Speakers and Panelists

Peter Barkmann is a Senior Hydrologist at the Colorado Geological Survey (CGS) where he conducts regional water resource investigations, environmental assessments, and manages the groundwater resources program. Prior to joining the CGS in 2002, Peter helped a local consulting firm assess hydrogeological characteristics of the Denver Basin aquifers and oversaw the design and installation of production-water wells for municipal water providers in the basin. At CGS, he has worked to decipher the 3D stratigraphic architecture of this important aquifer system and was principal investigator and lead author of the CGS report *Cross-sections of the fresh-water strata of the Denver Basin*. He is co-author on numerous

CGS maps and reports, including the award-winning *Ground Water Atlas of Colorado* (2003). Recently, he has led the effort to update the *Atlas* to an entirely web-based format and has coordinated development of a statewide Abandoned Mined Land inventory data hub. Peter holds a Bachelor of Science Degree in Geology from Western Washington University and a Master of Science Degree in Geology from the University of Montana.

Thomas Cech currently serves as the Co-Director of the One World One Water (OWOW) Center for Urban Water Education and Stewardship at Metro State University, Denver. Tom was born and raised on a farm near Clarkson, Nebraska, graduated from Kearney State College with a Bachelor of Science Degree in Math Education, and later received a master's degree in Community and Regional Planning from the University of Nebraska – Lincoln. He has served as the Executive Director of the Central Colorado Water Conservancy District in Greeley and has taught undergraduate- and graduate-level cources in water resources at the University of Northern Colorado and Colorado State University.

Bruce Finley is a longtime staff reporter for the Denver Post who covers environment-related news: the land, air and water issues around Colorado and the West. Bruce has worked both as a journalist and a lawyer on a variety of issues worldwide; however, he grew up in Colorado and its mountains and has relished the chance to serve its residents. Bruce graduated from Stanford University, then earned masters' degrees in international relations as a Fulbright scholar in Britain and in journalism at Northwestern University. He went to law school at the University of Denver, earning his Juris Doctor degree in 2012 and joining the Colorado

Bar. He has won numerous journalism awards. His international affairs work led to on-site reporting in 40 countries including a stint in Africa, multiple assignments in Iraq, and after the 9/11 attacks, around the Arab world from Pakistan to Yemen.









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Roger Fragua has dedicated his professional career to the advancement and development of American Indian communities. He is currently the President of Cota Holdings, LLC, and NDN Energy, LLC, whose mission is to support Tribal community and economic development in the energy sector. Cota focuses on Tribal development projects and efforts of energy companies within Indian Country. Previously, Roger served as Deputy Director of the Council of Energy Resource Tribes and where he worked with leaders of the 47 federally recognized Tribes and four Canadian First Nations to dramatically restructure federal-Indian relations concerning minerals, mining, taxation, and Tribal jurisdiction over environmental regulations on Indian lands. Roger also worked for the Enron Corporation in Houston,



Texas, where he created innovative business concepts and promoted partnerships between Tribes and Enron. Roger has worked with the Western Governors' Association and the National Tribal Environmental Council on State and Tribal relations as it relates to environmental issues. The basis for Roger's commitment to Indian Country is steeped in his life-long tenure as member of the Jemez Pueblo in New Mexico where he has served as Tribal Administrator.

Elizabeth Garner is the Colorado State Demographer with the Department of Local Affairs, an agency focused on strengthening the capacity of Colorado's communities and local governments. She leads the State Demography Office, which produces population and economic estimates and forecasts for use by state agencies and local governments. Elizabeth has over 25 years of experience analyzing population and economic trends in the state, and her current areas of research include aging in Colorado, characteristics of migration, and poverty. Elizabeth is an economist and received her B.A. in Business at the University of San Diego, her masters in Agricultural and Resource Economics at Colorado State University. She is



also a Colorado native, something only 43% of the state's current population can claim.

Dr. Seth Haines is a Research Geophysicist with the USGS Central Energy Resources Science Center in Denver. His areas of work include characterizing gas hydrate resources using seismic and other geophysical methods and quantifying the potential effects of oil and gas development on water resources and wildlife habitat. This work includes analysis of data related to hydraulic fracturing and water production as well as linking of those observed water trends with USGS assessments of oil and gas resources. Prior to relocating to Colorado, Seth grew up in rural Maine. He received a BA in Geology and Physics at Middlebury College in Vermont, and an MS and PhD in Geophysics from Stanford University.



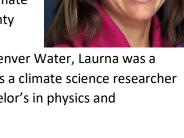
Dr. Mark Jensen is a Professor of Chemistry and the Jerry and Tina Grandey University Chair in Nuclear Science and Engineering at Colorado School of Mines. Mark's research interests are focused on the nuclear fuel cycle, ranging from mechanisms of selectivity in chemical separations to biologically based metal separations and the biochemistry and environmental chemistry of the transuranium elements. Prior to his appointment at Mines, Mark has studied the chemistry of the actinide and lanthanide elements as a scientist in the Heavy Element Chemistry and Separation Science Group at Argonne National Laboratory for twenty years. He received his Ph.D. in Inorganic and

Nuclear Chemistry from Florida State University after which he had a postdoctoral position at DOE's Argonne National Laboratory.

