



## 2024 Mega-Conference Speaker Bios

Listed alphabetically, as of September 20, 2024



### **Scott Andreasen**

Scott Andreasen is a renowned expert in septic business development and branding, with a distinguished career in marketing for the septic industry and outdoor construction. In 2022, Scott published *Excavation & Septic Internet Marketing Profits*, a valuable resource for business owners seeking to enhance their online visibility and profitability. The book outlines practical strategies and insights from Scott's extensive experience to help septic businesses navigate digital marketing complexities. Since 2022, he has specialized in crafting innovative marketing strategies tailored to the unique needs of septic businesses, helping them establish a robust online presence and achieve substantial growth. Scott's marketing journey began in 2009, focusing on the outdoor construction sector. His extensive experience laid a solid foundation for his transition to the septic industry, where he quickly became a trusted advisor and strategist. His deep understanding of the industry's nuances has enabled him to devise effective marketing campaigns that drive significant results. Scott leverages the latest digital tools and platforms to create comprehensive branding strategies that resonate with target audiences. His client-centric approach and dedication to excellence have earned him a reputation as a leading figure in septic business development and branding. Through his consultancy, Scott has transformed numerous businesses, enabling them to dominate their local markets and achieve growth.

### **Salil Raj Aryal**

Salil is currently pursuing a Master of Science in Civil Engineering at the University of South Alabama working as a graduate assistant working on onsite decentralized wastewater treatment systems.

### **Lilith Astete Vasquez**

Lilith is a 6th year doctoral student pursuing a degree in Mechanical & Aerospace Engineering. Her research involves three topics, centered around the improvement of sanitation systems for use in rural and developing regions. She has studied the effects of alternative waste introduction methods to onsite sanitation systems, including the impacts upon degradation of organic solids and contaminants of emerging concern. Further, she has studied the prevalence and treatment of antibiotic resistant bacteria in Brazil, and the use of anammox systems for improving decentralized wastewater treatment for reuse applications. Lilith is a veteran of the US Navy, and prior to her graduate studies she completed a BS in Environmental Engineering and worked in both private and public sectors of water management.

### **Amal Bakchan**

Amal Bakchan is an assistant professor at the Department of Construction Science at Texas A&M University. She holds a Ph.D. in Civil Engineering from the University of Texas at Austin. Her work seeks to improve access to basic services in underserved communities in the US and developing nations. Amal's research primarily focuses on water and wastewater infrastructures, in the broad areas of socio-technical infrastructure systems management in extreme contexts; infrastructure resilience; regionalization of responsible management entities of decentralized systems in rural communities; and workforce development.

### **Derek Betts**

Derek Betts assumed the role of District Manager for the Nassau County Soil and Water Conservation District in the summer of 2021. With over a decade of experience working in the conservation field, Derek began his career with a bachelor's degree in Physical Anthropology from the University of Miami, followed by a master's degree in Conservation Biology from Columbia University. Tapping into his love for conservation and a penchant for travel, Derek then spent several years in the field working for various international conservation NGOs.

Beginning with the Peace Corps, Derek served as a natural resource management volunteer in Mali, working with local communities to promote sustainable ecotourism and elephant conservation. From there, Derek lived in Gabon, Switzerland, Kenya, and Ethiopia, and worked for organizations such as the United Nations, The Born Free Foundation, The Aspinall Foundation, and Princeton University. Since returning to the US in 2015, Derek worked for Panthera Cooperation, The African Parks Network, and the Wildlife Conservation Society, helping to manage a suite of conservation projects across the globe. As a native Long Islander with strong, long-lasting ties to Nassau County, Derek is thrilled to focus his conservation efforts back home and help safeguard Nassau County and its environs for generations to come. One of the main programs that Derek currently helps to manage is the Nassau County S.E.P.T.I.C. Program.

### **Jason Birdsong**

Jason Birdsong is a seasoned professional with 15 years of experience in the wastewater industry, serving as the owner of JT Services a Septic and Plumbing company based in Claremore, Oklahoma. As President of the Oklahoma On-Site Wastewater Association for the past 3 years, Jason played a pivotal role in state rule revisions and has been instrumental in introducing a bill into legislation focused on licensing and installation standards for onsite systems. His leadership and advocacy have significantly contributed to advancing industry standards and promoting environmental sustainability. In addition to his role in the state association, Jason has served as Vice President of the National Association of Wastewater Technicians (NAWT) for 2 years and is currently the President Elect, where he has actively participated in various committees, bringing valuable insights and expertise to the organization. Outside of work, Jason cherishes time with his family, including his wife Erin and daughter Delia. He enjoys outdoor activities and is passionate about making a positive impact in his community and beyond through his work and leadership.

### **Colin Bishop**

Colin Bishop is the Chief Executive Officer of Anua - a sustainable technology manufacturer that provides Clean Water and Clean Air solutions which are integrated into the One Place vision. He is a Registered Sanitarian in multiple states and a Registered Environmental Health Specialist through the National Environmental Health Association. He graduated from Brigham Young University with a Bachelor of Science degree in Zoology. Colin is a scientist, inventor, people connector, spiritual explorer, tech guru, outdoor enthusiast, and runner.

### **Shiloh Bolden**

Shiloh Bolden, an undergraduate environmental engineering student at San Diego State University, conducts research on sustainable decentralized wastewater treatment systems funded by the National Institute of Health through SDSU's Maximizing Access to Research Program. In Dr. Natalie Mladenov's Water and Reuse Lab, he focuses on enhancing anaerobic baffled reactors globally to remove nitrogen and pharmaceutical contaminants. Shiloh aims to pursue a doctorate in environmental engineering and work in the non-profit sector to provide clean water to underserved communities. With practical experience and academic training, he aims to contribute to and promote sustainable water management practices.

