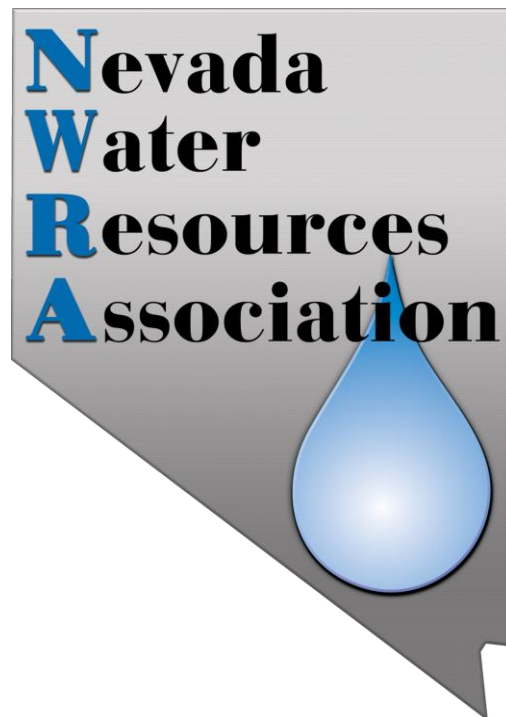
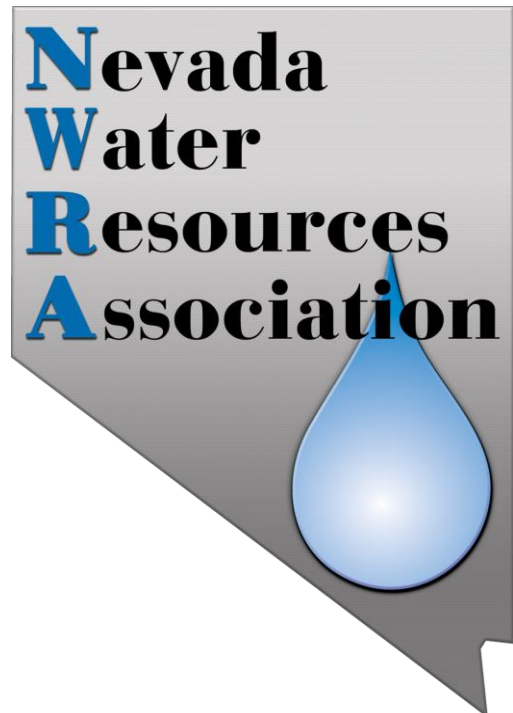


**2014 NWRA Annual Conference  
February 4-6, 2014  
Las Vegas, Nevada**



**Speaker Biographies**

# **2014 NWRA Annual Conference Las Vegas, Nevada**



## **Perspectives on 3M Plans Discussion**

**Tuesday, February 4, 2014  
5:45 p.m. – 7:00 p.m.**

## **Richard Felling**

**Mr. Richard Felling** has a B.S degree in Chemistry from Southern Utah University, an M.S. in Geology from the University of Colorado, Boulder, and an M.S. in Hydrogeology from the University of Nevada, Reno. He is a registered geologist in the state of California.

Mr. Felling's career has centered on resource development throughout the western U.S., South America and China, including mineral exploration and mining, water, geothermal exploration and the petroleum industry. For the last ten years he has worked for the Nevada Division of Water Resources, most recently in the position of Chief of their Hydrology Section. His work there deals primarily with the hydrologic aspects of water supply, including water availability and the effects of water development.

## **Stephen R. Palmer**

**Stephen R. Palmer** is an attorney in the U.S. Department of the Interior, Office of the Solicitor, Pacific Southwest Region, in Sacramento, CA. Mr. Palmer's areas of practice include water rights, Endangered Species Act, NEPA, Clean Water Act, procurement and contracts, realty, and Reclamation law in California, Nevada and Oregon. As an attorney in the Office of the Solicitor, Stephen represented the Bureau of Reclamation, National Park Service, U.S. Fish and Wildlife Service, Bureau of Indian Affairs and Bureau of Land Management in a variety of water rights matters throughout Nevada for over 20 years.

Prior to attending law school Mr. Palmer was a consulting hydrogeologist in Colorado, a member of the bar in the states of Washington and California and a licensed Professional Engineer in Colorado.

## **Pat Rogers**

**Mr. Rogers**, Vice President of Permitting and Environmental Compliance, joined General Moly in 2007, and has led the Company's permitting, land management, water rights, environmental programs and compliance for the Mt. Hope and Liberty projects. Pat also provides corporate level communications and direction throughout local, state, and federal channels. Mr. Rogers has over 27 years of environmental, permitting and regulatory compliance experience in mining and mill operations, primarily in Nevada.

Previous roles include building a successful consultancy as Elko Division Manager of JBR Environmental Consultants and serving as Environmental Manager at Newmont Mining Corporation.

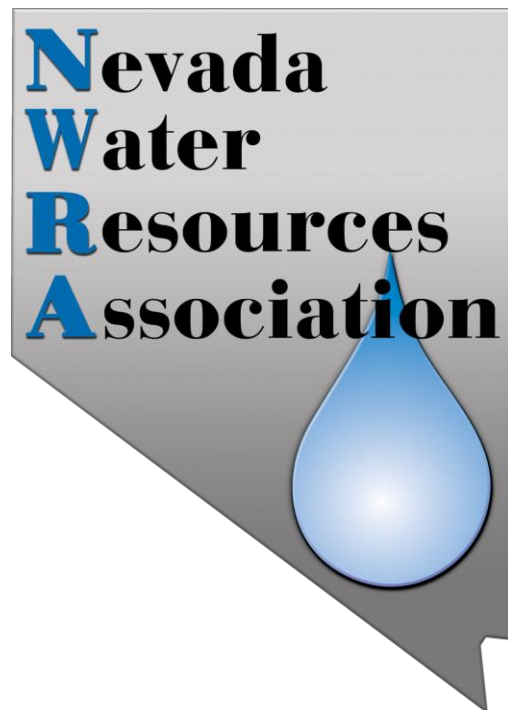
Mr. Rogers earned an MS and BS in Geology from the University of Idaho, and is a Certified Environmental Manager (NV) and Registered Professional Geologist (ID).

## **Gregory James**

**Gregory James** received his AB degree from the University of California, Santa Barbara, and his law degree from UCLA. He moved to Owens Valley in 1977. From 1977 to 2004, Mr. James represented Inyo County in many capacities, including that of Special Legal Counsel, County Counsel and Director of the Inyo County Water Department.

Since the beginning of 2005, Mr. James has continued to represent Inyo County as a private attorney, as well as representing other clients on water-related and other matters.

# **2014 NWRA Annual Conference Las Vegas, Nevada**



**Opening Keynote Presentation**

**Wednesday, February 5, 2014  
8:05 a.m. – 8:45 a.m.**

# Steven D. Hill

**Steve Hill** was recently appointed to the position of Director of the Governor's Office of Economic Development by Nevada Governor Brian Sandoval.

Mr. Hill is a founder of Silver State Materials, a concrete, sand and gravel supplier in the Las Vegas area since 1987. Silver State was purchased by CalPortland in 2008.

