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REIMAGINING THE

Cadillac Desert

THURSDAY
SEPTEMBER 15, 2016

AUTRY MUSEUM OF THE AMERICAN WEST

#BBKCADESERT

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SCHEDULE

8–8:30 a.m.

Check in and Continental Breakfast (Plaza)

8:30 a.m.

Welcome and Opening Remarks - **Eric Garner**, Managing Partner, Best Best & Krieger LLP

8:45–9:30 a.m.: The Forever Drought

Bill Patzert, a climate scientist at NASA's Jet Propulsion Laboratory, will provide an overview of our current water reality. He will discuss the outlook for drought relief, future water trends and what it all means for water suppliers and consumers.

9:30–10:45 a.m.: Where Will Water Come From?

This panel will examine the water supply landscape of the future. Some of the region's foremost water experts will weigh in on the role of imported water, local water sustainability projects, conservation, technology, finance and other factors in meeting the challenges of the West's water future.

- **Mark Gold**, Associate Vice Chancellor for Environment and Sustainability, UCLA Institute of the Environment and Sustainability
- **Richard Howitt**, Professor Emeritus, UC Davis and ERA Economics
- **Jeff Kightlinger**, General Manager/Chief Executive Officer, The Metropolitan Water District of Southern California
- Moderator: **Eric Garner**, Managing Partner, BB&K

10:45–11 a.m.: Networking Break (Plaza)

11 a.m.–12:15 p.m.: Water and Technology

Innovation in water technology has outpaced its adoption. Can we surmount the obstacles to technological adoption in response to growing water stresses? This panel of industry innovators will describe available and emerging water technologies and discuss how they are reinventing water management to deploy technologies in public and private sectors.

- **Howard Brewen**, Superintendent, City of San Luis Obispo Water Resource Recovery Facility
- **Eric Hoek**, Founder and CEO, Water Planet, Inc.
- **Paul Gagliardo**, Innovation Director, American Water
- Moderator: **Laura Shenkar**, Founder and Principal, Artemis Water Strategy

All presentations will be in the Wells Fargo Theater, unless noted.
No food or drink allowed in the Theater.

12:15 – 1 p.m.: Lunch (Heritage Hall)

1–1:30 p.m.: Using Nature's Technology in Response to Drought (Heritage Hall)

Theodore Payne Foundation Director of Outreach **Lisa Novick** will present on the beauty and benefits of native landscapes. She will highlight California's rich palette of native plants, which use up to 80 percent less water while supporting ecosystems and promoting watershed health.

1:45 – 3 p.m.: How are Cities Looking at Water?

Cities are finding it increasingly difficult to provide clean and affordable water service in the face of water shortages and rapidly changing regulatory, physical and fiscal constraints. This panel of present and former leaders from major municipal water agencies will discuss innovative strategies for delivering water in the water-scarce West.

- **Shana Epstein**, General Manager, Ventura Water
- **Pat Mulroy**, Senior Fellow, William S. Boyd School of Law, UNLV, Climate Adaptation and Environmental Policy, Brookings Institution
- **David Pettijohn**, Director of Water Resources, Los Angeles Department of Water and Power
- Moderator: **Scott Burton**, Utilities General Manager, City of Ontario

3 p.m. – 3:15 p.m. Networking Break (Plaza)

3:15 – 4:30 p.m.: Modern Urban Living in the Dry Age

A century of urbanization has profoundly impacted water resources in Western cities. This panel will discuss how design can drive the (re)adaptation of our urban landscapes to water scarcity. Panelists will describe the water-smart environments of our future and will discuss the considerations and tools that inform water-smart design choices.

- **Hadley Arnold**, Director, Arid Lands Institute
- **Stephanie Pincetl**, Director, UCLA California Center for Sustainable Communities
- **Mark Hanna**, Senior Principal Water Resources Engineer, Geosyntec Consultants
- Moderator: **Paeter Garcia**, Partner, BB&K

4:30 – 4:45 p.m.: Closing Remarks

4:45 – 6 p.m.: Networking Reception (Plaza)

ABOUT THE AUTRY MUSEUM OF THE AMERICAN WEST

The Autry is a museum dedicated to exploring and sharing the stories, experiences, and perceptions of the diverse peoples of the American West, connecting the past to the present to inspire our shared future. The museum presents a wide range of exhibitions and public programs—including lectures, film, theater, festivals, family events, and music—and performs scholarship, research, and educational outreach. The Autry's collection of more than 500,000 pieces of art and artifacts includes the Southwest Museum of the American Indian Collection, one of the largest and most significant in the United States.

The Autry welcomes you as their guest to explore the galleries and exhibits.

PRESENTERS



HADLEY ARNOLD

Hadley Arnold leads the Arid Lands Institute, a research, teaching and outreach center. ALI creates new planning and design tools solving water-supply challenges in drylands. ALI has built collaborations between leading architecture and engineering firms, public agencies, university science and policy teams, and university design programs in 30 states and around the world. ALI research has been supported by the AIA | Los Angeles, Holcim Foundation,

Buckminster Fuller Institute, US Department of Housing and Urban Development, EPA, City of LA Mayor's Office for Great Streets, the Metropolitan Water District of Southern California, Metabolic Studio, and the AIA College of Fellows 2015 Latrobe Prize.