### **John R. Buchanan**

Dr. John R. Buchanan is a Professor at the University of Tennessee and is on the faculty of the Biosystems Engineering and Soil Science Department. He has 35 years of teaching, research, and outreach experience in the areas of onsite and decentralized wastewater management, water supply, water quality, and storm water engineering. Dr. Buchanan has B.S. and M.S. degrees in Agricultural Engineering and a Ph.D. in Civil Engineering, all from The University of Tennessee. John is a member of NOWRA, and the American Society of Agricultural and Biological Engineers. He currently serves as the undergraduate director of the Construction Science and Management Program housed within the Biosystems Engineering and Soil Science Department. John is a registered professional engineer in Tennessee.

**Carolina Cantu**

Carolina Cantu is an Environmental Protection Specialist in EPA's Office of Wastewater Management (OWM) in Washington, DC. Carolina recently joined OWM in late 2023 and has supported the expansion of the Closing America's Wastewater Access Gap Initiative. She is also this year's lead for SepticSmart Week activities. Carolina holds a Bachelor of Science in Environmental Science from the University of Arkansas.

**Rachel S. Chai**

Rachel S. Chai was born in Ocean Springs, MS in 1996. She received his B.S. and M.S. in Civil Engineering at the University of South Alabama in 2020 and 2022. She is currently pursuing a PhD student at the University of South Alabama under the Systems Engineering program focusing on lifecycle assessment for decentralized wastewater treatment systems. Drawing on her experience, her research applies systems thinking and civil engineering design toward finding innovative solutions in the Alabama Black Belt region under the guidance of Drs. Kevin White, Sean Walker, and Kaushik Venkiteshwaran.

**Stuart Coleman**

Stuart Coleman is a writer, public speaker, environmental entrepreneur and non-profit leader. He is the author of over eighty articles and several books, including the award-winning biography Eddie Would Go. After working as the Surfrider Foundation's Hawaii Manager for ten years, Coleman co-founded the non-profit WAI: Wastewater Alternatives & Innovations in 2019 and serves as the Executive Director.

**Alissa Cox**

Alissa Cox, PhD, is a Clinical Assistant Professor in the Natural Resources Science department at the University of Rhode Island, and the Director of the URI Onsite Wastewater Resource Center, which includes the New England Onsite Wastewater Training Program. She teaches professional and student audiences about onsite wastewater treatment system function, design, installation, maintenance, troubleshooting and performance monitoring. Her applied research revolves around understanding threats posed by groundwater table dynamics and climate change to current and future onsite wastewater treatment systems along the coast, as well as documenting the field performance of diverse advanced residential wastewater treatment technologies. Effective education and community engagement are central to Alissa's interests, and she works with different stakeholders to examine how research and holistic wastewater management approaches can help improve both local water quality and the resiliency of coastal communities facing myriad future changes and threats.

**Mick Credere**

With an unexpected background coming out as an officer in the US Marine Corps, Mick Credere translated his knowledge of weapon systems to leap into a successful startup that specialized in marketing for the defense sector working under what is now one of his mentors. With the successful growth and sale of that company, Mick was able to translate the knowledge he gained in digital marketing from the defense sector, to help start AWP with the help of a partner and his wife Kristina focusing on the unique challenges faced by businesses in the wastewater industry. Now representing clients in 17 states and across almost any part of the wastewater industry you might imagine, AWP has successfully grown into a well-known brand. Mick is proud to stand as a disruptive and aggressive leader in the wastewater industry and looks to upend the standard way of doing business. In his free time, Mick is an avid pilot and chauffeur for his children and his wife and daughter's horses.

**Nelson da Luz**

Nelson da Luz is a Postdoctoral Research Associate at the University of Massachusetts Amherst. He earned his PhD under Dr. Emily Kumpel with the dissertation "Enhancing Management of Built and Natural Water and Sanitation Systems Using Data Science". In his research, he works at the confluence of data intensive computing and civil infrastructure related to water and sanitation. He employs investigative tools such as modeling, simulation, high performance computing, machine learning, and dataset usage and manipulation. He received his BS in Civil Engineering and ME in Environmental Engineering from Manhattan College in Riverdale, NY. He

has had his Engineer in Training qualification since 2015. Past research projects have included bioaccumulation and sediment transport modeling, evaluating water quality monitoring programs for distribution systems, and developing tools for evaluating surface water quality monitoring programs. In the onsite/ decentralized industry space, he is actively involved in the state of California's ongoing Wastewater Needs Assessment, providing machine-learning model-based estimates of wastewater infrastructure coverage. More broadly, he is involved in the research and development of model-based tools for similar purposes for national use across the United States. He has also been a presenter as part of US EPA's Septic Smart Week.

#### **Derek DeLand**

Derek DeLand is the Environmental Health Programs Manager in NSF's Government Affairs Division. In this role he serves as a point of contact for local and state regulatory agencies providing support with respect to NSF standards, certifications, and services. Additionally, he has served on several NSF standard development task groups, including chairing the task group charged with updating the NSF 350 standard to incorporate risk-based methodologies. Derek came to NSF after 19 years at a local health department in Michigan where he served as a sanitarian and Environmental Health Director overseeing food safety, drinking water, onsite wastewater, and various other programs. He received his MPH with an environmental health concentration from the University of Illinois-Springfield and is a credentialed REHS/RS.

#### **Ashley Donnelly**

Ashley Donnelly has a passion for building relationships within the onsite wastewater treatment industry through training and technical education. Ashley entered the industry over 20 years ago and works to preserve the environment through sound wastewater treatment solutions. In her position at Infiltrator Water Technologies (IWT), she manages the Inside Sales Team and is responsible for maintaining and building customer relationships. This involves assisting engineers, contractors and regulators with technical and design information, training, installation, and operation & maintenance. In 2020, she launched IWT's webinar program, which is currently accredited in over 14 states and has trained over 5,000 attendees on various contemporary industry topics. She serves on the National Onsite Wastewater Recycling Association (NOWRA) Board of Directors as well as committees within the industry (NOWRA Emerging Professionals (Social Outreach Chair) and NEWEA Small Communities Committee.