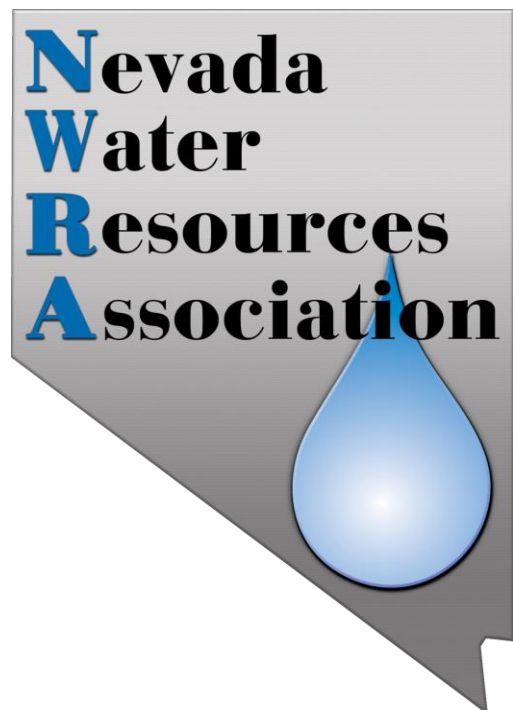
Prior to accepting his appointment, Mr. Hill served as CalPortland's Sr. Vice President, responsible for Nevada and Arizona operations, as well as Chairman of Service1st Bank of Nevada, Chairman of the Las Vegas Chamber of Commerce State Policy Task Force, and Commissioner on the Nevada Commission on Economic Development.

Mr. Hill is a past Chair of the Chamber's Board of Trustees and the Boys & Girls Clubs of Las Vegas. He has also served as Chairman of Government Affairs for the Las Vegas Chamber, the Associated Builders & Contractors and the Associated General Contractors.

In recent years Mr. Hill has served as a member of the Nevada Savings and Government Efficiency (SAGE) Commission, the Clark County Growth Task Force; the Trauma System Development Task Force; the RTC Regional Fixed Guideway Citizens Advisory Committee; the Clean Water Coalition; the legislative Interim Advisory Committee on Air Quality; and as Chairman of the Governor's Construction Liability Insurance Task Force.

Mr. Hill received a degree in Mechanical Engineering from Rose-Hulman Institute of Technology. He and his wife, Molly, are 24 year residents of Las Vegas and have 3 children.

**2014 NWRA Annual Conference  
Las Vegas, Nevada**



**Panel: Water and Agriculture in  
Nevada**

**Wednesday, February 5, 2014  
8:45 a.m. – 10:15 a.m.**

## Joy Morris

**Joy Morris**, National Fish and Wildlife Foundation. Joy manages NFWF's Walker Basin Restoration Program based in Reno and Yerington, Nevada. She currently serves as the Program's lead water acquisition negotiator, oversees a growing array of field operations and stewardship activities, and spends a significant amount of time sharing information about the Program with local ranchers and landowners as well as organizing and facilitating a variety of research and demonstration projects. Joy has worked in the Walker Basin for more than six years, serving as the U.S. Fish and Wildlife Service's Walker River Restoration Coordinator before joining NFWF in 2009. Over the last decade Joy has also worked as a research assistant and environmental consultant in New Mexico and Nevada, where much of her work focused on water contamination issues. She holds a Bachelor of Science in Geology from the New Mexico Institute of Mining and Technology, and a Master of Science in Hydrogeology from the University of Nevada-Reno.

## Jay Davison

**Jay Davison** is an Associate Professor and Area Forage and Alternative Crop Specialist in the Central/Northeastern Area of the University of Nevada Cooperative Extension. He has a Bachelor of Science degree in rangeland management and Master of Science degree in Plant Science. Jay has been employed by Cooperative Extension for over 28 years, the last 15 as a Specialist in forages and alternative crops. Prior to joining Extension, Mr. Davison was employed for 5 years as agriculture/natural resource management consultant in Nevada.

Jay has published over 100 peer reviewed articles, fact sheets, book chapters, abstracts and Extension bulletins related to agricultural production systems in Nevada. He is a native Nevadan and has had the pleasure of working in all corners of the state over the last 33 years. His current primary assignment is testing alternative crops adapted to Nevada conditions.

## Loretta Singletary, Ph.D.

**Loretta Singletary** is a Professor and Interdisciplinary Outreach Liaison with University of Nevada Cooperative Extension. In this role she works with university campus and field based faculty to expand outreach teaching and research programs that require an interdisciplinary approach to effectively address critical issues facing Nevada's communities. Dr. Singletary is recognized for her work in collaborative problem solving to sustain community and natural resource ecosystems.

Dr. Singletary was a State Extension Specialist in Rural Development in the Department of Agricultural Economics and Rural Sociology at Penn State University prior to joining



University of Nevada, Reno faculty in 1997. She is a native of South Carolina and alumna of Clemson University where she earned a Ph.D. in Applied Economics.

## **Paul Mathews**

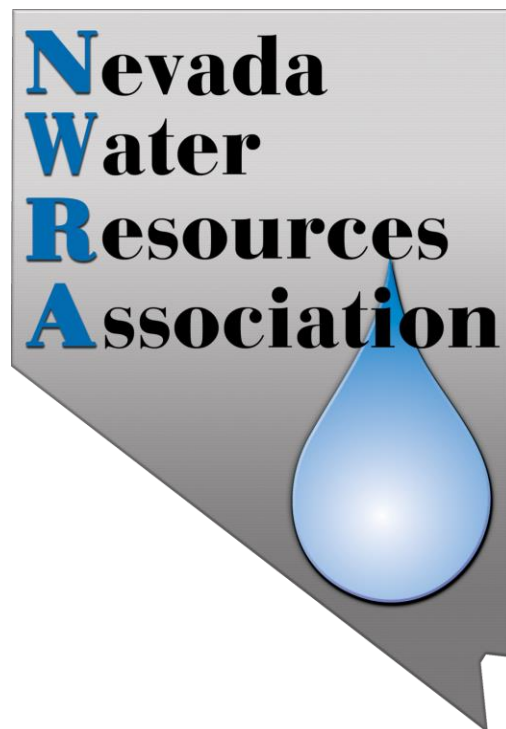
**Paul Mathews** has been a long time Farmer and Rancher of Lincoln County Nevada. He graduated from Brigham Young University in 1998 with a degree in Animal Science. Then shortly after, in 2001, Paul became involved in the Nevada State Farm Bureau Federation. He competed in both the State and National Discussion Meet Contest as well as the State and National Achievement Award Contest and ultimately took home a small yard tractor as a result of placing 2<sup>nd</sup> in the National Contest. Paul then presided over policy development as the State Farm Bureau Vice President for the next 7 years.

Mr. Mathews is now currently serving as the local Lincoln County Farm Bureau President.

Paul has served as a Lincoln County Commissioner for 6 years and hopes to continue on. He currently serves as the Chairman of the Lincoln County Water District.

Paul has also enjoyed volunteering his time and talents to help out with both the 4H and FFA programs in this area whenever he can.

**2014 NWRA Annual Conference  
Las Vegas, Nevada**



**Panel: Water and Tourism**

**Wednesday, February 5, 2014  
10:30 a.m. – 12:00 p.m.**

## Terry Jicinsky

**Terry Jicinsky** is senior vice president of operations for the Las Vegas Convention and Visitors Authority (LVCVA), overseeing the day-to-day operations of the Las Vegas Convention Center and Cashman Center. The 3.2 million square foot Convention Center is the third largest center in North America and has helped Las Vegas achieve the No. 1 trade show ranking in North America for 17 years. Cashman Center serves as the home stadium for the AAA Baseball team, the Las Vegas 51s. With over 25 years experience in the travel and tourism industry, his career path has covered aspects ranging from consumer travel research, internet marketing, database marketing and hotel management. Mr. Jicinsky previously served as the senior vice president of marketing for the LVCVA, stewarding the world-renowned branding campaign, "What happens Here Stays Here <sup>TM</sup>."

Before joining the LVCVA in 1992, Mr. Jicinsky's work experience included consulting positions with the national accounting firms of Laventhol & Horwath and Coopers & Lybrand, as well as management positions with Marriott hotels.

Terry is a member of the International Association of Convention Centers, the International Association of Venue Managers and has previously served on the board of directors for the Destination Marketing Association International, the International Association of Convention and Visitors Bureau Foundation, the International Travel and Tourism Research Association and the Las Vegas American Marketing Association.

