

**2012 Lake Mead Symposium  
March 5-6, 2012  
Las Vegas, Nevada**

**Nevada  
Water  
Resources  
Association**



**SPEAKER BIOGRAPHIES**

# **2012 Lake Mead Symposium Las Vegas, Nevada**

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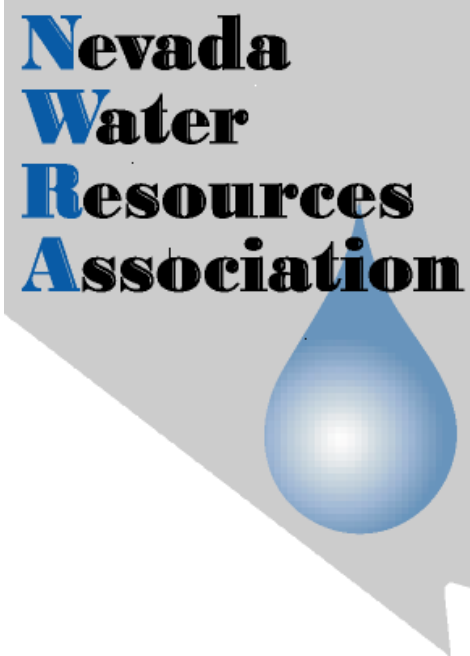


**Opening Keynote Speaker  
Monday, March 5, 2012  
1:25 p.m. – 1:50 p.m.**

# Chris Holdren

Dr. **Chris Holdren** is the Manager of the Environmental Applications and Research Group at the U.S. Bureau of Reclamation in Denver, CO. His responsibilities include a variety of water projects throughout the western United States, including continuing studies of Lake Mead, AZ-NV, and the Salton Sea, CA. Chris has more than 30 years of experience with lake and watershed management programs, and he has been working on Lake Mead since 1998.

# **2012 Lake Mead Symposium Las Vegas, Nevada**



**Quagga Mussels  
Monday, March 5, 2012  
2:00 p.m. – 3:30 p.m.**

## Sean Comeau, MPH, MSI

**Mr. Comeau** has a B.S. in Biology with distinction from the University of Nevada-Reno, an M.P.H in Environmental and Occupational Health from the University of Nevada Las Vegas, and is currently pursuing his M.D. at the University of Nevada, School of Medicine.

Mr. Comeau became involved in working with quagga mussels under the guidance of Dr. David Wong at the University of Nevada Las Vegas (UNLV). He has had his work published in *Biofouling* for a study regarding the susceptibility of quagga mussels to hot-water sprays as a means of watercraft decontamination. He was the 2011 UNLV Outstanding Graduate Student of the year. He was also the recipient of the United States President's Volunteer Service Award.

## Chad L. Cross, Ph.D., PStat®

**Dr. Cross** is trained as a multidisciplinary scientist and holds advanced degrees in both ecology and statistics. He works primarily as a biostatistician, where he specializes in spatial statistics, GIS applications, sampling and experimental design, and the application of novel techniques to nonstandard data sets.

Dr. Cross has worked extensively with state and federal governments, academic scientists, and private consultancies. He was a statistician with the US Environmental Protection Agency, was a tenured Biostatistics professor at the University of Nevada, Las Vegas, and currently works as the principal statistician for a large environmental consulting firm. He is skilled and experienced in all aspects of research design and analysis. He has been a principal, co-principal, or consulting investigator on numerous grants and contracts, and he publishes frequently in the scientific literature. He actively pursues furthering his scientific knowledge and expertise by engaging in several professional and learned societies, including the American Statistical Association (he was one of the first 100 statisticians to receive professional certification), Sigma Xi – The Scientific Research Society, and the Wildlife Society. Additionally, he is on the editorial board for the journal *Environmental and Ecological Statistics*.

Dr. Cross has participated broadly in both field and laboratory research. He has experience working in a host of natural and anthropogenic habitats, including arid environments, wetlands, and forest ecosystems. He has scores of professional/technical publications and scientific presentations. He has lent his expertise to the study of venomous reptiles, waterfowl, amphibians, small mammals, raptors, game fishes, invasive species (both aquatic and terrestrial), MRSA infections, hydrochemical groundwater modeling, loggerhead sea turtles, and a host of other areas of scientific inquiry.

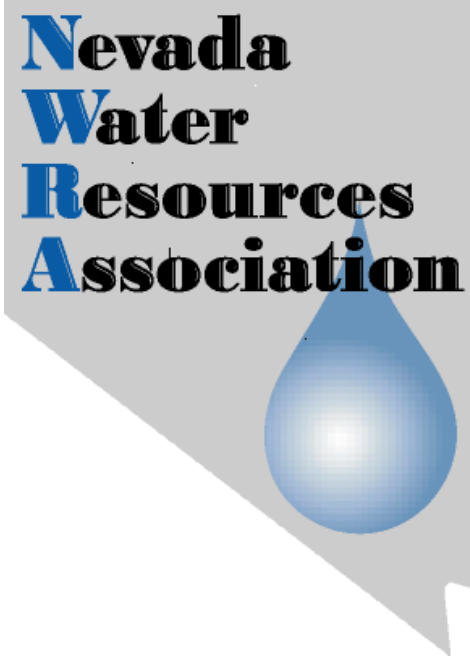
## **Shawn Gerstenberger, Ph.D.**

**Shawn Gerstenberger** is a professor and the chair, Department of Environmental and Occupational Health, University of Nevada, Las Vegas. He has facilitated a quarterly interagency quagga mussel meeting in the Lower Colorado Region since early 2007. There are 29 agencies from Nevada, California, Colorado, and Arizona attending this meeting to update discoveries and progress about their quagga mussel associated projects. He has Ph.D. and Master in Aquatic Toxicology and a Bachelor in Reclamation. He is the PI for several quagga mussel-associated projects.

## **Richard S. Ianniello**

**Rick Ianniello** is originally from Asheville, North Carolina, and has a B. A. in Environmental Science from University of Colorado, Boulder. He is now working on his Masters in Public Health at University of Nevada, Las Vegas and works as a graduate assistant research the reproductive ecology of quagga mussels in Lake Mead.

**2012 Lake Mead Symposium  
Las Vegas, Nevada**



**Shoreline & Riparian Resources  
Monday, March 5, 2012  
2:00 p.m. – 3:30 p.m.**

## Scott Abella

**Dr. Abella** has a B.S. in Natural Resources Management from Grand Valley State University, a M.S. in Forest Resources from Clemson University, and a PhD in Forest Science from Northern Arizona University (NAU).

