

Speaker Biographies

Catherine Allen

Catherine Allen is the Chief for the Sustainable Communities & Infrastructure Branch within EPA's Office of Wastewater Management, Water Infrastructure Division. Ms. Allen began her career in the Region 5 NPDES and pollution prevention programs. Following a 2-year stint as a Mansfield Fellow in Japan, she joined the international office at EPA, where she managed the international environmental health program. She returned to domestic programs in 2004, joining what was then the Office of Solid Waste and Emergency Response land revitalization program and then moving to the Office of Policy, where she last worked on disaster mitigation and recovery programs. Cathy has a BS in Mechanical Engineering and a BA in Political Science from Stanford University and a MS in Environmental Engineering from Johns Hopkins.

Anita Anderson

Anita Anderson has over 20 years of experience as a water supply engineer with the Minnesota Department of Health, Section of Drinking Water Protection. Her primary area of expertise is surface water treatment, specializing in small systems. Currently she is also working on special projects to implement water reuse in Minnesota in a safe and sustainable way and to predict the vulnerability of groundwater drinking water sources to microbial pathogens. She holds a Bachelor's degree from Gustavus Adolphus College and a Master's degree in Environmental Engineering from the University of Minnesota. She is a registered professional engineer in Minnesota.

Dick Bachelder

Dick Bachelder's career in the onsite industry began in 1990 with PSA, Inc., a Maine company which developed the BioDiffuser line of plastic leaching chambers. When Advanced Drainage Systems, Inc. (ADS) purchased PSA, Inc. in 2000, Dick joined the ADS onsite team. Instrumental in the development of the Arc line of plastic chambers and growth of the GEO-flow sand-lined system market while at ADS, his responsibilities for both companies included management of all onsite-product-related approval issues. In 2013 Infiltrator purchased ADS's chamber assets and Dick joined Infiltrator's Science & Government Affairs Department, where he continues to focus on product approval development and management, as well as regulation development. Dick's industry involvement includes his past service on the Ohio Department of Health's Technical Advisory Committee, and his present positions as a voting member of the Canadian Standards Association's (CSA) B65 Technical Subcommittee on onsite wastewater system design and installation, a founding member of the National Onsite Wastewater Recycling Association (NOWRA), Director of the Yankee Onsite Wastewater Association (YOWA), and a Captains of Industry (COI) member of the State Onsite Regulators Association (SORA).

Amy Beatty

Amy Beatty is employed with Le Sueur County in the Environmental Services Department. She has been employed at the County for the past fourteen years as the Environmental Programs Specialist (county feedlot officer, solid waste officer, and certified advanced septic designer and inspector).

Marie-Christine Belanger

Marie-Christine Belanger is the current Product Director at Premier Tech Aqua (PTA), a Canadian company and world leader in the Onsite Wastewater Treatment industry. She accumulated over five years of professional experience as a Project Manager for the development and implementation of decentralized wastewater treatment systems for GSI Environnement before pursuing a career as Project Development Director at Group Celdex, a firm specializing in the development of integrated Waste Management programs in emerging countries. Ms. Belanger joined PTA 16 years ago. Her functions at PTA have brought her to play key roles on several steering and advisory committees throughout North America, namely with the BNQ, CSA, NOWRA, NSF, local provincial and state organizations, etc. where she has taken part in the development and advancement of industry-wide regulations and standards leading to better protection of the environment and the public's health. Ms. Belanger holds a Physics Engineering degree from Laval University and a Master's degree in Chemical Engineering from L'Ecole Polytechnique de Montreal.