Terry's accomplishments also include getting his Master's in Hospitality Administration at the University of Nevada, Las Vegas; Bachelor's in Hotel & Restaurant Management – University of Wisconsin, Stout; Certified Destination Management Executive; Named to Hospitality Sales & Marketing Association International's (HSMAI) Top 25 Most Extraordinary Minds in Sales & Marketing and Graduate of Las Vegas Chamber of Commerce Leadership Program.

## Brian McAnallen

**Brian McAnallen** serves as the Las Vegas Chamber of Commerce as Vice President of Government Affairs. Mr. McAnallen oversees the Chamber's legislative advocacy and public policy efforts and works with the Government Affairs Committee.

Mr. McAnallen brings more than twenty years of experience working directly with city, state, and federal lawmakers, government agencies, and public affairs professionals. He previously served as Director of Legislative Affairs for CenturyLink, where he was the primary liaison at the Nevada State Capitol during the legislative session and worked closely to develop and implement strategies to advance the company's legislative agenda. Brian also has more than thirteen years as a chief government

affairs representative for a variety of organizations, including the Arizona Chamber of Commerce and the American Cancer Society. He served in the public sector as a staff member for the Speaker of the Arizona House of Representatives and two U.S. Representatives from Arizona. Brian's political experience includes managing several local and state legislative campaigns, experience with federal races, and managing a successful statewide ballot campaign in 2002.

## **Robert E. Lang, Ph.D.**

**Robert Lang** is a nationally recognized authority on urban growth, economic development, and population dynamics, including the interplay between politics and growth in the American West. Mr. Lang is often called on by national business leaders and media to provide an understanding economic recovery in the west (including Nevada), what elements led to the region's economic decline, and what it will take to bring it back.

Robert's research specialties include suburban studies, real estate, demographic and spatial analysis, economic development, and metropolitan policy.

Mr. Lang has authored more than 150 academic and professional publications and has developed many new urban planning concepts such as "Boomburbs," "Edgeless Cities," and "Megapolitan Areas." His new book, *Megapolitan America* (American Planning Association), details the rise of megapolitan areas and how they will change how American plans. He is also a contributor to the new book *America's New Swing Region* (Brookings Institution Press), which examines the profound economic, political, and social changes that continue to reshape the Mountain West. Mr. Lang's research has been featured in numerous media outlets, including USA Today, New York Times, Washington Post, Wall Street Journal, NPR, CNN, MSNBC, and FOX News.

Mr. Lang is a professor in the Greenspun College of Urban Affairs and serves as the UNLV director of Brookings Mountain West and the executive director of The Lincy Institute at UNLV. He is a nonresident senior fellow at the Brookings Institution and a fellow of the Urban Land Institute, both in Washington, D.C.

Robert earned a Ph.D. in urban sociology from Rutgers University.

# Jessica Rosman

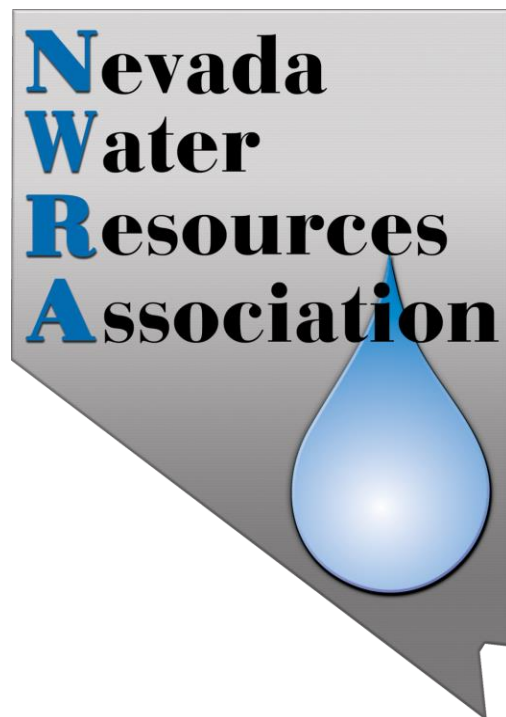
**Jessica Rosman** is the director of supplier diversity and sustainability for Caesars Entertainment's Sourcing Team. Her work is focused on operational efficiency programs as well as maintaining Caesars' commitment to a diversified pool of vendors and working with developing businesses to help them grow. Jessica is an integral part of Caesars Entertainment's CodeGreen and Sourcing Teams, driving recycling programs and creating corporate contracts across 37 properties.

Combining diversity and sustainability into her sourcing role, Ms. Rosman leads the company's efforts in identifying, recruiting and positioning a diverse group of entrepreneurs to grow their business in innovative ways through mentor protégé relationships.

Prior to joining Caesars in 2008, Jessica consulted for smaller Mexican enterprises on behalf of the Government of Mexico in the areas of Brand and CSR. A native Las Vegas, she is involved in the Boys and Girls Clubs, Ya Es Hora, Water Conservation Coalition, Nevada US Green Building Council (USGBC), JewEL Leadership program and the Clean the World program.

Ms. Rosman has an MBA from Cornell University's Johnson School of Management and was active in their Center for Sustainable Global Enterprise. She received her bachelor's degree in International Development Studies from UCLA and was selected as a 2007 Fulbright Scholar in Mexico to further her work making Mexican companies more efficient and better CSR partners.

# **2014 NWRA Annual Conference Las Vegas, Nevada**



## **Technical Session A: Water Supply**

**Wednesday, February 5, 2014  
1:45 p.m. – 3:15 p.m.**

## **Catherine R. Hansford, B.S., M.S.**

**Ms. Catherine Hansford** is the principal of Hansford Economic Consulting which provides resource and regional economics consulting services. Ms. Hansford's experience has been garnered through working in both the private and public sectors over the past eighteen years, frequently working on multi-disciplinary teams.

Ms. Hansford is a practitioner of financial, economic, and resource sciences, and an enthusiast of collaboration with a passion for the water industry. Ms. Hansford assists clients with fiscal and financing issues, infrastructure funding issues, and economic development opportunities.

Ms. Hansford has a Masters degree in Agricultural Economics from the University of Nevada, Reno and a Bachelors degree in Rural and Environmental Economics from the University of Newcastle upon Tyne.

## **Nathan Harper**

**Mr. Nathan Harper** has a B.A. and M.A. in Anthropology from Wichita State University with a focus on Biological Anthropology and Archaeology of the Eastern Mediterranean and American Southwest.

Mr. Harper has undertaken archaeological research in Cyprus, Greece, Turkey, Jordan and Israel to help answer questions of Mediterranean migration. Work in the American Southwest has addressed questions of early Americans and the advent of agriculture.

Mr. Harper has been with the Las Vegas Valley Water District since 2010 as the Preserve Archaeologist, working to protect and manage the cultural resources of the Springs Preserve, Warm Springs Natural Area, and the Las Vegas Wash in the Clark County Wetlands Park.

## **Stephen Maples**

**Mr. Stephen Maples** graduated with a B.S. in Geological Engineering from the University of Nevada, Reno in 2010. He graduated with a M.S. in Hydrogeology from the University of Nevada, Reno in 2012.

Mr. Maples began his career as a hydrologist with the USGS Nevada Water Science Center in 2012.