Dr. Abella worked as a graduate research assistant with Clemson University and NAU and as a Research Specialist, Senior, with the Ecological Restoration Institute at NAU following completion of his PhD. His dissertation entailed evaluating landscape-scale variation in northern Arizona ponderosa pine forest communities by sampling plant-environment relationships and experimentally assessing responses to ecological restoration treatments across soil types.

Dr. Abella is currently an Associate Research Professor in the Department of Environmental and Occupational Health at the University of Nevada Las Vegas (UNLV). His research focus is applied ecology in the areas of fire ecology, plant ecology, and restoration ecology, aimed at community and landscape scales. At UNLV, he has taught courses in ecology, land use planning, restoration ecology, environmental science, and undergraduate and graduate research.

## Joseph G. Barnes

**Mr. Barnes** has a B.S. in Biology from Baldwin-Wallace Collage and an M.S. in Biological Sciences from the University of Nevada, Las Vegas. Mr. Barnes began his professional career as a Fisheries Biologist aboard commercial vessels in waters off Alaska, Hawaii, and Japan. Later, he was employed by state agencies in Idaho and Arizona as a Wildlife Technician tracking salmon migration and surveying for Southwestern Willow Flycatchers. From 2004–2011, he has been based in southern Nevada working as a Research Assistant for the Public Lands Institute, and the University of Nevada, Las Vegas which overlapped his thesis research from 2008–2010. His work with the Public Lands Institute primarily involved long-term studies of the ecology of Peregrine Falcons breeding within Lake Mead National Recreation Area and assessing trends of migratory aquatic birds found within the recreation area. In early 2011, after completing his M.S. thesis, he began studying Golden Eagle habitat use in New Mexico and Arizona. Over the past several years, Mr. Barnes has been involved with several independent raptor research projects in Wisconsin, California, the Great Basin Desert, Alaska, and southern Texas. Currently, Mr. Barnes is conducting independent research establishing a dietary assessment of Peregrine and Prairie Falcons breeding across southern Nevada, as well as working as an independent contractor trapping Golden Eagles with the American Eagle Research Institute.

## **Kenneth Chittick**

**Mr. Chittick** is currently working on a B.S. degree in environmental studies at the University of Nevada Las Vegas (UNLV).

Before Mr. Chittick pursued his degree in environmental studies, he served in the United States Air Force. He was a project manager for the Planning and Implementations office at the Communications Squadron. His daily activities consisted of processing work orders and serving as a point of contact for communications customers. One of his major projects was the relocation of over 500 workers after the renovation of McChord Air Force Base's command building.

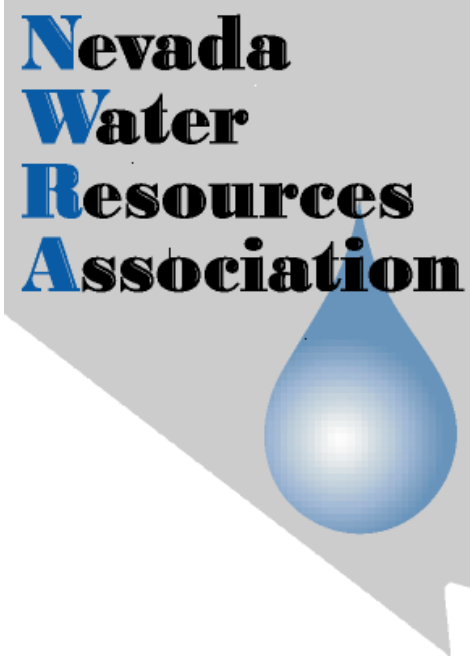
Mr. Chittick is currently working on two projects in the laboratory of Dr. Scott Abella at UNLV. The mesquite project he is working on is a study of the geographic distribution and characteristics of mesquite and acacia stands around Lake Mead. The shoreline project he is working is a study of primary succession of soil properties and flora around Lake Mead.

## **Jason R. Eckberg**

**Jason** has a B.S. in Environmental Studies and a M.S. in Environmental Science, both from the University of Nevada, Las Vegas.

Jason has been with the Southern Nevada Water Authority since 2000. Originally in the Conservation division, he worked with landscape contractors and golf course personnel on improving irrigation efficiency and water conservation. Since 2007 he has managed the revegetation program as well as all invertebrate related activities along the Las Vegas Wash.

# **2012 Lake Mead Symposium Las Vegas, Nevada**



**Quagga Mussels  
Monday, March 5, 2012  
3:45 p.m. – 5:30 p.m.**

## **Bryan Moore**

**Bryan Moore** is currently the NPS Lake Mead National Recreation Area Physical Resource Manager in charge of Quagga Mussel-related issues. He is the key member in monitoring quagga mussel invasion status in Lake Mead and Lake Mohave. He is responsible for synchronizing containment efforts for invasive mussels in Lake Mead, and cooperates with other agencies in the southwest US to monitor and educate the public about mussels. He has a Bachelor degree in biology.

## **Paul A. Rochelle, Ph.D.**

**Paul Rochelle** has a Ph.D. in Microbiology from the University of Wales, Institute of Science and Technology and a Bachelors degree in Microbiology from Manchester Polytechnic. Paul started his professional career as a Research Fellow at the University of California, Irvine investigating bioremediation of chemical waste and then as a Molecular Biology Research Associate at Cardiff University in Wales investigating deep ocean microbial communities. He joined the Metropolitan Water District of Southern California (MWDSC) in 1995 as a Research Microbiologist with responsibility for pathogen monitoring and developing improved analytical methods. He has managed microbiology teams at MWDSC since 2002 and currently manages the Source Water Microbiology Team. His responsibilities include monitoring and research on invasive mussels, assessing treatment plant performance, pathogen detection methods, assessing disinfection technologies, cyanobacterial toxins, and source water protection projects.

## **Ashlie Watters, MPH, Ph.D. Candidate**

**Ashlie** received a B. S. in Nutrition and a Master in Public Health from the University of Nevada, Las Vegas where she is now working on her doctorate in Public Health. Ashlie works as a graduate assistant for the School of Community Health Sciences at the University Nevada, Las Vegas. She is researching ways to prevent the further spread of quagga and zebra mussels through the use of chemical control methods in the Western United States.

## **David Wong, Ph.D.**

**Dr. Wong** is an Associate Research Professor, Department of Environmental and Occupational Health, University of Nevada, Las Vegas. He has a Ph.D. in Marine Ecology and a Master and Bachelor in Fisheries/Aquaculture. He has been the Principal investigator for a couple of quagga mussel associated projects. He is an invited editor and reviewer for more than 10 scientific journals.

# **2012 Lake Mead Symposium Las Vegas, Nevada**

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**Shoreline & Riparian Resources  
Monday, March 5, 2012  
3:45 p.m. – 5:30 p.m.**

## **Curtis E. Deuser**

**Mr. Deuser** has a B.S. in Natural Resources Management from Colorado State University. He is a Supervisory Restoration Ecologist with the National Park Service Biological Resource Management Division.