#### **Bruce Douglas**

Mr. Bruce F. Douglas, PE. has over 40 years of private and public sector experience in hydrogeology, soil science, and environmental engineering, focusing on decentralized wastewater management, onsite wastewater soil absorption systems and non-potable water reuse. He has a Bachelor of Science degree in Hydrology from the University of New Hampshire and a Master of Science degree in Plant and Soil Science from the University of Vermont. During his professional career, he has been involved in project planning, design, construction, operation, and management of wastewater treatment systems from the individual household level to small community systems. He is a member of the National Onsite Wastewater Recycling Association, the State Onsite Regulator's Association, and the New England Water Environment Association (NEWEA), where he has served as chair of NEWEA's Water Reuse Committee. He is also a member of the Water Environment Federation's Decentralized Water Infrastructure Task Force. He is currently the Wastewater Programs Manager in the Drinking Water and Groundwater Protection Division of the State of Vermont's Department of Environmental Conservation.

#### **Matthew Dowling**

Matt Dowling is the onsite wastewater management program manager for the Town of Charlestown (RI) and has nearly 25 years of project coordination experience in groundwater hydrogeology, watershed management and groundwater remediation. In his current role, Matt currently oversees the individual management of over 5,000 onsite wastewater treatment systems (OWTS) in Charlestown, including nearly 900 advanced nitrogen reducing

OWTS for protection of public health and the environment. Matt's programmatic approach and methods are rooted in holistic watershed management practices.

**Heidi Faller**

Heidi Faller is an Environmental Toxicologist with EPA's Office of Wastewater Management (OWM) in Washington, DC. Her career with EPA has included working in the Office of Science and Technology, Office of International and Tribal Affairs, Office of the Chief Financial Officer and Office of Research and Development. Heidi joined OWM in 2011 and has served as the lead of the Decentralized Wastewater Program since 2015. She manages the Decentralized Wastewater MOU Partnership and is a leading team member of several of the decentralized program's initiatives, including Closing America's Wastewater Access Gap Initiative and SepticSmart Week as well as managing the septic program website. Heidi holds a Bachelor of Arts in Biology from DePauw University and a Masters of Environmental Toxicology from the University of Wisconsin-Madison.

**Tom Ferrero**

Tom Ferrero, owner of Elkhart Environmental Processing Corp, Elkhart, IN. Beginning as a septic tank pumper in a family-owned business which his father started in 1941, Tom never strayed too far from a septic tank. Tom has a BS in Civil Engineering and has been a certified Sewage Treatment Plant Operator and Sewage Enforcement Officer. From 1970 to 1998 he owned and managed a full-service septic system company and developed and continue to use daily (e.g. 20 million gallons in 2023) a process which pretreats septage prior to introduction of the liquid fraction into a municipal sewage collection system and landfills or beneficially uses the dewatered solids. Tom has held positions in the septage industry associations on a National, State, and local level, and his leadership includes being the National Association of Wastewater Technicians (NAWT) first Secretary. He is a past President of NAWT and currently the NAWT Secretary. While no longer flying, Tom, a private pilot could often be found flying around Pennsylvania and the surrounding states rallying support for the unification and training of septage haulers along with helping other develop septage processing facilities.

**Aaron Forbis-Stokes**

Triangle Environmental is a small business founded in 2016 and focused on the development of technologies and services related to Water, Sanitation, and Hygiene. Triangle Environmental partners with academic and research institutions and private companies to develop novel technologies that Triangle Environmental can then accelerate from the lab to the field and finally to market. Prior work includes research and development, implementation, consulting and execution services for Bill & Melinda Gates Foundation funded technologies ranging from "Reinvented Toilets", to improved pit latrine emptying, mobile septage treatment technologies, and community-scale treatment systems. Aaron Forbis-Stokes, Ph.D., serves as the Research and Development Manager for Triangle Environmental. His technical background includes biological waste treatment, nutrient removal, energy recovery, and membrane-based separation processes from bench-top to full-scale systems with a focus on decentralized systems. His work includes developing five different technologies through 12 full-scale pilot systems across five countries. Prior to joining Triangle Environmental, Aaron received Bachelor's and Master's degrees in Civil Engineering from Texas A&M University and then a PhD in Environmental Engineering at Duke University.

**Ryan Fox**

Ryan Fox, the owner of Fox Onsite Solutions in Santa Cruz, California, brings over a decade of experience in the onsite wastewater industry. Ryan earned a B.S. in Biological Sciences from the University of California, Davis. He is a third-generation wastewater professional. Initially starting as an inspector but then transitioning from a regulatory role into consultancy, Ryan founded Fox Onsite Solutions in 2018. His firm focuses on permitting, testing, and design of standard and enhanced onsite wastewater treatment systems in the California Bay Area.

**Trevor Gillespie**

Trevor's career in the building materials industry began in 1998 working for tool manufacturers including Stanley, Bosch, Skil and PorterCable. He went on to sell building materials in Southern California for Prime Source Building Materials, one of the largest purveyors of fasteners in the world and one of the largest distributors of building materials in the world. In 2013 Trevor began working for Infiltrator Water Technologies covering CA, NV and AZ as a sales representative. Trevor's industry involvement includes positions as board member for the Arizona Onsite Wastewater Recycling Association (AzOWRA) as well as a member of the California Onsite Water Association (COWA) and the National Onsite Wastewater Recycling Association (NOWRA). Trevor is based in Thousand Oaks, CA.