Lynn Broaddus

Lynn Broaddus made a decision early on to focus on natural resource sustainability. Her career includes work in energy conservation and efficiency, biodiversity, land conservation, water resources, and education. These experiences are underpinned by scientific rigor and a tireless belief that good people working together can make big differences. Lynn formed Broadview Collaborative, Inc. in 2014 to increase her impact on the resiliency and sustainability issues that drive her. While this is her first private sector endeavor, it builds on her history of creating new efforts and retooling struggling ones. During her six years with The Johnson Foundation at Wingspread she was charged with re-shaping the Foundation's environmental programming in a way that would bring national stature to the Racine, Wisconsin-based foundation. The result was Charting New Waters. Over the span of six years, she convened hundreds of national leaders from government, business and non-governmental organizations, and academic experts to explore the intersections of freshwater and climate change, infrastructure and built environment, agriculture, energy, finance and public health. The initiative resulted in more than a dozen direct publications on U.S. water management needs, and spurred additional partnerships and initiatives that left the field undeniably changed, and more united. Prior to joining The Johnson Foundation, Lynn served for six years as executive director of Milwaukee Riverkeeper®, a water advocacy organization that she grew into a strong, nationally respected voice with what may be the largest volunteer base of any similar group in the country. Before joining Riverkeeper, she spent 12 years working for The Nature Conservancy and a related organization, NatureServe, where in her role as director of U.S. Network Partnerships she negotiated the first set of national data sharing agreements among the nation's Natural Heritage Programs in all 50 states and the Navajo Nation. Lynn hosts On The Water Front, a blog dedicated to exploring a broad spectrum freshwater and sustainability topics, and can be reached at LBroaddus@BroadviewCollaborative.com

Brian Brogard

Brian Brogard grew up in the septic system business running equipment since he was young. In 2000 he purchased the business from his parents and has grown that business into a successful plumbing, heating & excavating company. He keeps very busy designing and installing septic systems especially throughout the lakes area.

John Buchanan

Dr. John R. Buchanan is an Associate Professor and is on the faculty of the Biosystems Engineering and Soil Science Department at the University of Tennessee. He has 27 years of

teaching, research, and outreach experience in the areas of onsite and decentralized wastewater management, 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 the Water Environment Federation, Soil and Water Conservation Society, NOWRA, and the American Society of Agricultural and Biological Engineers. He is a registered professional engineer in Tennessee.

Mary Clark

Mary Clark is an Environmental Program Manager for the Indirect Discharge program which permits and manages soil-based wastewater systems 6,500 gpd and larger, for the State of Vermont and is currently President of the State Onsite Regulators Association (SORA). She has a B.S. degree from the University of Connecticut in Natural Resource Conservation and has worked in the decentralized wastewater field for 40 years. Mary started work as an engineering technician for consulting engineering companies, then acquired a VT Wastewater Designer License. She was a regional office permit regulator, then a scientist and program manager for Stone Environmental Inc. where she led onsite wastewater management studies and plans, and finally she worked for two industry manufacturers before coming back to state government.

David Cotton

Dave Cotton, P.E.; Currently works for the Michigan Department of Environmental Quality in the Onsite Wastewater Program. He graduated from Michigan Tech in 1983 and has spent 35+ years in Small and Decentralized Wastewater Management: Working in-depth in many areas including as a regulator, designer, installer, equipment distributor, service provider, on-going research, manufacturer's rep, and product development.

Sheila Craig

Sheila Craig has been a facilitator for the SE Minnesota Wastewater Initiative since 2003. Previously she was an Extension Educator with the University of Minnesota for 29 years. She has a Bachelor's degree from Iowa State University and Masters in Adult Education from the University of Minnesota.

Peter Daniels

Mr. Daniels has twelve years of consulting experience where he has focused on industrial wastewater treatment, municipal wastewater treatment, wastewater conveyance, and environmental compliance. He has worked for both private and public sector clients and worked on projects in multiple states and countries. He has been involved in projects from concept design and planning all the way through detailed design, construction, and project closeout (record drawings and O&M manuals). He is familiar with public infrastructure funding programs, grant applications, and public bidding processes.

Governor Mark Dayton

Mark Dayton is Minnesota's 40th Governor. He was born in Minneapolis and raised in a house in Long Lake. He has two grown sons, Eric and Andrew. Mark became a grandfather in 2013 when Eric and his wife, Cory had their first child, Hugo. In 2017, Eric and Cory welcomed their second child, George. Mark lives in St. Paul with his two German Shepherds, Itasca and Wanamingo (Mingo).

