

# Colorado Groundwater Conference – November 9 & 10, 2021

## Presenter Professional Backgrounds (in alphabetical order)

### Joel Barber, PE, Senior Hydrogeologist, LRE Water, Denver, CO



Joel Barber is a member of LRE Water's Groundwater Team and has over 8 years of experience in the groundwater services, groundwater engineering, water resources, and geotechnical engineering. He is passionate about implementing comprehensive engineering programs including specialized site investigations, advanced data analysis, and numerical modeling to solve groundwater problems. His technical expertise includes design and implementation of advanced field investigation programs, groundwater flow modeling, vadose zone modeling, data analysis using python, and science and engineering communication. Joel has worked on projects including groundwater well drilling and construction, managed aquifer recharge (MAR)/aquifer storage and recovery (ASR), river bank filtration (RBF), groundwater recharge quantification, Colorado groundwater water rights engineering. Joel earned a B.S. in Geological Engineering and M.S. in Hydrogeology from the Colorado School of Mines.

### Peter Barkmann, Senior Hydrogeologist (Retired), CO



Peter has a BS Degree in Geology from Western Washington University and a MS Degree in Geology from the University of Montana. His geological background spans minerals exploration; petroleum development and exploration, geothermal exploration; and water resources. For the past three decades he has focused mainly on groundwater resources and environmental geology. For the Colorado Geological Survey, he conducted regional water resource investigations, environmental assessments, and managed the Ground Water resources program. Prior to joining CGS he assisted a local water resources consulting firm in assessing hydrogeological characteristics of the Denver Basin aquifers and overseeing design and installation of production water wells for municipal water providers in the basin. Mr. Barkmann is co-author of *Artificial Recharge of Ground Water in Colorado-A Statewide Assessment*, published in 2005, and the award-winning *Ground Water Atlas of Colorado*, published in 2003.

### William "Bill" Caile, JD, Attorney, Holland & Hart, Denver, CO



Bill frequently works with large industrial water users, including mining and oil and gas companies, as well as agricultural producers and ranchers, ski areas and resorts, and private landowners. Bill has experience with many matters that collaterally involve water, including real estate transactions, land use approvals, corporate acquisitions, and environmental compliance. Additionally, he has experience in the development and implementation of water supply plans, including surface and groundwater supplies. He has represented clients in all seven of Colorado's specialized Water Court divisions, as well as in adjudicatory and administrative hearings before the State Engineer, the Ground Water Commission, local government authorities, and ditch company boards. Bill began his legal career as the law clerk for the Water Judge in Colorado's Division 1 Water Court, where he assisted with several high-profile trials involving complex water rights issues. He earned his J.D. from the University of Colorado School of Law and B.S. from the University of Colorado at Boulder.

### Dick Brown, Economist, Public Policy Consultant to the Colorado Water Well Contractors Association, Glendale, CO

Dick Brown is a consultant to many firms and governmental entities on economics and public finance. Dick has a BA in Economics from the University of Missouri, Kansas City and an MPA with a double concentration in city management and public finance from the University of Colorado, Colorado Springs. He has taught several graduate level courses in economics, public administration and public finance at the University of Denver and at the University of Colorado. Dick's involvement with water issues began as an undergraduate student working for the water and wastewater department of the City of Gladstone, Missouri. As a commissioned officer in the US Army, Dick worked on potable water systems for villages in the Republic of Vietnam as an adviser to the 3<sup>rd</sup> ARVN Ranger Group. During his time as the city manager of Fountain, Colorado, Dick was involved in the development of the Fountain Valley Pipeline, the creation of the Arkansas River Power Authority, the city's augmentation plan and the financial structure of the city's water utility.

### Theresa Jehn Delaport, President, Quantum Water Consulting, Lakewood, CO



Theresa has over thirty years of professional and supervisory experience which includes: ground water evaluation studies, environmental evaluations, surface and ground water rights studies, including Plans for Augmentation, temporary substitute supply plans, and surface water hydrology studies; aquifer and pump test analyses, monitoring well and water well design, construction and testing; pump/motor/control design, specification preparation and installation for large municipal and domestic water supply wells. Theresa has been assisting clients in managing their hydrologic and water-rights issues for nearly 30 years. Quantum Water Consulting has expertise in water resources and water rights evaluations; environmental assessment and remediation, engineering, surveying, and GIS database development and management. Theresa specializes in Western Water Rights, Municipal Water Well Design, Surface Water Analysis, and Colorado water issues and is the definer and locator of the Pawnee aquifer Colorado.