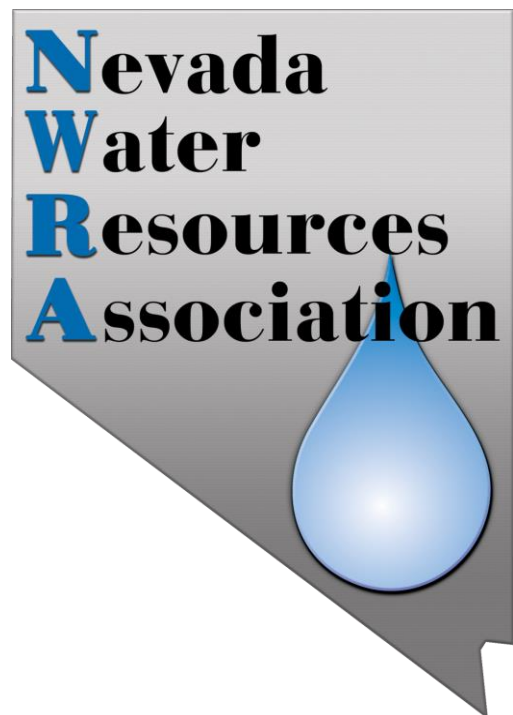
# James Prieur

**James Prieur** is a Senior Hydrologist in the Water Resources Division of the Southern Nevada Water Authority (SNWA). He has a Bachelor of Science in Geology and Environmental Science from the University of Illinois and a Master of Science in Water Resources specializing in Hydrogeology from the University of Wisconsin. James is a licensed Professional Geologist.

Mr. Prieur has over thirty years of professional experience in applied hydrogeology and has performed studies throughout the United States and internationally. He joined SNWA in 2006. Prior to this, he was a founder and Principal Hydrogeologist for Delta Environmental Consultants, Inc. Earlier in his career, Mr. Prieur worked on the Safe Drinking Water Program for the Illinois Department of Public Health and as a Hydrogeologist with NUS Corporation, a Halliburton Company, on the USEPA Superfund program.



**2014 NWRA Annual Conference  
Las Vegas, Nevada**



**Concurrent Technical Session B:  
Adapting to Climate Change**

**Wednesday, February 5, 2014  
1:45 p.m. – 3:15 p.m.**

# Keely Brooks

**Ms. Keely Brooks** has a B.A. in Geology from Skidmore College, and a M.S. in Geology from Syracuse University.

Keely Brooks joined Southern Nevada Water Authority (SNWA) in 2010 as a policy analyst with specific focus on climate change. She is responsible for monitoring climate change research, advances in mitigation and adaptation strategies and legislative initiatives. She also evaluates climate change research and their implications and impacts on long-term water resources planning, treatment and operations for the SNWA and Las Vegas Valley Water District. As part of this responsibility, Keely led an internal work group in an activity to assess the vulnerability and risk of critical SNWA assets to climate change impacts, and this group is now focused on developing the cost and effectiveness of different adaptation strategies to reduce these risks. She represents SNWA on climate change subcommittees for several national trade organizations, including the Water Utility Climate Alliance.

Prior to joining SNWA, Brooks was a modeling analyst with Navarro Research and Engineering, and conducted performance assessments for the Department of Energy. She received her Bachelor's in Geology from Skidmore College, in Saratoga Springs, NY, and she holds a M.S. degree from Syracuse University in Geology. Keely's graduate work focused on reconstructing past climates of lowland tropical Africa using geophysical methods.

# Derek Kauneckis, Ph.D.

**Professor Derek Kauneckis** has a Ph.D. in Public Policy from Indiana University Bloomington and a M.S. from the University of California Davis. He is currently an associate professor in the Political Science Department at the University of Nevada Reno where he teaches public policy analysis, policy theory, public finance and budgeting, environmental policy, renewable energy policy, and climate change adaptation and mitigation policy. His research interests include climate adaptation policy, property rights and natural resources, policy instrument design, multi-level governance and science and innovation policy. Prof. Kauneckis is the recipient of numerous teaching and mentoring awards and conducts research and consults with government agencies, private firms and non-profit organizations in the region and internationally.

## **Al Preston, Ph.D., P.E.**

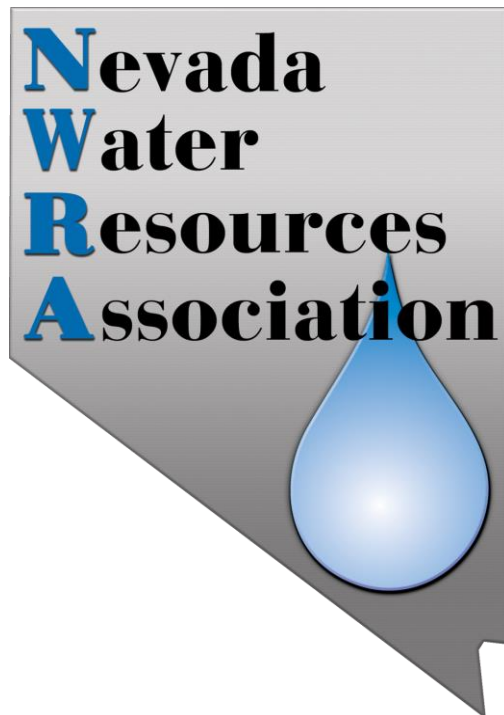
**Dr. Al Preston** is a Project Engineer at Flow Science Incorporated and is the technical lead for the Surface Water Quality & Hydrodynamics practice. He has been with the company since receiving his Ph.D. from Caltech in 2004. His field of specialization is fluid mechanics, hydrodynamic and water quality modeling, and cavitation dynamics.

At Flow Science Al has primarily worked on hydrodynamic simulations and water quality modeling of coastal outfalls, rivers, lakes and reservoirs. He has worked extensively on the development of a three-dimensional, hydrodynamic and water quality model for Lake Mead and the application of the model to situate a new drinking water intake, examine the effects of a deep-water diffuser discharge, and to investigate the effects of climate change on water quality.

## **Todd Tietjen, Ph.D.**

**Todd Tietjen** is the Limnology Project Manager with the Regional Water Quality group at the Southern Nevada Water Authority. In this role Todd focuses on water quality issues in Lakes Mead and Mohave as well as associated aquatic systems. He received his Ph.D. in Aquatic Ecology from the University of Alabama, a M.S. in Aquatic Biology from Southwest Texas State University. Todd is currently the Regional Director for the North American Lake Management Society.

**2014 NWRA Annual Conference  
Las Vegas, Nevada**



**Panel: Economic Perspective on  
Water Resources and Energy**

**Wednesday, February 5, 2014  
3:45 p.m. – 5:15 p.m.**

## **James E. Faulds, Ph.D.**

**Dr. Faulds** has been with NBMG since 1997, originally as a Research Professor and since January 2012 as Director and State Geologist. He specializes in structural geology, tectonics, and geothermal systems. Jim has studied crustal deformation in many parts of the world, including several regions of the western U.S. and western Turkey. Much of his research has focused on how fault systems initiate and evolve through time. Jim has published widely on extensional and strike-slip tectonics and the structural controls on geothermal activity. For the past 10 years, he has been analyzing geothermal systems in the western U.S. and western Turkey and is currently preparing a catalogue of the structural settings of >400 geothermal systems in the Great Basin region. Jim's geothermal work included a one-year sabbatical fellowship from the Le Studium program in France that facilitated work in Turkey. His research has contributed to developing more sophisticated exploration strategies for geothermal systems. He has also taught courses in structural geology, tectonics, geothermal exploration, and field geology, including directing UNR's geology field camp for 5 years. Jim has served as advisor for about 20 graduate students. He also previously served as President of the Nevada Petroleum and Geothermal Society.

Dr. Faulds earned his B.S. (with highest honors) at the University of Montana, his M.S. at the University of Arizona, and his Ph.D. at the University of New Mexico. Following completion of his education, he held postdoctoral research positions at the University of Nevada, Las Vegas and at the University of Southern California. Jim was on the faculty at the University of Iowa for several years before coming to UNR.

