

# AGWT Northwest Groundwater Conference

## Presenter Professional Background (alphabetical order)

### **Collins Asante-Sasu, PhD candidate, Department of Civil and Environmental Engineering, Washington State University**



Collins Asante-Sasu is a PhD candidate in Engineering Science in the Department of Civil and Environmental Engineering at Washington State University. As part of his research, he examines changes in regional aquifer storage in the Columbia Plateau Regional Aquifer System (CPRAS). A part of his dissertation studies the application of the Gravity Recovery and Climate Experiment (GRACE) satellite for the study of groundwater.

### **Troy Baker, Executive Director, Walla Walla Basin Watershed Council, Walla Walla, WA**



Troy has worked in Eastern Oregon and Eastern Washington for the past 28 years and started working for the watershed council in 2005. Prior to his current position as the Executive Director, he led the watershed council's surface and groundwater monitoring and GIS programs. Troy graduated from Western Oregon University with a B.S. in Natural Science and has continued his training with various ESRI and Northwest Environmental Training Center courses focusing on applying a GIS to natural science.

### **Roy Bartholomay, Center Director, USGS Idaho Water Science Center, Idaho Falls, ID**



Roy Bartholomay is the Center Director of the USGS Idaho Water Science Center. He previously served as the Project Chief of the USGS Idaho National Laboratory (INL) Project office and Chief of the USGS Huron South Dakota Program office and South Dakota Water Quality Specialist. His research in water quality and groundwater geochemistry at the INL has supported the U.S. Department of Energy's remediation of contaminated sites and has helped to protect critical water resources. In his 35-year career with the USGS, he authored or co-authored nearly 100 scientific publications. Roy earned Degrees in Geology from North Dakota State University and Idaho State University.

### **Alicia Candelaria, Environmental Scientist, GeoEngineers, Inc., Kennewick, WA**



Alicia is an environmental scientist with more than 10 years of experience in groundwater and vadose zone fate and transport modeling. Her curriculum and research focused groundwater and numerical modeling of flow in the vadose zone. She spent the first half of her career working on contaminated sites in arid southwestern United States before extending her expertise to the Pacific Northwest. She has participated in many facets of work at environmentally impacted sites from data collection, data analysis, model development, site characterization, and preparing technical reports and memos. Alicia has developed fate and transport models using GMS ModFlow, SESOIL, HYDRUS, and GeoStudios. She helped characterize fate and transport for contaminants including VOCs, metals, nitrate, secondary leaching from sodium hydroxide spills, and some radiologicals. She has worked for and with a variety of government and private sector clients.

### **Sara Chudnoff, PG, Hydrogeologist, American Ground Water Trust, Pinetop, AZ**



Sara recently joined the American Ground Water Trust. She has been working in the water resources and environmental field in New Mexico since the early 2000s. As a consulting scientist, she worked on projects from methane monitoring and reporting to hydrogeologic investigations and well design. In 2009, Ms. Chudnoff left her regulatory role with the State and started working with Bernalillo County. In this position, she worked with hundreds of residents monitoring water levels and promoting outreach and education. At the New Mexico Bureau of Geology, she took this model to work on a State-Wide Groundwater Level Monitoring Network. Sara facilitates educational outreach for watershed health with the local school district and provides water resource consulting in New Mexico. She has a BS in Geology from New Mexico Tech and a MS in Water Resources from the University of New Mexico.

### **Alexis Clark, PG, Hydrogeologist, Idaho Geological Survey, Boise, ID**



Alexis is a hydrogeologist with Idaho Geological Survey (IGS), serving as the technical lead for hydrogeologic, geothermal, and groundwater research. The IGS is a non-regulatory state agency that leads in the collection, interpretation, and dissemination of geology and mineral data for Idaho. This work includes publishing geologic maps, conducting applied research in the areas of hydrogeology, hazards geology, oil and gas, minerals, and geothermal resources, and supporting public education and community outreach. The hydrogeology program focuses on IGS' mission objectives by conducting hydrogeologic investigations and participating in technical committees on groundwater resources and water quality. Prior to IGS, for 20 years she conducted groundwater supply and water quality investigations as a consulting hydrogeologist, working on projects in the western US. Alexis has a MS in hydrogeology from the University of Arizona and a BS in geology from Eastern Illinois University.