### Jacob Gallagher, Business Development Manager, Ellingson-DTD, Bellefonte, PA



Seventeen years ago, after getting an undergraduate degree in Chemical Biology from UC Berkeley, Jacob pursued the most logical career path and got a job as a driller's helper. He never looked back. His experience includes work in the water supply, mineral exploration, geotechnical and environmental remediation markets. DTD is a drilling contractor focused on the use of directional drilling technology for horizontal well installations. The company has primarily focused on environmental applications since its inception in 1996 and has completed wells throughout the United States and several European locations.

### Courtney Hemenway, PE, President, Hemenway Groundwater Engineering, Parker, CO



Courtney Hemenway is the President of Hemenway Groundwater Engineering, Inc. and is a registered Professional Engineer in Colorado with BS and MS degrees from Colorado State University. He is a civil engineer with expertise in groundwater hydrology and modeling, well design and construction, ASR, and hydraulic fracturing of deep bedrock aquifer wells, with over 40 years of experience in these areas. Mr. Hemenway has conducted numerous municipal groundwater development programs and has participated in many water resource management projects involving the conjunctive use and interaction of groundwater and surface water. Mr. Hemenway has been involved in the design, drilling, and testing of more than 125 deep Denver Basin wells, numerous shallow alluvial wells, and over 1,500 shallow alluvial soil borings and monitoring wells. He has also been the project engineer on ASR projects since 1991 and has managed the installation and operation of 36 ASR wells in the Denver Basin.

**Dennis Hisey, Senator, Colorado Senate District 2, Colorado General Assembly, Denver, CO**



Senator Hisey represents Colorado's District 2 at the Colorado General Assembly. He was elected in 2018 and serves on the Finance and Transportation & Energy Committees. Prior to being elected, he served as El Paso County Commissioner since 2004 and was elected to serve as Chairman for 6 of those years. As a commissioner, he was involved in water issues beginning with locating potable water sources for rural neighborhoods that found it necessary to haul water for household use. He was instrumental in the formation of, and was founding chairman of, the Fountain Creek Watershed Flood Control and Greenway District, dealing with storm water, flooding and the preservation of downstream water rights. Senator Hisey obtained degrees from Oral Roberts University and Oregon State University.

**Adam Jokerst, PE, Deputy Director, Water Resources, Water and Sewer Department, Greeley, CO**



Adam Jokerst serves as Deputy Director for Water Resources at the City of Greeley, where he oversees long range water supply planning, water acquisition, water resource operations, and water conservation for the Water & Sewer Department. He is a registered professional engineer in Colorado and has worked on water resources projects throughout the Western U.S. for over 12 years in both the private and public sectors. Mr. Jokerst is passionate about using innovation and collaboration to solve complex water problems. He received his Bachelor's Degree from the University of Arkansas and his Master's Degree from Colorado State University.

**Tracy Kosloff, PE, Deputy State Engineer, Colorado Division of Water Resources, Colorado DNR, Denver, CO**



Tracy has worked for the Colorado Division of Water Resources for over 11 years. As Deputy State Engineer, she oversees the Intrastate Water Supply Development and Litigation Section & the Hydrogeology Section. This position directs and supervises the review and engineering evaluation of substitute water supply plans, water court applications, well permit applications, subdivision water supply plans, and other water supply-related activities; as well as critical hydrogeological investigation activities in the Hydrogeology Section. This position also provides general support to the State Engineer in water administration matters around the state and provides a point of contact for the Colorado General Assembly on legislative matters related to water administration. Tracy earned a Master Degree in Civil and Environmental Engineering from UCLA.

**Peter Mayer, PE, Principal, Water Demand Management, LLC, Boulder, CO**



Peter Mayer, Principal and Founder of WaterDM, is a professional engineer and urban water expert who has dedicated his career to advancing the science of water management. For more than 25 years, Peter's work has focused on urban water management, integrated resource planning, water use patterns, assessing the impact of water rate structures and metering systems, evaluating water conservation measures and programs, forecasting future demand with and without conservation, water loss control, preparing water conservation plans and conducting water supply scenario analysis. Over his career, Peter has worked with hundreds of water utilities and organizations across the US and Canada. He received his Master of Science in Water Resources Engineering from Department of Civil, Environmental and Architectural Engineering University of Colorado, Boulder and Bachelor of Arts in Anthropology from Oberlin College, Oberlin Ohio.

