

***2012 MSSC Annual Salinity Summit
“Shaping Our Vision”
January 26-27, 2012***



January 26-27, 2012

SPEAKER BIOGRAPHIES

2012 MSSC Annual Salinity Summit
“Shaping Our Vision”
January 26-27, 2012



Opening & Keynote Speaker
Thursday, January 26, 2012
8:00 a.m. - 8:30 a.m.

James McDaniel

James B. McDaniel is the Senior Assistant General Manager for the Los Angeles Department of Water and Power's Water System. With 29 years of water utility experience, Mr. McDaniel has executive management oversight for all water system operations, including production (groundwater and aqueduct), distribution, treatment, pumping, water resources, and engineering for the water system that serves over four million residents of the City of Los Angeles with annual revenues of \$1 billion. The water system serves an average of 600 million gallons of water per day (2.3 million cubic meters) with a dedicated staff of approximately 1,800 people.

Mr. McDaniel is a registered Civil Engineer in the State of California, as well as a certified Water Distribution Operator. He is a member of the American Water Works Association, and the American Society of Civil Engineers. He currently serves on the Colorado River Board of California and has been a trustee on the Board of the Water Research Foundation. Mr. McDaniel has been a Board member of the Association of Metropolitan Water Agencies (AMWA) for many years including a term as President of AMWA. Mr. McDaniel received his B.S. in Civil Engineering from the University of California at Irvine.

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**Policy Options in Austere Budget
Thursday, January 26, 2012
8:30 a.m. – 10:00 a.m.**

Eric Sapirstein

After leadership positions at the U.S. Environmental Protection Agency (EPA) and Washington-based consulting firms, **Eric Sapirstein** founded ENS Resources, Inc. in 1986. For more than 20 years, his firm has focused on legislative and regulatory affairs consulting for local and regional governments as well as national organizations that serve the public's interests.

Throughout his career, Mr. Sapirstein has been a recognized leader in environmental protection and innovative energy policy issues. Prior to establishing ENS, Mr. Sapirstein was a Policy and Governmental Affairs Analyst with JSCF, Inc. He focused on regulatory and legislative initiatives related to Appropriations, the Resource Conservation and Recovery Act, the Clean Water Act, the Safe Drinking Act, and forestry management.

Mr. Sapirstein also served as an Associate with LRMC, Ltd., an association management consulting firm. He was the lead official overseeing the legislative and regulatory interests of environmental association clients as well as individual private clients. Mr. Sapirstein worked closely with Congressional committee members and staff, including committees on Appropriations, Budget, Environment and Public Works, Finance, Transportation, Energy and Commerce, and Ways and Means.

Before working on behalf of clients, Mr. Sapirstein represented the EPA before Congress. He advised senior Agency officials on strategies regarding waste management, radioactive materials and clean water policy issues. He represented the Agency with members of Congress, Congressional staff, and federal and state agencies. Mr. Sapirstein received two Special Achievement Awards, recognizing superior work that helped ensure passage of the Superfund Act during the 96th Congress.

Mr. Sapirstein earned a Master's of Public Administration (MPA), with a concentration in public finance, budgeting, and urban administration, from The George Washington University. He was nominated and selected to compete as a Presidential Management Intern. He holds a Bachelor's Degree in Political Science from Boston University.

John O'Donnell

John O'Donnell is a partner in Murray, Montgomery and O'Donnell, a public affairs firm that specializes in representing local governments, special jurisdictions and utilities: water and electric. John's firm represents the City of Phoenix in Washington, DC. Mr. O'Donnell has worked with many Phoenix elected officials and professional staff on light rail and Federal Transit Administration proposals.

Michael Dunbar

Mike Dunbar has more than 35 years of public utility management, planning and engineering experience in the water and wastewater industry and is a professional civil engineer. He joined South Coast Water District in 1987 as District Engineer and became General Manager in 1992. In 1999, he was appointed General Manager of the consolidated South Coast Water District, following its merger with Dana Point Sanitary District and Capistrano Beach Water District. South Coast Water District serves Dana Point, South Laguna, and areas of north San Clemente and north San Juan Capistrano.

Prior to joining the District, Dunbar worked for several engineering consulting firms. He received his Bachelor of Science Degree in Civil Engineering and a Master of Science Degree in Environmental Health Engineering from the University of Notre Dame. Born and raised in Chicago, Dunbar moved to Laguna Niguel in 1987 with his wife, Cindy. They have three daughters and a son. Dunbar has been active in Laguna Niguel organizations, including the YMCA, where he served on the Board of Managers.