Mr. Deuser has worked in several National Park Units in the Western U.S. and has been permanently based at Lake Mead NRA since 1991. He has specialized in vegetation management throughout his career including native plant propagation, revegetation, rare plant surveys, vegetation monitoring, prescribed fire management and exotic plant management. He has spent more than 23 years conducting tamarisk control and revegetation at springs throughout the Lake Mead Region. He is a Steering Committee Member of the Interagency Southern Nevada Restoration Team and coordinates many restoration projects throughout the region.

Mr. Deuser has collaborated with the USGS and multiple Universities conducting research on post fire annual brome grass control, post fire tamarisk control, rangeland restoration, sahara mustard control, camelthorn control, multiple post tamarisk control and site recovery studies and is a lead agency participant in the riparian effectiveness monitoring study on the Virgin River.

Since 2000 Mr. Deuser has been the Liaison for the Lake Mead Exotic Plant Management Team responsible for coordinating exotic plant control in 20 National Park Service Units in six states and has developed partnerships with the BLM, USFWS, USFS, USBR, BIA throughout the Colorado River Basin.

## **Carrie Norman**

**Ms. Norman** has a B.S. in Biology from Eastern Washington University. She started her professional career working for the Lake Mead Exotic Plant Management Team as a crew member in 2001. She then worked for Public Lands Institute (PLI/UNLV) implementing early detection rapid response on four federal agencies in Clark County, Nevada (USFS, NPS, BLM, & USFWS). In 2007, Ms. Norman became the Exotic Plant Manager at Lake Mead National Recreation Area, and also became the park botanist in June 2010.

## **Nita G. Tallent, Ph.D.**

**Dr. Tallent** has a B.S. in Biological Sciences, M.A.S. in Ecology and Statistics, and a Ph.D. in Biological Sciences from the University of Nevada, Las Vegas. She conducted research on the ecology of shoreline riparia at Lake Mohave, a lower Colorado River impoundment located in the Lake Mead National Recreation Area for her Master's thesis and investigated the impacts of an invasive ornamental shrub, *Buddleja davidii*, butterfly bush, on plant succession on New Zealand floodplains to earn her Ph.D.

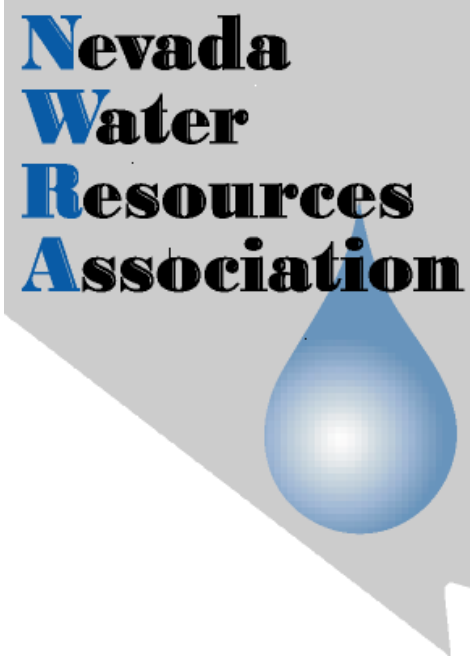
Dr. Tallent started her professional career in 1989 working for the US Environmental Protection Agency (EPA) to support the Exxon Valdez Alaskan Oil Spill Bioremediation Project. She continued supporting EPA projects (e.g., Environmental Monitoring and Assessment Program (EMAP) Surface Waters, Arid Lands and Forest Health Monitoring projects, the EPA/NPS Sierra Contaminant Study and the EPA Southwest Ecosystem Services Project) working with the DOI Bureau of Land Management and the EPA.

Dr. Tallent has been the Program Manager for the National Park Service, Mojave Desert Network Inventory & Monitoring Program since July 2010.

## **Jef R. Jaeger, Ph.D.**

**Dr. Jaeger** has a Ph.D. and M.S. in Biological Sciences from the University of Nevada, Las Vegas and a B.A. in Environmental Studies from the University of California, Santa Cruz. His fields of research include phylogeography, ecology and conservation biology. He is particularly interested in understanding the processes that govern population structure of organisms through time, especially population responses to habitat and climate change. With over two decades of experience, Dr. Jaeger mostly considers himself a wildlife conservation biologist, and he has conducted monitoring and research on the Relict Leopard Frog since the late 1990s.

# **2012 Lake Mead Symposium Las Vegas, Nevada**



**Water Quality  
Tuesday, March 6, 2012  
8:00 a.m. – 9:45 a.m.**

## **Doug Drury, Ph.D.**

**Dr. Drury** has over 40 years experience in designing and operating treatment plants. He has operated treatment plants with ponds, trickling filters, conventional activated sludge, biological nutrient removal for both nitrogen and phosphorus, and reverse osmosis membrane plants for drinking water. He also designed, built and operated treatment plants for removal of toxic trace organics. His early research involved following nutrients in eutrophic lakes. Dr. Drury now oversees Water Quality, Research, and Technical Services at Clark County Water Reclamation District. Currently, he is involved in the District's full scale in-plant pilot study, to be incorporated into the 30 MGD tertiary membrane filtration and ozone disinfection expansion for oxidation of pharmaceuticals and personal care products. Dr. Drury has a Doctorate in Environmental Engineering from Utah State University.

## **Imad A. Hannoun, Ph.D., P.E.**

**Dr. Hannoun** is currently President of Flow Science Incorporated and has been with the firm since 1992. He is the manager of the Harrisonburg, VA office and is responsible for developing software in Computational Fluid Dynamics (CFD) for reservoir, river, and clearwell modeling applications. He is also responsible for developing, applying, and maintaining software in the analysis of transient fluid flows in pipeline and open channel systems. Dr. Hannoun has extensive experience in solving complex problems in the design and analysis of diffuser systems discharging into natural water bodies and the analysis and modeling of water quality in reservoirs with the DYRESM and ELCOM reservoir simulators. For the period 1986-1992, he was a Senior Scientist at JAYCOR in San Diego, California. His duties included the development of complex hydrodynamic simulation software that was used to compute the underwater trajectories of U.S. Navy TRIDENT missiles launched from submarines, underwater explosions near submarines, and pilot ejection from aircraft.

Dr. Hannoun has a B.E. in Civil Engineering from the American University of Beirut, Lebanon, a M.S. in Civil Engineering from the California Institute of Technology, Pasadena, California and a Ph.D. in Civil and Environmental Engineering from the California Institute of Technology, Pasadena, California.

