New Mexico Groundwater Webinar – October 12 & 13, 2021

Professional background of presenters (In alphabetical order)

David Bardsley, PG, Business Development, Ellingson-DTD, Mineral Wells, TX

David Bardsley P.G. has over thirty-seven years of environmental and water supply drilling experience working in a variety of settings across the United States. Mr. Bardsley earned a Bachelor of Science degree in Geology & Geophysics along with a Communications Minor (1984) from the University of Missouri-Rolla. He started his career as a drill rig helper advancing through various technical and managerial positions in both small and large drilling companies. He was an early leader in the use of horizontal drilling to solve environmental and water supply challenges and has authored/co-authored over twenty papers on horizontal environmental drilling methodology. David has been directly involved in the design and oversight for the installation of hundreds of horizontal environmental and water supply wells. He is a licensed well driller in Texas, Arizona and Louisiana and holds RG/PG certifications in Texas, Missouri, Louisiana and Tennessee. Mr. Bardsley is a strong proponent of education and has served as a short course instructor at Battelle environmental conferences and University of Wisconsin Madison along with presenting environmental drilling training to students at University of Arizona and University of Louisiana Lafayette.

Julia Fay Bernal, Director, Pueblo Action Alliance, Albuquerque, NM

Julia Bernal is an enrolled tribal member at **Sandia Pueblo** but is also from **Taos Pueblo** and the **Yuchi-Creek Nations of Oklahoma**. She has her BA in English and Literature from the University of Redlands. Currently, she is working towards her MA in Water Resources Policy Management and a MA in Community Regional Planning at the University of New Mexico. In 2014 she obtained a Water Resources Technician Certification from the BIA through the Native American Water Corps. Julia has contributed her analysis on environmental issues in New Mexico with her expertise in New Mexico water and environmental policies and organization. Particularly, her focus has remained on the oil and gas industry and how it's adverse impacts affect the environment, the water and the people. She advocates for the decolonization of water policy and stolen water resources. She has helped PAA build campaigns against carbon pricing, fracking 101 education, and the reclamation of indigenous water management practices.

Victoria Blumenberg, Grad. Research Assistant, Water Science & Management, New Mexico State University, Las Cruces, NM

Victoria is currently pursuing a PhD in water science and management. She earned her M.S. and B.S. Degrees from the University of North Carolina at Charlotte. Her M.S. research focus was isotope hydrology of groundwater to assess the sustainability of the High Plains Region. Victoria's undergraduate program focused on using GIS to analyze environmental issues. Prior to college, she spent 7 years as an enlisted member of the United States Air Force Reserve as an Intelligence Analyst. During her enlistment, she completed four deployments to Kuwait and Iraq in support of Operation Iraqi Freedom and Operation Enduring Freedom, as well as three temporary duty assignments in Germany and Puerto Rico.

Tucker Colvin, Research Scientist, Southwest Environmental Finance Center, Department of Civil Engineering, University of New Mexico, Albuquerque, NM

Tucker earned his B.S. in Environmental Science from Montana State University and his M.S. in Geography from the University of New Mexico. As a graduate student, he worked with the Climate and Human Development research group at UNM to identify the needs and challenges faced by rural drinking water systems in New Mexico and the governance and institutional structures that created them. Additionally, he researched how institutional structures treat populations differently. His thesis, titled *Drinking Water Governance for Whom? An Institutional Analysis of Rural Drinking Water Systems in New Mexico,* earned thesis distinction. Before graduate school, Tucker worked as a drinking water treatment plant operator in Bozeman, Montana. In this position he worked with SCADA systems, asset management plans, equipment maintenance, source water protection, regulations and compliance, water chemistry, and community relations. He maintains his Montana operator's license. He also has experience working in water and soil chemistry laboratories, teaching science and geography courses, and working in agriculture.

James D'Arezzo, Chairman and CEO, AquaterreX, Dunedin, FL

Since March 2020, Jim has served as Chairman and Chief Executive Officer of AquaterreX, a global environmental services organization that focuses on water strategy technology to help solve the global water crisis. He has more than 30 years of senior executive experience in a variety of corporations from start-ups to a Fortune 500 company. Jim has deep experience in growth at technology companies, from hardware and software to energy. He was one of the original corporate officers of Compaq Computer, which became the world leader in personal computer sales prior to merging with Hewlett Packard. He founded the Geographic Information Systems Division at leading design software company, Autodesk Inc. Most recently, as CEO of Condusiv Technologies, the global leader in performance-improving software for Windows computers, he grew an installed base of over 100 million software licenses for Microsoft Windows-based servers and workstations. D'Arezzo holds a BA from Johns Hopkins University and an MBA from Fordham University.