Joshua Johnson

Joshua Johnson is a Professional Staff Member on the US Senate Energy and Natural Resources Committee. As a member of the Republican staff, he is responsible for the Water and Power Subcommittee with jurisdiction over the Bureau of Reclamation and the United States Geological Survey. He also is responsible for matters relating to the Freely Associated States and the United States Territories. Prior to joining the Senate, Mr. Johnson was the Staff Director of the United States House Resources Committee's Subcommittee on Water and Power. He worked in the House of Representatives for ten years.

Mr. Johnson earned his Masters of Economics from the London School of Economics and his B.A. from the University of Utah. Currently he is pursuing a Masters in National Security and Strategic Studies from the Naval War College.

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**Salinity Management Objectives: A 10 Year
Progress Report and the Road Ahead
Thursday, January 26, 2012
10:15 a.m. – 11:45 a.m.**

Michael Gabaldon

Mr. Michael Gabaldon is the Director Technical Resources for the Bureau of Reclamation. The position, located in Denver, Colorado, oversees Reclamation's Technical Service Center, the Research and Development Office, the Power Resources Office, and the Design, Estimating, Construction, and Dam Safety Office.

He began his career with Reclamation in 1982 as a Construction Engineer at the Montrose Projects Office in Colorado. In 1989, he relocated to the Durango Projects Office where he was a design engineer on the Anima-La Plata Project. In 1991, he moved to the Bend Construction Office in the Pacific Northwest Region, where he served as the Office Engineer. In 1996, he was Reclamation's Pacific Northwest Regional Liaison Officer in Washington, D.C. In 1998, he became the Albuquerque Area Manager where he was responsible for Reclamation program activities in the Rio Grande basin, the Pecos River basin, and the Canadian River basin - spanning three states from southeastern Colorado through New Mexico and west Texas.

In 2001, he relocated to Washington, D.C, to serve as the Deputy Director of Operations, and in 2003, he became the Director of the Policy, Management, and Technical Services in Denver, Colorado where he was responsible for the Office of Program and Policy Services, Chief Information Office, Technical Service Center, Research and Development Office, International Affairs, and Management Services Office.

He also served as the Secretary's Designee and Chairman of the Glen Canyon Dam Adaptive Management Work Group for 5 years.

A native of New Mexico, Mr. Gabaldon earned a Bachelor of Science degree in Civil Engineering from the University of New Mexico, and holds a degree in Water Technology/Utilities from New Mexico State University. He also completed the Executive Leadership Program at Harvard University's Kennedy School of Government. He is a registered Professional Engineer.

Don Barnett

Mr. Barnett has a B.S. degree in Engineering Geology and an M.S. degree in Civil Engineering, both from Brigham Young University. He is a licensed Professional Engineer and licensed Professional Geologist.

Mr. Barnett is a consulting engineer, hydrologist and geologist and President of the firm of Barnett Intermountain Water Consulting. His practice focuses in the areas of water policy and administration, water rights and water resource development. Over the past 25 years, he has worked for a number of state entities, water districts, municipalities, industries, special service districts, irrigation companies and individuals in the intermountain states.

Mr. Barnett has served the Colorado River Basin Salinity Control Forum for more than the past 15 years. This organization was created in 1973 by the governors of the seven Colorado River Basin states to coordinate activities and efforts aimed at reducing the salt load of the Colorado River. The Colorado River Basin Salinity Control Program is a partnership between federal, state and local entities and individuals. This \$40 million per year program has reduced the salt load of the Colorado River by more than 1 million tons per year and reduced the annual downstream damages by more than \$300 million. In 2010, Mr. Barnett became the Colorado River Basin Salinity Control Forum's Executive Director. In his capacity as Executive Director, Mr. Barnett supports and coordinates the implementation of the program and serves as a liaison between the federal and state partners.

Jorge Arroyo, P.E.

Jorge Arroyo directs the Texas Water Development Board (TWDB) Innovative Water Technologies (IWT) Programs whose goal is to advance innovative water supplies in Texas through research, demonstration projects and educational outreach efforts.

Mr. Arroyo began his career as a Civil Engineer in Costa Rica working for the Costa Rican Water Institute and, later, for the United States Agency for International Development.

He is a graduate of the University of Costa Rica and of the Loughborough University in England. In 2006 he received the International Desalination Association inaugural fellowship award to conduct research under the auspices of the Singapore Public Utilities Board.

Mark Beuhler

Mr. Beuhler has a B.S. in Engineering from Tulane University and a M.S. in Environmental Engineering from the University of North Carolina at Chapel Hill. He is a Registered Civil Engineer and a former Grade 5 Water Treatment Plant Operator.

Mr. Beuhler has worked for various public agencies and private consulting firms in Southern California. Within the past 25 years he spent 19 years at the Metropolitan Water District of Southern California, spending much of that time as the Director of Water Quality. He also spent 5 years at the Coachella Valley Water District as the Assistant General Manager, involved in Colorado River and salinity issues.