Mark attended Long Lake Elementary School and Blake School in Hopkins. He loved hockey, and it was his childhood dream to be the starting goalie on the U.S. Olympic Hockey Team! He didn't make it, but he was named an All-State goalie his senior year in high school. He graduated, cum laude, from Yale University, where he also played Division I hockey. After college, Mark taught 9th Grade general science for two years in a New York City public school. He still tells how it was the toughest job he ever had! It was here where he realized the terrible injustice that his students had so little, while he had been given so much; and he decided that he would devote his life to improving social equality and economic opportunity for all Americans.

For most of the past 40 years, Mark has served Minnesotans, as Commissioner of the Minnesota Departments of Economic Development and of Energy and Economic Development, as State Auditor, and as United States Senator. He has worked throughout our state to help businesses locate or expand and create jobs, to improve government services, to better fund our public schools, to support our servicemen and women, to help Minnesotans get the health care they need, and in many other ways to make a better Minnesota.

During Mark's time as Governor, Minnesota has added more than 285,900 new jobs, earning CNBC's ranking as America's Top State for Business. Thanks to budgets Mark has signed into law, and the state's improving economy, Minnesota has turned a \$6 billion deficit into repeated budget surpluses. Mark has kept his promise to increase funding for K-12 education every year he is Governor: no excuses, no exceptions. And thanks to Mark's leadership, all children (totaling more than 55,000 students) now have access to free, all-day Kindergarten. In 2015, and again in 2017, Mark was appointed by the President of the United States to serve on the Council of Governors, which is responsible for advising the Secretary of Defense, Secretary of Homeland Security, and the White House Homeland Security Council on matters related to the National Guard and civil support missions.

Bill Dunn

Bill Dunn has been the MPCA's Clean Water Revolving Fund Coordinator for the past 15 years which has duties to establish an annual Project Priority List (PPL) that is used for state and federal funding awards. State financial assistance programs offer low interest loans, affordability grants and Clean Water Legacy pollutant-based grants. Prior to that, Mr. Dunn worked on Smart Growth, pollution prevention and recycling policy initiatives over his first 15 years of state service. He also currently serves as Chief Steward of Local 301 Minnesota Association of Professional Employees (MAPE). Two decades ago, Bill escaped the Metro wastewater service area and has been living worry-free with a private conventional, 2 trench gravity septic system since that time.

Stacey Fesser

Stacey Fesser started a business, Fesser Environmental, 3 years ago where she designs, inspects, and installs residential and commercial septic systems. Prior to that Stacey worked for 7 years with the Septic and Wetland program at Blue Earth County in Mankato, MN. She has her Master's degree in Soil Science from the University of Minnesota, holds all the Subsurface Sewage Treatment Systems (SSTS) certifications, and helps teach Soils courses in the OSTP program.

Alice Flood

Alice Flood - Oronoco Township Resident: Alice has lived in her Cedar Beach home for 42 years. She worked for the Mayo Clinic for 44 years and recently retired as an operations manager. She is a liaison between her community and the Township Board.

Jeff Freeman

Jeff Freeman is the Executive Director of the Minnesota Public Facilities Authority, a Minnesota state agency that manages state water infrastructure financing programs, including the Clean Water and Drinking Water State Revolving Fund loan programs and several state grant programs. Mr. Freeman has been with the Public Facilities Authority since 1996. Prior to that he worked for twelve years for the Minnesota Pollution Control Agency in a variety of water quality positions. Mr. Freeman currently serves as President of the Council of Infrastructure Financing Authorities (CIFA), a national organization of state revolving fund managers. He has a Masters Degree in Public Affairs from the Humphrey School at the University of Minnesota and a Bachelor of Science from Minnesota State University, Moorhead.