Dr. Hannoun is a registered Professional Engineer in 19 states, the President of the California Lake Management Society and the Region IX Director of the North American Lake Management Society.

Dr. Hannoun has authored reports in the following areas of work: dispersion and mixing in rivers, reservoir hydrodynamics and water quality, computational fluid dynamics,

numerical methods, pipeline surges and transients, open channel flow, clearwell and settling tank design, power plant cooling systems, brine and wastewater diffusers, laser-Doppler velocimetry, underwater missile launch, underwater explosions, and airplane pilot ejection. In addition, he is the author or co-author of many technical publications in refereed journals. Dr. Hannoun has been an invited speaker at many conferences in the USA and abroad. He has served on several research and review committees.

## **Michael Moran**

**Michael Moran** is a supervisory hydrologist with the USGS in Henderson, Nevada. He supervises hydrologists who work on projects relating to the availability and quality of surface and groundwater resources in southern Nevada. Michael has been with the USGS for 15 years and holds a Ph.D. in geological engineering from the South Dakota School of Mines & Technology.

**2012 Lake Mead Symposium  
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**Aquatic Biota  
Tuesday, March 6, 2012  
8:00 a.m. – 9:45 a.m.**

## **John Beaver, Ph.D.**

**John Beaver**, Ph.D., is an aquatic ecologist specializing in North American lake water quality. Dr. Beaver has authored more than 40 refereed journal articles related to aquatic microbiology and limnology in the scientific literature. He has been performing plankton analyses on Lake Mead for over 20 years.

## **Steven L. Goodbred**

**Steven Goodbred** recently retired as a scientist from the U.S. Geological Survey (USGS) with Emeritus status at the Western Ecological Research Center in Sacramento, California. For more than 35 years he has been actively involved in assessing impacts of anthropogenic activities and environmental contaminants on aquatic ecosystems on both the east and west coasts. He started out in academia at Goucher College in Towson MD studying the impacts of a hydroelectric dam on the Susquehanna R., and then with an environmental consultant assessing impacts of coal fired and nuclear power plants on the Hudson R. His government career started in 1978 with the U.S. Fish and Wildlife Service in Annapolis MD where he worked on the Chesapeake Bay. After 10 years in MD he moved to Southern California working on a variety of contaminant issues including oil spills and superfund sites and the Salton Sea. In 1994 he moved to Sacramento CA and began working with the USGS National Water Quality Program assessing environmental contaminants on aquatic biota. He began research on Lake Mead in 1995 where they found significant evidence of endocrine disruption in Las Vegas Wash and Bay. Considerable follow-up research on the status of endocrine and reproductive health in several species of fish in Lake Mead continues.

## **Debora Herndon**

**Debora Herndon** has a B.S. in Fisheries Biology from Humboldt State University.

Ms. Herndon started her professional career working for Nevada Department of Wildlife as a Conservation Aide in the Fisheries Division. In 2007, she worked as a biologist for Nevada Department of Wildlife working on Lake Mead razorback sucker augmentation and assisting with a habitat enhancement project on Lake Mohave.

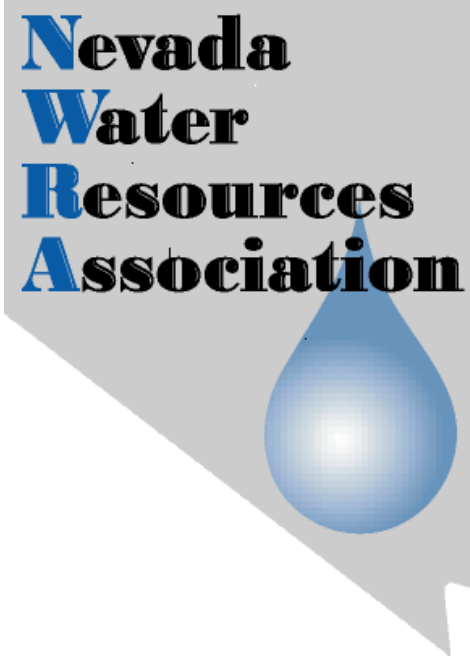
Ms. Herndon has been with Nevada Department of Wildlife, Fisheries Division, as a Lake Mead biologist since August 2009.

## **Jill A. Jenkins, Ph.D.**

**Dr. Jenkins** earned a Ph.D. in microbiology with a focus on comparative immunology and mechanisms of virulence in channel catfish from Memphis State University in 1991; a M.S. in microbiology and biochemistry with a focus topic on steelhead trout immunology in 1985 from Idaho State University, and; a B.S. in biology from Rochester Institute of Technology in 1981 with a major in Microbiology. She has adjunct graduate faculty appointments in four departments at Louisiana universities.

Since 1992 she has served with the Department of the Interior, first in U.S. Fish and Wildlife Service and then with the U.S. Geological Survey. Jenkins' efforts emphasize the study of potential impacts of environmental stressors at the cellular and molecular levels. Her major areas of focus include biomarker development, endocrine disruption, genetics, and comparative immunology. Key laboratory biotechnologies she uses are photomicroscopy and flow cytometry. Primary cell types studied are blood and spermatozoa, and assays are tailored to the particular species requirements and hypotheses being addressed. Jenkins specializes in the development and application of biomarkers; these are measures of variables that respond in quantifiable ways to changes in the environment. Specific information can be found at <https://profile.usgs.gov/jenkinsj>.

# **2012 Lake Mead Symposium Las Vegas, Nevada**



**Water Quality  
Tuesday, March 6, 2012  
10:15 a.m. – 11:45 a.m.**

## **Donald J. Bills**

**Don Bills** has a B.S. in Physical Science from California State University-Chico and has done post-graduate study in hydrology, geohydrology, and water chemistry at CSU-Chico and Northern Arizona University.

As a project hydrologist with the U.S. Geological Survey-Arizona Water Science Center in Flagstaff, Arizona, Don has 34 years of experience in basic data programs and projects studying the surface water, ground water, and water chemistry of Northern Arizona. He is currently principal investigator for studies on uranium issues in the Grand Canyon Region and was recently appointed to the USGS Strategic Science Planning Team for Energy and Minerals. Other recent work include geohydrologic studies of the Coconino Plateau, the Flagstaff area, and Little Colorado Basin in addition to water-resources assessment and development to support Tribal Lands in Northern Arizona. Don was one of several lead hydrologists for the USGS Geln Canyon Environmental Studies phase 1 and 2 on the Colorado River and its tributaries in the Grand Canyon in the 1980s and 90s. Don's special interests are in large regional groundwater-flow systems and regional springs. He continues to provide teaching support for hydrogeology and watershed hydrology at Northern Arizona University and Community Colleges in Northern Arizona.