Mr. Beuhler is now a consultant at the firm Beuhler & Associates, LLC.

Edmund G. "Ed" Archuleta

Edmund G. "Ed" Archuleta has been manager of the El Paso Water Utilities Public Service Board since January 1989. He is responsible for all aspects of water, wastewater, reclaimed water service, and storm water to the greater El Paso metropolitan area. He reports to and implements strategic policies set by the seven-member Public Service Board.

A registered Professional Engineer in Texas, New Mexico, and Iowa, Mr. Archuleta earned BS and MS degrees in Civil Engineering from New Mexico State University and a Master of Management degree from the University of New Mexico. He is an American Academy of Environmental Engineers Diplomat. He was appointed in June 2006 by President George W. Bush to the National Infrastructure Advisory Council. In 2008, he was appointed to the National Academy of Engineering/Science to develop a publication on Water Reuse as an Approach on Meeting Future Water Supply Needs. Most recently, he was named The WaterReuse Association's Person of the Year for 2010.

In 2010, Mr. Archuleta was appointed by President Barack Obama to represent the United States on the three-member Pecos River Compact Commission. Archuleta serves with two other Commissioners, each representing the states of Texas and New Mexico.

Mr. Archuleta is currently involved with several technical and professional organizations, including the American Water Works Association, the Water Environment Federation, WaterReuse Foundation, the National and Texas Societies of Professional Engineers, the Texas Water Conservation Association, New Mexico/Texas Water Commission, and Far West Texas Planning Group. He is a past Chairman of the Water Research Foundation, and current Board Member of the Association of Metropolitan Water Agencies, the WaterReuse Association, and the El

Paso Regional Economic Development Corporation. He serves as chairman of the Multi-State Salinity Coalition, an organization of 17 member cities in the West.

Mr. Archuleta is currently serving or has served on several civic organizations, including the United Way, the Paso del Norte Health Foundation, the Rotary Club, the Greater El Paso Chamber of Commerce, Paso del Norte Group, El Paso Symphony, and New Mexico State University Academy of Construction Grants Advisory Committee. He is also on the Engineering Advisory Committee to New Mexico State University and the University of Texas at El Paso.

Mark Stratton

Since January 1993, **Mr. Stratton** has been employed by the Metropolitan Domestic Water Improvement District (MDWID). Originally hired as the District's engineer in April 1994, he became the District's General Manager and has been in that position for nearly 18 years. In that role, he has overseen the operation and management of the utility that has grown from 12,000 customers to nearly 20,000 customers during that time. As General Manager, Mr. Stratton has supervised a staff of 50 employees that includes all aspects of the utility operation from financial to engineering and construction/operation of the utility. He oversees the budget of nearly \$17 million and has developed a capital improvement program that has exceeded \$60 million in capital projects. Current capital projects being developed include a regional cooperative with three other local water agencies for the design and construction of a Central Arizona Project (CAP) water delivery system with an estimated cost of \$80-100 million.

Prior to his work with the District, Mr. Stratton was the planning manager for Pima County Wastewater Management Department. Approval of new developments, as well as the infrastructure to provide service to those developments was under his command.

Mr. Stratton has also been involved with numerous associations in the water and wastewater field. He currently serves on the Board of Directors for the Multi-State Salinity Coalition (MSSC) and has served on the American Water Works Association (AWWA) Board of Directors as the Arizona Section Director. Mr. Stratton is also a past-president for the Arizona Water & Pollution Control Association (now known as the AZ Water Association) and had been on that Board of Directors for over 10 years. Mr. Stratton had served as president of the Southern Arizona Water Users Association (SAWUA) for six years and currently serves on external advisory committee for the University of Arizona Water Resources Research Center. He has also served on numerous committees for the Arizona Department of Water Resources and was a member of the Statewide Water Advisory Group (SWAG).

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Luncheon Keynote Speaker
Thursday, January 26, 2012
11:45 a.m. – 1:15 p.m.

Ron Davis

Ron Davis was selected as the Executive Director for CalDesal effective February 1, 2011. CalDesal is an association consisting of both public water agencies and private firms that advocates for environmentally responsible desalination of water and salinity management in California.

Davis served as the State Legislative Director for the Association of California Water Agencies (ACWA) from January 2005 to December 30, 2010. As the State Legislative Director, Davis managed a team of 6 professionals. Along with his legislative team, he represented the interests of the 450 ACWA members before the California Legislature and the Governor's office. During his tenure at ACWA, Davis was one of the lead negotiators on numerous high profile water related legislative measures including the historic 2009 Delta Reform Act.