Laurna Kaatz is the climate science, policy, and adaptation program director for Denver Water. Her primary responsibility is to lead climate investigations and implement findings to inform planning, policy, and research. Laurna's work incorporates many areas of water resource planning, including climate and drought planning, operational and water rights analysis, and long-range integrated resource planning. As incoming Chair of the Water Utility Climate Alliance, lead practitioner of the Decision Making under Deep Uncertainty Society, and Past President of AWRA CO Section, Laurna is extensively

engaged in climate preparedness and resilience. Before her career at Denver Water, Laurna was a Professor of Physics at Sweet Briar College, and then went on to work as a climate science researcher with Aurora Water. Laurna has a master's degree in physics and a Bachelor's in physics and mathematics, and is currently working on her PhD.

Tracy Kosloff is Deputy State Engineer with the Colorado Division of Water Resources. She holds bachelor's and master's degrees in Engineering from UCLA. She worked as a consulting engineer in the water supply planning field before joining the Colorado Division of Water Resources in 2010. Ms. Kosloff originally focused on water supply regulation in the South Platte River Basin and Colorado's eastern plains but now holds a statewide role dealing with Well Permitting, Surface Water Use Approvals, State Legislation, Water Law, and whatever else is necessary.









Eric Kuhn is the former General Manager of the Colorado River District, a position he held for more than 20 years. He earned his BS in Engineering from the University of New Mexico and an MS in Business Administration from Pepperdine University. Early in his career, he worked as a Naval engineer officer aboard nuclear submarines and as a nuclear start-up engineer for Bechtel Power Corp. After joining the Colorado River District in 1981 as Assistant Secretary-Engineer, he served on the Engineering Advisory Committee of the Upper Colorado River Compact Commission and the Colorado Water Conservation Board representing the Colorado River mainstem. Eric was appointed by Governor Bill Owens as an at-large

representative on the Colorado Interbasin Compact Committee. Since retiring in 2018, Eric has written a book titled "Science Be Dammed: How Ignoring Inconvenient Science Drained the Colorado River," which is an alarming reminder of the high stakes in the management-and perils in the mismanagement-of water in the western United States.

Jan Kulmann is currently serving as Mayor of Thornton, CO, the Vice Chair of the Rocky Flats Stewardship Council, and member of the North I-25 Coalition. Professionally, Jan is a licensed professional engineer having received a bachelor's degree in Electrical Engineering from Louisiana State University, along with a minor in music performance, and later an MBA from Colorado State University. Jan has spent her working career in the utility and oil & gas industries in both Texas and Colorado. She spent several years designing infrastructure for local electric utilities in the fast-growing

Houston metro area. She coordinated efforts with area builders and developers to safely increase the power supply for residents and businesses. This work has given her valuable experience and knowledge on the requirements necessary for fast growing communities, like Thornton. After moving to Thornton in 2007, Jan brought her leadership skills and technical expertise in both process safety and environmental protection to the oil & gas industry. Jan manages and develops the people, processes and programs that are necessary to ensure operations are conducted safely and with strict environmental protections.

Dr. Patty Limerick is the Faculty Director and Chair of the Board of the Center of the American West at the University of Colorado, where she is also a Professor of History. Patty has dedicated her career to bridging the gap between academics and the general public and to demonstrating the benefits of applying historical perspective to contemporary dilemmas and conflicts. Patty was appointed the Colorado State Historian in 2016 and served until 2018. In 2016, she was also appointed to the National Endowment for the Humanities advisory board, the National Council on the Humanities where she served until October 2019. Patty received her BA

from UC Santa Cruz in 1972 and her Ph.D. in American Studies from Yale University in 1980. She started her academic career in 1980 as an Assistant Professor of History at Harvard. In 1984, Patty moved to







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Boulder to join the History Department of the University of Colorado, where she became Full Professor in 1991. Patty has published several books including *Desert Passages (1985), The Legacy of Conquest,* (1987), and *A Ditch in Time: The City, the West, and Water* (2012). She is also a prolific essayist, and many of her most notable articles were collected in 2000 under the title *Something in the Soil*. Patty's awards and honors are numerous and include a MacArthur Fellowship (1995 to 2000) and the Hazel Barnes Prize (2001). She has served as president of several professional organizations, advised documentary and film projects, and done two tours as a Pulitzer Nonfiction jurist, as well as chairing the 2011 Pulitzer jury in History. She regularly engages the public on the op-ed pages of local and national newspapers and currently writes a monthly column for *The Denver Post*.