#### **Claude Goguen**

Claude Goguen has more than 30 years of experience in the precast concrete and construction industry. He holds a degree in Civil Engineering and is a licensed P.E. in Indiana. Prior to his role as VP of education with NPCA, Claude was an operations manager at a precast concrete manufacturing plant. Since starting with NPCA, Claude has focused on the onsite wastewater industry and has served as the staff liaison to the NPCA Water and Wastewater Structures Committee. Claude also serves on NAWT and NOWRA education and technical committees and served on IOWPA and NOWRA Board of directors. He has presented courses and seminars relating to precast concrete wastewater systems at various federal, state and regional onsite wastewater meetings over the last 17 years.

#### **Kruttika Gopal**

Kruttika Gopal is an Environmental Protection Specialist in EPA's Office of Wastewater Management (OWM) in Washington, DC. She has been with OWM since 2023, supporting a variety of technical assistance initiatives. She is a part of EPA's Decentralized Wastewater Program, which includes the Decentralized Wastewater Management MOU Partnership and SepticSmart Week. Since 2024, she has worked on the Closing America's Wastewater Access Gap Initiative, which provides underserved communities with technical assistance for their decentralized wastewater infrastructure. She also supports EPA's Lagoon Action Plan and Tribal wastewater program. Kruttika holds a Bachelor's degree in Environmental Studies from American University.

#### **Dennis Hallahan**

Dennis F. Hallahan, P.E., is the Technical Director of Infiltrator Water Technologies. Dennis has over thirty years of experience with the design and construction of on-site wastewater treatment systems. He has authored several articles for on-site industry magazines and has given numerous presentations nationally on the science and fundamentals of on-site wastewater treatment systems. Dennis also oversees a department that is responsible for product research and testing for both Universities and private consultants. The department develops system sizing charts for national and international codes, and assists engineers in the design of large decentralized systems, some in excess of 1 million gallons per day. He received his MS in civil engineering from the University of Connecticut and his BS in civil engineering from the University of Vermont. Dennis is a registered professional engineer in Connecticut. He has been with Infiltrator Water Technologies for over 20 years and in his current position as Technical Director, he is responsible for the technology transfer between Infiltrator and the regulatory and design communities. Dennis also holds several patents for on-site wastewater products. Member ASCE, WEF, NOWRA, has served as chairman of the NOWRA Technical Practices Committee and also serves on the NOWRA Educational Committee. Dennis is also a member of the New England Water Environment Federation and serves on the Small Communities Committee.

#### **Brian Harding**

Brian Harding is an author, podcaster, professional keynote speaker, and business consultant for entrepreneurs in service industries who want to build a business that can run without them. He has nearly 20 years' experience owning and operating a service-based business, and more than 25 years' experience leading and managing employees. Brian is a leading authority on creating, developing, and implementing proven, practical step-by-step

solutions, strategies, and processes that allow his clients to attain the freedom and growth they want. Some of the most common benefits his clients cite are clarity, confidence, peace of mind, and accelerated growth. His strategies draw upon many years of practical experience in leadership, process improvement, accounting, sales and marketing, and of course leading and managing employees.

### **Sara Heger**

Dr. Sara Heger is a researcher and instructor at the University of Minnesota in the Onsite Sewage Treatment Program, where she is faculty in the Water Resources Science program. Sara is the past president of the National Onsite Wastewater Recycling Association. For over 20 years, she has been conducting research and providing education and technical assistance to students, homeowners, small communities, onsite professionals, and local government units regarding decentralized onsite wastewater treatment. Sara coordinates the research program at the University of Minnesota with current projects evaluating the bioaugmentation of septic tanks and adding biochar and iron enhanced sand into septic systems. Dr. Heger serves on the NSF International Committee on Wastewater Treatment Systems and chairs Minnesota's Septic System Advisory Committee. She has a BS in Biosystems & Agricultural Engineering and a MS and PhD in Water Resource Science.

### **Michael Hines**

Michael Hines holds a B.S. in Engineering from Southern Illinois University and M.S. in Environmental Health Engineering from Kansas University. He has worked in wastewater engineering for 56 years; 13 years with the Illinois Department of Public Health (Assistant State Sanitary Engineer); 14 years in corporate environmental management for the Tennessee Valley Authority (Manager, Environmental Compliance Branch); and 34 years to date as Founding Principal, Southeast Environmental Engineering and President, Utility Capacity Corporation. Mike has designed, constructed, and operated over 50 advanced treatment/effluent drip dispersal systems. He is active in NOWRA, AWWA, and WEF. In 1968-1969, Ronald "Tony" Favreau and Mike developed the recirculating sand filter process used around the world.

### **Jiayi Hua**

Jiayi Hua is a Ph.D. student in the Department of Civil & Environmental Engineering at the University of South Florida. She obtained her B.S. in Environmental Engineering at Suzhou University of Science and Technology and her Master of Engineering in Environmental Engineering at the University of South Florida. She is an ENVISION Sustainability Professional (ENV SP) and a certified Water Sustainability Professional. She wants to contribute to the field of sustainability to help people survive and thrive in new living environments with limited natural resources.

### **Charles Humphrey**

Charles Humphrey is a Professor of Environmental Health Sciences at East Carolina University (ECU). He earned a PhD in Coastal Resources Management: Geoscience concentration from ECU, a MS in Soil Science and a BS in Natural Resources: Ecosystems Assessment from North Carolina State University (NCSU). He has over 27 years experience in the onsite wastewater field including 3 years as an Environmental Health Specialist, 3 years as a research technician, 7 years as an Area Environmental Agent for NCSU Cooperative Extension, and 15 years as a Professor at ECU. He is a Registered Environmental Health Specialist, NC Licensed Soil Scientist, and NC Authorized Onsite Wastewater System Evaluator.

### **Travis Johnson**

Travis Johnson has worked in the onsite wastewater industry for over 16 years. He spent the first ten years working for a large full-service septic contractor in Minnesota. During those ten years, he acquired all the Minnesota SSTS certifications including his advanced designer and inspector certifications. Travis specialized in tight lots and larger flow systems. He currently represents Infiltrator Water Technologies in Minnesota, North Dakota and South Dakota.