Tom Fritts

Tom Fritts is vice-president of Residential Sewage Treatment Company in Grandview, Missouri where they design, sell and service alternative onsite wastewater systems. Tom is past president of the Missouri Smallflows Organization (MSO), the Kansas Small Flows Association (KSFA) and the National Onsite Wastewater Recycling Association (NOWRA). He is an approved instructor for NOWRA, the Consortium of Institutes for Decentralized Wastewater Treatment and several states across the country. Tom is the 2016 recipient of the NOWRA "Dick Otis Industry Achievement Award" and the KSFA 2015 "Raymond Peat Industry Achievement Award".

Kelly Galloway

Kelly Galloway, B.Sc.(CE), P.Eng., is a Civil Engineer with 27 years of experience, 22 years with her own firm, Engineering Technologies Canada Ltd., based in PEI. Kelly has received multiple awards for excellence in engineering and sustainable design, including a 2011 FCM Sustainable Community Award. Ms. Galloway's areas of consulting activity include: design of small community, commercial and residential sewage systems, soil evaluations and planning studies. She has consulted on technical aspects of guidelines for the provinces of NB and BC in Canada. Kelly is a voting member of the CAN CSA B65-12 Technical Committee for decentralized wastewater systems. She delivers training to installers, regulators and engineers, and is a frequent speaker at major industry conferences. Kelly holds two patents for inventions for the on-site industry.

Jake Garrett

Jake Garrett, PE, is the Manager of the Gila County, Arizona Wastewater Program. He has been active in the onsite industry for the last 25 years, first in the private sector as a percolation tester, conventional and alternative system designer, and installation planning and execution under Arizona's Bulletin 12 and then the 2001 Rules. Since joining Gila County in 2002 he has managed the environmental programs delegated to Gila County from both ADEQ and ADHS. In 2007 the wastewater program moved to the Building Department where he has worked to implement a one-stop-shop for Gila County residents. He was an active participant in the 2005 rule revision process and has continued to participate in industry growth and education activities including various leadership roles including organizing and presenting the Southwest Conference. He is Past President of the Arizona County Directors of Environmental Health Services Association (ACDEHSA), Past President of the Arizona Onsite Wastewater Recycling

Association (AzOWRA), Past Chairman of the ADEQ Onsite Wastewater Advisory Committee (OWAC) and Chairman on the Central Associations of Government (CAG) Environmental Protection Committee (EPC).

Claude Goguen

Claude Goguen has more than 24 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 and a licensed P.Eng. in Canada. Prior to his role in technical services 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. He has presented courses and seminars relating to precast concrete wastewater systems at various federal, state and regional onsite wastewater meetings over the last 10 years.

Dave Gustafson

Dave Gustafson, PE is a registered engineer working in the Water Resource Center at the University of Minnesota. He has been dealing with sewage for over 30 years in municipal scale systems and backyard treatment technologies. He has been educating and assisting onsite treatment professionals in MN, nationally and internationally for over twenty five years. His position allows him to be active in the troubleshooting and evaluation of systems in MN and nationally. He has learned through the years that we can learn from each other and getting your hands dirty helps to keeps your thoughts clear.

Lois Hackbarth

Lois Hackbarth - Oronoco Township Resident: Lois lives in Cedar Beach, where her home had a compliant septic system even before the community project began.

Nick Haig

Nick Haig has been a program administrator for the Minnesota Pollution Control Agency's Certification and Training Unit since 2012. His main focus is on improving the quality and relevance of the environmental professional certification process for septic system professionals and solid waste landfill operators. He was the program coordinator for the Onsite Sewage Treatment Program at the University of Minnesota for seven years and spent three years engaging small communities in the wastewater infrastructure upgrade process. Nick holds a B.S. in Environmental Policy with a minor in philosophy from St. Norbert College and a M.S. in Water Resources Science from the University of Minnesota.