## **Brenda Shank**

**Ms. Brenda Shank** is the Director of Renewable Energy Strategy and Development for NV Energy. In her current role, Ms. Shank's responsibilities include overseeing NV Energy's efforts to develop renewable energy facilities, which include wind, solar, and geothermal in various stages of development. Additionally, she is responsible for preparation of resource plan filings pertaining to renewable energy planning and strategy for the two regulated utilities of NV Energy, ensuring compliance with all Nevada statutes and regulations. Ms. Shank began her career with NV Energy, then the Nevada Power Company, in 1994 as a Transmission Engineer. During her tenure at the company, she has held various roles, including Project Management, Construction Management, System Control and Environmental Analysis. Ms. Shank has played a key role in many projects for NV Energy, ranging from the construction of countless transmission lines and substations to construction of its first 500 kV transmission power line.

Prior to moving to Nevada, Ms. Shank spent nine years in the mining industry in Arizona while attending the University of Arizona to earn her B.S. in Civil Engineering.

## **Randal B. Peterson**

**Randal B. Peterson** manages the permitting group for Ormat Technologies, based in Reno, Nevada. Primarily responsible for obtaining federal, state, and local permits for Ormat's projects in North America, Mr. Peterson serves as Ormat's principal liaison to regulatory agencies and local stakeholders and provides support in regulatory compliance, interconnection processes, and due diligence.

Before coming to Ormat, Mr. Peterson spent 30 years in electric power generation, 18 of which were for Constellation Energy, where he was directly involved in renewable power generation, most recently as General Manager of Constellation's biomass power plant operations.

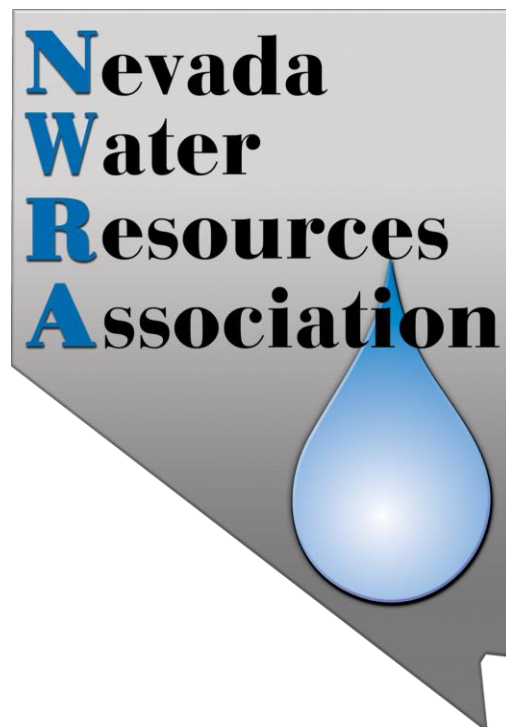
Mr. Peterson received his Bachelors and Masters of Business Administration degrees from the University of Phoenix, Sacramento Campus.

## **Andrew Wang**

**Andrew Wang** is the Director of Development for SolarReserve, LLC. With 20 years of commercial and technical experience in the clean energy sector, Mr. Wang develops utility-scale concentrating solar power (CSP) projects with focus on US and China opportunities. Prior to SolarReserve, Mr. Wang successfully originated and managed 3,000 MW of wholesale power contracts at Southern California Edison (NYSE: EIX), a leading national purchaser of renewable energy. Previous responsibilities include global marketing and sales positions for Capstone Turbine (NASDAQ: CPST), the world's leading provider of microturbine DG solutions, and program management for conversion of landfill gas to heavy duty CNG vehicle fuel at the former Puente Hills Landfill, one of the largest municipal solid waste landfills in the US.

Mr. Wang holds a BS in Mechanical Engineering from the University of California Berkeley, an MS in Environmental Engineering from Stanford University, an MBA from the Anderson School at UCLA, and is a licensed Professional Engineer in California.

# **2014 NWRA Annual Conference Las Vegas, Nevada**



## **Technical Session C: Water Quality**

**Thursday, February 6, 2014  
8:00 a.m. – 9:00 a.m.**

## **Angela Paul**

**Angela Paul** has a B.S. in Environmental Toxicology from the University of California Davis, a M.S. in Environmental Toxicology with an emphasis in Ecotoxicology from Clemson University, and a M.S. in Environmental Sciences and Health with an emphasis in Environmental Chemistry from the University of Nevada, Reno.

Ms. Paul started her career with the United States Geological Survey in June 1998 and has largely been involved with local water-quality related studies and with projects associated with the USGS National Water Quality Assessment Program. In September 2011 Ms. Paul began her position as Water Quality Specialist for the USGS Nevada Water Science Center. Today Angela will be presenting on work that was performed as part of the USGS National Water Quality Assessment Program.

## **Michael R. Rosen, Ph.D.**

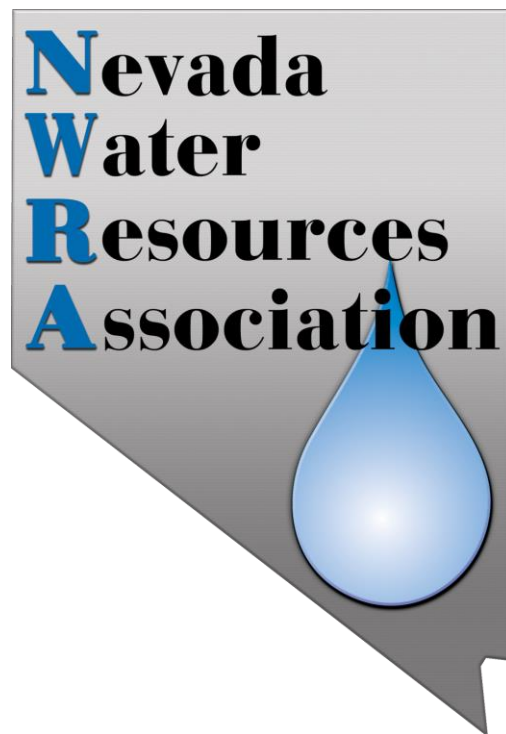
**Dr. Michael R. Rosen** joined the USGS in 2001. He is currently the Water Quality Specialist for the Western US for the Water Science Field Team. Michael was a Research Hydrologist based in Carson City from 2001 to 2011 working on both surface and groundwater water quality issues. He is also an adjunct professor in the Dept. Geological Sciences and Engineering and the Hydrological Sciences Program at the Univ. Nevada – Reno. Mr. Rosen was previously employed at the Institute of Geological and Nuclear Sciences, New Zealand, the Div. of Water Res., CSIRO and Curtin Univ. Tech. in Western Australia, and the Limnological Res. Center at the Univ. Minnesota. Michael received his BS in Geology at Haverford College, his MS from the Univ. Rochester and his PhD from the Univ. Texas - Austin.

## **Zachary Walter**

**Zachary Walter** has a B.S. in Hydrogeology with minors in Math and Chemistry from the University of Nevada, Reno. He has worked at Farr West Engineering since 2009 and is involved in public drinking water quality and supply.



**2014 NWRA Annual Conference  
Las Vegas, Nevada**



**Concurrent Technical Session D:  
Innovations**

**Thursday, February 6, 2014  
8:00 a.m. – 9:00 a.m.**

## Keith Halford

**Keith Halford** has been a U.S. Geological Survey hydrologist since 1987 and worked in Louisiana, Florida, Nevada, and California. His areas of expertise are aquifer tests, borehole geophysics, geostatistics, ground-water simulation, and parameter estimation. Developing methods and software for modeling water levels to estimate drawdowns has been the focus of recent publications.

## Justin Huntington, Ph.D.

**Justin Huntington** is an assistant research professor of Hydrology at the Desert Research Institute (DRI) in Reno. Justin received his Ph.D. in Hydrology from the University of Nevada, Reno in 2011. His interests include estimation of basin and field scale water and energy budgets, groundwater recharge, consumptive use, remote sensing, and surface and groundwater interactions.