HOWARD BREWEN

Howard Brewen is the superintendent of the City of San Luis Obispo's Water Resource Recovery Facility. Howard's entrepreneurial experience in the private sector has brought sustainability innovation to the municipal environment. Under Howard's direction, the City collaborated with Pacific Gas and Electric in a \$9.75 million Energy Efficiency Project at the WRRF, the first of its kind in California. Howard is currently spearheading a \$105 million WRRF upgrade that will deliver the latest in water resource recovery technology. Howard is also working with California Polytechnic State University, San Luis Obispo to further an extensive student research and development project on the use of algae for wastewater treatment and biofuel, which is housed at the City's WRRF.



JOHN BROWN

John Brown (Program Co-Chair), a partner at BB&K, is a public lawyer and has represented, as general and special counsel, a variety of California public agencies including cities, redevelopment agencies, special districts and school districts. He is the city attorney for the cities of Ontario and La Habra Heights and the town attorney of the Town of Apple Valley. John has served as general counsel to the Elsinore Valley Municipal Water District for more than 40 years and also acts as general counsel to the Hi-Desert Water District.



SCOTT BURTON

Scott Burton is the general manager of the City of Ontario's Municipal Utilities. He has served in various capacities with the City over the past 16 years and, prior to that, was an engineer with the Yorba Linda Water District and a consulting engineering firm. In his current capacity, he leads a staff of 170 dedicated employees responsible for water, sewer, solid waste and recycling enterprise functions serving about 35,000 customer accounts. Ontario is home to a 13-square-mile master planned community that is poised to develop over the next 25 years. With this comes unique challenges in managing, conserving and expanding Ontario's water supply resources.



SHANA EPSTEIN

Shana Epstein has served as general manager of Ventura Water since 2011. She has led the municipal utility to achieve many important accomplishments, rising to the challenge posed by five years of drought. Shana leads an integrated water agency that operates four treatment/purification plants and maintains more than 600 miles of pipeline. Prior to joining the City of Ventura, Shana served as the environmental utilities manager for the City of Beverly Hills. In this position, she led a 75-person team to manage water, wastewater, stormwater and solid waste.



PAUL GAGLIARDO

Paul Gagliardo is the manager of innovation development for American Water, the largest publicly traded US water and wastewater utility company. Paul leads the company's Innovation Development Process, which tests and develops new technologies and processes for use in the company and the water industry. He came to American Water in 2009 from Natawa Corporation, a start-up company focused on utilities and technology within a public-private partnership framework, where he served as vice president. He also spent more than 20 years at the City of San Diego, where he created and managed the Aqua2000 Research Center, a program focused on testing new technologies for the water and wastewater business.



PAETER GARCIA

Paeter Garcia is a partner in BB&K's Los Angeles office. His practice involves a broad range of water law, policy, and litigation matters, including surface and groundwater rights, water supply planning, and related fields of environmental and natural resources law for both public agency and private clients. Paeter has served as an adjunct water law professor at California State University, San Bernardino and UC Riverside Extension, and as vice chair of the Southern California Water Committee's Urban Water Planning Task Force.



ERIC GARNER

Eric Garner (Program Co-Chair) is managing partner at BB&K and has practiced water law at the firm for nearly 30 years. For the past two decades, he has worked extensively on groundwater matters. He has advised clients throughout California on groundwater issues and was involved in the drafting of the Sustainable Groundwater Management Act. He has worked on surface water issues throughout the state and has drafted water laws in South Africa, Trinidad and Pakistan. Eric co-authored “California Water” and “California Water II,” and is an adjunct law professor at the University of Southern California Gould School of Law. Follow him on Twitter @BBKEricGarner.



MARK GOLD

Professor Mark Gold is the associate vice chancellor for Environment and Sustainability at UCLA. His research focuses on integrated water management, coastal resource management, and urban sustainability. He is spearheading UCLA's first ever Grand Challenge: Thriving in a Hotter Los Angeles by 2050: a Path to 100% Renewable Energy, 100% Local Water and Enhanced Ecosystem and Human Health. In addition, Mark serves on LA Mayor Eric Garcetti's Water Task Force and is a city representative on the Metropolitan Water District Board of Directors. Prior to working at UCLA, Mark was the president of Heal the Bay for 18 years.



MARK HANNA

Mark Hanna is a California registered professional engineer and a senior principal in Geosyntec Consultants' Los Angeles office. His 20 plus years of experience in water resources, water rights and integrated planning allows him to offer multi-sector clients comprehensive solutions to the growing problems of water supply in the natural and urban environment. In addition to several regional planning studies revolving around local water resources, Mark currently leads Frank Gehry's engineering team in the Los Angeles River Vision Study and consults on the redevelopment of several large parcels along the Los Angeles River.



