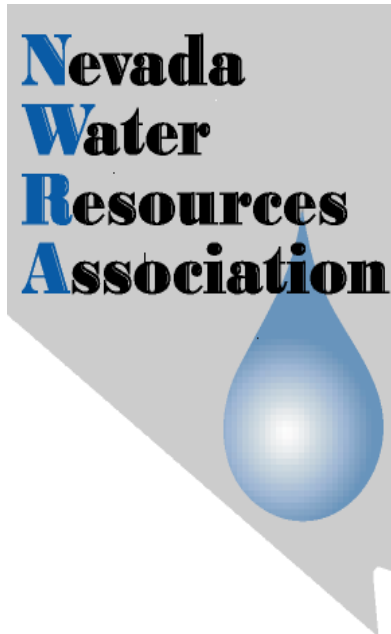


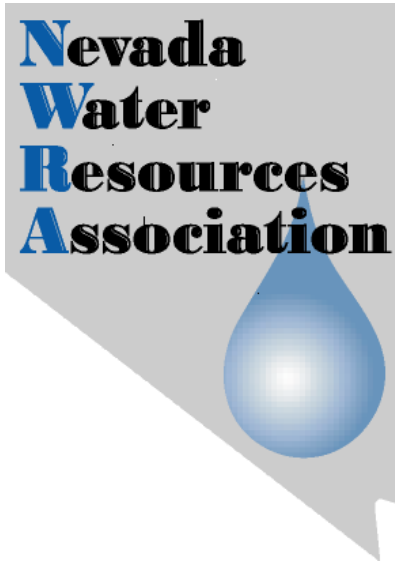
**2012 NWRA
ANNUAL CONFERENCE
“Desert Gold: Water in the West”**



March 6-8, 2012

SPEAKER BIOGRAPHIES

**2012 NWRA
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“Desert Gold: Water in the West”**



Opening Keynote Speaker

**Wednesday, March 7, 2012
8:05 a.m. - 8:45 a.m.**

Governor Brian Sandoval

Brian Sandoval was elected Governor of Nevada on November 2, 2010. He took the oath of office before Chief Justice Michael Douglas shortly after Noon on January 3, 2011. Governor Sandoval comes to his office after a long career in public service. He was appointed United States District Judge for the District of Nevada by President George W. Bush in October 2005, becoming the state's first Hispanic federal judge. He was elected Attorney General of Nevada in 2002.

Prior to his election as Attorney General, Sandoval served as a member and chairman of the Nevada Gaming Commission, which oversees Nevada's gaming industry. At age 35, Sandoval was the youngest person ever to serve as the state's chief gaming regulator. He also served for three years as Nevada's at-large member of the Tahoe Regional Planning Agency ("TRPA") Governing Board. The TRPA is a bi-state agency that governs land use policies at Lake Tahoe.

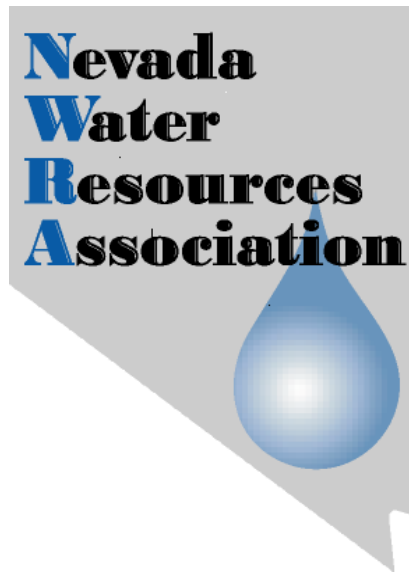
Before his Gaming Commission and TRPA appointments, Sandoval served two terms in the Nevada Legislature where he served on the Judiciary, Taxation and Natural Resources Committees and sponsored 14 bills that became law. As a legislator, he also served on the Nevada Legislative Commission, the Advisory Commission on Sentencing, the Juvenile Justice Commission, the Advisory Council on Community Notification of Sex Offenders and the Tahoe Regional Planning Agency Oversight Committee.

As a private practitioner, Sandoval had a varied law practice, where he engaged in litigation, administrative and adoption matters. Throughout his career, Sandoval has received several awards and certificates, including the Hispanics in Politics' 1996 "Broche de Oro Award," the Anti-Defamation League's 2003 "Torch of Liberty Award," the Nevada State Bar's 2004 "Access to Justice Public Lawyer Award," the Latino Coalition's 2004 "Most Influential Hispanic in the U.S. Award," the 2004 University of Nevada "Alumnus of the Year Award," and the "Excellence in Leadership Award" from the Latino Coalition in 2010.

Governor Sandoval received his Bachelor of Arts degree from the University of Nevada in 1986 and his law degree from The Ohio State University Moritz College of Law in 1989.

Governor Sandoval and his wife, Kathleen, have three children. Governor Sandoval enjoys running, traveling and spending time with his family.

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Colorado River

**Wednesday, March 7, 2012
8:45 a.m. – 10:00 a.m.**

Jennifer Pitt

Jennifer Pitt manages EDF's efforts on the Colorado River, to protect and restore the delta and reform water policy. She works with water users throughout the Colorado basin to develop practical programs to restore river habitats, and critically, to dedicate water to environmental resources. Her expertise includes the US-Mexico border environmental issues, the legal and policy framework for Colorado River management, the economics of water use and water transfers, and the science of river restoration.

Jennifer has represented EDF in multi-party negotiations including a successful effort to find common ground between water users in Arizona and environmental interests concerning the future of the Yuma Desalting Plant.

Before Jennifer joined EDF in 1999, she worked on river restoration for the National Park Service, and as a legislative aide to Congressman Mike Kopetski (OR-5). She has also worked as a ranger at Mesa Verde and Sequoia National Parks.

Jennifer has an AB from Harvard College and an MES from the Yale School of Forestry and Environmental Studies.

Bob Johnson

Bob is a Senior Consultant to HDR Engineering and is also a partner in Water Consult, a small water planning firm located in Loveland, Colorado. Prior to Bob's work with Water Consult and HDR he served as Commissioner of Reclamation where he oversaw the water and power programs of the nation's largest water wholesaler and second largest producer of hydropower. Before becoming Commissioner in 2006, Bob spent 30 plus years with Reclamation where he worked most extensively in the Colorado River Basin, serving as the Secretary of the Interior's senior manager responsible for carrying out the Secretary's responsibilities as "Water Master" of the lower Colorado River. Bob was extensively involved in a number of significant changes in the management of the Colorado River, including; development of interstate water banking guidelines, negotiation of the California Quantification Settlement Agreement, development of water surplus and shortage guidelines, development of operating guidelines for Colorado River reservoirs, and development of the Lower Colorado River Multi Species Conservation Program.

