which grew to involve the 100,000-strong Northern California Girl Scout community.

A bred, born and raised daughter of the American West, Kimery has to be reminded that occasionally important things do happen east of the 100th meridian.



ADDENDUM to Speaker Biographies

Biography Mario López Pérez

Academic Background

Agronomy Engineer by the Universidad Autónoma Metropolitana. Master of Science in Pedology and Soil Survey by University of Reading, United Kingdom. Diploma on Public Administration with honors by Universidad La Salle of México. Diploma on Water Resources Management by the Sao Paulo University of Brasil and Colorado State University sponsored by the World Bank and the Bank of Holland.

Working Experience

He has worked over the past 30 years for the Mexican Federal Administration in the water sector. Since 2007 he is the Engineering and Technical Standards Manager in the National Water Commission of Mexico. He is in charge of the binational water issues with the USA, Guatemala and Belize.

During his professional career in the National Water Commission he has been Chief of Advisers of the General Technical Deputy, Water Management Modernization Program Coordinator (a World Bank funded program), National Basin Councils Director, Regional Water Management Director, Regional Water Planning and Finance Director and State Water Management Director. He started as a professional working in the National Water Plan Commission of the Ministry of Agriculture and Water Resources in 1980.

Other Professional Experience

He has had short working periods at the International Water Organization of France, at the Badger Meter Company in Oklahoma USA and University of Texas at Austin.

He has been key speaker, panelist, moderator and organizer of workshops, courses, seminars and conferences in Canada, Colombia, Chile, China, Spain, USA, México and Perú over integrated water resources management, water law, water resources planning, water rights management, basin councils and transboundary basin management.

Current CoChair on Water Issues in the Environmental Border Program 2012 between USA Canada and Mexico.

Represents the National Water Commission with the US Environmental Protection Agency for the Border Joint Investment Water and Wastewater Infrastructure Program.

Chairs the Friend Program for the Mexican IHP Committee which is part of the UNESCO International Hydrologic Program.

Since 2006 he is IBWC Mexican Section Technical Adviser for USA, Guatemala and Belize.

Between 2001 and 2009 he developed technical assistance over water management and water law on request by the Colombia and Perú Governments and congressmen during their respective Water Law development process.