**Mallory Jordan**

Mallory is an Earth System Science PhD student at Auburn University, where she also received her M.S. in Geography. Her research is focused on using spatial methods to investigate and address various water and wastewater related challenges. Some of her recent research includes inventorying onsite wastewater treatment system data across the U.S. and modeling the pollution potential of onsite wastewater treatment systems.

**Jonathan Kaiser**

Jon joined Infiltrator Water Technologies in 2016 as a Project Engineer after graduating with his B.S. in Environmental Engineering from the University of Vermont. He is currently a project manager and spends his time at Infiltrator working on research and development initiatives and new product development. Jon also serves as the Chair of the National Onsite Wastewater Recycling Association (NOWRA) Emerging Professionals Committee. He is also a presenter and published author on many industry-related topics.

**Ben Kele**

Ben is an Australian on-site & decentralized wastewater treatment systems specialist. He has completed his Master's degree in Applied Science in on-site wastewater treatment and has high hopes of handing in his PhD thesis on this topic if he can ever find the time to write it. Ben has patented technologies from his research. He has built a company that focuses on providing on-site wastewater treatment options for difficult sites. He has a passion for working with difficult to treat effluents.

**Andy Lazur**

Dr. Andy Lazur is a Statewide Water Quality Specialist with the University of Maryland Extension focusing on drinking water quality, private wells, groundwater protection, septic systems, and pond management education. He has been involved in various aspects of water quality in Research and Extension for 35 years. His work is applied and collaborative in nature, working directly with varied stakeholders to identify and solve issues. Andy serves as the vice-chair of NOWRA's Education Committee.

**Joshua Klein**

Joshua Klein has been with EPA for over 7 years in the State Revolving Fund Branch in the Office of Wastewater Management within the Office of Water. He was the federal co-lead for the Clean Watersheds Needs Survey. Josh graduated with a Master of Science in Environmental Science from American University in 2010 and has undergraduate degrees in Economics and Politics from Brandeis University.

**Dave Lowe**

Dave Lowe earned a bachelor of science degree from Cal-Poly, San Luis Obispo, CA. He has over 30 years experience in the onsite sewage industry. His background includes pumping septic tanks, installing onsite systems, is a state licensed Onsite Sewage Designer in Washington, and has developed and manufactures wastewater treatment devices. Dave also owns two US utility patents for wastewater treatment devices. Dave has supported the industry by serving as President of the Washington Onsite Sewage Association (WOSSA), member of the Technical Advisory Group of Washington Department of Health, member of the Onsite Rule Revision Committee for Washington State, an instructor at the Northwest Onsite Training Center, and owner of Lowridge Onsite Technologies, Inc.

**Jake Lowe**

Jake Lowe has been working in the onsite industry for the last 6+ years. He works for Lowridge Onsite Technologies in various capacities. His experience has included supporting troubleshooting work with technical support on Lowridge systems, training classes through WOSSA, serving on the committee for the most recent WAC re-write, and serving as the current manufacturers rep for the WOSSA board. The presentations Jake has given have been for service professionals, health inspectors, and realtors.



**Zach Lowenstein**

Zach Lowenstein is a Physical Scientist in EPA's Office of Wastewater Management (OWM), located in Washington, DC. Zach has been with EPA's OWM since 2017, with the Decentralized Wastewater Program, managing initiatives such as SepticSmart Week and the Decentralized Wastewater MOU Partnership. He is now the Program Manager for the Closing America's Wastewater Access Gap Program which focuses on providing technical assistance to underserved communities and tribes with inadequate decentralized wastewater infrastructure. Prior to his employment at EPA, Zach worked for a couple of years in water use and well permitting at the South Florida Water Management District, and before that, as an environmental scientist at a small consulting firm in the oil and gas sector, focused on groundwater and soil remediation. Zach holds a Bachelor's in Environmental Science and Master's in Public Health, both from the University of Florida. Zach resides in Alexandria, VA with his wife and two children.

**Gary MacConnell**

Mr. MacConnell is a registered engineer in five states and is President of both MacConnell and Associates, PC and Green Global Technologies. He has a Bachelors Degree from Gettysburg College and three Masters Degrees from Duke University. He has over 40 years of experience in engineering and specializes in onsite wastewater. He has presented over 70 presentations and papers, both nationally and internationally.

**Phal Mantha**

Phal Mantha is the Director of Agriculture and Sustainability at the non-profit organization Ridge to Reefs, which was established in 2011 to protect coastal communities and restore coral reef ecosystems by reducing land-to-sea pollution with innovative green infrastructure and regenerative agricultural practices. Phal has worked to implement innovative solutions to complex agricultural and environmental challenges in globally diverse regions including North America, Asia-Pacific, and the Caribbean. In his role at RTR, Phal has worked closely with academia, environmental practitioners, and community-led organizations to design, develop, construct, and monitor numerous innovative nature-based treatment systems including Denitrifying Bioreactors, Denitrifying Nutrient Curtains, Inoculated Deep Litter Piggeries (IDLS), Constructed Wetlands, and "Bioreactor Gardens" for Onsite Wastewater treatment, disposal, and reuse. Phal holds a Bachelors of Science in Agriscience from Michigan State University and a Masters of Natural Resource Management from Virginia Tech's Center for Leadership in Global Sustainability. He serves on the Board of Directors for The National Center for Appropriate Technology (NCAT) and is a member of the Development and Personnel Committees in this role.

**Bryer Manwell**

Bryer Manwell, M.Sc., P.Eng. is a registered professional engineer in both Alberta and British Columbia, Canada. She received her bachelor's degree in Materials Engineering from the University of Alberta and her master's degree in Environmental Engineering from the University of Calgary. Ms. Manwell is a current member of Canadian Onsite Technical Resource Association (COTRA) and past president of WCOWMA-Onsite Wastewater Management of British Columbia. Within the onsite wastewater industry, she works to implement environmentally sound practices; specifically, she has focused on researching the use of permeable reactive barriers for passive treatment of nitrogen and pathogens in onsite waterer effluent for the past ten years.