### **Carolee Cooper, REHS, RS, Environmental Health Program Specialist, Idaho Dept of Health and Welfare, Boise, ID**



Carolee Cooper has been an Environmental Health Specialist for the last 17 years in Idaho. She worked as an EHS health inspector for 15 years at the state health department level and the last two years for the Idaho Department of Health and Welfare. She earned a degree in Biology, Microbiology and Immunology from Idaho State University and is a Navy veteran.

### **Curtis Cude, Healthy Waters Program Coordinator, Oregon Health Authority, Portland, OR**



Curtis Cude is the Healthy Waters Program Coordinator for the Oregon Health Authority (OHA). Curtis has over 25 years of experience as a natural resource specialist, program manager and principal investigator at Oregon Department of Environmental Quality and OHA, working in radiation health, water quality protection, environmental health, occupational health, public health surveillance and information systems development. Curtis and his OHA colleagues have been investigating water insecurity since 2017.

**John “Colt” Dickman, Natural Resource Conflict Resolution Professional, Oregon State University, Corvallis, OR**



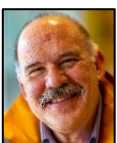
John “Colt” Dickman is a natural resource conflict resolution professional. As a member of the United States Marine Corps, he served as a Combat engineer in Iraq. He earned an undergraduate degree in history and political science. Colt was commissioned as a Marine officer and served various roles around the Marine Corps. Colt graduated from OSU, with a Master’s of Natural Resource Management (Water Conflict Management and Transformation). His research focused on comparing the conflict between surface water and groundwater in Idaho. Colt served the last four years of his military career as the Headquarters Marine Corps’ Environmental Engineering Management Officer until he retired. He managed the Marine Corps environmental compliance program and environmental management system. He also worked on several complex water issues around the world. Colt is the Environmental and Community Health Division Administrator for Southwest District Health. His team protects groundwater quality through the management and regulation of Idaho’s Subsurface Sewage Disposal Program, in Southwestern Idaho.

**Ryan Dougherty, RG, PE, Project Hydrogeologist/Water Resources Engineer, Summit Water Resources, LLC, Portland, OR**



Ryan has eight years of experience providing hydrogeologic and water resource management services in the Pacific Northwest. As a hybrid hydrogeologist and water resources engineer, he applies a broad quantitative skillset to support groundwater supply studies, aquifer storage and recovery (ASR) and artificial recharge (AR) projects, public water system planning and management efforts, source water protection studies, numerical groundwater modeling, and the design, construction, optimization, and rehabilitation of water supply wells. Ryan also has significant experience with water rights in the State of Oregon and has a thorough understanding of regulatory requirements for public water systems. He earned an M.S. in Environmental Engineering from California State University, Fullerton and B.S. in Geology and Business Administration from the University of Oregon. He is registered as a Professional Engineer and Registered Geologist in the State of Oregon.

**Charles Dunning, PhD, VP, Hydrology, WellIntel, Milwaukee, WI**



Charles joined WellIntel in 2017 following a 21-year career with the U.S. Geological Survey as a Supervisory Hydrologist and Groundwater Specialist, leading teams of scientists in conducting groundwater studies that included groundwater-flow modeling and the collection of basic records. From 2010 to 2013, Charles was a Water Resources Advisor in the Water Resource Programme of the International Atomic Energy Agency, Vienna, Austria, where he led the IAEA Water Availability Enhancement Project to strengthen Member States’ national capacity to conduct comprehensive assessments of their water resources. Today, Charles leads WellIntel’s hydrologic and science efforts and supports business development in new markets. Charles has advanced degrees in Geology and Civil Engineering.

**Renee Hadley, PG, District Manager, Walla Walla County Conservation District, Walla Walla, WA**



Renee Hadley is a licensed geologist with a background in aquifer mapping, agricultural extension, tree seed collection, invasive species surveys, and geotechnical engineering for landslides, erosion hazards, stormwater management and deep foundation designs. She is currently the manager of the Walla Walla County Conservation District and supervises day-to-day operations, coordinates with agencies, plans outreach and education activities, and writes grants.

**Dan Haller, PE, CWRE, Principal Water Resources Engineer, Aspect Consulting LLC, Yakima, WA**



Dan Haller is a Principal Engineer, with 20 years of experience providing water right permitting and water resource engineering and management. Dan’s background includes management of storage and conservation projects; water banking and water rights transfers; and water system design, planning, and financial planning experience. Before joining Aspect, he spent more than a decade with the Washington State Department of Ecology (Ecology) working on water rights, multi-million dollar grant projects, and managing the Office of Columbia River. Dan leads Aspect’s Yakima office, coordinating Aspect resources for Central and Eastern Washington projects. He earned his Master’s Degree in Environmental Engineering and B.S. Degree in Civil Engineering from Washington State University.