## Marjorie L. Sant

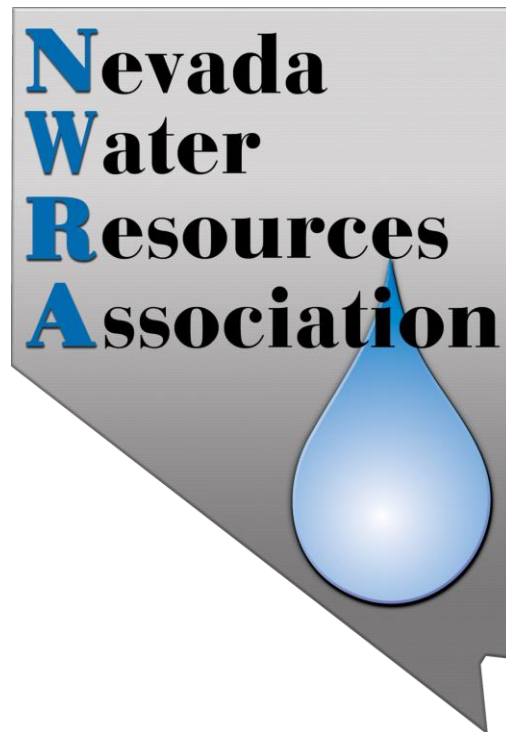
**Ms. Marjorie L. Sant** has a J.D. from the University of Colorado, School of Law and a B.A. in Economics *cum laude* from the University of Colorado, Boulder.

Ms. Sant practices water rights law in Colorado. Having grown up in the West, Ms. Sant is acutely aware of the vital importance of water rights and their operation in the region. She advises clients on all aspects of Colorado water rights, including applications to the water court for conditional and absolute water rights, changes of water rights, exchanges and augmentation plans, as well as actions before state administrative agencies.

In addition, Ms. Sant routinely represents clients with regard to all aspects of transfers of water rights, including due diligence investigation, title review and proper documentation unique to water rights conveyance. She represents a wide range of clients, such as ditch companies, recreational interests, municipalities, special districts, energy providers and agricultural users. Ms. Sant regularly works with developers, municipal water providers, engineers and water administration officials.

After graduation from law school, Ms. Sant worked as the law clerk to the Hon. Roger A. Klein, Water Judge for the Division 1 Water Court and Chief Judge of the 19th Judicial District in Colorado where she provided substantial assistance preparing substantive court orders. During law school, she served as notes and comments editor for the *Colorado Journal of International Environmental Law and Policy*.

# **2014 NWRA Annual Conference Las Vegas, Nevada**



**Panel: Economic Development  
and Urban Water Supplies**

**Thursday, February 6, 2014  
9:15 a.m. – 10:45 a.m.**

## **Eric Dickenson, Ph.D.**

**Dr. Eric Dickenson** received his B.S. in Chemical Engineering from the University of California at Davis and doctorate in Civil Engineering from the University of Colorado at Boulder. He is currently a Project Manager for the Water Quality-Research and Development group at the Southern Nevada Water Authority. Before joining the SNWA team in 2011 he was a Research Professor at the Colorado School of Mines. His research primarily focuses on the occurrence and treatment of trace organic contaminants in drinking water, wastewater, and water reuse treatment systems. He has served as principal and co-principal investigator for several water reuse projects funded by the WaterReuse Research Foundation, Water Research Foundation, Water Environment Research Foundation, USDA, US EPA and NSF.

## **Jim Smitherman**

**Jim Smitherman** has been the Program Manager for the Western Regional Water Commission and the Northern Nevada Water Planning Commission since they were created in Washoe County by the 2007 Nevada Legislature. Program responsibilities include development of the Washoe County area Comprehensive Regional Water Management Plan. During the preceding seven years he served in a similar role managing the Washoe County Regional Water Planning Commission. Prior to this, Mr. Smitherman worked for 10 years as an Environmental Scientist at the Nevada Division of Environmental Protection.

Jim's education includes degrees in geology from California State University Chico and the University of Idaho.

## **John Hester**

**John Hester** concluded his first attempt to retire by becoming the Planning Director for the Tahoe Regional Planning Agency. At TRPA he is responsible for Long Range Planning, Transportation Planning, Current Planning and Code Compliance. He is also currently serving as the Acting Research and Analysis Director.

Before his first attempt to retire in June 2011, John was an Assistant City Manager for the City of Reno, Nevada. He also served the City as Community Development Director and Redevelopment Agency Administrator. Prior to joining the City of Reno staff in 1998, Mr. Hester served Washoe County, Nevada for over 17 years in various capacities including Community Development Director, Acting Water Resources Director, and Director of Comprehensive Planning. Before moving to Northern Nevada he was employed as a planner for the regional planning agency in the Cincinnati, Ohio

area, the regional planning agency in Dallas/Fort Worth and in urban design with the City of Fort Worth, Texas.

John was named "Planner of the Year" by the Nevada Chapter of the American Planning Association and "Public Administrator of the Year" by the Sierra Nevada Chapter of the American Society for Public Administration. He has given presentations at various national conferences, been a guest speaker and lecturer at a number of universities, and he and his staff have received numerous awards including an American Planning Association National Planning Award. John has served as a member of the Nevada Small Business Development Center State Advisory Board, the State Land Use Planning Advisory Council, State Advisory Board on Water Resource Planning and Development, and has also served as an officer for the Nevada Chapter of the American Planning Association.

In addition to his professional involvement, John has served on the boards of various community organizations including Keep Truckee Meadows Beautiful and the Nevada Land Trust, and as President of the Parent Faculty Association and Chair of Silent Auction Committee for the elementary school his son attended. He currently serves on the Board of Trustees for Sage Ridge School, a college preparatory school in the Reno area, and as a City of Reno Civil Service Commissioner.

Mr. Hester has a Master of City and Regional Planning and a Bachelor of Science in Architecture from the University of Texas at Arlington, and he is a member of the American Institute of Certified Planners.

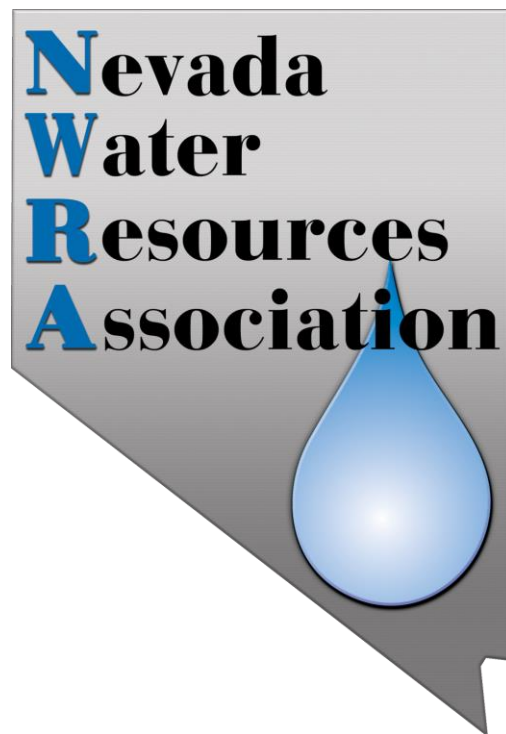
## **Zane Marshall**

**Zane Marshall** is the Director of the Water & Environmental Resources Department of the Southern Nevada Water Authority (SNWA). A Las Vegas native, Zane leads five divisions that manage water, land and environmental resources, and implement water conservation programs for southern Nevada.

Zane has a Bachelor's of Arts in Environmental Studies and Biology, and a Masters of Arts in Science in Biology and Statistics from the University of Nevada, Las Vegas. He is a member of several professional organizations, including the Association of Metropolitan Water Agencies, and he has been qualified as an expert witness in biological resources by the Nevada State Engineer.