## **Dana La Rance**

**Ms. La Rance** has a B.S. in Chemistry from University of Nevada Las Vegas.

She is a City of Henderson Water Quality Laboratory Manager with over 20 years of experience in the analytical chemistry field. She plans, directs, coordinates, and supervises laboratory programs and activities associated with the sampling and chemical and microbiological analyses of domestic water and wastewater, well waters, and surface waters.

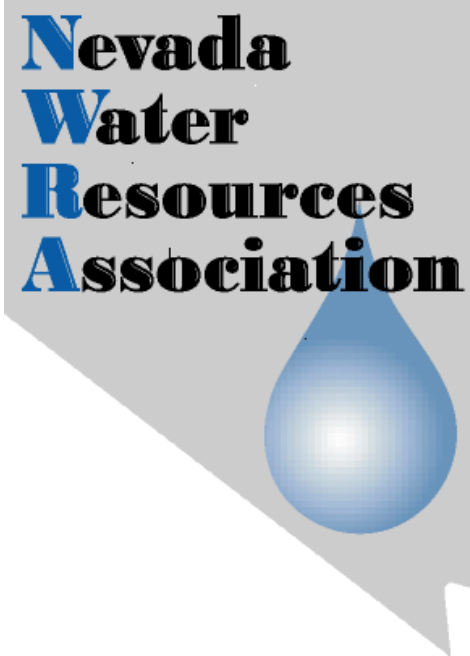
Ms. La Rance has spent over 5 years as a Data Validator. She performed data validation review of off-site laboratory organic, inorganic, and radionuclide analytical chemistry data. She was responsible for producing data validation reports that summarize the quality of sample results in analytical data packages, including explanations of any resulting qualification of sample data. She has a thorough knowledge of supervisory practices and procedures; water, wastewater, and industrial waste field sampling techniques; methods and techniques used in a laboratory quality control program; pertinent environmental regulations; Standard Methods of Water and Wastewater Examination and 40 CFR as it relates to testing requirements, analyses methods, permitting, and holding times. Ms. La Rance is experienced in the following

methods and protocols: EPA Methods for Chemical Analysis of Water and Wastewater, SW-846 (Solid Waste), US-EPA Contract Laboratory Program Methods, and Standard Methods for Water and Wastewater.

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

**Dr. Tietjen** 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.

# **2012 Lake Mead Symposium Las Vegas, Nevada**



**Aquatic Biota  
Tuesday, March 6, 2012  
10:15 a.m. – 11:45 a.m.**

## Tim Ricks

**Tim Ricks** is currently an environmental biologist at the Southern Nevada Water Authority in Las Vegas, Nevada. He currently manages a wide variety of activities including fisheries, environmental compliance, and grant management.

Mr. Ricks worked for BIO-WEST, Inc from June 2000 to May 2005 as a fisheries technician. Prior to this, he was the fisheries crew leader at Utah State University from May 2005 to August 2005. There, he monitored threatened bull trout in Eastern Oregon.

Mr. Ricks holds degrees from both Utah State University (Fisheries and Wildlife, Fisheries 1998-2005) and the University of Utah (Biology and Creative Writing).

## Ron Kegerries

**Mr. Kegerries** holds an MS in biology and a BS in biology with an emphasis in prefisheries and wildlife management, both from Pittsburg State University.

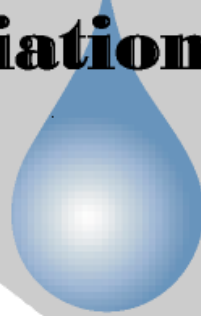
Mr. Kegerries has 10 years of fisheries experience, particularly with threatened and endangered species throughout the West and Midwest. He began his professional career working as a stream fisheries biologist for the Kansas Department of Wildlife and Parks. He currently serves as a fisheries biologist and aquatic ecologist for several projects with Bio-West, Inc. in Logan, UT. Mr. Kegerries's efforts have helped establish research needs for various endangered fish species (such as the razorback sucker [*Xyrauchen texanus*], Virgin River chub [*Gila seminuda*], and woundfin [*Plagopterus argentissimus*]).

## Brandon Albrecht

**Mr. Albrecht** has more than 12 years of experience working on aquatic systems and analyzing ecological inter-relationships among lake and stream organisms. He currently serves as BIO-WEST's Fisheries and Aquatics Section manager and is the lead fisheries biologist/aquatic ecologist for several projects, including studies of the endangered razorback sucker (*Xyrauchen texanus*) on Lake Mead, Nevada and Arizona. His efforts have helped identify additional research and monitoring activities necessary to address data gaps in critical life history stages of endangered fish species including the razorback sucker, Virgin River chub (*Gila seminuda*), woundfin (*Plagopterus argentissimus*), bonytail chub (*Gila elegans*), and other endemic and native species. Mr. Albrecht has also provided technical expertise and management for a biological inventory project that is evaluating potential habitat alterations associated with groundwater pumping on spring-adapted species (fish, amphibians, springsnails, and aquatic macroinvertebrates) in east/central Nevada and western Utah; performed comprehensive reviews and updated species profiling of the razorback sucker, flannelmouth sucker (*Catostomus latipinnis*), and bonytail chub; helped develop and test a method for prioritizing restoration sites along the lower Colorado River; managed all field collections, analysis, and reporting for a multiyear monitoring and research effort on the lower Virgin River fish community; developed and initiated monitoring and research efforts on the Muddy River fish and macroinvertebrate community; and provided technical expertise pertaining to efforts to monitor, acclimate, and quantitatively explore the effectiveness of Colorado pikeminnow (*Ptychocheilus lucius*) augmentation efforts on the San Juan River. He serves as Western Resource Advocates and The Nature Conservancy's (WRA/TNC's) representative on the Upper Colorado River Recovery Program's (UCRRP) Biology Committee. Also, Mr. Albrecht serves as a San Juan River Recovery Implementation Program (SJRIP) Biology Committee alternate representative for the Jicarilla Apache Nation (Apache Nation). He has conducted fisheries community research in various capacities on a variety of warm- and cold-water species, as well as modeled fish communities with bioenergetics software. Mr. Albrecht is an adept researcher and field investigator who is able to translate field data into practical, meaningful, and quantitative results. He received his BS in fisheries and wildlife and MS in aquatic ecology from Utah State University.