Dennis Hallahan

Dennis Hallahan has 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 is responsible for product research and testing at Universities, test centers and private consultants. His department develops system sizing charts for national and international approvals and assists customers and field representatives in the planning and review of large commercial decentralized systems. Many of these systems are in excess of a 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 19 years and holds the current position as Technical Director. Dennis also holds patents for on-site wastewater products and is a member of the Water Environment Federation and of the National Onsite Wastewater Recycling Association and currently serves as Chairman for the NOWRA Technical Practices Committee.

Jill Lauren Hass

Jill Lauren Hass, P.Eng., M.Eng., LEED AP® is Senior Project Engineer at Cole Engineering with 22 years of design and construction experience, specializing in innovative onsite water & wastewater infrastructure. She has extensively worked in challenging conditions, from designing new community servicing in Greenfield developments on rocky outcrops in British Columbia, to installations in dense urban cities to peri-urban slums in India. Previously Jill was the Vice President and Chief Technology Officer of a private alternative sewer company, overseeing both the Engineering Department and the R&D Department; the R&D programs she managed included 12 university research projects on sludge reduction in STEG/STEP systems, increasing conversion of sludge solids to biogas, and tank optimization. Recently, Jill returned from a 2+ year contract with the United Nations to install their first purpose-built municipal sewerage system within a refugee camp, 4 miles south of the Syrian border in Jordan, servicing up to 100,000 people. She brings to every project strong technical skills and is an outspoken advocate for decentralized servicing. A lifetime environmentalist, Jill spends her weekends canoeing, camping and cross-country skiing.

Stephanie Holt

Stephanie Holt is a Management Analyst with Public Health & Environment (PHE) serving Washington County since 2008. Her primary responsibilities are administering the county's septic loan and grant program, contract management, requests for proposals, requests for quotation, requests for board action, and records retention. She helps lead workforce development planning efforts and community health assessment reporting.

Stephanie facilitates a strategic plan action team focused on delivering effective programs and co-facilitates PHE's Performance Improvement Team (PIT) to advance the culture of quality improvement. She represents the County on the Minnesota Chapter of the National Institute of Governmental Purchasing, which asserts leadership in the field of governmental purchasing in the State of Minnesota and is a member of the Metro Counties Cooperative Purchasing Group. Stephanie graduated with a Bachelor's degree in Business Marketing from St. Cloud State University and received an Associate's degree in Accounting from Rasmussen University.

Ben Howard

Ben Howard is a rural development technician for the Rural Community Assistance Program in Southern Ohio. His work centers on helping communities with planning and financing wastewater and drinking water infrastructure. During the Masters of Public Administration program at the Ohio State University, he collaborated with the Rich Earth Institute in Vermont, the US leader in research and advocacy for use of human urine for its fertilizer value, and the Cape Cod Eco Toilet Center that showcases alternative toilet designs. He completed Compost Operator Training through the US Composting Council to gain a foundation in practical commercial composting operations, especially regarding bio-solids. While completing his research he studied conventional on-site sanitation through the Food, Agricultural, and Biological Engineering Department at The Ohio State University. He is excited to share his research that investigated the practice of land application of septage as a regulatory framework through which to return nutrients in human waste to soil.

Corey Hower

Corey Hower has worked for the Minnesota Pollution Control Agency as a water quality engineer for over 17 years. He deals with small land-based treatment systems up to large surface water discharger systems. Corey reviews projects to meet all state and federal wastewater regulations. He graduated in 1999 from the University of Minnesota with a degree in Biosystems and Agricultural Engineering.

Bo Hu

Dr. Bo Hu is an associate Professor at the Department of Bioproducts and Biosystems Engineering at the University of Minnesota. He is also a joint faculty member of the Biotechnology Institute of UMN. Dr. Hu has over 20 years of active research experience specifically in biomass utilization, fermentative conversion, and environmental remediation. He has led projects on bioremediation from waste materials via mixotrophic microalgae and fungal fermentation, and projects to develop the modified anaerobic digestion system for biohydrogen production and its microbial community change by using 16s rDNA based microbial analysis. Hu's team at UMN has set up several standard procedures such as 16s rDNA fingerprint screening for microbial species in wastewater treatment facilities, ITS sequences to identify oleaginous fungal species; and several conversion platforms such as pelletized fungal fermentation, solid and hemi- SolidSF to accumulate oil from lignocellulosic materials. His research ideas to tackle regional issues have been funded by many programs, especially local funding agencies such as MN Pork Board, IOWA Pork Board, MN Rapid Agricultural Response Program, etc.