**Angela Hansen, PG, Water Rights Section Manager, Idaho Department of Water Resources, Boise, ID**



Angela Hansen is the Water Rights Section Manager for the Idaho Department of Water Resources in Boise, ID. Her team addresses Idaho water user’s water right needs across the state from permitting new water rights, changing old water rights, maintaining records, and everything in between. Angela is a certified public manager, certified administrative hearing officer, and a registered professional geologist. She attended Boise State University where she earned her Bachelor of Science degree in Geology.

**Maria Iglesias-Thome, Graduate Student, Oregon State University Department of Water Resources Science, Corvallis, OR**



Maria is pursuing an MS degree in Water Resource Sciences at Oregon State University. She obtained a BS degree in Environmental Resource Science with a focus on Water Science from Pennsylvania State University. For her MS thesis, Maria is conducting research on human and ecosystem interactions facilitated through groundwater and water scarcity in the tropical coastal karstic environment of her home area in the Yucatan Peninsula.

**John Jansen, PhD, PG, PGp, Senior Geophysicist and Hydrogeologist, Collier Consulting, West Bend, WI**



John has a B.S. in Geology and a M.S. and Ph.D. in Geological Sciences with an emphasis in hydrogeology and geophysics, all from the University of Wisconsin-Milwaukee. He is a Senior Geophysicist and Hydrogeologist for Collier Consulting. John works on a wide variety of ground water projects around the country specializing in high-capacity wells and groundwater resource management. He received the NGWA Keith A Anderson Award in 2012 for service to NGWA and the groundwater industry and was the NGWA McElhiney Distinguished Lecturer in Water Well Technology in 2013. John was an invited lecturer on managed aquifer recharge and groundwater geophysics for the Geoscience University of China in Beijing in June of 2018.

**Alan Kolok, PhD, Professor, College of Natural Resources, University of Idaho and Director Emeritus, Idaho Water Resources Research Institute, Moscow, ID**



Dr. Alan Kolok is a professor of Ecotoxicology in the College of Natural Resources at the University of Idaho, and Director Emeritus of the Idaho Water Resources Research Institute. He received his PhD from the University of Colorado and has served professionally as the Founding Director of the Nebraska Watershed Network at the University of Nebraska-Omaha and as Director of the Center for Environmental Health and Toxicology at the University of Nebraska Medical Center. He has published over 90 peer-reviewed scientific publications as well as two books: *Modern Poisons: A Brief Introduction to Contemporary Toxicology*, and *Twist*, a science fiction novel in which prions have gone horribly wrong. In his spare time, Alan is working on his second non-fiction book, *Generally Regarded as Safe*, and is active as a Community Scientist in conjunction with AGU's, Thriving Earth Exchange.

**Chris Kowitz, North Central Region Manager, Oregon Water Resources Department, Salem, OR**



Chris is the North Central Region Manager for the Oregon Water Resources Department. This region consists of district offices in The Dalles, Condon, Milton-Freewater, and Pendleton. He oversees regulatory and policy matters including surface and groundwater resources in the lower Deschutes, lower John Day, Umatilla, and Walla Walla River watersheds. He holds a Bachelors of Environmental Science from Western Washington University. Chris has 18 years of experience working in the natural environment, including natural resources management and restoration, water resource planning, applied research, and policy development. He has worked for city, county, and state governments in the Northwest, specializing in program implementation, inter-jurisdictional coordination, environmental systems, and stakeholder engagement.

**Kevin Lindsey, PhD, LG, LHG, Principal Hydrogeologist, GEOEngineers, Inc., Kennewick, WA**



Kevin has 29 years of technical experience in geology and hydrogeology, including geologic mapping, geologic database construction and modeling, geotechnical, vadose zone and groundwater well logging, hydrogeologic characterization and monitoring of sediment and basalt aquifers, and teaching introductory and upper division geology courses. The majority of Kevin's experience is in the Pacific Northwest as a project manager and/or senior technical staff member, focusing on projects assessing groundwater quality, quantity, and supply; controls and characteristics of surface water-groundwater continuity; aquifer impacts from shallow groundwater development; and environmental monitoring and permitting from projects with the potential to effect groundwater. His work includes water rights review to ensure project compliance, completion of applications in the event changes are needed, and providing technical support to document impairment or lack of impairment. He has managed large, multiphase hydrogeologic and interdisciplinary investigations, developing skills in staff management, client outreach, and fiscal performance.