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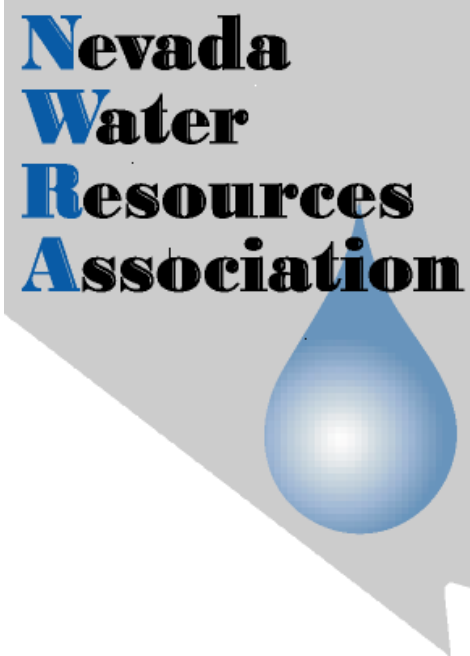


**Luncheon Keynote Speaker  
Tuesday, March 6, 2012  
11:25 p.m. – 1:00 p.m.**

# Michael R. Rosen

**Michael R. Rosen** currently a Research Hydrologist and Nevada Basin and Range (NVBR) Study Unit Chief for the National Water Quality Assessment (NAWQA) program at the US Geological Survey based in Carson City. He is also part of the Hydrological Sciences Program faculty at the University of Nevada, Reno. He joined the USGS in May 2001, but before this he was employed for almost 8 years at the Institute of Geological and Nuclear Sciences in Taupo, New Zealand as the Ground Water Program Leader. He also worked in the Division of Water Resources, CSIRO, in Perth, Western Australia (2 years), Curtin University of Technology (1 year), Perth, Western Australia and at the Limnological Research Center at the University of Minnesota (1 year). I received my undergraduate degree in Geology at Haverford College, my master's degree from the University of Rochester and my PhD from the University of Texas at Austin. My research in the past has covered the fields of hydrochemistry (water quality), chemical limnology, sedimentary geochemistry, paleolimnology (including paleoclimate research), ecology, geothermal research, Antarctic research, and hydrogeology.

**2012 Lake Mead Symposium  
Las Vegas, Nevada**



**Lake Management  
Tuesday, March 6, 2012  
1:15 p.m. – 2:45 p.m.**

## **John Duffield, Ph.D.**

**John Duffield, Ph.D.** is a natural resource economist at the University of Montana, where he has taught and conducted research for the last 37 years. John has contributed to the development and application of tools for the economic valuation of nonmarket resources such as fish, wildlife, recreation, and other ecosystem services. This work has helped inform public policy decisions that require weighing production of marketed goods, such as hydropower, irrigated agriculture, or mineral resources, against potentially foregone environmental services, such as fisheries, clean air, or biodiversity. Applications include critical habitat analysis for bull trout and piping plover, evaluation of proposed dams on the American, Klamath, and Kootenai Rivers, wolf recovery in Central Idaho and Yellowstone, and water right allocation in the Upper Missouri.

John was a member of the National Academy of Sciences panel on bear and wolf management in Alaska, and has participated in a number of significant natural resource damage cases, including ARCO v. Montana. He also served as the lead economist for the Alaska Native class in the *Exxon Valdez* oil spill case. A current project is evaluation of the impacts of Glen Canyon Dam on ecosystem services in the Grand Canyon of the Colorado. A long-term interest is in valuing cultural and natural resources in the tribal context, including work for the Penobscot, Salish-Kootenai, Klamath, Elem Pomo, Ute Mountain Ute, Lower Elwah Klallam, and Spokane Tribes.

John was born and raised in Montana, and received a Ph.D. in economics from Yale (1974) and a BA (economics and math) from Northwestern (1968).

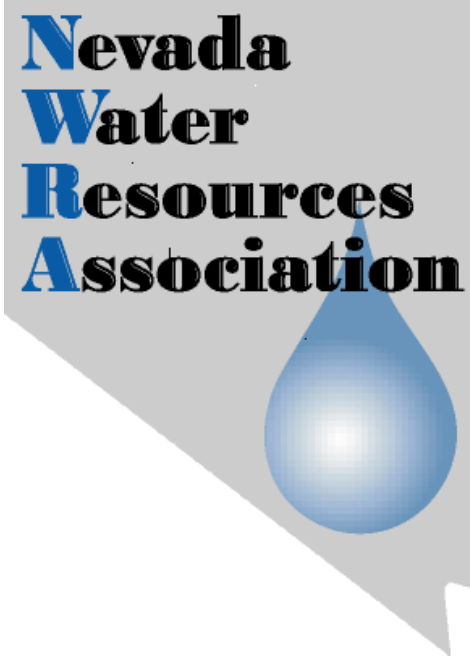
## **Carly Jerla**

**Carly Jerla** is a Hydraulic Engineer for Reclamation's Lower Colorado Region in the Boulder Canyon Operations Office. She is currently on assignment to the University of Colorado's Center for Advanced Decision Support for Water & Environmental Systems in Boulder, Colo. Carly obtained a BS Degree in Civil and Environmental Engineering and a BS Degree in Engineering and Public Policy from Carnegie Mellon University in 2002. She also earned her MS in Civil Engineering from the University of Colorado in 2005. Carly was an integral part of technical team that developed the Colorado River Interim Guidelines for Lower Basin Shortages and Coordinated Operations for Lake Powell and Lake Mead, and leads the Region's research and development of modeling applications and decision support for water operations and planning. Carly has been with the Study since its inception and was named the Reclamation Co-Study Manager in November 2011.

# Peggy Roefer

**Ms. Roefer** is the Regional Water Quality Program Manager for the Southern Nevada Water Authority. She has worked for SNWA for 26 years and her jobs have included Microbiology Supervisor and Regional Water Quality Supervisor. She has a degree in Microbiology from the University of Texas at Austin and has spent the last 17 years dealing with emerging issues in southern Nevada such *Cryptosporidium*, perchlorate, selenium, and quagga mussels.

# **2012 Lake Mead Symposium Las Vegas, Nevada**



**Contaminants  
Tuesday, March 6, 2012  
1:15 p.m. – 2:45 p.m.**

## **David Alvarez, Ph.D.**

**Dr. Alvarez** received a Ph.D. in environmental/analytical chemistry from the University of Missouri-Columbia. He is currently the Chief of the Environmental Chemistry Branch at the U.S. Geological Survey's Columbia Environmental Research Center in Columbia, Missouri. His research focus is in the development and application of passive sampling devices for the integrative sampling of hydrophobic and hydrophilic organic chemicals in a variety of environmental matrices.

Dr. Alvarez has been working on contaminant issues in Lake Mead since 2002. This work has been part of multiple collaborations with USGS, US Fish and Wildlife Service, National Park Service, and US Environmental Protection Agency.