Bob is a native Nevadan and attended the University of Nevada Reno where he earned bachelor's and master's degrees in agriculture and resource economics.

Jayne Harkins, P.E.

Ms. Harkins is a University of North Dakota graduate with a Bachelor of Science Degree in Geological Engineering with an emphasis in hydrology and groundwater. Harkins is a registered professional engineer in Nevada and California. She holds a Masters in Public Administration from the University of Nevada – Las Vegas, and is a graduate of the Office of Personnel Management’s Women’s Executive Leadership Program.

Ms. Harkins leads the Colorado River Commission of Nevada (CRC), responsible for deliveries of over 500 MW of federal hydropower, and supplemental resources to 11 power customers in southern Nevada. The CRC works with federal and regional agencies to protect the reliability and control costs of federal hydropower projects. The CRC is responsible as a full-service electric utility to serve the needs of the Southern Nevada Water Authority in its effort to expand the water treatment and transmission facilities in southern Nevada. The CRC has also designed and built electrical transmission and distribution facilities in southern Nevada.

The CRC also provides leadership and consultation on various efforts to secure additional water and power resources for southern Nevada.

Before coming to the Commission, Ms. Harkins spent 27 years with the U.S. Bureau of Reclamation, where she most recently served as the Deputy Regional Director of the Lower Colorado Region. During her tenure at Reclamation, she led the agency in the development of Interim Surplus Guidelines, as well as supervised water and power operations for the Lower Colorado Region. Ms. Harkins led Reclamation’s conservation efforts in the development of Inadvertent Overrun and Payback Policy, offstream storage rule, construction and operation of Warren H. Brock Reservoir, Yuma Desalting Plant Pilot Run, and implementation of California’s Quantification Settlement Agreement.

Ms. Harkins has received numerous awards during her career, including the Department of the Interior’s Superior Service Award and was inducted as a 2010 National Honorary Member of Pi Alpha Alpha, the National Honor Society for Public Affairs and Administration.

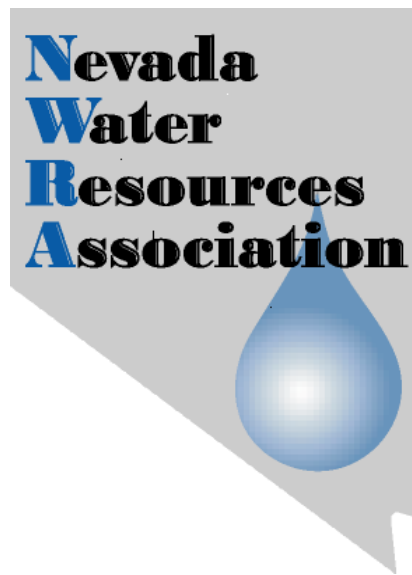
Ms. Harkins is a member of the American Public Power Association, the Colorado River Energy Distributors Association, and the Colorado River Water Users Association.

Terrance (Terry) Fulp, Ph.D.

Dr. Fulp was appointed Deputy Regional Director of the Bureau of Reclamation's Lower Colorado Region in March 2008. Terry oversees programs that implement the Secretary of the Interior's water master functions on the lower Colorado River, including water delivery, accounting, and contracting. Mr. Fulp is also responsible for the Region's water conservation program and the Lower Colorado River Multi-Species Conservation Program, a multi-agency effort to conserve and work towards the recovery of endangered species and protect and maintain wildlife habitat on the lower Colorado River.

Terry holds a Ph.D. in Mathematical and Computer Sciences from the Colorado School of Mines, A M.S. in Civil Engineering from the University of Colorado, A M.S. in Geophysics from Stanford University, and a B.S. in Earth Sciences from the University of Tulsa.

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**Reforms to the Endangered
Species Act**

**Wednesday, March 7, 2012
10:15 a.m. – 11:30 a.m.**

Ya-Wei Li

Endangered Species Policy Analyst Areas of expertise: Endangered Species Act; wildlife recovery; wildlife and environmental law

Ya-Wei (Jake) works at the intersection of policy, law, and science relating to endangered species conservation, with a focus on the Endangered Species Act (ESA). His work includes analyzing and developing policies on ESA listings, consultations, critical habitat designations, recovery planning, habitat conservation plans, and safe harbor agreements. He also works on endangered species issues in the context of international trade, federal lands, and marine ecosystems.

Before joining Defenders in 2010, Jake practiced environmental law for several years at Latham & Watkins, LLP. There, he worked on regulatory counseling and litigation relating to endangered species, air and water pollution, pesticides, chemical regulation, environmental assessments, and renewable energy. He also conducted extensive pro bono work on animal welfare and shark conservation.

Jake holds a J.D. from Cornell Law School and a B.S. from Drexel University. At Cornell, Jake focused on environmental law and policy and completed courses in conservation biology and herpetology. He also developed strategies to protect vernal pools and worked at the federal district court for the Southern District of New York. He has been admitted to the District of Columbia and New York State bars, and is a member of the Society for Conservation Biology.

Gary Frazer

Gary Frazer is the Assistant Director for Endangered Species with the U.S. Fish and Wildlife Service, returning to that position in August 2009 after having previously served in the job from 1999 to 2004. As Assistant Director, Gary is the senior career official responsible for policy development, budget formulation, and oversight relating to the Fish and Wildlife Service's administration of the Endangered Species Act.

Gary was born and raised in a small farming community in southeastern Iowa. He earned a B.S. in Fisheries and Wildlife Biology from Iowa State University in 1977 and an M.S. degree in Forestry with a Wildlife Specialty from Purdue University in 1981.

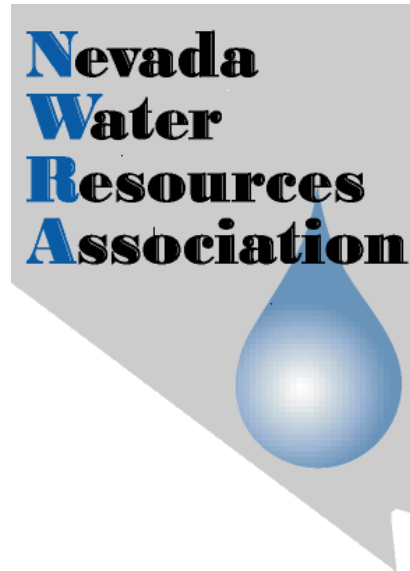
Sean Skaggs

Attorney **Sean Skaggs** is a Member of *Ebbin Moser & Skaggs, LLP*, a law firm in San Diego, CA. As a lawyer in San Diego, California, attorney Skaggs serves San Diego County, as well as clients throughout California.