**Dolores "Lola" Maratita**

Dolores "Lola" Maratita, a Community Program Specialist in the Portfolio Management Branch. I am currently the grant manager for the Solid Waste Management and Decentralized Water System grant programs. I have worked with USDA, Rural Development for 20 years. Prior to joining my USDA family, I worked for Department of the Army.

**Jillian Maxcy-Brown**

Jillian Maxcy-Brown is an assistant professor in the Civil and Environmental Engineering Department at Auburn University. She earned a Ph.D. in Civil Engineering from the University of Alabama and a B.S. in Engineering with

a Civil Engineering concentration from LeTourneau University. Her research focuses on equity challenges for wastewater access in the U.S. and served as a consultant for the Nature Conservancy to address sanitation challenges in the Pacific. She is the vice chair for the Emerging Professionals Committee.

#### **Christine McTavish**

Christine has 13 years of experience in wastewater collection and conveyance, and specializes in pressure sewer systems. A University of Alberta graduate, she has had the opportunity to work with wastewater professionals across Canada, the United States, Australia, New Zealand, and Malaysia. Christine is passionate about reducing the environmental impact of wastewater systems, starting from the construction of collection systems, through operation of the network, and to the ultimate destination at the wastewater treatment plant.

#### **Kelsey McWilliams**

Kelsey McWilliams is the CEO and founder of Point of Shift. Point of Shift is a sanitation design consultancy that designs, permits, and implements circular sanitation systems for single residencies, communities, and ecovillages. Point of Shift also assists new sanitation technologies to enter and scale in the US market. This combination of technology and consumer insights gives Point of Shift a broad and detailed view of the US innovative sanitation ecosystem. Kelsey has worked in the circular onsite sanitation sector for 8 years throughout India, east Africa, and the Americas. Previously, she was the first full-time hire for a start up focused on treating urine collected from portapotties into fertilizer. She was also an Associate Director for the Toilet Board Coalition, where she led the Agricultural program assessing the feasibility of circular sanitation systems on tea plantations. Kelsey also sits on a few regulatory task forces in Vermont and across the US that are focused on changing policies to allow easier pathways to innovations in onsite sanitation systems.

#### **Michael Mezzacapo**

Michael Mezzacapo, MS is a Physical Scientist with EPA Headquarters' Office of Wastewater Management, split between the Clean Water Technology Center and Decentralized Program, including the Closing America's Wastewater Access Gap Community Initiative. He is focused on wastewater technical assistance and technology advancement in underserved rural communities and previously held roles with the State of Vermont and University of Hawaii Water Resources Research Center and Sea Grant College Program.

#### **Anne Mitchell**

Anne Mitchell graduated from Michigan State University in 2014 with a master's degree in public health and toxicology. After graduating, Anne worked for the Ingham County Health Department as a registered sanitarian within the Land and Water Program for eight years, designing, permitting, inspecting and regulating onsite wastewater systems and drinking water wells. Anne began working for The Michigan Department of Environment, Great Lakes, and Energy Onsite Wastewater Management Unit in October of 2023 as the Program Manager for the Septic Replacement Loan Program.

#### **Stephen Moeller**

Stephen Moeller's career journey in the industrial sector began with a solid foundation in the electrical wholesale business. Building on this early experience, he transitioned into the field of industrial electrical, controls, and instrumentation contracting, gaining valuable expertise in these areas. For over a decade, Stephen played a pivotal role in a global organization, where he focused on developing and managing business relationships and procurement for large-scale construction projects. His dedication and strategic approach contributed significantly to the success of these initiatives. In collaboration with Gig Drewery, Stephen is involved in the development and marketing of the RioVation BioMaze product line, demonstrating his entrepreneurial spirit and ability to bring innovative solutions to market. Stephen's interest in wastewater treatment led to extensive research into the field's current state and historical evolution. More recently, he has delved into microbiology, recognizing its importance in advanced wastewater treatment. Stephen's commitment to continuous learning and exploration is a testament to his drive to stay at the forefront of his fields of interest.

**Drew Nickoli**

Drew has been in the onsite industry since 2014, and started off working at a test site servicing, installing, and sampling wastewater treatment systems. Drew began his career with Eljen as a Technical Representative in April 2022. He conducts trainings regularly both in the classroom and on site at installations. Drew has presented at countless conferences and trade shows across the country in his 10 years in the industry and sits on the Board of Directors for The Ohio Onsite Wastewater Association. Mr. Nickoli served in the U.S. Army as a Combat Engineer from 2008 - 2016. Drew served in Operation Enduring Freedom in Afghanistan in 2013, performing counter IED and route clearance operations. He also served on the Ohio National Guard's search and extraction team after returning home from Afghanistan before retiring from the Army in 2016. He is an active member in the "Save A Warrior" community that helps veterans and first responders to overcome the symptoms and addictions associated with Complex Post-Traumatic Stress.

**Michael Payne**

Michael Payne is a professional groundwater engineer and hydrogeologist. He graduated from the University of British Columbia in Geological Engineering in 1982, and Water Resources Engineering (Masters) in 1985. After ten years of project engineering in BC, Alberta, and Africa, Michael formed Payne Engineering Geology in 1992. During his 39 years of engineering practice, Mr. Payne has evaluated site hydrogeology and designed solutions for 250 onsite wastewater treatment systems, ranging in size from a small cottage to small towns. Michael was a co-author of all three versions of BC's Standard Practice Manual (SPM) for onsite sewage systems. He is one of the primary authors of the Engineers and Geoscientists of BC Professional Practice Guidelines - Onsite Sewerage Systems. Michael has been appointed as an expert witness for disciplinary investigations and legal disputes relating to engineering of onsite sewage systems.