A longtime legislative advocate with extensive experience in water-related issues, Davis represented the Santa Clara Valley Water District before the Legislature for 12 years. Prior to his work at Santa Clara Valley Water District, he served as Assistant Executive Director for the California Municipal Utilities Association and represented a number of private sector clients as a consultant.

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Controlling Salinity Before it Controls You
Thursday, January 26, 2012
1:30 p.m. – 2:45 p.m.

Dr. Robert Mace, P.G.

Robert Mace is a deputy executive administrator for Water Science and Conservation at the Texas Water Development Board. Managing a group of 66 staff, they study rivers and aquifers of the state, promote water conservation, and pursue innovative technologies such as desalination, rainwater collection, and water reuse. Robert has a BS in geophysics, a MS in hydrology from the New Mexico Institute of Mining and Technology, and a PhD in hydrogeology from the University of Texas at Austin. He has over 20 years of experience working with water in Texas.

Richard Bilinski, PMP

Richard Bilinski is a Project Management Professional currently assigned as Project Manager with the Tulsa District, U.S. Army Corps of Engineers. He is responsible for management oversight of numerous civil works projects in Oklahoma, Kansas and Texas with budgets totaling in excess of 200 million dollars with over 8 million dollars placement annually.

Mr. Bilinski is a Mechanical Engineering graduate of Oklahoma State University and has been with the Corps of Engineers for over 25 years. During that time, he held numerous positions within the Corps and Department of the Army, serving one year on an executive developmental assignment in Washington, D.C. and is a graduate of the Army Management Staff College.

Kib Jacobson

Mr. Jacobson has a M.S. in Agricultural Economics from Utah State University, Logan UT. Mr. Jacobson has spent his professional career of over 31 years as a public servant working in different capacities in the Upper Colorado (UC) Region of the Bureau of Reclamation located in Salt Lake City, UT.

For the past nine years Mr. Jacobson has been the Colorado River Basin Salinity Control Program Manager and Chief of the Water Quality Group. As the Program Manager he has been responsible for implementing the Title II Colorado River Basin Salinity Control Program that was authorized by Public Law 93-320. Reclamation is the lead federal agency and Reclamation and the other federal agencies partner with the seven Colorado River Basin States (Basin States) to meet the target objective of reducing the annual salinity load in the Colorado River by 1.8 million tons per year by the year 2030. Currently, federal agencies and their salinity control programs prevent about 1.2 million tons of salt each year from entering the Colorado River system. Reclamation's salinity control programs control about 570,000 tons of that annual total.

Mr. Jacobson was the Central Utah Project (CUP) Program Manager for five years. The CUP is a Reclamation project that mainly diverts water from the Colorado River Basin through a series of reservoirs and aqueduct to the Wasatch Front in the Great Salt Lake Basin. Mr. Jacobson provided a visible and active liaison role for Reclamation among Reclamation offices, Field Solicitor Office, the Completion Act Office, the Utah Reclamation Mitigation and Conservation Commission, and Central Utah Water Conservancy District.

Mr. Jacobson was the Native American Affairs Program (NAAP) Manager for the UC Region for four years. He served as Reclamation's representative on Federal Indian Water Rights Settlement teams as appointed by the Secretary of Interior's Office. He provided contact and liaison with all Tribes involved in UC Region Programs.

For almost three years Mr. Jacobson served as the Regional Liaison for the UC Region in Reclamation's Washington DC Office. He as an authoritative source of knowledge, advice, and counsel to the Commissioner and Assistant Commissioner on UC Regional issues. He served as liaison in the Washington Office for the Regional Director and key regional program managers providing knowledge and counsel. Mr. Jacobson represented Reclamation in meetings with the Department of Interior officials, other Federal agencies, State Representatives, members of Congress, etc.

Dr. Ari Michelsen

Dr. Michelsen is Research Director, Texas AgriLife Research and Extension Center at El Paso, and Professor of Agricultural Economics, Texas A&M University System specializing in water resources valuation, pricing, markets, conservation and policy analysis. His research focuses on the effectiveness of agricultural and residential water conservation programs, water markets and prices, energy and water quality regulatory impacts and integrated systems for river basin management and water policy analysis in the U.S., China and Chile.

He has authored or co-authored over 140 articles and technical reports. He is immediate Past-President of the American Water Resources Association and serves on the Board of Directors, is Past-President and serves on the Board of the Universities Council on Water Resources, and also serves on the National Water Census Advisory Committee, National Levee Safety Review Committee, Paso del Norte Watershed Council Executive Committee, Rio Grande Salinity Coalition, and is Chair of the 6th World Water Forum, Core Group Priority on Balancing Water Uses through Integrated Water Resources Management, which will be held in Marseille, France March 12-17, 2012.

He has a B.S. in Conservation and Resource Management, University of Maryland, College Park, a M.S. in Economics and a Ph.D. in Agricultural and Resource Economics, from Colorado State University, Fort Collins.