Mr. Skaggs area of practice is Environmental Law. He was admitted to Practice Law in 1991 in the State of Virginia and 2003 in the State of California.

Mr. Skaggs attended Macalester College, BA, 1987, College of William & Mary, JD, 1991 and graduated Law School, 1991.

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Luncheon Keynote Speaker

**Wednesday, March 7, 2012
11:45 a.m. – 1:15 p.m.**

Pat Mulroy

Pat Mulroy oversees the operations of the Southern Nevada Water Authority (SNWA) and the Las Vegas Valley Water District (LVVWD). The Water Authority is responsible for acquiring, treating and delivering water to local agencies that collectively serve 2 million residents and nearly 40 million annual visitors.

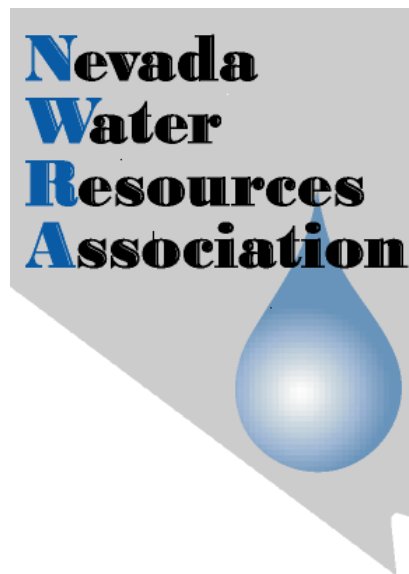
Mulroy was a principal architect of the Southern Nevada Water Authority, which has served as a model for other Western water agencies since its creation in 1991.

As general manager of one of the country's most progressive water agencies, Mulroy is exceptionally active in regional and national water issues. She is president of the Association of Metropolitan Water Agencies, for which she is the first woman and Nevadan to lead the association. Mulroy also currently serves on the Board of Directors of the National Water Resources Association, and on the Board of Trustees of the Water Research Foundation. Additionally, she was the first chairperson of the Western Urban Water Coalition and served on the Colorado River Water Users Association's Board of Directors.

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 she has served on the Nevada Public Radio Board of Directors. Mulroy also is actively involved with the Diocese of Las Vegas and Bishop Gorman High School. Her honors include the 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.

Mulroy has served as special assistant to the Clark County Manager and as Clark County Justice Court Administrator. She and her husband, Robert, have two children. Mulroy's recreational interests include skiing and reading.

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Technical Session A: Water Wells

**Wednesday, March 7, 2012
1:30 p.m. – 2:30 p.m.**

Norman R. Carlson

Mr. Carlson is a registered Professional Geoscientist (Geophysics) in Texas (License # 4703), and he is Chief Geophysicist at Zonge International, Inc., Tucson, AZ, where he has worked for 32 years. Prior to joining Zonge, he worked for Western Geophysical Co. and United Geophysical Co. as a Quality Control Seismologist and as a Vibroseis Party Chief. His field work has included dynamite, airgun, and Vibroseis seismics, as well as electrical and electromagnetic methods such as resistivity, induced polarization, and magnetotellurics, plus potential-field methods such as gravity and magnetics.

During his career, Mr. Carlson has worked in more than 16 different countries, in environments as varied as the southwestern deserts of Iran to the arctic ice north of the North Slope of Alaska. His projects have been equally varied, ranging from large targets such as oil fields in the Middle East to small unexploded ordnance (UXO) such as hand grenades and mortar shells for military cleanup projects.

Mr. Carlson is also a past-president of the Environmental & Engineering Geophysical Society, and served as District representative for six western states for six years in the Society of Exploration Geophysicists. His current focus is on the application of geophysical methods to groundwater exploration and to environmental problems.

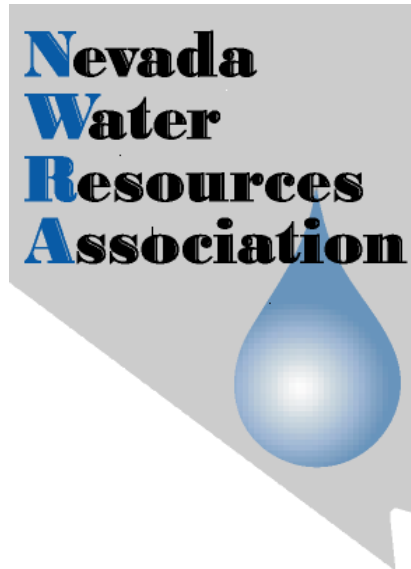
Jack M. Childress, P.G.

Jack Childress is a Senior Hydrogeologist with Interflow Hydrology, Inc, of Truckee, California. For the past eight years he has been involved in a wide range of water resource investigations in the western and southeastern United States, including several multi-basin studies in Nevada, and managing a large salt water intrusion monitoring program as a hydrologist for the State of South Carolina. Recently he has been involved in large-scale studies of Granite Springs Valley, the Dixie Valley Flow System, and the Diamond Valley Flow System of Nevada. Some of Jack's professional interests are water resource exploration, aqueous geochemistry, and aquifer hydraulics. When not logging miles on yet another long gravel road in Nevada, he enjoys spending time with his family, skiing, and building computers. Mr. Childress obtained his Bachelor's of Science in Geology from Montana State University in Bozeman, Montana, and is a registered professional geologist in California.

Noah Heller, M.S., P.G.

Noah Heller is the President of BESST, Inc. located in San Rafael, CA. Mr. Heller is a California registered geologist and holds a BA and MS in geology. He began BESST, Inc. in 1999 with a focus on innovative environmental investigative and monitoring technologies such as SimulProbe, Barcad and ZIST (Zone Isolation Sampling Technologies). In early 2005, Mr. Heller introduced a service arm to BESST consisting of miniaturized down hole technologies for profiling groundwater production wells. These various technologies have been used all over the US and in various international markets serving a wide spectrum of industries.

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**Concurrent Technical Session B:
Basin Budgets**

**Wednesday, March 7, 2012
1:30 p.m. – 2:30 p.m.**

Gary B. Karst

Mr. Karst is a groundwater hydrologist with the National Park Service's Pacific West Region and is stationed at Lake Mead National Recreation Area. He holds a Bachelor of Science degree in Geology from Idaho State University and a Master of Science in Hydrology/Hydrogeology from the University of Nevada (Reno). Mr. Karst is a registered Professional Geologist.

Prior to joining the National Park Service in 2008, Mr. Karst accumulated over 20 years of diverse professional experience in the private sector working as a consulting hydrogeologist in the areas of groundwater remediation, mining development, water resource development, and water resource protection. Mr. Karst provides technical support to National Park units in the western U.S., primarily on water-resources issues associated with protection of park water rights. He specializes in physical and quantitative groundwater hydrology.