Brian Humpal

Brian Humpal is an Advanced Designer, Inspector, Service Provider, Installer, and Maintainer. He began his career in the septic system field in 1993 and has been involved with all aspects of the industry. However, the majority of his career has been focused on existing system compliance inspections.

Charles Humphrey

Charles Humphrey earned a BS in Ecosystems Assessment and MS in Soil Science from North Carolina State University and a PhD in Coastal Resources Management: Geosciences Concentration from East Carolina University. He worked for a combined 3 years as an Environmental Health Specialist with Union County and Wake County in NC, and an REHS and NC Licensed Soil Scientist. He worked for 7 years as an Area Environmental Agent for NC Cooperative Extension, and is currently an Associate Professor of Environmental Health Sciences at East Carolina University (ECU). He has been at ECU for 9 years and teaches undergraduate and graduate level wastewater management and safe water classes. His research focuses on wastewater treatment, pollutant transport through soils, groundwater and surface water interactions, and land use impacts on water quality.

Aaron Jensen

Aaron Jensen has worked for the MPCA SSTS program since 2013. One of his tasks includes administering the Clean Water Legacy grants to counties. These grants to counties are for administration of SSTS programs, for special projects to improve SSTS compliance rates, to support their work in regulating systems that require that an Advanced Inspector and to assist low-income homeowners with needed SSTS upgrades. Prior to that he worked for the Douglas County Land and Resource Management office for six years as an Environmental Planning Technician, where he became a certified advanced SSTS Inspector. Aaron holds a Bachelor of

Science degree in Environmental and Natural Resource Management for the University of Minnesota Crookston.

Wayne Johnson

Wayne Johnson was raised on a dairy farm, went to college and received a degree in mathematics & computer science. In 1993, he purchased a small local pumping business and has grown that business into all phases of the on-site industry. He and his wife (and business partner) Dena enjoy being involved in local boards and service organizations in the community.

Dwayne Jones

Dwayne Jones is president of Dwayne C. Jones Contracting Inc, t/a Jones Pump Service with over 30 years' experience providing consulting, conventional/alternative onsite system design, installation, and operation. Dwayne is a National Environmental Health Association (NEHA) certified contractor, past president of the Maryland Onsite Wastewater Professional Association (MOWPA), and is a current member of the NOWRA Board.

Ben Kele

Ben Kele has been a researcher and post graduate student at the Central Queensland University. He has successfully completed his Bachelors of Applied Science and master's degrees and has finished his PhD research, even if he hasn't handed in his PhD thesis yet. His company Arris, is based on the Waite campus of the Adelaide University and it specializes in providing water treatment solutions for difficult sites. Ben has been designing, installing, researching and maintaining on-site systems across Australia for over 20 years. He works with on-site and decentralized systems in potable, wastewater, stormwater, and mining/industrial water. Ben has delivered specialist lectures and courses at 5 different Australian Universities and also teaches short courses for the ICEWARM water education program. While he is now working in the commercial field he still has a passion for research and continues his own investigations while supporting other post graduate studies.

Brian Koski

Brian Koski is a licensed installer, maintainer, advanced designer, service provider and wastewater operator. His company Septic check, is a full service contractor in central MN.

Dale Ladouceur

Dale Ladouceur is a Registered Sanitarian and is employed with the Michigan Department of Environmental Quality (DEQ), Office of Drinking Water and Municipal Assistance, Environmental Health Programs Unit, Onsite Wastewater Program and has been with the DEQ for 16+ years. Previous to working for the DEQ, Dale worked for the Mid-Michigan District Health Department for over 12 years. Dale has a B.S. degree in Environmental Health from Ferris State College (a.k.a. Ferris State University).