**Krista Podwin**

Krista Podwin, M.Sc., P.Eng. is a seasoned environmental engineer with over 25 years of experience. Her career encompasses a broad spectrum of engineering projects, with a recent and dedicated focus on the impacts of onsite sewage systems on watersheds. Mrs. Podwin earned her bachelor's degree in Environmental Engineering from the University of Regina, followed by a Master's of Applied Science in Chemical Engineering from the University of Waterloo. She is involved in research projects aimed at identifying and mitigating environmental impacts of onsite wastewater systems.

**Sushama Pradhan**

Sushama Pradhan, Ph D, is the Nonpoint Source Pollution Control Program Coordinator at the On-site Water Protection Branch in North Carolina Department of Health and Human Services. She specifically engages in impact assessments of onsite wastewater systems and prevention of surface and ground water quality degradation from such systems. She got her Doctoral degree in Soil Science at North Carolina State University. Dr. Pradhan has over 15 plus years of research experience in onsite water management, onsite system technologies performance evaluation, and modeling onsite systems derived pollutant loadings using GIS based hydrologic model. Currently she is overseeing 'Decentralized Wastewater Infrastructure: Septic Systems Needs in Marginalized Communities of North Carolina' project funded by CDC and Restoration of Waste Detection and Elimination (WaDE) program. Dr. Pradhan has successfully managed/completed numerous multidisciplinary projects including addressing PFAS and other contaminants in septic systems and private drinking water wells, on-site system field performance surveys, evaluation of nutrient contributions from septic systems to water resources in the piedmont of North Carolina, efficacy of sapolite removing E. Coli from septic system effluent.

**Jeff Rook**

Jeff Rook: National Wastewater Sales Manager Education: BS Economics, State University of New York, College at Cortland I've been employed at Goulds Water Technology, Xylem for 29 years spending all my time on the sales end of wastewater product. I started in sales in the Michigan territory for 5 years. I then moved back to

upstate NY and covered the NY and New England region for 20 years. I am from and live in Seneca Falls, NY, in the Finger Lakes Region of NY, and am now responsible for the national sales of wastewater product.

#### **CeCe Rudnicki**

CeCe Rudnicki has been involved in the onsite wastewater industry in Wisconsin since 1995. Over the years, she has worked as a licensed soil tester, designer, installer, pumper, county regulator and state regulator. She is currently the owner and operator of The Septic Gal - doing soil testing and septic design and specializing in industry training. CeCe is a lifelong learner and loves to share her passion of finding solutions to onsite wastewater issues with others. She holds licenses in Wisconsin as a Master Plumber-Restricted Service, Certified Soil Tester, POWTS Inspector and Designer of Engineering Systems. Her contact information can be found at [www.thesepticgal.com](http://www.thesepticgal.com)

#### **Gabrielle Saba Zimmer**

Gabby Saba Zimmer brings eight years of experience in education and curriculum development to the Wastewater Alternatives & Innovations (WAI) team as the program manager, curriculum developer and instructor for the Work-4-Water program. The Work-4-Water program is funded by the Department of Labor and has a large ripple effect as the first decentralized onsite wastewater workforce development and educational training program in the state of Hawai'i. Gabby received her Bachelor of Arts in Sociology and Masters of Teaching from the University of Virginia. Her previous work as a kumu (educator) for Kamehameha Schools, Kapālama inspires her passion to create pathways built on a pedagogy of aloha that empower Hawaii's next generation of changemakers to contribute to their communities both globally and locally. Her dedication to restore healthy watersheds, clean water and resilient reefs is fueled by a lifelong passion for Hawai'i's beaches and water.

#### **Elisabeth Schlaudt**

Elisabeth Schlaudt joined the State Revolving Fund Branch in the Office of Wastewater Management within the Office of Water in March 2020. She was the federal co-lead for the Clean Watersheds Needs Survey. Elisabeth has master's degrees in Water Resources Management and Hydrogeology from the University of Wisconsin-Madison.

#### **Patricia Scott**

Tricia Scott has worked for the State of Nebraska for 20 years. She has spent eight of those years working in the Onsite Section of the Department of Environment and Energy and finds working in onsite regulation very rewarding. She holds a geology degree from the University of Nebraska-Lincoln. Tricia grew up in rural Western Nebraska (practically Wyoming) on a true family farm, which was homesteaded by her family over 100 years ago, and where her parents still live. She maintains ties to her rural roots and tries to make sure the issues which affect rural onsite system owners are considered. She began serving on the NOWRA Board in December 2020 as a regulator representative. In her spare time, she writes fiction, reads, and does various crafting projects. She resides in Lincoln in a home which some might say has too many books and far too many terrible old science fiction movies.

#### **Kevin Sherman**

Kevin Sherman received a B.S. in ecology & evolution from Stony Brook University. He also has a B.S. in civil engineering from the FAMU/FSU College of Engineering. Kevin has a M.S. in Biology from the University of South Carolina, and a M.P.H. in Public health management from the University of South Florida. He also has a Ph.D. in Biological Oceanography from Florida State University. Kevin worked for the Florida Department of Health for fourteen years. From 1989 to 1992 he served as administrator of the state's onsite sewage program. For six years, Dr. Sherman served as the Executive Vice President of the Florida Onsite Wastewater Association. Currently, he is Director of Engineering and Regulatory Affairs for SeptiTech, Inc. Dr. Sherman is author or co-author of over 25 publications. He is a past-president of the Florida Environmental Health Association and the

National Onsite Wastewater Recycling Association. He is a Professional Engineer in seven states and is a Registered Sanitarian in Florida.

### **Jeremy Simmons**

Jeremy Simmons leads the Wastewater Management section at DOH. He earned a Bachelor's of Environmental Science from the University of Colorado and has several years of experience working on wastewater, environmental, environmental health, and public health issues with private industry, local health, and state health agencies.