Dwight L. Smith, P.E., P.G.

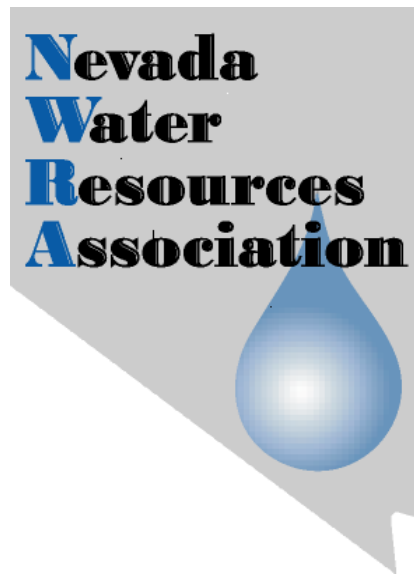
Dwight L. Smith is the Principal Hydrogeologist with Interflow Hydrology located in Truckee CA. Dwight obtained his Masters Degree in Hydrogeology from the University of Nevada, Reno, and his Bachelor Degree in Geological Engineering from the Colorado School of Mines. For over 20 years, he has practiced as a consulting hydrogeologist, completing many studies throughout Nevada and the western U.S. His areas of interest include sustainability in ground water resources development, numeric flow modeling, characterization of stream and spring resources, and striving to better understand basin-scale and watershed-scale recharge, subsurface flow, and discharge processes.

David J. Donovan

Mr. Donovan holds a B.S. in Geology from Northern Arizona University, and an M.S. in Geosciences from University of Nevada, Las Vegas.

Mr. Donovan started his professional career working in 1987 for Newmont Mining as a staff geologist (ore control and mapping). In 1991, he then began working worked for Las Vegas Valley Water District and then Southern Nevada Authority as a hydrologist. During these past two decades, he has researched and authored multiple publications on the hydrogeology of Las Vegas and other valleys in eastern Nevada. Topics have included; hydrogeologic framework, geochemistry, natural and artificial recharge and discharge

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**Midterm Report on Mine-related
Groundwater Pumping:
pre-dewatering projections,
observed effects, and updated
groundwater modeling results**

**Wednesday, March 7, 2012
2:45 p.m. – 4:00 p.m.**

Paul M. Pettit

Paul M. Pettit received his B. S. (geology) from Washington State University in 1978. Paul has thirty four (34) years of experience in the mining industry and has been employed by Newmont for the past twenty two (22) years. His current position is the Senior Environmental Manager for Newmont's Carlin Trend Operations with responsibilities that include management of Newmont's Nevada ground and surface Water Rights, Environmental Compliance, Permitting, Potable Water Systems, Environmental Monitoring and Hydrology.

Paul has been involved with mine hydrologic issues since the mid 1980's and has been involved with dewatering systems along the Carlin Trend since 1990. In addition, he has conducted hydrologic work at Lone Tree, Twin Creeks, Phoenix and the Cove mine.

Paul is President of the Newmont Legacy Fund Board of Directors and has served on the Board of Directors of the Nevada Water Resources Association from 1995 to 2009 and served two terms as President (2000 to 2002) and was Vice-President from 2008 to 2009. Paul has also served on the Statewide Advisory Council on Water Resources Research (ACOWRR) of the Desert Research Institute representing Newmont Mining Corporation

David E. Prudic

David Prudic has a B.S. in Geology from Southern Colorado State College, a M.S. in Geological Engineering from the University of Missouri, Rolla, and a PhD in Hydrogeology from the University of Nevada, Reno.

David was employed by the U.S. Geological Survey (USGS) for 31½ years. As a USGS hydrologist, his first assignment was in upstate New York where he studied subsurface flow and radionuclide movement from a radioactive-waste site in western New York. David moved to Carson City in 1980 and initially worked on studies of regional groundwater flow in the Great Basin, the Central Valley of California, and the Gulf Coast of Texas, Louisiana, and Alabama as part of a national program. Later work included many detailed studies in Nevada, and the development of computer programs linking groundwater flow with surface water. David retired from the USGS in 2008 and began teaching part time at the University of Nevada, Reno. He continues to study groundwater interactions with surface water in the Humboldt River basin and at Great Basin National Park.

Tom Myers, Ph.D.

Tom Myers is a researcher and consultant in hydrogeology and water resources. Tom specializes in groundwater modeling, hydrogeology, environmental forensics, regulatory compliance, water rights, NEPA analysis, and environmental and water policy. He focuses on mining and water resource development issues, coal-bed methane development and groundwater contamination.

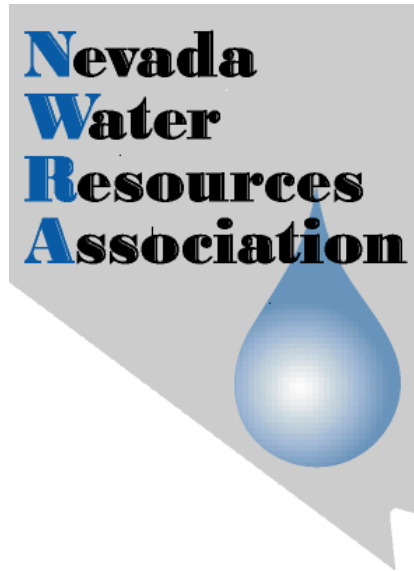
With a Ph.D. and M.S. in hydrology/hydrogeology and more than 28 years experience as a consultant, government planner, academic researcher, teacher and advocate for environmental responsibility and good science, Tom brings a strong technical, regulatory, and public relations background to his work. His work includes major hydrology studies for federal government, hydrogeologic assessments for county governments, expert and evidence reports for use in litigation and administrative hearings, expert witnessing for private industry and nonprofit groups, and testimony to Congress and National Academy of Science. Tom has testified as an expert before the Nevada State Engineer and State Environmental Commission. He has provided evidentiary testimony before federal court in Billings MT.

Because of his experience as a watchdog of government agencies and different industries, Tom has a unique background from which he draws on as a consultant. For example, he has worked to locate the source of pollution from many mines or to determine the cause of drawdown at private wells.

He combines a strong technical background with a working knowledge of state environmental and federal NEPA, BLM mining, water law and Clean Water Act regulations which enables him to work with attorneys and conservation groups.

Tom's experience and training uniquely qualifies him to provide diverse and affordable services to clients ranging from nonprofit conservation groups to law firms, industry and governments in many areas of hydrogeology and environmental and water policy. His client base includes nonprofit conservation groups, Native American tribes, the federal government and private industry.