**Mallory Little, Toxicologist, Office of Environmental Public Health Sciences, Washington State Dept. of Health, Tumwater, WA**



Mallory Little is a toxicologist in the Office of Environmental Public Health Sciences at the Washington State Department of Health. Mallory's education and experience are in the field of toxicology, microbiology, and human health risk assessment. She has worked on various issues involving human exposure to chemical contaminants in groundwater and wastewater. Mallory earned a Master of Public Health Degree from the University of Washington.

**Kent Madison, President, 3RValve LLC, Echo, OR**



Kent is the third generation to operate the family owned farm employing several different farming techniques; including land applying BioSolids and reuse water as organic fertilizer. He holds patents on an ASR (Aquifer Storage and Recovery) down hole control valve and manufactures and sells under the 3RValve name. He is presently researching down-hole generation using this same technology. Kent received his Associate of Science degree in Production Agriculture from Blue Mt. Community College and his Bachelor of Science in General Agriculture from Oregon State University.

**Sasha McLarty, PhD, Assistant Professor, Washington State University, Pullman, WA**



Sasha is an Assistant Professor at Washington State University in Pullman, WA. Her research leverages a diversity of tools and data to better answer three questions: How much water do we have? How much water do we use? How much water do we need? Her research combines satellite and in situ observations of hydrologic systems into modeling and decision support frameworks over large regional scales, including in the Columbia Plateau Aquifer in the Pacific Northwest (USA) and in High Mountain Asia. She focuses on complex groundwater systems, where interdisciplinary approaches are necessary to understand both natural and anthropogenic drivers of aquifer change. Sasha enjoys working at the interface of research and water resources management and has contributed to multiple "science diplomacy" efforts in the United States and internationally to advance the role of scientific research in decision making.

**Jason Melady, RG, LG, CWRE, Principal Hydrogeologist, Summit Water Resources, LLC, Portland, OR**



Jason Melady is a principal hydrogeologist at Summit Water Resources in Portland, Oregon, specializing in water resources, groundwater supply, and water rights evaluations. He is an expert in the design and operation of ASR well systems for municipal and agricultural clients. Previously, he worked at GSI Water Solutions as a Principal Hydrogeologist for over 20 years. He received an MS in Hydrogeology from Portland State University and Bachelor's Degree in Geology from Indian University Bloomington. Jason is a registered geologist in Oregon and Washington and a certified water rights examiner in the state of Oregon.

**Steven Patten, Public Works Engineering Technician, City of Milton-Freewater, Milton-Freewater, OR**



Steven holds a MS and BS in Biology and a BA in History. He has worked on water resource management in the Walla Walla Valley since 2009. Previous employment includes groundwater monitoring, surface water monitoring, groundwater/surface water interaction studies, groundwater/surface water modeling, designing/constructing/operating ~15 managed aquifer recharge sites and ASR feasibility studies and design. As an Engineering Tech for the Public Works Department at the City of Milton-Freewater, Oregon, he manages the departments' GIS/AutoCAD, water, and other public works projects and represents the City in on-going bi-state water planning efforts.



**Tara Patten, Project Manager, Walla Walla Basin Watershed Council, Milton-Freewater, OR**



Tara Patten is a Project Manager at the Walla Walla Basin Watershed Council. She has worked with the Council since 2013 collecting and managing hydrologic data, conducting habitat assessments, and assisting with restoration projects. She previously worked in Walla Walla planting riparian buffers along urban streams. She completed a M.S. in Biology in 2008.

**Mike Piechowski, LG, LHG, Principal Hydrogeologist, Robinson Noble, Inc., Tacoma, WA**



Mike is a licensed geologist and hydrogeologist in Washington State with nearly 30 years of experience. He was hired by Robinson Noble after several years working for environmental and geotechnical firms in Missouri and Kansas. Since joining Robinson Noble, he has specialized in water supply wells and is an expert in the design, construction, development, testing, and rehabilitation of large-capacity water wells. Mike has presented topics for the Washington State Ground Water Association, the British Columbia Ground Water Association, the Pacific Northwest Ground Water Exposition, and other industry and trade groups. Mike earned his Bachelor's and Master's degrees in Geology at the University of Missouri in Columbia, MO.