**Dennis McGrane, PE, CPG, Owner, McGrane Water Engineering, Lyons, CO**



Dennis has almost 30 years of experience working with municipal, industrial and golf course clients in the western United States. He has experience in both small and large water supply and development projects. As both a professional geologist and engineer, he offers a unique combination of skills and experience to solve complex groundwater problems. His primary focus includes well and pumping system design, aquifer studies, forecasting water levels and well and well field production using analytic and computer modeling means, water rights and expert testimony work, well rehabilitation, and Aquifer Storage and Recovery (ASR) programs. Dennis graduated from Dartmouth College with a degree in Geology.

**Calvin Miller, PhD, Groundwater Specialist, Miller Groundwater Engineering, LLC, Fort Collins, CO**



Calvin is the owner of Miller Groundwater Engineering, LLC, specializing in quantitative analysis and planning for groundwater projects and problems. His experience includes groundwater/surface-water interaction assessments for water rights, including recharge and augmentation plans, non-tributary well evaluations, and stream depletion determinations, aquifer testing and site yield evaluations for large-scale water supply, evaluation of subsurface drain systems and dewatering projects, contaminant assessment and remedial action modeling, multiphase flow analysis and modeling (air-NAPL-water), including air-sparging/SVE systems, and 3D visualization of subsurface data. Calvin received his B.S. in Agricultural Engineering from Louisiana State University, M.S. in Agricultural Engineering and Ph.D. in Civil and Environmental Engineering from Colorado State Engineering. He is a Licensed PE in Louisiana (inactive), Wyoming, and Colorado.

**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.

**Connor Newman, PG, Hydrologist, Colorado Water Science Center, U.S. Geological Survey, Denver, CO**



Connor specializes in hydrogeology and environmental geochemistry, specifically the response of natural systems to human-induced changes such as mining and water-resource utilization. He uses hydrologic modeling tools and geochemistry to understand groundwater flow and the origin and fate of dissolved solutes. Connor has experience working as an on-site mapping and ore-control geologist at an operational molybdenum mine (the Climax Mine), a tour guide in a National Monument (Oregon Caves), as a consulting hydrogeologist, for a state mining regulatory program, and currently for the USGS. He earned his Master of Science in Geology from the University of Nevada, Reno and Bachelor of Arts in Geology from the University of Colorado, Boulder. Connor is a Professional Geologist in Wyoming.

**Jenny Phillips, DABT, Deputy Director, Technical Development Unit, VP, Director Risk Assessment and Toxicology, TRC Companies, Fort Collins, CO**



Ms. Phillips has 30+ years of experience in risk assessment/management. She has a B.S. and M.S. degree in Toxicology/Environmental Health from Colorado State University. She has served as project/task manager and/or senior technical reviewer for hundreds of projects that contain both human health and ecological risk assessments. She has extensive experience in the evaluation of human health and ecological risk, risk communication, derivation of risk based cleanup levels, fate and transport of contaminants, determination of endpoints protective of site ecological and human receptors and negotiation of site closure issues. In the arena of risk assessment, Ms. Phillips has also worked on projects specific to health impact assessment, high consequence analysis and environmental justice issues. She has participated in several community and public forums including two projects with local, state and community groups to collaborate on risk and technical issues that lasted over a year each. She is also technically proficient with compliance with federal and state regulatory guidance to ensure that the risk assessment projects will meet currently accepted criteria and requirements. She has worked on over 300 projects ranging from conceptual risk assessments to quantitative baseline risk assessments at Superfund and Resource Conservation and Recovery Act sites and internationally. In addition, Ms. Phillips has experience in the implementation of investigation field programs for sediment and surface water sites and has served as the senior technical reviewer for many RI and risk assessment projects within the US and internationally.

**Patricia J. Rettig, Head Archivist, Water Resources Archive, Colorado State University Morgan Library, Fort Collins, CO**



Patty Rettig is the head archivist in the Water Resources Archive at the Colorado State University Libraries. Rettig has built the archive to hold over 100 distinct collections documenting Colorado's water heritage by engaging with the water community across the state. This involves working with people throughout the university as well as with state and federal agencies, ditch companies, businesses, and individuals. She earned her Master of Library Science from the University of Maryland, College Park, and her B.A. in English from Wittenberg University. She has been with the Water Resources Archive since its beginning in 2001. Ms. Rettig works with individuals and organizations across the state to save historic documents related to Colorado's water resources. She assists students, faculty, and other researchers in using the archival collections. She also conducts extensive outreach--articles, exhibits, and presentations--to further the cause of preserving the state's water heritage.