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**Technical Session C:
Open Water Evaporation**

**Wednesday, March 7, 2012
2:45 p.m. – 4:00 p.m.**

Michael T. Moreo

Mike Moreo earned his B.S. from the University of Nevada, Reno in 1994 with a major in Hydrology and minor in Biology. Mike has conducted numerous groundwater investigations since beginning work as a Hydrologist for the USGS in 1998. He is currently the Evapotranspiration Specialist for the Nevada Water Science Center, and he is engaged in a variety of projects focused primarily on quantifying energy- and basin-water budgets.

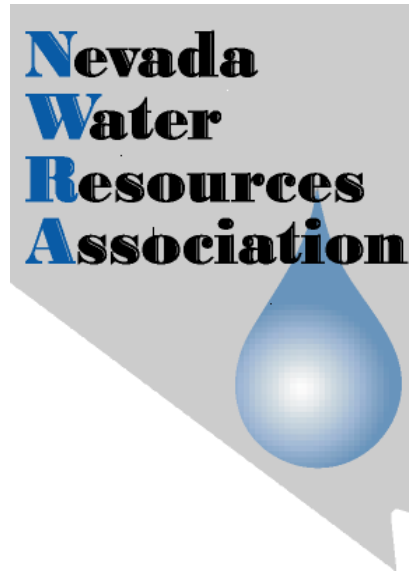
Todd Tietjen, Ph.D.

Dr. Tietjen (pronounced as Tea-gin) joined the Southern Nevada Water Authority in 2008 to work as their in-house limnologist examining water quality issues in Lake Mead. Prior to this he was an Assistant Professor of Aquatic Resources in the Department of Wildlife and Fisheries at Mississippi State University from 2004 to 2008. While at Mississippi State University he taught Limnology and Wetlands Ecology and conducted research on lakes of the Mississippi River Floodplain. From 2002 – 2004 he worked as a Postdoctoral Researcher with the USGS Grand Canyon Monitoring and Research Center examining nutrient and carbon dynamics in the Colorado River as it flows through Grand Canyon. Todd received his Ph.D. in Aquatic Ecology from the University of Alabama in 2002, a M.S. in Aquatic Biology from Southwest Texas State University in 1996, and a B.A. in Environmental Studies from Alfred University in 1990.

Justin Huntington

Justin Huntington is currently an assistant research scientist at the Desert Research Institute specializing in water resource topics related to hydroclimatology, evapotranspiration, recharge, runoff and large scale water budgets. Novel approaches and methods to characterize different water budget components are of special interest including space borne remote sensing techniques and water balance modeling. Other interests include potential climate change impacts to water resources and how these potential impacts affect water management strategies such as irrigation demands, minimum flow requirements, etc. Justin Huntington has been a member of NWRA since 2004.

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**Emerging Augmentation
Strategies**

**Wednesday, March 7, 2012
4:15 p.m. – 5:30 p.m.**

Nikolay Voutchkov, P.E., BCEE

With over 30 years of professional experience, fourteen of which as a Board Certified Environmental Engineer, **Mr. Voutchkov** has completed a wide range of engineering, planning and applied research projects in the field of desalination, conventional water supply, wastewater treatment and reuse. He has extensive expertise with all phases of project delivery: from conceptual scoping, pilot testing and feasibility analysis; to front-end and detailed project design; permitting; contractor procurement; project construction and operations oversight/asset management.

Currently, Mr. Voutchkov provides independent technical advisory services in the desalination field to public utilities and private consulting companies and investors in the USA and abroad. Between 1998 and 2009, Mr. Voutchkov was a Chief Technology Officer for Poseidon Resources - a private company specialized in the development of large water infrastructure/desalination projects. While with Poseidon Resources, Mr. Voutchkov had executive and engineering responsibilities for the implementation of some of the largest seawater desalination projects presently under development in the USA.

Besides successfully managing engineering, scientific and policy challenges associated with the wider acceptance and use of seawater desalination for municipal water supply, Mr. Voutchkov has been on the forefront of advancing applied research, technology and policy for cost-effective and environmentally safe production of fresh water from the sea.

Mr. Voutchkov is an active member of the WaterReuse Association – Desalination Committee; the American Water Works Association - Desalination and Membrane Process Committees; the American Membrane Technology Association, and the International Desalination Association.

Bruce Moore

Prior to arriving at SNWA in 2007, **Bruce Moore's** career spanned 32 years primarily in the Federal Government. The preponderance of the career was spent with the Bureau of Reclamation in three Regional Offices, a Project Office and Headquarters in Washington, DC. While with Reclamation he served more than 20 years as Regional Engineer in both the Upper and Lower Region Offices. He is currently the Acting Director of SNWA Surface Water Resources with responsibilities for Colorado River activities and national contact for Desalination and Water Reuse

Joe Maez, P.E.

Joe Maez has been with the Nevada Division of Environmental Protection since 1993 and is the supervisor for the compliance and enforcement branch of the Bureau of Water Pollution Control. His section is responsible for ensuring the clean water act compliance of Nevada permit holders that discharge to surface waters in the state. Additionally, his section also ensures compliance with permit holders that discharge to ground waters under the states groundwater permitting programs.

Mr. Maez is a registered professional Civil Engineer in Nevada and California. He served as president of the Nevada Water Environment Association, the States's WEF association and remains active with this group.

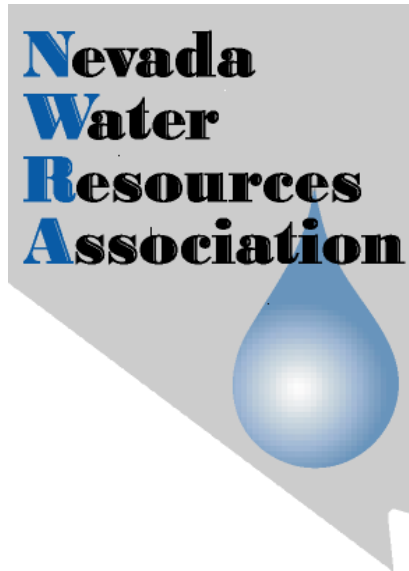
Arlen Huggins

Mr. Huggins is an Associate Research Scientist with the Desert Research Institute, Division of Atmospheric Sciences in Reno, Nevada.

Mr. Huggins has an active interest in applied research in both summer convective storms and wintertime storms. As a researcher on U.S. Bureau of Reclamation and NOAA-sponsored weather modification projects, Arlen has studied the physical effects of both airborne and ground-based cloud seeding on winter storm clouds, and produced several publications documenting the effects of seeding from cloud to ground. He is the Director of the [Nevada State Weather Modification Program](#), which is designed to augment snowfall in selected mountainous regions of Nevada.