Chuck Cullom

Chuck Cullom is the Colorado River Programs Manager for the Central Arizona Project. He has over 20 years of experience managing and developing water resources in Arizona and the southwest. At CAP, his primary focus is to develop and implement plans, projects, and programs to insure sufficient Colorado River water supplies are available to CAP to deliver to its customers in central Arizona. Currently, Chuck is working on plans to develop new water supplies from local, regional, and international desalination projects as well as augmentation of the Colorado River system. Augmentation projects include importation of new supplies, increasing winter snowpack through cloud seeding, and increasing watershed efficiency. In addition, he leads CAP's compliance with the Lower Colorado River multi-species conservation plan and preparation of facilities to recovery CAP water stored underground. Previously, Chuck oversaw the design, construction and operation recharge projects at CAP. He earned his Master's degree in Geology from Northern Arizona University and his B.S. in Geology from the University of Arkansas. Prior to joining CAP, Chuck worked for Bookman-Edmonston Engineering and for the Arizona Department of Water Resources.

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**Innovation & Creativity: Cutting Edge,
Emerging Technologies, Solar Energy
(New Technologies)
Thursday, January 26, 2012
3:00 p.m. – 4:15 p.m.**

Yoram Cohen, Ph.D.

Dr. Yoram Cohen received his B.A.Sc., M.A.Sc., in 1975 and 1977, respectively, both in Chemical Engineering, from the University of Toronto, and his Ph.D. from the University of Delaware in 1981. He has been on the Faculty of Chemical and Biomolecular Engineering at the University of California, Los Angeles (UCLA) since 1981. He is also an Affiliate Faculty at the UCLA Institute of the Environment and an Adjunct Professor at Ben-Gurion University. He was a Visiting Professor at the Technion (1987-1988), at Universitat Rovira i Virgili (1944) and a Distinguished Visiting Professor at Victoria University (2006). He is a founder and Director of the Water Technology Research Center and the Center for Environmental Risk Reduction, and a member of the UCLA/National Science Foundation (NSF) Center for the Environmental Implications of Nanotechnology (CEIN). Dr. Cohen is a UCLA Luskin Scholar and a recipient of the 2008 Ann C. Rosenfield Community Partnership Prize in recognition of his environmental research. He received the 2003 Lawrence K. Cecil award in Environmental Chemical Engineering from the American Institute of Chemical Engineers (AIChE), the AIChE Separations Division Outstanding Paper Award (1997 and 2009), and was elected Fellow of the AIChE in 2009. In 2008 he received a County of Los Angeles Commendation (2008), a State of California Senate Certificate of Recognition, and a Certificate of Special Congressional Recognition (US) for contributing to legislation to protect public health and dedicated service to the Los Angeles community. Dr. Cohen served as Chair of the AIChE Environmental Division (2002) and of the Separation Division (2008). He published over 180 research papers and book chapters, presented over 300 papers in scientific conferences and gave over 130 invited talks on water technology, water desalination, separations processes, membrane technology, transport phenomena, polymer science, surface nano-structuring and environmental engineering. He is also the Editor of three environmental volumes. Dr. Cohen developed patented technologies in water desalination technology, membrane synthesis, high recovery brackish water desalination, membrane process monitoring, chemical sensors, surface nano-structuring with polymers, and developed models and software for environmental impact assessment. His present research focuses on distributed smart water systems, optimization and control of water treatment systems, RO/NF membrane development, membrane process monitoring, environmental impact assessment regarding emerging contaminants and the environmental implications of nanotechnology. He has served on numerous Government Advisory Committees (including the USEPA Science Advisory Board and the NRC Board on Environmental studies and Toxicology) and recently served on the Blue Ribbon Committee of the Metropolitan Water District of Southern California. Dr. Cohen organized over thirty scientific conferences including the 2008 International Congress on Membranes and membrane processes (ICOM), the 2009 and 2010 West Coast Water Technology Transfer workshops, and he was the Meeting Program Chair of the 2010 Annual AIChE Meeting. He is a member of a number of professional societies including the, AIChE, ACS, NAMS, IDA, AWWA and AMTA.

Dr. Tzahi Cath

Dr. Tzahi Cath is the Assistant Professor of Environmental Science and Engineering at the Colorado School of Mines.

Scarcity of potable water will continue to be one of the main problems humanity faces in the 21st century. Based on the current trend, membrane processes will continue to be a leading technology for water and wastewater treatment practices, particularly due to its high product quality, reduced waste production, and smaller space requirements.

His main field of research is membrane processes for water purification, wastewater reclamation, and desalination. His current focus is on the understanding and implementation of membrane contactor processes (forward osmosis and membrane distillation) and pressure-driven membrane processes (reverse osmosis, nanofiltration, ultrafiltration, and microfiltration) in various reuse and zero-liquid-discharge applications.