AnnieLu DeWitt, Remediation Technologies, Clean Harbors, South Portland, ME

AnnieLu is the National Technical and Sales Lead for the Emerging Contaminant and Water Treatment Program for the Clean Harbors Environmental Services group. She brings her 25 years of experience in the environmental laboratory and remediation fields to assist clients in interpreting their analytical results to evaluate their options for treatment utilizing varied medias and pre-treatment equipment to achieve project objectives. Having worked as a GC/MS and also most recently as a LC-MS/MS chemist for PFAS compounds she believes in the importance of evaluating the project as a whole, from suggesting the most valuable testing methods at the beginning of the project that help determine the best treatment trains and medias for complex waste streams to informing clients on their options for final deposition of their spent media. AnnieLu holds a BS in Chemistry-Geology from Bridgewater State University.

Chuck Dunning, PhD, PG, Vice president Business Development, WellIntel, Milwaukee, WI

Chuck has a demonstrated history of working in the water resource and groundwater data fields. He is skilled in International Project Management, Geology, Hydrogeology, Groundwater Modeling, and Supervisory Management. He has a PhD in Civil and Environmental Engineering from University of Wisconsin-Madison. Prior to joining WellIntel he spent 21 years at the United States Geological Survey Wisconsin Water Science Center where he directed groundwater research priorities, strategic planning, community engagement and program development.

Kyle Harwood, JD, Partner, Egolf + Ferlic + Martinez + Harwood, LLC, Santa Fe, NM

Kyle Harwood is an attorney and water resources professional who, prior to becoming a partner at Egolf + Martinez + Harwood, was owner of Harwood Consulting, PC, which provided legal and interdisciplinary water resource consulting services in New Mexico. Kyle has advised clients on land and water law regulation and policy issues and he litigates these issues in courts throughout the state. He also drafts regulations and policy for clients and has authored numerous articles on water resource issues and lectured on land use and water law. Kyle represents public, private and nonprofit clients, as well as governmental clients, in water and natural resource issues, including special master assignments and expert witness services. He is a New Mexico State Bar Board Certified Specialist in Natural Resource Law - Water Law. As a certified instructor for the New Mexico Real Estate Commission, he has taught water law classes for hundreds of real estate professionals. Kyle is a former board member and chair of the New Mexico State Bar Natural Resources, Environment and Energy Law (NREEL) Section. He earned his J.D. from the University of New Mexico School of Law, M.P.A. in Water Resources from the University of New Mexico and B.S. in Natural Resources from Cornell University.

Mike Hightower, PE, Program Director, NM Produced Water Research Consortium, Albuquerque, NM

Michael Hightower is a civil and environmental engineer with 40 years of experience in research and development. His current efforts include research and evaluation of innovative environmental and energy technologies and the reliability, security, and protection of critical water and energy infrastructures. He has led programs supporting the U.S. in improving the safety, security, and reliability of energy and water infrastructures; managed and coordinated Sandia's marine energy transport safety and security program; managed environmental research and development programs for DOE; has coordinated Sandia's energy water interdependency research program since 2005; and has conducted civil and structural modeling, analysis, and design of penetrating weapons systems, missiles and rockets, and energy generation, mining, and transportation facilities and infrastructure. Michael's background also includes extensive work with public-private partnerships involving water quality, desalination, and water policy. He earned his M.S. and B.S. degrees in Civil Engineering from New Mexico State University.

Arlin Howles, CPG, Senior Hydrogeologist, Earth Organization, Frazier Park, CA

As a Senior Hydrogeogoloist for Earth Organization, Arlin's work focuses on exploring for and developing groundwater resources worldwide. Arlin has extensive work experience as a Wellsite Geologist for organizations including Excellence Logging, Field Geo Services, Inc., SM Energy Company, Chinook Consulting Services and PLM Exploration Services, LLC. He received a Master's Degree in Geology, Geophysics, Internal Studies from the University of South Carolina and a Bachelor's Degree in Geology from Edinboro University of Pennsylvania. He is also a certified Petroleum Geologist.