Recent work includes evaluation of the Nevada program using plume dispersion modeling, radiometric measurements, ultra trace chemistry analysis of snowfall and hydrologic modeling to assess the impacts of snowfall enhancement on streamflow.

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**How Does Renewable Energy Tie
with Water in the State?**

**Thursday, March 8, 2012
8:30 a.m. – 9:45 a.m.**

Jack McGinley

Jack McGinley is a Renewable Energy Development Director for NV Energy and has the responsibility for the development of renewable generation projects. Mr. McGinley graduated from the University of Nevada Reno in 1984 and holds a Bachelor of Science Degree in Mechanical Engineering.

Upon graduation, NV Energy employed Mr. McGinley where he has held various management positions in Resource Planning, Supply Side Engineering, Demand Side Management, Power Contracts, Research and Development and Strategic Planning. Mr. McGinley has negotiated many renewable energy purchase power contracts and is the project manager on the Company's first renewable energy project, a waste heat recovery project located just outside of Las Vegas. Mr. McGinley was been appointed to and serves on the State of Nevada's New Energy Industry Task Force, Renewable Energy and Energy Efficiency Authority.

Thomas Clark

Mr. Clark is the Director of Legislative and Regulatory Affairs for Holland & Hart, primarily working in the Reno office. Mr. Clark provides non-legal government advocacy and media relations for the firm's clients.

Tom joined Holland & Hart in 2007 following seven years as the owner of his own company, Tom Clark Consulting. For more than 12 years, he has advocated on behalf of his clients before federal, state, and local governments, representing a variety of interest including renewable energy, energy, mortgage professionals, insurance, gaming, emergency medical services, telecommunications and land development. He also provides strategic consulting services for community education campaigns as well as state and local political campaigns. Tom actively represents law enforcement, treatment facilities, and the healthcare community in the fight against methamphetamine in the state, and successfully passed one of the most comprehensive anti-meth agendas in the nation at the 2007 legislature.

Prior to starting his own company, Mr. Clark was the Government Affairs Director for R&R Partners, Nevada's largest government affairs firm.

Mr. Clark started his political career in Nevada serving on Governor Bob Miller's staff in 1994.

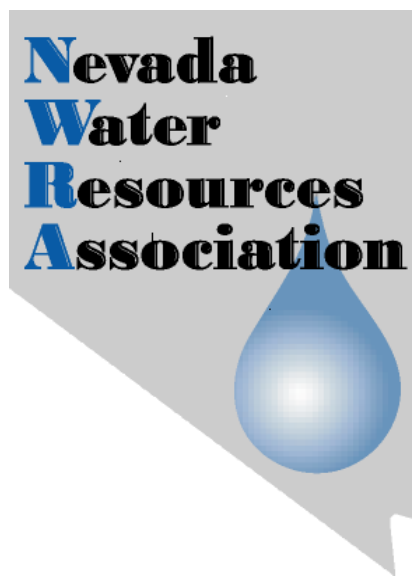
Max Walenciak, P.E.

Mr. Walenciak is a registered professional engineer with over 30 years of diverse project management experience including both gas-fired and geothermal power plants. His experience includes project planning, design development, permitting support, negotiation of key project development and operation agreements, and operations of power plants and associated facilities. He has an in-depth understanding of the design, procurement, and construction process from the owner/developer's perspective.

Mr. Walenciak is responsible for engineering, equipment procurement and contractor selection for the Company's planned 'Faulkner 1' geothermal power plant, well field and transmission line at Blue Mountain, Nevada. Mr. Walenciak will direct critical path scheduling and manage the overall construction effort.

Max Walenciak is based in Nevada Geothermal Power's Reno office

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**Technical Session D:
Modeling: A Water Resources Tool**

**Thursday, March 8, 2012
8:30 a.m. – 9:45 a.m.**

Brent A. Meyer, M.S.

Mr. Meyer is the primary groundwater flow modeler at GeoHydros having extensive experience with FEFLOW and the simulation of complex heterogeneous, anisotropic, and dual permeability aquifer systems. His responsibilities include groundwater flow and fate and transport modeling, geologic and solids modeling, geochemical modeling, and GIS. He is fluent in the ESRI suite of GIS software, and the geochemical modeling software, Visual MINTEQ and also has significant experience with EarthVision, MODFLOW, and surface water modeling with Spatial Analyst.

Mr. Meyer's more notable project examples include the design and calibration of a 3D regional-scale groundwater flow model for Bucks County, PA that embraced multiple lithologic units, regional scale faults, and anisotropic aquifer properties and was used to delineate wellhead protection zones through 3D particle tracking. He also developed two 3D dual-permeability regional-scale groundwater flow models for parts of north-central Florida that simulate the location and capacity of karst conduits, discrete spring discharges, and discrete swallet recharge and that calibrate to heads, spring flows, and tracer-defined groundwater velocities at both high and low water conditions.

As a geochemist, Mr. Meyer was responsible for designing a geochemical/microbiological laboratory for the University of Nevada and the USGS that performed growth experiments involving anaerobic iron reducing bacteria.

Kyle E. Richards, M.S.

Mr. Richards has a B.S. in Zoology from Colorado State University and a M.S. in Hydrology from Colorado School of Mines. He is currently pursuing a Ph.D. in Hydrology, also from the Colorado School of Mines.

Mr. Richards started his professional career at Arcadis U.S., working as a hydrogeologist providing support for groundwater remediation projects at various locations throughout the United States. This work included hydrogeologic analysis of remediation data, groundwater modeling and geophysical data collection and interpretation. He then began work at Colorado School of Mines as a research associate, initially supporting a project concerned with nitrate pollution resulting from the use of On-site Wastewater Treatment Systems. This was followed by coursework and research towards a Ph.D. with the primary project focused on geophysical work related to hydrothermal systems in Colorado.

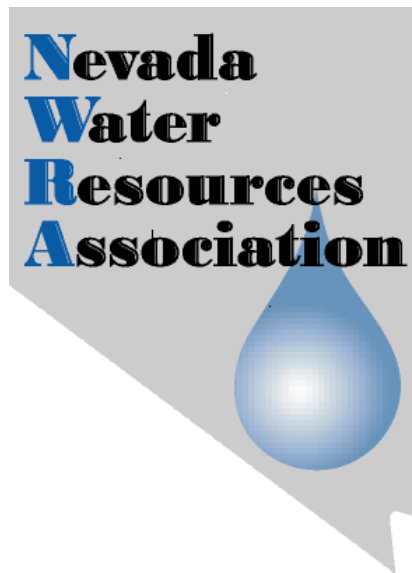
Mr. Richards is currently working with the USGS in Henderson working on the Death Valley Regional Flow System and Southern Amargosa Embedded Models.