Richard Luthy, Ph.D., P.E., D.E.E.

Richard G. Luthy is the Silas H. Palmer Professor and Senior Fellow at the Woods Institute for the Environment at Stanford University. His area of teaching and research is environmental engineering and water quality with application to water reuse and management of contaminated sediments. His work focuses on persistent and bio-accumulative contaminants like PCBs, pesticides and mercury, and emerging contaminants like perfluorinated compounds. Professor Luthy is a past chair of the National Research Council's Water Science and Technology Board and he served on various NRC committees. He is a former President of the Association of Environmental Engineering and Science Professors, a registered professional engineer, and a member of the National Academy of Engineering.

Shane Walker, Ph.D.

Dr. Walker is an Assistant Professor in the Department of Civil Engineering at The University of Texas at El Paso where he teaches courses in water and wastewater treatment. He received a B.S. degree in Civil Engineering at Texas Tech University and M.S. and Ph.D. degrees in Environmental and Water Resources Engineering at The University of Texas at Austin. Dr. Walker is a member of the Center for Inland Desalination Systems (CIDS) research group, and his research interests include treatment of inland desalination concentrates as well as the development of improved drinking water and sanitation systems for impoverished and developing countries.

Philip Brandhuber, Ph.D.

Dr. Philip Brandhuber is a Professional Associate at HDR Engineering and specializes in water chemistry, water quality and water treatment. Phil's work has focused on the occurrence and treatment of inorganic contaminants using advanced treatment technologies. Dr. Brandhuber has been the principal investigator for several water related research projects sponsored by the Water Research Foundation, WaterReuse Foundation and the Water Environment Research Foundation. His evaluation of the occurrence of the endocrine disrupting compound perchlorate in drinking water systems received national attention, including an interview on NPR's *All Things Considered*. A long time Colorado resident, Dr. Brandhuber is a graduate of CU Boulder. When not working on water issues, Phil can be found hiking, biking or skiing in the Colorado mountains.

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**Seawater Desalination: The Pros and Cons of
Co-located Power and Desalination Plants
Thursday, January 26, 2012
4:15 p.m. – 5:30 p.m.**

Val Frenkel, Ph.D., P.E., D.WRE

Dr. Val S. Frenkel is an eminent figure in the water industry with his expertise in water and wastewater treatment, water reuse, and membrane technologies, including desalination. Equally instrumental was Dr. Frenkel's role in the development of low pressure membrane technologies and applications which are used and taught at the university level.

Dr. Frenkel's works go far beyond his job scope as they are published extensively both in the US and abroad, authoring several patents. He has published more than 100 articles in the areas of water, wastewater treatment, desalination and salinity management. For his works, Dr. Frenkel has received numerous accolades from the likes of the International Desalination Association and American Academy of Environmental Engineer. At the same time, Dr. Frenkel is also a Diplomat, Water Resources Engineer (D.WRE) of the American Academy of Water Resources Engineers (AAWRE), which is part of the Academy of the Civil Engineering Certification, Inc. (CEC).

Nikolay Voutchkov, P.E., BCEE

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

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

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

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

Joe Geever

Joe Geever is the Water Programs Manager for Surfrider Foundation.

Joe was raised in Los Angeles and learned to surf while in elementary school – the start of a lifetime relationship with the coast and ocean. He later left high school before graduation and worked as a commercial fisherman during most of his early adulthood.

Later in life Joe quit fishing to finish his formal education, earning a Bachelors Degree in Economics and a Juris Doctorate (law school degree) – both from the University of Virginia. Since then, Joe has devoted his professional career to the restoration and protection of our coasts and oceans.

Joe's duties at Surfrider Foundation include assisting the organization's all-volunteer chapters with legal and policy analysis, as well as development of Surfrider Foundation programs and campaigns.

Richard Nagel

Rich Nagel was named General Manager by the West Basin Municipal Water District Board of Directors in May 2006 and was previously West Basin's Manager of Water Quality since 2000. He is responsible for West Basin's Water Reliability 2020 Program that includes providing a safe high-quality supply of water, reducing the service areas use of imported water, doubling the recycled water production at the nationally recognized Edward C. Little Water Recycling and Research Facility, doubling conservation initiatives, increasing public education and development of ocean-water desalination as an alternative water supply.

Nagel has over 25 years of experience in water supply and wastewater, water quality regulatory programs, research and development programs with numerous public and regulatory agencies on groundwater quality issues, remedial investigation activities and various water treatment studies overseeing numerous reports on groundwater studies and the effects of various contaminants. He was named 2011 Person of the Year by the WaterReuse Association for his significant contributions to the advancement of water reuse and dedication to the water reuse community.