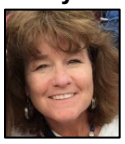
Mark Kelly, Water Resources Division Manager, Albuquerque Bernalillo County Water Utility Authority, Albuquerque, NM

Mark has worked for the Albuquerque Bernalillo County Water Utility Authority for over 11 years as an Industrial Pretreatment Engineer, Compliance Division Manager and most recently as Water Resources Division Manager. Prior to working for the Albuquerque Bernalillo County Water Utility Authority, he worked at Molzen-Corbin and Associates for almost 5 years as an engineer. Mark received his B.S. in Environmental Engineering from the New Mexico Institute of Mining and Technology.

Dagmar Llewellyn, Planning Group Supervisor, Water Management Division, US Bureau of Reclamation, Albuquerque, NM

Dagmar Llewellyn has served as a hydrologist at the Bureau of Reclamation in Albuquerque since 2010. She coordinates projects on the impacts of climate change, and building of resilience to resulting changes in our watersheds and water supply. She has a background in geosciences and civil engineering. After 25 years in environmental and water-resource consulting, she moved to the Bureau of Reclamation in response to the passage of the SECURE Water Act, which assigned to Reclamation the evaluation of the potential implications of climate change for water supply and demand in the western United States. Since 2010, she has worked on programs authorized under this Act, including the West Wide Climate Risk Assessment and Basin Studies Program and Rio Grande water management and endangered species issues. Prior to employment at Reclamation, she worked for 22 years at S. S. Papadopulos & Associates. She is an adjunct faculty at the University of New Mexico, where she has taught hydrogeology in the Civil Engineering Department, New Mexico Water Management at the Law School, Water Resources Management in the Geography Department, and served on Master's Thesis committees.

Nancy Mortvedt, Director of Client Engagement, SL Environmental Law Group, PC, Denver, CO



Nancy Mortvedt is the Director of Client Engagement for SL Environmental Law, drawing upon decades of experience collaborating with and advising senior leaders in water and other sectors to help them succeed in their established business objectives. SL Environmental Law Group assists water suppliers that face increased costs due to the contamination of their drinking water supplies by chemicals from commercial products. Prior to joining SL Environmental, Nancy spent 13 years leading business development and client relationships with the American Water Works Association. There, she forged strong affiliations with water utilities, manufacturers and partners throughout the United States, Europe and Israel. Prior to that, she led business development and marketing efforts in the manufacturing, technical, business-to-business and fundraising industries. Nancy earned her Bachelor of Science Degrees in Marketing and Advertising from Ferris State University, Michigan.

Laura Paskus, Environmental Journalist, Host, New Mexico In Focus / NMPBS Albuquerque, NM, Secretary, Society of Environmental Journalists, Washington DC

Laura has been a journalist since 2002, working in print, online, radio, and public television. Her career has focused on helping people understand water, climate, energy and wildlife issues within their communities. Currently, she is working for NMPBS as the environment reporter. In addition to producing weekly segments, Laura produces and hosts a monthly show, "Our Land: New Mexico's Environmental Past, Present, and Future" and is working as part of FRONTLINE's Local Journalism Initiative on an investigation into the military's contamination of groundwater in New Mexico. She is also the editor of The Slick, a project of Capital & Main, a freelancer and recently authored a book titled "At the Precipice: New Mexico's Changing Climate." Throughout her career, she's worked for High Country News, KUNM-FM, Tribal College Journal and New Mexico Political Report, and freelanced for outlets like Al Jazeera, Ms. Magazine, Indian Country Today, National Geographic Online, Columbia Journalism Review, The Progressive, Santa Fe Reporter, New Mexico In Depth and Orion. Laura is a long-time member of Society of Environmental Journalists and has served three terms as president of the Rio Grande Chapter of the Society of Professional Journalists. Laura earned a degree in Geography and Environmental Studies from University of New Mexico and a B.A. degree in Anthropology from the University of Virginia.