### **James Stikma**

James Stikma, owner of Canadian Septic Inc., has over 7.5 years of experience as a Registered Onsite Wastewater Practitioner for Design & Install in the Greater Vancouver area in British Columbia. His company is known for high-quality septic services for residential and commercial clients. James has served on the WCOWMA-BC board for 4 years and was recently elected Vice President. He is committed to continuous learning, attending conferences like the WWETT Show, Septic-Con, AOWMA Convention, and is looking forward to the NOWRA show in Spokane later this year. James also is passionate about educating the public about septic systems through social media, emphasizing the importance of proper design, installation, and maintenance.

### **Robert Sweeney**

President & Founder of Environmental Management Systems, Inc. specializing in finding solutions for challenging sites & projects. Current NOWRA Board Member and Chair of the Technical Practices Committee. Former President & Board Member of WOSSA and Former Board Member of O2WA. 46 years in Onsite Wastewater Treatment and Recycling. 20 years as a Regulator and 26 years as a Consultant / Designer / Maintainer. 33 Years with military health, safety and environmental protection. Registered Environmental Health Specialist / Sanitarian (OR & NV) / Professional Onsite Wastewater Treatment System Designer (WA). BS Science / Public Health Certificate / MS Management / MBA Veteran Entrepreneurship / Army Medical Service & Civil Affairs Officers Advanced Courses / Wetlands / Erosion and Sediment Control / Food Protection / Water Quality / Epidemiology / Disaster Preparedness and more.

### **Hideyuki Terashima**

Hideyuki Terashima is a geologist with the Illinois State Water Survey located at the University of Illinois. He graduated from the U of I with a bachelors of science in geology with a focus on environmental geology. He has been with the state water survey for the past 10 years working on an outreach based program called WaterOperator.org to help municipal water and wastewater operators maintain compliance. His team now has launched DecentralizedWastewater.org which aims to expand their focus area to the onsite wastewater industry.

### **Quang Tran**

Quang Tran is a Ph.D. candidate in Environmental Engineering at Oregon State University with research and application focusing on innovative water and wastewater treatment technologies, specifically membrane separation processes, toward an ecofriendly and circular treatment solutions. A special interest involves the integration of the electrodialysis and forward osmosis membrane systems to achieve concurrent recovery of nutrient and clean water from wastewater. Quang also studied a range of membrane-based water treatment techniques, such as addressing challenges faced by ultrafiltration during harmful algal blooms. In addition to over 5 years of research experience, he also participated in the private sector through internship opportunities as well as teaching activities at OSU.

### **Tammy Trantham**

Tammy Trantham has extensive experience in water quality education. She obtained her Bachelor of Science degree in Biology from Viterbo University in La Crosse, Wisconsin. She completed her Master's of Biology from

Missouri State University with an emphasis in Aquatic Biology. Tammy has hosted educational presentations all around southwest Missouri pertaining to stream ecology, lake ecology and wastewater treatment. As the Executive Director of Missouri Smallflows Organization, she coordinates educational presentations around the state for continuing education opportunities including the only Missouri onsite wastewater conference - MSO Conference & Trade Show in Columbia. Over her last 14 years of working in the onsite wastewater industry, she has helped plan the NOWRA Mega-Conference in different parts of the nation. She is also a registered Onsite Soil Evaluator through the Department of Health and Senior Services (DHSS) to conduct soil evaluations for onsite wastewater treatment systems. Tammy is also the Executive Director of the Minnesota Onsite Wastewater Association (MOWA).

### **Joseph Valentine**

Joseph A. Valentine is a biologist and soil scientist. He was certified as an SEO in 1975 and has 49 years' experience with on-lot sewage treatment; 11 years regulatory experience with the Bucks County Department of Health and 38 years' experience as a consultant. He was also an adjunct faculty member at Delaware Valley College (DVC), now Delaware Valley University from 1983 to 2022 teaching various soil courses and was a member of the DEP funded research project at DVC investigating on-lot sewage disposal systems.

### **Huiyun Wu**

Dr. Huiyun Wu is an Environmental Engineer specialized for microbial water quality research. Dr. Wu will start the role as a tenure-track Assistant Professor in Environmental Engineering at Washington State University in August 2024. Dr. Wu received a Ph.D. in Environmental Engineering from Michigan State University. Following the doctoral studies, Dr. Wu undertook a two-year Oak Ridge Institute for Science and Education (ORISE) fellowship with the U.S. Environmental Protection Agency (EPA) in Research Triangle Park, North Carolina, and served as a Postdoctoral Fellow in the Department of Environmental Health Sciences in the School of Public Health & Tropical Medicine at Tulane University. Dr. Wu's research is focused on data-driven strategies for advancing water sustainability, molecular microbiology applications, and environmental microbiome investigation. Dr. Wu has worked on multiple interdisciplinary research projects, including water reuse, wastewater-based epidemiology and sanitary sewage overflow survey, environmental metagenomics, microbial source tracking, stormwater management, and microbial water quality modeling.

### **Paul Young**

Paul Young is a seasoned industry expert and dedicated Army Reservist with a distinguished career spanning over 15 years. He holds a Master of Public Administration (MPA) from American Public University and a Bachelor of Arts in Environmental Science from the University of Denver. Paul's academic background is complemented by extensive practical experience in onsite waste management, where he has demonstrated expertise in advocacy for state and local policies that provide cost-effective means for homeowners to design, install, and maintain onsite waste systems. As a Warrant Officer in the Army Reserves, Paul has undertaken numerous humanitarian missions, utilizing his skills to enhance sanitation infrastructure in diverse and challenging environments. His work in foreign countries has improved public health outcomes and fostered sustainable practices within local communities. Paul's leadership and technical acumen have been pivotal in executing complex projects under stringent conditions, ensuring environmental safety and compliance with international standards.