Jeff Lyng is the Director of Energy & Environmental Policy at Xcel Energy, serving electricity and natural gas customers in eight states. He is responsible for developing strategy and policies that will continue the company's leadership in the clean energy transition while keeping customer bills low. Prior to joining Xcel Energy, Jeff was a Senior Policy Advisor with the Center for the New Energy Economy at Colorado State University where he worked with states to develop clean energy policies and programs. He also served as the Renewable Energy Policy Manager in former Colorado

Governor Bill Ritter's Energy Office. Jeff earned his master's degree in Building Systems Engineering from the University of Colorado where he studied solar energy in the production home market. Jeff has served on the boards of Xcel Energy's Innovative Clean Technologies Program, the Colorado Energy Services Coalition, the Colorado Renewable Energy Society and is a past Board Chair of the American Solar Energy Society.

Jordan Macknick is the Lead Energy-Water-Land Analyst for the National Renewable Energy Laboratory. He is a member of the Strategic Energy Analysis Center's Systems Modeling team within the Resources and Sustainability Group. Jordan's primary work addresses the environmental impacts of energy technologies, while seeking opportunities for energy and ecological synergies. In his energy-water-land leadership capacity, Jordan analyzes national and regional implications of different energy pathways in the context of water and land resources, evaluates opportunities to improve the energy management of water infrastructure, and explores innovative



approaches to co-locating solar and agricultural activities. Jordan received his BA in Mathematics and Environmental Studies from Hamline University in 2005, and his Master of Environmental Science degree in Transboundary Natural Resource Policy from Yale in 2009. Jordan's areas of expertise include systems modeling of energy and water infrastructure interactions, renewable-powered water treatment systems, meta-analysis of diverse data sets, and low-impact renewable energy development.



Jayla Poppleton is the Executive Director of Water Education Colorado. Previously, she oversaw print and digital content programming and served 9 years as the editor for *Headwaters* magazine, Water Education Colorado's flagship publication. Throughout her career, Jayla has focused on communicating important science and policy issues through a human-interest lens. She has written extensively on all aspects of Colorado water, and it continues to be the subject she is most passionate about. Jayla serves on the Advisory Committees for TAP-IN Colorado, and for the One World One Water Center at Metro State University. Hailing from the outskirts of Chicago, Jayla was drawn to

beautiful Colorado, where she earned a bachelor's degree from Colorado State University in technical journalism specializing in natural resources management. She fell in love with Colorado's rivers while guiding commercial rafts down the Cache la Poudre River, and now lives in Denver with her husband and three sons.

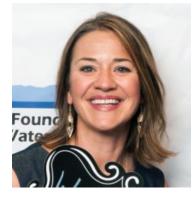
Luke Runyon is a reporter covering the Colorado River Basin for public radio station KUNC in Greeley, CO. His investigations show how water issues can both unite and divide communities throughout the Western U.S. Luke produces feature stories for KUNC and a network of public media stations in Colorado, Utah, Wyoming, New Mexico, Kansas, Arizona, California and Nevada. Before covering water at KUNC, Luke covered the agriculture and food beat for five years as the station's Harvest Public Media reporter. He has also reported for Aspen Public Radio in Aspen, Colo. and Illinois Public Radio in Springfield, Ill. His reports have been featured on NPR's Morning

Edition, All Things Considered, Weekend Edition, Here & Now and APM's Marketplace. He's a graduate of the University of Illinois' Public Affairs Reporting program. Luke's work has been recognized by the Society of Environmental Journalists, Radio Television Digital News Association, the Colorado Broadcasters Association and the Public Media Journalists Association.

Russ Sands has worked in the water industry for 15 years. His career has included time spent ensuring water quality for Denver Water, managing water conservation and stormwater programs for the City of Boulder, and working as a consultant on climate, resilience and water issues. As the Section Chief for the Colorado Water Conservation Board (CWCB), Russ works with stakeholders across the state on local and regional water challenges. Russ is currently working with leaders from each of Colorado's major river basins to update local and state analysis that will feed into the update to the Colorado Water Plan.







Christy Woodward serves as the Senior Director of Regulatory Affairs for the Colorado Oil & Gas Association. She leads COGA's regulatory strategy. Ms. Woodward has 19 years' experience in civil and environmental engineering design and project management, including Clean Water and Clean Air Act permitting and compliance as well as Wildlife and Cultural assessments for energy projects on Federal Lands. She is an Environmental Engineer who has provided technical support for the oil and gas industry, the homebuilding industry, mining industry, other private clients, U.S. Environmental Protection Agency and the Department of Defense. Ms. Woodward's technical



experience includes regulatory compliance, permitting, and agency negotiation; planning and implementation of surface and subsurface investigations and remedial evaluations; remedial design and implementation; design and implementation of hydrogeological, hydrological, and sedimentation studies; watershed management projects; and stormwater control projects.

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Kurt Gutjahr Managing Director, Center for the American West University of Colorado, Boulder

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