**Kelly Romero-Heaney, Assistant Director for Water Policy, Colorado DNR, Denver, CO**



Kelly has over 20 years of experience in natural resource issues. She has extensive knowledge and participates in the Colorado Water Plan Basin Roundtables and Work Groups, community planning and collaborative work in Northwest Colorado. Her priorities at the Department include updating the Colorado Water Plan, overseeing interstate negotiations around the Colorado River, and implementing new water measurement rules, among others, all while managing impacts of climate change, population growth, and systematic drought on our water system. Kelly has diverse experience in the private and government sector as a consultant, hydrologist, environmental specialist and wildland firefighter with the US Forest Service. She launched one of the first stream management plans after the adoption of the Colorado Water Plan and partnered with The Nature Conservancy to create the Yampa River Fund, a \$4.5 million endowment for river restoration and agricultural improvements. Kelly has a bachelor's degree in Environmental Geology from the University of Montana.

**Fred Rothauge, Special Projects Manager, Hydro Resources, Simms, TX**



Fred Rothauge has over 30 years of experience in the drilling fluids industry. His experience in oil and gas, mining and water well drilling and rehabilitation industry covers a broad array of locations, drilling processes and fluid solutions. He was a co-author of Johnson Screen's 3rd edition of *Groundwater and Wells*. He is a licensed well driller/contractor in Wyoming, Utah, Arizona, South Dakota, New Mexico, Montana and Colorado. He is certified by the National Ground Water Association in air rotary drilling, mud rotary drilling, reverse circulation drilling, and water well drilling and maintenance.

**Lesley Sebol, PhD Colorado Geological Survey-Colorado School of Mines, Golden, CO**



Lesley has been working for the Colorado Geological Survey as a Geologist-Hydrogeologist since 2014. She 20+ years of experience consulting with both private and government clients. Her specialties include hydrogeology, groundwater, water quality and environmental science. She has managed or worked on projects in the following US states: Colorado, Wyoming, Arizona, Indiana, Ohio, Idaho, Iowa, Oklahoma, Connecticut, Delaware, Rhode Island, New York, and Massachusetts and in the following Canadian provinces: Ontario and the Northwest Territories. Her current projects include monitoring and remediation of LUST sites and county groundwater studies. Lesley earned her B.S. in Geology from the University of Maryland, M.S. in Environmental Science from the University of New Haven, and M.S. and Ph.D. in Hydrogeology from the University of Waterloo. She holds certifications for Professional Geologist in Colorado and Professional Geoscientist in Ontario.

**Matt Seitz, PE, PG, Principal Hydrogeologist, HRS Water Consultants, Inc., Lakewood, CO**



Mr. Seitz specializes in groundwater field studies, hydrogeologic data analysis, data management, and project management. He began his career in water consulting at HRS in 1998 and has completed numerous groundwater and surface water projects throughout Colorado and the Rocky Mountain West. His areas of interest include aquifer testing, well design and construction observation, spatial analysis using Geographic Information Systems (GIS), groundwater modeling, and water rights engineering. His clients include municipalities, water districts, private well owners, farmers and ranchers, ditch companies, State and Federal agencies, HOA's, and private natural resources companies.

**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.

**Brianna Titone, Representative, 27th District, Colorado General Assembly, Geologist, Denver, CO**



Brianna Titone is the Colorado's twenty-seventh state house district representative. She was elected in November 2020. She currently serves on the Technology Committee as Vice Chair, Energy and Environment Committee and Health and Insurance Committee, Brianna previously served on the Agriculture, Livestock and Water Committee and Legislative Emergency Preparedness, Response, and Recovery Committee. She has experience as a geological consultant and has worked in eight countries. As a Geologist, Brianna seeks to utilize her knowledge and experience to work with all stakeholders on water issues as well as her knowledge of environmental issues and technology to further environmental conservation efforts to protect Colorado's open spaces. Brianna earned a Master's Degree in Information and Communications Technology from the University of Denver.