A registered engineer, Nagel graduated from San Diego State University with a Bachelor of Science in Civil Engineering. He is on the Chair of the South Bay Steering Committee for the Greater Los Angeles Integrated Regional Water Management Plan, Board of Directors of the WaterReuse Foundation and California WaterReuse Association, Board Member of the Urban Water Institute and the Multi-State Salinity Coalition, alternate Board member of the National Water Research Institute and New Water Supply Coalition, served on DWR's Recycled Water Task Force, and the Los Angeles County Department of Public Works Recycled Water Task Force.

Art Baggett

Art Baggett served as Chair of the California SWRCB for Governors Davis and Schwarzenegg. He has extensive experience in complex water right and quality negotiations including the Klamath Hydro Settlement, Orville FERC proceeding, the Yuba Accord and AB 2121 process. He was hearing officer on numerous water rights proceeding on north coast rivers, and has overseen complex proceeding through the SWRCB process including the State Implementation Plan, the California Toxics Rule, numerous TMDLs, Basin Plans and 303(d) proceedings, the first MS4 phase 2 Storm water Permit, WDR waivers and policy and the State wide policy on Desalinization and Water Recycling. Art has a working knowledge of local government, having served eight years on the Mariposa County Board of Supervisors and Water Agency. Art also served as President of the Association of State and Interstate Water Administrators and on numerous US EPA federal advisory committees. He has a working knowledge of both federal and state endangered species acts and the agencies that administer them. This extensive experience with all levels of government and regulatory agencies is extremely helpful in resolving complex water issues. Art will advise on the SWRCP Policy and support Gary Carlton on other regulatory consideration

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Opening Keynote Presentation
Friday, January 27, 2012
8:30 a.m. – 9:00 a.m.

Edward Vaughan

Mr. Vaughan is an attorney in private practice. He serves as a director of Security State Bank of Pearsall, a director of the Texas and Southwestern Cattleraisers Association, a director of The Former Texas Rangers Foundation, an advisory director of First State Bank of Uvalde, and an advisory director of the Texas Agricultural Land Trust. Mr. Vaughan is a past president, chairman, and director of the Texas Lyceum. A member of the Texas Water Development Board since 2008, Mr. Vaughan was appointed chairman in December 2010. He serves as the Board's representative on the Texas Bioenergy Policy Council. A frequent speaker at continuing legal education seminars and related programs, Mr. Vaughan holds a Bachelor's degree from the University of Texas and a law degree from St. Mary's University. His term expires on December 31, 2013.

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**Emerging Solutions in Concentrate
Management**
Friday, January 27, 2012
9:00 a.m. – 10:15 a.m.

Charlie He

Mr. Charlie He, an associate and environmental senior project engineer with Carollo, has more than ten years of experience in water and wastewater treatment, water quality data analysis, computer modeling, and advanced analytical work, environmental chemistry, water resource, hydrology, water distribution, and wastewater collection and treatment. Mr. He obtained experience in membrane technologies, including MBR, brackish water Reverse Osmosis (RO), and membrane concentrate management studies, testing and design. He is the southwest regional lead of the Carollo's Research Group and a member of AWWA Water Desalting Committee.

Keith Lampi

Keith Lampi is the Chief Operating Officer of Hydration Technology Innovations (HTI) of Albany, Oregon. HTI is the first company in the world to commercialize forward osmosis water purification/separations technology for industrial as well as consumer applications. Mr. Lampi is one of the original founders of HTI, which emerged from the roots of Osmotek, Inc. in 1989.

Mr. Lampi received his B.A. in Chemistry from Linfield College and M.S. in Environmental and Natural Resource Economics from Oregon State University.

Mr. Lampi oversees both the personal hydration product line along with flat sheet membrane and spiral element manufacturing for industrial applications. His areas of expertise include separation technologies for the food industry, agriculture, industrial waste waters, municipal waste waters, and bio-purifications. In addition to heading daily operations, his responsibilities include membrane and product development, product piloting, application assessments and project management.

Mr. Lampi has also led HTI in the development of several military-based products which provide oral rehydration drinks solutions for military actions in areas where the available water is not potable. Industrial products which Mr. Lampi has helped develop include the "Green Machine" which has recently been introduced to the natural gas industry for recycling "frac" water and landfill leachate systems for the waste disposal industry.

In the area of humanitarian aid, Mr. Lampi has been intimately involved in the development of the HydroPack™ product line which is a simple membrane pouch filled with drink powder and when placed in virtually any water; self-hydrates. The product was used extensively in Haiti just after the recent earthquakes and in Africa today.

Mr. Lampi has been the project manager for work with NASA, DOE, EPA, USAF, and the office of Naval Research. He helps administer both patent applications and the company's research direction.