Zane currently serves on the Board of Directors for the Great Basin Bird Observatory, is a National Park Service volunteer member of the Devils Hole Dive Team, and served in the U.S. Marine Corps Reserve from 1990 to 1998. Zane received the UNLV Outstanding Alumni Award in 2007 for leadership, contributions and dedication to improve the environment.

# **2014 NWRA Annual Conference Las Vegas, Nevada**



## **Technical Session E: Science Impacts to Policy**

**Thursday, February 6, 2014  
11:00 a.m. – 12:15 p.m.**

## Jeff Johnson

**Mr. Jeff Johnson** is a Manager, with the Southern Nevada Water Authority (SNWA), where he specializes in water resource investigations and planning. His current focus is water resource planning, climate change vulnerability and adaptation, and surface and groundwater development strategies related of the Colorado River, Virgin and Muddy Rivers, and Coyote Spring Valley. Jeff is a hydrogeologist with over 20 years of experience that includes optimization of production and 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.

## Tim Mayer, Ph.D.

**Dr. Tim Mayer** received a B.S. in Forest Resource Management from the University of Montana in Missoula in 1981 and a Ph.D. in Environmental Science and Engineering from the Oregon Graduate Institute in Portland, Oregon in 1995.

In between degrees, Dr. Mayer interrupted his science career for several years to follow his other passion, jazz piano. After several years of gainful employment (and unemployment) as a professional musician, he returned to the sciences. In 1995, after graduation, he started his job as a hydrologist with the US Fish and Wildlife Service. Tim has worked for the agency ever since. For the last two years he has supervised the Water Resources Branch in the regional office in Portland. And he still gigs regularly.

## Richard Felling

**Mr. Richard Felling** has a B.S degree in Chemistry from Southern Utah University, an M.S. in Geology from the University of Colorado, Boulder, and an M.S. in Hydrogeology from the University of Nevada, Reno. He is a registered geologist in the state of California.

Mr. Felling's career has centered on resource development throughout the western U.S., South America and China, including mineral exploration and mining, water, geothermal exploration and the petroleum industry. For the last ten years he has worked for the Nevada Division of Water Resources, most recently in the position of Chief of their Hydrology Section. Richard's work there deals primarily with the hydrologic aspects of water supply, including water availability and the effects of water development.

# David J. Syzdek

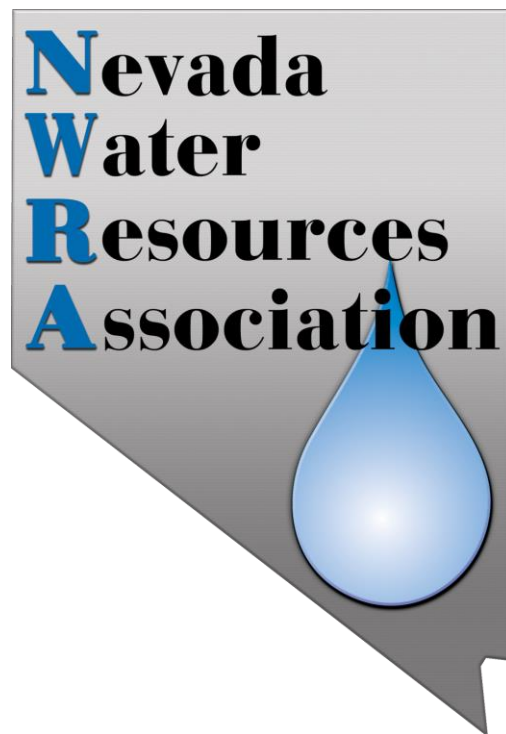
**Mr. David J. Syzdek** has a B.S. in Environmental Studies with an emphasis on Water Resource Management and dual minors in Biology and Geology from the University of Nevada at Las Vegas.

Mr. Syzdek has over 20 years of experience as a wildlife biologist. He started his career conducting surveys and field research working with desert tortoises in the Las Vegas area. Between 2000 and 2002, David worked as a museum herpetologist in Morrison, Colorado as well as for the US Geological Survey performing a herpetological inventory of National Park Service lands in Utah and Wyoming. Upon returning to Nevada in 2003, he worked as a consultant on biological surveys for natural gas and water pipelines in southern and eastern Nevada.

Mr. Syzdek has been an environmental biologist for the Southern Nevada Water Authority since 2006. His current focus is guiding management and restoration activities in the Muddy River and Warm Springs Natural Area and restoring habitat cooperatively with other agencies for the recovery of the Moapa dace, an endangered fish species only found at the headwaters of the Muddy River in Clark County.



**2014 NWRA Annual Conference  
Las Vegas, Nevada**



**Concurrent Technical Session F:  
Efficiency and Optimization**

**Thursday, February 6, 2014  
11:00 a.m. – 12:15 p.m.**

## **John Enloe, P.E.**

**John Enloe, P.E.** is a graduate of Humboldt State University. Mr. Enloe has over 30 years of water planning, permitting, design and project implementation experience in both the public and private sector, including five years as Manager of Water Planning and Engineering for Sierra Pacific Power Company in Reno, Nevada. In 1997, he started the ECO:LOGIC Reno office which is now part of Stantec, and is currently a working project manager and principal of the firm. For many years, Mr. Enloe has been actively involved in regional water supply, planning and policy issues affecting Reno and the surrounding area. As a consultant, John's experience helps ensure that regionally appropriate alternatives and solutions are brought forward for consideration.

## **George F. McMahon, Ph.D., P.E., D.WRE**

**Dr. George McMahon** holds a B.S.E. degree from University of South Florida, and Masters and Doctoral degrees from Georgia Institute of Technology. He is a registered professional engineer in Georgia, South Carolina, Louisiana and Michigan. Additional certifications include Diplomate Water Resources Engineer (D.WRE), American Academy of Water Resources Engineers; Professional Hydrologist (PH), American Institute of Hydrology; Board-Certified Environmental Engineer (BCEE), American Academy of Environmental Engineers and Scientists; and Certified Professional in Erosion and Sediment Control (CPESC), International Erosion Control Association.

Dr. McMahon has more than 43 years of water resources planning, engineering and design, construction and operations experience worldwide. His career began with the Savannah District Corps of Engineers with the design of hydraulic and hydropower features for the Richard B. Russell Dam on the Savannah River, and subsequently technical supervision of the Savannah District's navigation dredging programs. George moved to the private sector in 1986 and has since been engaged in interstate disputes and numerous multipurpose river basin studies worldwide. He served as International Team Leader of ADB TA 3708-PRC, *Strategic Planning Study for the Preparation of the Yellow River Law of the Peoples' Republic of China*, and as Technical Director for the *Surface Water Availability Assessment for Georgia Statewide Water Planning*, a program that ultimately won ACEC State Engineering Excellence and National Recognition Awards. Dr. McMahon is an Associate Editor of the ASCE *Journal of Water Resources Planning and Management*, and has authored one book and more than 60 peer-reviewed journal papers, conference proceedings papers and technical reports on technical, economic and policy aspects of water resource management.

## **Stephen E. Rogers, C.W.P.**

**Stephen E. Rogers** has a B.S. in Biological Sciences from Drexel University (1971) and a M.S. in Environmental Engineering from the University of Colorado at Boulder (1989). His professional career began in analytical laboratories investigating eutrophication, algae nutrient uptake kinetics, oil shale development, power plant water quality, and drinking water quality. During that time, Mr. Rogers achieved his certification as a treatment plant operator. He then supervised the commissioning and operation of two wastewater treatment plants for Douglas County, Oregon, before he joined the Denver Water Department in 1982 as the supervisor of the Potable Water Reuse Demonstration Plant, overseeing its final phases of construction, commissioning, and operation. In 1989, Mr. Rogers became a consultant and has worked for several regional and national engineering firms. His work has been primarily in industrial and municipal water and wastewater, and has included feasibility studies, design, construction and operations. In addition to his engineering portfolio, Mr. Rogers is also the Operator in Responsible Charge for several domestic and industrial treatment facilities for clients including Newmont Mining Corporation and Climax Molybdenum Company – Henderson Operations. In 2013, Mr. Rogers joined ARCADIS as a Senior Water Resources Engineer, focusing on western mining, industrial water treatment and operations.