ERIC HOEK

Eric Hoek is chief executive officer at Water Planet, Inc., which develops and markets membrane-based water purification and separation products, solutions and services. Previously, Eric was an engineering professor at UCLA and UC Riverside, researching and teaching spanned water treatment, desalination, membrane technology and nanotechnology. He has published extensively on these topics and was an editor of the international journal *Desalination and the Encyclopedia of Membrane Science & Technology*. His early research and inventions led to the formation of NanoH₂O, now LG Water Solutions. He recently embarked on a five-year collaboration with Global Classrooms for Peace to improve sanitation and water issues on Fiji's remote islands.



RICHARD HOWITT

Richard Howitt is a professor emeritus of agricultural and resource economics at UC Davis and a principal at ERA Economics. He has published widely on agricultural and environmental resource allocation issues, with an emphasis on agricultural land use, water markets and the application of optimization models to resource allocation questions. His research interests include building computer models of land and water use, and their calibration to GIS-based data sets. He is engaged in an analysis of land use patterns in the Sacramento-San Joaquin Delta and in an assessment of economic outcomes for agriculture and recreation in the Delta and the impact of new groundwater legislation.



JEFFREY KIGHTLINGER

Jeffrey Kightlinger is general manager and chief executive officer for the Metropolitan Water District of Southern California. The MWD is the largest municipal water provider in the nation delivering an average of over two billion gallons of water a day to 19 million customers across Southern California. Metropolitan serves one out of every two Californians in the six counties of Ventura, Los Angeles, Orange, Riverside, San Bernardino and San Diego. Jeffrey was appointed general manager in February 2006. Prior to that, he served as the general counsel for the agency. Follow him on Twitter @8thGenCA.



PAT MULROY

Pat Mulroy serves as a non-resident senior fellow for Climate Adaptation and Environmental Policy for The Brookings Institution and also as a practitioner in residence for the Saltman Center for Conflict Resolution at the UNLV William S. Boyd School of Law. She also holds a faculty position at the Desert Research Institute, where she serves as the Maki Distinguished Faculty Associate. Pat also serves on the Wynn Resorts Ltd. Board of Directors. At UNLV's Boyd School of Law and DRI, Pat's focus is on helping communities in water-stressed areas throughout both the American Southwest and the world to develop strategies to address increased water resource volatility and identify solutions that balance the needs of all stakeholders. Follow her on Twitter @P_Mulroy.



LISA NOVICK

Lisa Novick is the director of outreach for the Theodore Payne Foundation for Wild Flowers and Native Plants. Since joining the Foundation in 2007, Lisa has designed and implemented its K-12 Education and Landscaping for Resilience programs, and has designed and installed dozens of native landscapes in public spaces across the Los Angeles region. In 2015, LFR received a Green Leadership Award from the Los Angeles County Board of Supervisors. A published writer in literary short fiction, Lisa blogs for the Huffington Post and is working on a book of creative nonfiction.



WILLIAM PATZERT

William Patzert, often called the “Prophet of California climate,” has been a scientist at the California Institute of Technology's NASA Jet Propulsion Laboratory in Pasadena, Calif. since 1983. The author of many scientific and popular articles, Bill works with undergraduate and graduate students from all over the world, and lectures at many local universities. A media favorite, he is often sought out by reporters and is regularly seen on local and national television representing NASA and JPL. In a recent article, he was named as one of the West's most influential individuals in dealing with water issues.



DAVID R. PETTIJOHN

David R. Pettijohn is the director of water resources for the Los Angeles Department of Water and Power. With more than 30 years of water utility experience, David has management oversight for water resource activities including strategic planning, watershed management, conservation, water recycling policy, and local resource development, as well as inter-agency coordination activities and legislative affairs. David is a registered civil engineer in the State of California. He serves on the Colorado River Board of California.



STEPHANIE PIN CETL

Stephanie Pincetl is professor-in-residence at the UCLA Institute of the Environment and Sustainability and director of the California Center for Sustainable Communities at UCLA. Stephanie conducts research on environmental policies and governance and analyzes how institutional rules construct how natural resources and energy are used to support human activities. She is an expert in bringing together interdisciplinary teams of researchers across the biophysical and engineering sciences with the social sciences to address problems of complex urban systems and environmental management. Follow her on Twitter [@stephaniepincet](https://twitter.com/stephaniepincet)



LAURA SHENKAR

Laura Shenkar is the founder and a principal at Artemis Water Strategy. She works with leading corporations and water utilities, with water tech companies and investors to drive deployment of advanced water technology. With Generate Capital, Artemis has adapted finance innovations from the solar industry to build the first water project finance vehicles. More than 1,000 companies have participated in Artemis' nonprofit Artemis Top 50 company competition, which has identified the early leaders in water tech. Artemis clients include Walmart, the US Navy, Intel as well as the governments of Canada, Singapore and Israel. Follow [@ArtemisWater](https://twitter.com/ArtemisWater) on Twitter.



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