Stephanie Russo Baca, JD, Staff Attorney, Utton Transboundary Resources Center, University of NM, Albuquerque, NM

Stephanie Russo Baca joined the staff of the Utton Center in fall 2018. Since her graduation from UNM School of Law, Stephanie has been associated with the Barncastle Law Firm in Las Cruces, New Mexico. She worked previously with the Utton Center as a student research assistant during law school for her 2L and 3L years and as a paralegal following graduation. She holds both the Indian Law and Natural Resources and Environmental Law Certificates, served on the Tribal Law Journal as a staff member and editor, and received the Dean's Award upon graduation. Stephanie also participated in the Madrid Summer Law Institute in 2015.
As staff attorney, Stephanie assists with the activities of the Joe M. Stell Ombudsman Program, the statewide program that provides impartial adjudication information and procedural guidance to unrepresented water right claimants in the state of New Mexico. She also contributes significantly to the Utton Center's overall mission of providing objective research-based public service to New Mexico's communities on issues related to energy, climate change, ecological conservation, food systems, and international natural resource management.

Andrew Stone, Executive Director, American Ground Water Trust, Concord, NH (Conference Moderator)

Andrew Stone completed post-graduate studies in hydrogeology at University College, London. For 13 years he was involved in groundwater research and lecturing at Rhodes University, South Africa. Since 1989 he has worked in the United States as a private-sector groundwater consultant, as adjunct professor (teaching groundwater protection policy at Antioch New England University), and as groundwater educator, advocate and outreach specialist. His work with the AGWT has involved convening over 250 “information-exchange” conferences and workshops focused on groundwater issues. He has organized over 70 “Groundwater Institutes” that have trained 2,000 science teachers and educators on water resources issues. He is a recipient of the National Ground Water Association “Oliver Award” for his work in promoting groundwater education.

Catherine Swanson, Groundwater Remediation Specialist, Purolite, Fullerton, CA

Catherine is a Chemical Engineer with water treatment background. She has worked in facility engineering, technical service, marketing, sales, and business development. Her current focus is on increasing business in the Environmental Solutions market for groundwater remediation and NPDES discharge. She is a technical resource for granular activated carbon, perchlorate, nitrate, uranium, and chrome VI treatments.Prior to joining Purolite, she was a sales engineer for Evoqua with responsibilities for groundwater remediation of inorganics like perchlorate, nitrate, chrome VI and uranium for the Western Region of the US. Previous employment in the field of chemistry and water treatment has been with Airliquide, GS Polymers and Dow Corning. She has a BS in chemical engineering from Northwestern University.

Stacy Timmons, Associate Director, Hydrogeology Programs New Mexico Bureau of Geology & Mineral Resources, New Mexico Tech, Socorro, NM

Stacy Timmons manages the Aquifer Mapping Program at the NM Bureau of Geology and Mineral Resources at New Mexico Tech. Working with the Aquifer Mapping Program, she has been involved with several large-scale, long-term hydrogeologic studies focused on geologic influences on recharge, and groundwater movement and occurrence. She has worked in diverse locations over New Mexico, including the San Agustin Plains, Magdalena, northeastern Tularosa Basin, Truth or Consequences hot springs district, La Cienega wetlands, and southern Sacramento Mountains. She has managed the Aquifer Mapping Program since 2013. This program aims to combine geologic, hydrologic, geochemical, and geophysical data to develop regional conceptual models to describe groundwater flow within aquifers in New Mexico. This work serves the state of New Mexico by providing publicly available reports and data that can be applied to decision-making and water resource planning. Stacy has BS and MS degrees in geology from the University of Cincinnati and Oregon State University and has worked in hydrogeology for the Bureau of Geology since 2004. Prior to working at the Bureau of Geology, Stacy worked in environmental, groundwater, and surface water consulting in New Mexico. In 2019 Stacey was appointed as a member of the New Mexico Interstate Stream Commission and the Water Quality Control Commission.

Pei Xu, PhD, Research Director, NM Produced Water Research Consortium, Albuquerque, NM

Dr. Pei Xu is a professor in the Department of Civil Engineering at the New Mexico State University, and the director of the Environmental Lab for Innovative Technologies. Her research focuses on water reuse, desalination, membrane processes, nanomaterials, and produced water treatment. The goal of her research is to address critical water shortage challenges in arid and semi-arid regions. She was recently selected as the AAAS Leshner Fellow on Food and Water Security, PESCO Endowed Professorship, and C. Herb Ward Family Endowed Interdisciplinary Chair at NMSU. Dr. Pei Xu earned her Ph.D. in Hydrosciences from Ecole Nationale du Génie Rural, des Eaux et des Forêts,(ENGREF), Paris, France, M.S. in Water and Wastewater Engineering from Lanzhou Jiaotong University, China and B.S. in Environmental Engineering from Xi’an University of Architecture & Technology, China.