Tom Davis, Ph.D.

Tom Davis is Director of the Center for Inland Desalination Systems at the University of Texas at El Paso (UTEP). Tom is a native of Columbia, SC. He earned his BS and PhD in Chemical Engineering at the University of South Carolina. Most of his career has been devoted to the understanding of ion-exchange membranes and their applications to electrodialysis and fuel cells. His employment includes Southern Research Institute, Exxon, Graver Water, the University of South Carolina, and ZDD, Inc., a small company that is commercializing technology for reduction of the amount of water lost in the disposal of concentrate from desalination of saline water. He is currently involved in demonstrations of the ZDD (Zero Discharge Desalination) technology at Alamogordo, NM, where the groundwater is nearly saturated with gypsum, and at Naples, FL, where gypsum and natural organic matter impact the recovery of potable water from groundwater.

***2012 MSSC Annual Salinity Summit
“Shaping Our Vision”
January 26-27, 2012***



**National and International Desalination
Developments Session
Friday, January 27, 2012
10:30 a.m. – 12:30 p.m.**

Fredi Lokiec

Fredi Lokiec graduated from the Technion, Israel Institute of Technology, in Chemical Engineering (B.Sc.) and Environmental Engineering (M.Sc.) as well as graduated in Computer Sciences from Tel Aviv University. For the past 21 years, Mr. Lokiec has been employed by IDE Technologies Ltd., Israel, previously as VP Global Marketing Manager and, since December 2007, as Executive Vice President Special Projects, managing business generation and development of IDE Special Projects: BOT/BOO, mega-projects.

Tom Seacord, P.E.

Tom Seacord is a Project Manager with Carollo Engineers, Inc. and has been specifically dedicated for the past 14 years to the area of desalination. He is a licensed professional engineer and has a B.S. and M.S. degree in Civil Engineering from Clarkson University. Tom worked on planning, pilot testing, design, construction and start-up of desalination treatment plants in California, Florida, Kansas, Missouri, South Carolina, Texas and Utah.

Tom Seacord is a current member of the Board of Directors for the American Membrane Technologies Association (AMTA) and the Affordable Desalination Collaboration (ADC).

Jon Freedman

Since 2005, **Jon Freedman** has been GE Water's Global Government Relations Leader. In this role, Jon is responsible for monitoring and helping shape domestic and international water policies. In addition, Jon helps form technology collaboratives between GE Water and government entities.

Jon joined GE more eight years ago as a Business Development Leader with GE Energy, where he led the acquisition of Osmonics, a leading global water treatment company. Jon then joined GE Water, where he served as General Manager, Contractual Services, with responsibility for developing and executing business plans to drive expansion into a range of service segments of the global water marketplace. More recently, Jon was a Director in GE's Corporate Marketing Initiatives Group, reporting to GE's Chief Marketing Officer.

Jon is on the Board of Directors of the WaterReuse Association, and he Chairs the Association's National Legislative Committee. Before joining GE, Jon worked for Suez Group, both in the United States and in Paris, France. Jon received a B.A. from the University of Virginia, a law degree from William & Mary, and an MBA in Finance from The Wharton School of the University of Pennsylvania.

Tom Pankratz

Tom Pankratz is an independent desalination consultant and editor of *Water Desalination Report*, a weekly publication that follows the global desalination market. He has experience in both thermal and membrane desalination processes and a wide range of desal-related topics including pretreatment, seawater intakes and concentrate outfalls. He has participated in some of the world's largest and most technically-advanced seawater desalination projects and currently serves as an expert advisor on projects in the US, Australia, Middle East and North Africa. He is member of the International Desalination Association board of directors, the Middle East Desalination Research Center advisory council, the WHO desalination technology committee, the AWWA Desalting Committee, and past member of the National Academy of Sciences desalination roadmap review committee.

Emily Tenenbaum

Emily Tenenbaum is the New Applications Project Manager at Voltea, an innovative water technology company based in the Netherlands. She holds a B.A. in chemistry from Pomona College and a PhD in physical chemistry from the University of Arizona. She also earned a Graduate Certificate in Entrepreneurial Chemistry from the University of Arizona where she was a recipient of a National Science Foundation Graduate Research Fellowship.

Voltea's award-winning capacitive deionization technology offers a robust, low-energy, high-recovery, chemical-free method for desalinating brackish water. Voltea's main commercial areas are desalination of cooling tower makeup water and point-of-entry residential water softening. Dr. Tenenbaum explores new applications for Voltea's capacitive deionization technology from both a technical and market perspective. Most recently, she is leading pilot projects applying capacitive deionization in desalination of municipal wastewater, brackish groundwater, and coal-bed methane produced water.