Stephen Maples

Mr. Maples graduated with B.S. in Geological Engineering from the University of Nevada, Reno in August, 2010. He began working on his M.S. in Hydrogeology in fall 2010 as part of UNR's Graduate Program of Hydrologic Sciences. He is hoping to complete his thesis work in the spring of 2012.

Mr. Maples is a Graduate Research Assistant at the Desert Research Institute, in Reno, NV, and is currently conducting research under the supervision of Dr. Brian Andraski, at the USGS Nevada Water Science Center in Carson City, NV.

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**Technical Session E:
Resource Development
and Water Use**

**Thursday, March 8, 2012
10:15 a.m. – 11:30 a.m.**

Jeffrey Johnson

Jeff Johnson is a Division Manager, in the Surface Water Resources Department of the Southern Nevada Water Authority (SNWA), where he specializes in water resource investigations for groundwater development, surface water diversions, and Colorado River resources. He is a hydrogeologist with 20 years of experience that includes optimization of production/artificial-recharge wells in the Las Vegas Valley, water resource acquisitions and water rights, Colorado River modeling, and regional groundwater develop studies for water conveyance to Clark County, Nevada. His current activities include water resource planning and water development strategies for Colorado River resources, the Muddy and Virgin Rivers, and Coyote Spring Valley.

Dr. Robert L. Johnson

Robert Johnson is manager of the Warm Springs Natural Area for the Southern Nevada Water Authority (SNWA). As manager, Robert leads a staff of biologists and restoration experts to manage the 1,220-acre property as a Natural Area for recovery of the endangered Moapa dace and other native wildlife species. Robert came to SNWA from Brigham Young University (BYU) where he managed the Plant and Wildlife Sciences' research farm, and conducted research on methodologies to increase the availability of native seed for the restoration industry. He also actively participated in international research studying the effects of deforestation on the ecological services provided to subsistence farmers in Bolivia. Prior to working at BYU, Robert spent almost ten years working as a restoration ecologist at Dugway Proving Ground, an 800,000-acre Department of Defense military installation in western Utah.

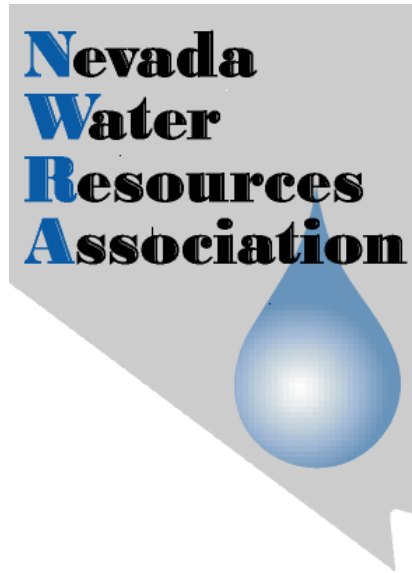
Alden C. Robinson, P.E.

Mr. Robinson has a B.S. in Civil Engineering from Utah State University.

Mr. Robinson has been active in developing renewable energy projects since 1984 with Sunrise Engineering, Inc. He has had “boots on the ground” experience in many segments of the energy development business. Current projects under his supervision and located throughout the western United States include: hydro electric, pumped/storage hydro, waste heat generation, geo-thermal and wind site development studies. Sunrise specialties include: feasibility and economic studies, hydrologic studies, equipment procurement, civil, mechanical and electrical engineering, construction administration, start-up, testing, FERC licensing, interconnect and power purchase agreements.

He is an active member of the National Hydro Association and Western Energy Institute. He lives in Fillmore, Utah where the Sunrise corporate headquarters are located and has worked at Sunrise Engineering since 1982. For the last two decades he has also been the President/CEO.

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Technical Session F: Water Quality

**Thursday, March 8, 2012
10:15 a.m. – 11:30 a.m.**

Xiaoping Zhou, Ph.D.

Dr. Zhou has a B.S. and a M.S. in Geology from Nanjing University in China, and an M.S. and a Ph.D. in Geosciences from University of Nevada, Las Vegas.

Dr. Zhou is a senior hydrologist with Southern Nevada Water Authority (SNWA), Regional Water Quality Division. He has more than 20 years of experience working on the geology, hydrogeology, and hydrology. His previous and current research focuses on geochemistry of groundwater and water quality monitoring in the Las Vegas Wash and its tributaries, Lake Mead, Muddy and Virgin Rivers, and constructed wetlands.

Timothy G. Rowe

Tim Rowe received B.S. degree in Fisheries/Wildlife Biology from California State University, Sacramento in 1978. He has been in government service for over 32 years, including with California Department of Fish & Game, U.S. Forest Service, U.S. Fish and Wildlife Service and the past 29 years with U.S. Geological Survey. Tim has served as a Hydrologist on many water-quality & quantity projects in California, Alaska, and the last 25 years in Nevada. Currently he is serving as Hydrologist with various projects and the USGS Lake Tahoe Liaison.

Jason Kuchnicki, M.S.

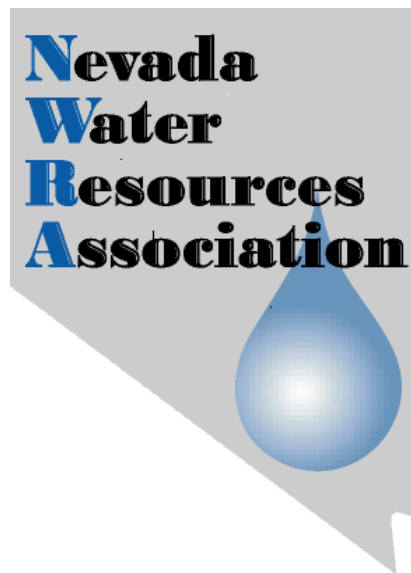
Upon graduating summa cum laude in 1994 from Kent State University with a B.S. in Geology, **Mr. Kuchnicki** relocated to the South Lake Tahoe. He worked as a Survey Technician for the USDA Forest Service, Lake Tahoe Basin Management Unit for 3 field seasons before enrolling in the University Of Nevada Reno's Graduate Program of Hydrologic Sciences. After receiving his M.S. in Hydrology, Mr. Kuchnicki was hired as an Environmental Scientist within the Nonpoint Source Pollution Management Program at the Nevada Division of Environmental Protection (NDEP). During the first five years at the agency, he worked primarily on nonpoint source issues in the Lake Tahoe, Las Vegas Wash and Truckee River watersheds. Within these watersheds, he served as the project manager for numerous nonpoint sources pollution control and restoration projects funding through NDEP's Section 319(h) grant.