## **Susanna Blunt**

**Susanna Blunt** recently worked at the Desert Research Institute as a graduate research assistant where she studied the microbial degradation of endocrine disrupting chemicals in Las Vegas Wash as part of her master's program at the University of Nevada, Las Vegas. While enrolled as a student at UNLV, she also worked as a graduate intern at the Southern Nevada Water Authority's Applied R&D Center, working on several different projects including the testing of municipal effluents for endocrine and reproductive effects to fathead minnows, toxicity identification evaluation (TIE) methodologies, and in vitro testing of environmental samples using the yeast estrogen screen (YES) assay. Prior to attending graduate school in Las Vegas, she received her B.S. in Biology at the Metropolitan State College of Denver in Colorado and spent three years working for an ecological consulting firm. There she conducted water quality monitoring of aquatic biota in lakes and streams and investigated impacts caused by nutrient loading, instream flow changes, and acid mine drainage.

## **Greg Linder**

**Greg Linder** has provided technical support for a number of natural resource organizations in county, state, and federal governments, and for non-governmental organizations focused on land-use, water-use, and fish and wildlife issues for over 30 years. Since October, 1997 Linder has worked for U.S. Geological Survey, Columbia Environmental Research Center (CERC) in Columbia, Missouri where his applied research has focused on analysis of environmental risks and characterizing uncertainties related to multiple stressor exposures. These technical findings have contributed to informed adaptive resource management decisions developed and implemented by agencies and bureaus of the Department of the Interior.

Academically, Linder presents undergraduate and graduate degrees from University of Nebraska-Lincoln, University of Nebraska School of Medicine and Allied Health Sciences, and University of Wyoming. He completed postdoctoral research at University of Cincinnati School of Medicine and Cornell University School of Natural Resources. He works for USGS/BRD/CERC from a field office in the Oregon's Willamette Valley.

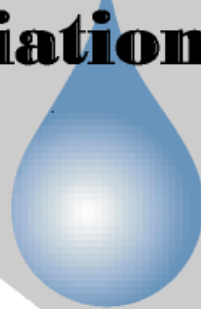
## **Rebecca Trenholm**

**Rebecca Trenholm** has a B.S. in Chemistry and an M.S. in Environmental Chemistry from University of Nevada, Las Vegas.

Rebecca has been working at the Southern Nevada Water Authority as a research chemist for the past 10 years specializing in analytical method development for emerging contaminants using GC-MS/MS and LC-MS/MS techniques.

# **2012 Lake Mead Symposium Las Vegas, Nevada**

**Nevada  
Water  
Resources  
Association**



**Lake Management  
Tuesday, March 6, 2012  
3:00 p.m. – 4:30 p.m.**

## Nicholas Gilliland

**Nicholas Gilliland** received a Bachelor of Science degree in Wildlife Sciences and Master of Science in Forestry Sciences from Auburn University, with the latter completed May 2011. In June 2011 he started work for the National Park Service at Cottonwood Cove Marina, contracting through Great Basin Institute. His work this summer involved education and outreach to park visitors regarding quagga mussels and boating safety presentations. In October 2011 he began as Quagga Mussel Coordinator, again through GBI, with the National Park Service. The Lake Mead NRA Quagga Mussel Coordinator is involved in all mitigation, prevention, education, and outreach efforts regarding the invasive quagga mussel for the recreation area, and coordinates with other agencies in this region. His main duties include boat inspections and washes, public education about the impacts of aquatic invasive species, and quagga (adult and veliger) monitoring in Lakes Mead and Mohave.

## Jim Holland

**Mr. Holland** is a Nevada Native from Boulder City. He is married with two daughters. Mr. Holland attended Boulder City High School, class of 1970 and the University of Nevada, Las Vegas. He participated in the NPS Cooperative Study Program from 1974-1977. He received his BS in Botany (1975), BS in Zoology (1975) and his MS in Biology (1977).

Mr. Holland worked for the National Park Service for 34 years. From April 1977 to July 1977 he worked as a Park Ranger, Cape Lookout National Seashore. From July 1977 to May 1980, he was the Environmental Specialist, Denver Service Center. From May 1980 to June 1983, he was the Resource Management Specialist, Everglades National Park; and from June 1983 to March 1986, was the Resource Management Specialist, Glen Canyon National Recreation Area. Additionally, from March 1986 to June 1992, Mr. Holland was the Park Planner, Glen Canyon National Recreation Area.

Currently, Mr. Holland is the Park Planner for Lake Mead National Recreation Area. He prepared the Development Concept Plan for the Willow Beach Development Area, drafted the Statement for Management, developed alternative funding agreements with State and Federal agencies, represent the park on the River Mountains Trail Partnership, assisted in the development of the entrance program, manage lands program, serve as liaison with the States on major road construction issues, and researched and coordinated the preparation of the Lake Management Plan, Wilderness Plans, Air tour Management Plan and Development Concept Plans for Lake Mead National Recreation Area.

Mr. Holland is an outdoor enthusiast and enjoys hiking, bicycling, boating, basketball, botany and exploring.

## **Kris Kirby**

**Kris Kirby** is a 16-year National Park Service (NPS) employee currently managing the commercial services program at Lake Mead National Recreation Area (Lake Mead NRA), a position she has held since 2007. Ms. Kirby is primarily responsible for oversight and direction for nine large concession contracts and 100 small business permits operating within Lake Mead National Recreation Area. Collectively these operations gross over \$45 million annually and they are important contributors to the local economy.

Ms. Kirby began her career with the NPS in 1996 as a staff member in the Lake Mead NRA commercial services office that she now manages. In 2003, she relocated to Glacier National Park in northwest Montana where she performed contract management and facilitated regulatory compliance for a \$16 million concession program encompassing seven contracts providing hospitality services focused around large historic lodging facilities. Her main role in this position was to coordinate concession asset and financial management programs with a \$1 million annual construction budget.

Ms. Kirby has been a primary liaison with the Lake Mead NRA concessioners during many of the challenging years in which the water levels of Lake Mead have been declining. As such, she has a good breadth of experience with the financial and managerial issues faced by concessioners as a result of the changes on Lake Mead, and she can speak to the delicate balancing act necessary for private sector operators to comply with government requirements while retaining financial viability during challenging economic times.

Ms. Kirby has a Master of Public Administration degree from the University of Nevada Las Vegas and a Bachelor of Arts in Political Science from Metropolitan State College of Denver. She is an avid hiker and skier and enjoys traveling.

## **Gail Kaiser**

**Gail Kaiser** is the Marina Operations Manager for Las Vegas Boat Harbor and Lake Mead Marina, a family business that has been owned and operated by the Gripentogs since 1957, when Gail was 3 years old. Being a family business, Mrs. Kaiser has many responsibilities in the organization. Her main focus is on marina operations and marina / Lake Mead public relations.