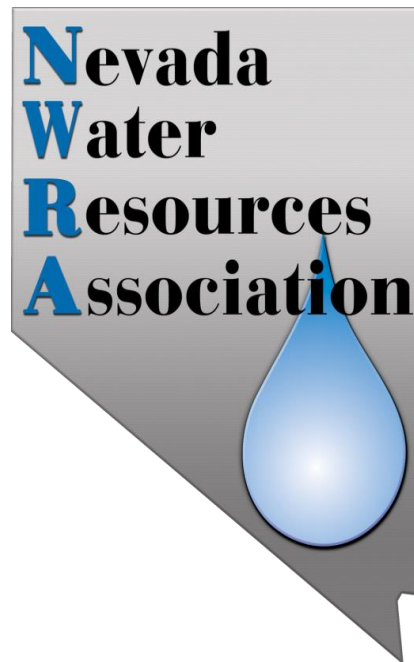
## **Kimberly Rollins, Ph.D.**

**Dr. Kimberly Rollins** is an associate professor in the Department of Economics at the University of Nevada, Reno. She has a PhD. from the University of Wisconsin-Madison, specializing in the Economics of Environment and Natural Resource Management. Kimberly was on faculty at the University of Guelph, in Ontario Canada from 1992 until 2002, where she worked on water-related research that included problems associated with financing upgrades to municipal water infrastructure, demand for changes in water quality, costs of water contamination, economics of conjoined groundwater-surface water supplies and use, as well as a wide variety of other applications of environmental and natural resource economics.

Much of Dr. Rollins applied work has focused on the economics of environmental assets that are managed to provide benefits that flow to the general public (current as well as future generations) as well as to private sector users. In addition to water resources, other recent applications include the economics of ecosystem restoration, return on investments (expected savings in wildfire suppression expenditures) in fuel reduction on public lands, valuation of ecosystem services, and economic implications of spatial interactions in creating defensible space for wildfire cost reduction.

Dr. Rollins has been on faculty at the University of Nevada, Reno since 2002, where her work has included supervising the building an economic model of water demand and estimating it with data for northern Nevada and Southern Nevada, as Part of an EPSCoR project

# **2014 NWRA Annual Conference Las Vegas, Nevada**



**Video Presentation with  
Congressman Mark Amodei,  
Representing the 2<sup>nd</sup> District of  
Nevada**

**Thursday, February 6, 2014  
1:40 p.m. – 2:00 p.m.**

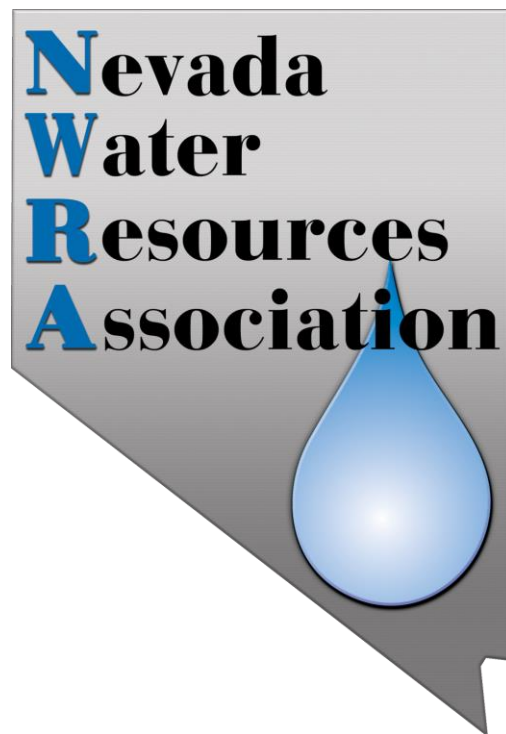
# Mark E. Amodei

**Congressman Mark Amodei** is a Republican member of the U.S. House of Representatives from Nevada. Mr. Amodei was elected by voters from Nevada's 2<sup>nd</sup> congressional district. He ran successfully for re-election on November 6, 2012. Mark was first elected in a special election in 2011 to fill the seat left vacant by Republican Dean Heller.

Mr. Amodei was born in Carson City, Nevada. He earned his B.A. from the University of Nevada, Reno, in 1980. Mark went on to receive his J.D. from the University of Pacific, McGeorge School of Law, in 1983. From 1984-1987 Mark was the lawyer for the United States Army Judge Advocate General corps.

Mark is the father of two daughters, Ryanne and Erin.

**2014 NWRA Annual Conference  
Las Vegas, Nevada**



**Panel: Perspectives on Water  
Resources and Mining**

**Thursday, February 6, 2014  
2:00 p.m. – 3:30 p.m.**

## **Paul M. Pettit**

**Paul M. Pettit** received his B. S. (geology) from Washington State University in 1978. Paul has thirty five (35) years of experience in the mining industry and has been employed by Newmont for the past twenty three (23) years. Paul has been the Senior Environmental Manager for Newmont's Carlin Trend Operations, Manager of Hydrology for Nevada Operation with responsibilities including management of Newmont's Nevada ground and surface water rights, Environmental Compliance, Permitting, Potable Water Systems, Environmental Monitoring and Hydrology. Paul continues in his role with water rights, potable water and regional hydrologic investigations on the Carlin Trend with new responsibilities at Newmont's Long Canyon Project where he directs hydrologic investigations to support NEPA review.

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.

## **Jay Dixon, P.E., WRS**

**Jay** is currently the Senior Hydrologist at the Round Mountain Gold Corp. Mine, where he is responsible for the design, management and implementation of various projects related to pit dewatering, water distribution and overall water management throughout the site. Jay's professional career spans over 17 years focusing on development, management and protection of water resources. As the current President of the Nevada Water Resources Association, Jay is actively involved in educational outreach on various water resources topics throughout the State. In the late '90s Jay was involved in groundwater research and deep well drilling oversight at the Nevada Test Site to help characterize groundwater impacts from Cold War Era underground nuclear weapons testing. Jay also serves on the Nye County Water District Governing Board and he is the Vice Chairman of the Round Mountain Town Board.

## **Melissa Jennings**

**Ms. Jennings** obtained her BS in Geology at the University of Nevada, Las Vegas in 1994. Melissa obtained a Master of Civil Engineering degree emphasis in environmental engineering from Norwich University in 2010. She has worked at the Silver Peak brine operation as geologist, hydrogeologist, and environmental engineer since 1998, and accepted a corporate geologist position in 2010 where her focus was redirected to global resources. Ms. Jennings currently splits her time between the Chile and USA operations.

## **Johnny Zhan, Ph.D.**

**Dr. Johnny Zhan** is the Regional Manager, Hydrology for Barrick Gold of North America. Since joining Barrick in 1996, he has advanced through various positions of increasing responsibility at Barrick's Goldstrike Mine and Corporate Environmental Department. He earned a doctoral degree in hydrology/hydrogeology from the University of Nevada, Reno, USA.

Dr. Zhan has done extensive work on the mine dewatering and saturated/unsaturated flow and transport modeling. He has applied his expertise and leadership in Barrick mining projects, operations and closed mines spanning six continents.

Dr. Zhan has authored or co-authored about 40 papers in professional journals and conference proceedings. Johnny has delivered keynote speeches and presented technical presentations at numerous short courses, seminars, workshops, and conferences in the US and beyond.