**Chad Pritchard, Chair and Professor, Department of Geosciences, Eastern Washington University, Cheney, WA**



Chad Pritchard has been a Professor of Geology at Eastern Washington University for over 10-years and is the current Chairperson of the Department of Geosciences. He has also worked as a Spokane area geological consultant focusing on groundwater and stormwater projects. Prior to that, Chad was on the Spokane County Soil Survey and was an environmental regulator for the State of Hawaii. He tries to share geologic information with the community through presentations, co-author of the Mountain Press book, "Washington Rocks!", co-editor of [floodexplorer.org](http://floodexplorer.org) (showcasing geology and history stories about the inland NW), and a number of research papers on hydrogeology, structural geology, and using isotopes for geochronology and petrology of rocks from the Pacific NW.

**Salini Sasidharan PhD, Assistant Professor, Dept of Biological & Ecological Engineering, Oregon State University, Corvallis, OR**



Dr. Sasidharan is an Assistant Professor and Sustainable Groundwater Management Engineer at the Department of Biological and Ecological Engineering at OSU. She is a scientist in the critical areas of Environmental Science and Engineering, including groundwater quantity and quality management, sustainable irrigated agriculture, and resilient urban and rural water resources infrastructures. Her research focuses on challenges of managed aquifer recharge (MAR), including vadose zone monitoring, water quantity, water quality (virus, bacteria, and other contaminants), clogging, engineering designs of the infrastructure (drywell, ASR, ASTR, infiltration basin), flow and contaminant transport numerical modeling, subsurface characterization for MAR site selection, and regulatory standards for sustainable groundwater management. Salini is a leading member of the Oregon Water Initiative, College of Agriculture Science, OSU and also serves as the Chair of the Lower Umatilla Basin Groundwater Management Area Committee in Oregon.

**Andrew Stone, Executive Director, American Ground Water Trust, Concord, NH**



Andrew Stone is a hydrogeology graduate from University College, London. He has experience in Africa and America as a university professor, groundwater consultant, & educator. Since 1989 he has worked in the United States as a private-sector consultant, as adjunct professor (teaching groundwater protection policy at Antioch New England University) and as groundwater educator, advocate and outreach specialist for the non-profit American Ground Water Trust. His work with the AGWT has involved convening over 350 "information-exchange" conferences and workshops related to well design, groundwater management, aquifer storage recovery, water rights, conjunctive use, geothermal technology, water banking, and asset management. He has organized over 70 "Groundwater Institutes" that have trained 2,000 science teachers and educators on water resources issues and the basics of hydrology. He is a recipient of the National Ground Water Association "Oliver Award" in for his work in promoting groundwater education.

**Erin Toulou, Student, Eastern Washington University Department of Geosciences, Cheney, WA**



Erin Toulou is from Mead, Washington and is a student in the Eastern Washington University Department of Geosciences focusing on Professional Geology and Groundwater Hydrology. Erin currently works in the U.S. Geological Survey – EWU cooperative agreement, helping USGS geologists on natural resources research projects. Erin's research with groundwater in the West Plains, Spokane County has been recognized with the Clawson-Youngs Environmental Studies Award and has been presented at multiple undergraduate research conferences.

**David Tuthill, PhD, PE, Founder & Co-Owner, Idaho Water Engineering, LLC**



Dave Tuthill has worked in the field of water resources throughout his career. He earned a B.S. in Agricultural Engineering from Colorado State University, an M.S. in Civil Engineering from the University of Colorado, and a Ph.D. in Civil Engineering from the University of Idaho. He worked for the Idaho Department of Water Resources (IDWR), serving in a variety of positions in both the State Office and the Western Regional Office. These assignments provided direct and applied experience in most of IDWR's regulatory and water right programs. As Director of IDWR, he was a member of the Cabinet of Governor C.L. "Butch" Otter, responsible for planning and administration of water resources in Idaho. Dave founded Idaho Water Engineering, LLC, which specializes in water rights analysis and solutions, measurement and automation, ground water recharge, state and federal permitting, development and marketing. IWE serves individuals, canal companies, irrigation districts, municipalities, water user organizations, and government at all levels. He serves as Vice-President of Recharge Development Corporation and is a Principal in Clean Water Professionals. Dave served 30 years in the US Army Reserve and retired as a Colonel in the Army Corps of Engineers in 2004.