Las Vegas Boat Harbor located at Hemenway Harbor on Lake Mead is the closest marina to Henderson and Las Vegas, through Boulder City. The Las Vegas Boat Harbor / Lake Mead Marina complex is a full service marina that consists of almost 1500 slips, two retail stores, boat and PWC rentals, a floating café & lounge, gas and pump-out facilities, and service and storage facilities.

The Gripentog family has seen many changes in the Lake Mead National Recreation Area. In 2001 the marina had to move from its home of over 45 years at the Las Vegas Bay to the Hemenway Harbor, 15 miles away, because of the silting in of Las Vegas Wash as a result of declining water levels on Lake Mead. The silt created a delta that continues to grow into the Las Vegas Bay, taking over where the marina was located. Mrs. Kaiser handled the logistics that accompany such a tremendous undertaking as moving a marina.

Mrs. Kaiser holds a degree from the Community College of Southern Nevada and is a certified SCUBA diver. She is married and the mother of two. Her husband, daughters and sons-in-law are all part of the family business.

Mrs. Kaiser also sits on many committees and boards that promote the Lake Mead National Recreation Area. They consist of: Lake Mead Water Quality Forum, Citizens Committee for Clean Water, Las Vegas Wash Coordination Committee, National Park Hospitality Association, the Better Business Bureau, and the Las Vegas and Henderson Chamber of Commerce.

Mrs. Kaiser can be found at the Las Vegas Boat Harbor on Lake Mead, where she enjoys her business as well as the beautiful desert and lake amenities.

## **Kent Turner**

**Mr. Turner** is currently the water resources program manager for Lake Mead National Recreation Area. He has been a natural resource manager for Lake Mead NRA since 1989. Prior to working for Lake Mead NRA he was the natural resource specialist for Cape Hatteras National Seashore from 1982 to 1989.

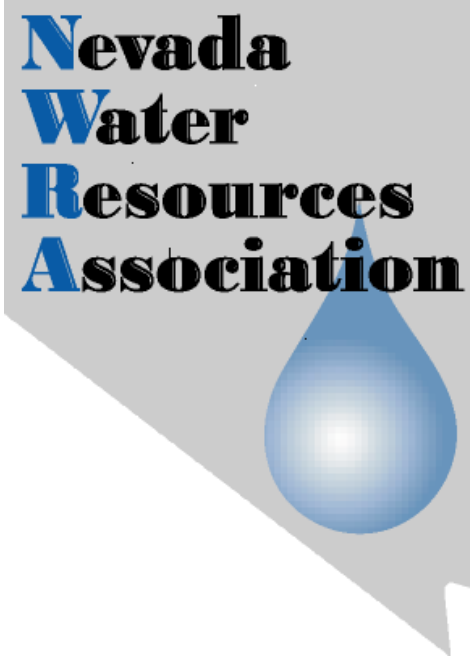
## **Michael Burrell**

**Mr. Burrell** received a B.S. in Fisheries Biology in 1978 from Colorado State University, Fort Collins Colorado

Mr. Burrell began his career with the Colorado Division of Wildlife doing seasonal work surveying streams and lakes in the southeast and southwest regions of the state.

Mr. Burrell began his career with the Nevada Department of Wildlife in 1980 as a field biologist surveying streams in the north east region of the state. In 1981 he became the fisheries biologist responsible for the management of aquatic resources in the north east portion of the Departments southern region in addition to assisting with fisheries projects on Lakes Mead and Mohave. In 1984 he became and remains the Departments fisheries biologist for Lake Mohave and the Colorado river below Davis Dam.

# **2012 Lake Mead Symposium Las Vegas, Nevada**



**Contaminants  
Tuesday, March 6, 2012  
3:00 p.m. – 4:30 p.m.**

## **Kathy Echols, Ph.D.**

**Dr. Echols** has a B.S. in Chemistry from the College of William and Mary and a Ph.D. in analytical chemistry from the University of Missouri – Columbia.

Dr. Echols began working for the US Fish and Wildlife Service during her graduate program, researching PCBs and methods to analyze them. After graduating in 1992 with her PhD she continued her work at the National Fisheries Contaminant Research Center in Columbia MO. In 1996 when the laboratory was transferred to the US Geological Survey she continued working on a variety of projects evaluating chemical contaminants in the environment. Currently she is the leader of the Environmental Forensics Group of the USGS Columbia Environmental Research Center, studying a variety of emerging and legacy contaminants in environmental matrices.

## **Douglas B. Mawhinney, Ph.D.**

**Dr. Mawhinney** received a B.A. in Chemistry from Thiel College and a Ph.D. in Analytical Chemistry from the University of Pittsburgh, where he studied surface chemistry on silicon, metal oxides, activated carbon and carbon nanotubes.

Dr. Mawhinney started his professional career as a Post Doctoral Research Associate at Cornell University in Analytical Toxicology, where he developed high-throughput analytical methods for human toxicology applications. He then became the Project Manager of the Chemical Terrorism Analytical Response section at the New Mexico State Public Health Laboratory, where he worked on issues related to environmental and human toxicology, and other preparedness activities. He then joined the U.S. Centers for Disease Control as a Research Chemist in the Laboratory Response Network program, where he developed analytical methods and conducted technology transfer to State Public Health Laboratories.

Dr. Mawhinney has been a Research Chemist with the Southern Nevada Water Authority since 2007.

## **Reynaldo Patiño, Ph.D.**

**Dr. Reynaldo Patiño** has a B.S. in Fisheries Science from Tokyo University of Fisheries and M.S. and Ph.D. degrees in Fisheries Science from Oregon State University.

Dr. Patiño started his professional career working as postdoctoral research associate for The University of Texas Marine Science Institute in 1988. He then worked as Assistant Unit Leader for Fisheries at the Texas Cooperative Fish and Wildlife Research Unit located at Texas Tech University from 1989 to 2003, and since 2004 has served as Unit Leader. Dr. Patiño also holds the rank of Professor of Natural Resources Management and of Biological Sciences at the university, where he also teaches graduate level courses and advises graduate students.

Dr. Patiño's research includes the area of reproductive biology and the impacts of environmental stressors, such as contaminants and climate change, on the reproductive health of aquatic vertebrates.

## **Seth Shanahan**

**Mr. Shanahan** has worked for the Southern Nevada Water Authority in Las Vegas, Nevada where he is currently a Senior Biologist responsible for administering the region's largest aquatic ecosystem services improvement program for over ten years. He received his undergraduate degree in forestry/wildlife biology from the University of Georgia, Athens and his graduate degree in water resource management from the University of Nevada, Las Vegas. Mr. Shanahan is certified as an Ecologist and Professional Wetland Scientist.