Serving as the NDEP representative on multiple workgroups and committees involved with a variety of environmental and resource related issues in the Lake Tahoe watershed, Mr. Kuchnicki was promoted to Lake Tahoe Watershed Program Manager in March of 2006. Mr. Kuchnicki oversaw the development of the bi-state Lake Tahoe Total Maximum Daily Load (TMDL), including the Lake Clarity Crediting Program (Crediting Program). Mr. Kuchnicki was instrumental in securing funding and served as Project Manager for several Crediting Program associated stormwater tools, including the Pollutant Load Reduction Model and the Roadway Rapid Assessment Methodology as well as the agencies current collaborative effort with the State of California to develop a joint adaptive management and continuous improvement system by which the Lake Tahoe TMDL will be managed into the future. Within his future capacities, Mr. Kuchnicki will continue to collaborate, coordinate with entities for the implementation of the Lake Tahoe TMDL within Nevada Lake Tahoe and will furthermore provide oversight of implementation and continuous improvement efforts.

Kathryn L. Hoffmann

Kathryn Hoffmann has been employed by Clark County, Nevada, since 2006. Ms. Hoffmann's responsibilities include management and implementation of Water Quality Planning in Clark County, as well as Clark County's MS4 National Pollutant Discharge Elimination System permit. She served as project manager for the development of the 2009 Nevada APA DeBoers Award winning Clark County Area-Wide 208 Water Quality Management Plan, as required by Section 208 of the Clean Water Act. Prior to employment in Nevada, she worked in Lorain County, Ohio, to implement environmental policy in northeastern Ohio. Ms. Hoffmann received a BA from Miami University in Urban and Regional Planning, Geography, and Environmental Science. She received a Master of Public Administration from the University of Nevada, Las Vegas.

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Water: an Extraordinary Good

**Thursday, March 8, 2012
1:45 p.m. – 3:15 p.m.**

Allen Biaggi

Allen Biaggi is a third generation Nevadan from Douglas County and is a graduate of the University of Nevada, Reno with degrees in Hydrology and in Architectural Engineering Design.

Mr. Biaggi served as the Director of Nevada's Department of Conservation and Natural Resources (a cabinet level position) under governors Guinn and Gibbons and as the Administrator of the Nevada Division of Environmental Protection under governors Miller and Guinn. During his tenure with the State of Nevada, Mr. Biaggi served on numerous boards and commissions including The Commission on Workplace Safety, the Governor's Climate Change Committee, the Lake Tahoe Bi-State Fire Commission and sat on the Governing Board of the Tahoe Regional Planning Agency for six years, including three years as its chairman.

Mr. Biaggi retired in 2010 after more than 30 years of service. He is an avid cyclist, skier and hiker. He resides in Douglas County with his wife Linda.

Dan Keppen

Mr. Keppen is Executive Director for the Family Farm Alliance, a non-profit association that advocates for family farmers, ranchers, irrigation districts and allied industries in 17 Western States. He has twenty three years of experience in water resources engineering and policy matters. Since the mid-1990's, he has worked primarily in advocacy positions representing Western irrigators, including over three years as executive director of the Klamath Water Users Association, where he was intimately involved with one of the most contentious water crises in the West. In 2000-2001, he served under a one-year agreement as special assistant to the Mid Pacific regional director for the Bureau of Reclamation. Prior to that time, Keppen was a water resources engineer for Tehama County, California and a water resources engineering consultant in the Portland, Oregon area.

He is a Registered Professional Civil Engineer in California and a past Civil Engineer and Certified Water Rights Examiner in Oregon. He has been invited to testify before Congressional environmental and water committees fourteen times.

Keppen has been awarded a "Resolution of Commendation" by the California State Senate and was appointed by Gov. Kulongoski to serve on the Oregon Climate Change Integration Group. In 2009, he received the John Keys III Memorial Award from the Bureau of Reclamation for "Building Partnerships and Strengthening Relationships".

Keppen received his M.S. in Civil Engineering (Water Resources) from Oregon State University and his B.S. in Petroleum Engineering from the University of Wyoming.

Robert E. Lang, Ph.D.

Robert Lang is a nonresident senior fellow at Brookings and UNLV Director of Brookings Institute Mountain West. He is a professor of sociology at UNLV, director of the Lincy Institute, and a fellow of the Urban Land Institute. He received a Ph.D. in Urban Sociology from Rutgers University. His research has been featured in USA Today, New York Times, Washington Post, Wall Street Journal, and reported on by CNN, MSNBC, and NPR. He is author of *Boomburbs: The Rise of America's Accidental Cities*, and co-author on three edited volumes entitled *Redefining Urban and Suburban America*.

Recently, Brookings Mountain West published *Unify | Regionalize | Diversify: An Economic Development Agenda for Nevada*, a comprehensive analysis and roadmap for development opportunities, the state's competitive position and challenges it uniquely faces. Lang will draw from the study to expand upon Nevada's potential for growing its local economy through a variety of platforms, including industries with potential for expansion, new policy options that will enable the state and the private sector to work more effectively to build a more regionally vibrant and diversified Nevada.

Ted Koch

Ted Koch grew up in Connecticut, receiving his B.S. in Environmental Biology in 1985 from Southern Connecticut State University in New Haven, and his M.S. in Zoology in 1990 from Idaho State University in Pocatello. He has worked for the U.S. Fish and Wildlife Service since 1988, including implementing every major section of the federal Endangered Species Act (ESA); reviewing federal projects; supporting hydropower project relicensing; conserving habitat on National Wildlife Refuge Lands; and researching and managing species in native habitats.

He has been Bull Trout Coordinator, working to conserve this species throughout its range in the Pacific Northwest of the United States; Assistant Regional Director for Budget and Administration in the Service's Southwest Regional Office; staff to the Assistant Secretary of the Interior for Fish, Wildlife and Parks; Branch of ESA Consultation supervisor; acting Majority Staff Director for the Fisheries, Wildlife and Water Subcommittee of the U.S. Senate for Idaho's Senator Crapo; led negotiations for Habitat Conservation Plans under the ESA with Plum Creek Timber Company and the state of Idaho; staff to the Assistant to the Secretary of Agriculture, Office of Economic Assistance in Portland, Oregon, conserving old-growth redwood forests; and Idaho Wolf Recovery Project Leader reintroducing wolves to Idaho. He is currently the Nevada State Supervisor in Reno, overseeing all Ecological Services programs endangered species, fisheries restoration, private lands, federal agency support, and other programs.

He has published several professional articles on a variety of conservation and policy subjects, and one book, "The Amphibians and Reptiles of Yellowstone and Grand Teton National Parks," and he has served on the boards of several private conservation organizations, including most recently as president of the board of the Land Trust of the Treasure Valley in Boise, Idaho.