Eric Larson

Eric Larson brought his passion for clean water and saving natural resources to the onsite industry in 1995. He started companies that specialize in providing high quality field service and technologies to protect the environment while minimizing system size and maximizing treatment capacity. His industry involvement includes serving as a director for MOWA and NOWRA and participating in multiple activities with the MPCA.

Dave Lentz

Dave Lentz manages Infiltrator Water Technologies' government affairs department, with responsibility for regulation of the company's chamber, EZflow, septic tank, and Delta Treatment Systems product lines. Nationally, Infiltrator is involved in rulemaking, legislation, and industry standards development supporting the onsite wastewater treatment system industry. Dave has over 25 years of experience related to soil, groundwater, and wastewater systems. He holds bachelor's and master's degrees in civil engineering and is a licensed professional engineer.

Jim Lockrem

Jim Lockrem is a Product Manager for SJE, a leading global supplier of water, wastewater and embedded controls with eight locations throughout USA and Asia. Jim works out of the corporate headquarters located in Detroit Lakes, MN. His responsibilities include managing control panel products for the onsite and municipal markets, and he works closely with customers, sales, marketing, and engineering throughout the product life cycle.

Gary Lucas

Gary Lucas is the Director of Innovation at ITP, LLC and has over 20 years of industry experience with water & wastewater treatment systems with the use of ultrafiltration (UF) membranes. Before being hired as the Director of Engineering for ITP, LLC, Gary was a project engineer and start up technician at Dynatec Systems, Inc. There he was instrumental in the development, design, production and commissioning of the Dynalift UF Membrane Bio-Reactor systems. Gary brings a wealth of experience and knowledge to the table offering training and developmental foundations to current and future ITP, LLC employees.

Gaida Mahgoub

Gaida Mahgoub is an ORISE Research Participant in the Decentralized Wastewater Program at the EPA's Office of Wastewater Management. Gaida conducts research on decentralized wastewater treatment system data, financing opportunities, and other decentralized wastewater related issues. Her primary research focus is assessing the status of decentralized wastewater systems through available data and identifying new avenues for collecting or compiling national-level data. Gaida also collaborates with the EPA's Water Finance Center on projects related to financing decentralized systems, such as the on-line septic finance learning module. Gaida graduated in 2015 with a Master of Health Science in Environmental Health Sciences from the Johns Hopkins School of Public Health.

Brenda Martinez

Brenda Martinez has been the Commercial Project Manager for Delta Treatment Systems (formerly Delta Environmental) for three years. Brenda assists developers and engineers in designing wastewater treatment systems that will optimize treatment performance for their projects. Prior to working for Delta, Brenda spent 15 years in the environmental testing industry, doing bench scale treatability studies for municipal wastewater plants as well as standard analytical testing for soils and waters under both Standard Methods and ASTM methodologies. Brenda holds a Bachelors Degree in Environmental Science from Texas A&M University, a Masters Degree in Environmental Management from the University of Maryland University College, and is currently a PhD student at Louisiana State University in the Environmental Science program.

Mark Mazzochette

Mark J. Mazzochette, P.E., has served as an environmental engineer in Maryland for 5 years. He has a Master of Science in Environmental Engineering degree from Virginia Tech. He is a

project engineer at Hydro-Terra Group located in Westminster, MD and is a licensed professional engineer in the states of Maryland and Pennsylvania. Mark has years of experience in the design and construction of water and wastewater infrastructure for a variety of municipal, commercial, industrial, and residential clients, with treatment facility flows ranging from a few thousand to several hundred million gallons per day. Decentralized facilities are now his specialty at Hydro-Terra Group design, construction, and startup projects including shared residential treatment and disposal systems, industrial pre-treatment plants, multi-use commercial systems, special use clients (church, wedding facility, etc.), and others with unique design and regulatory needs.

Bob McKinney

Bob McKinney currently heads two businesses and operates statewide in Iowa. R.D. McKinney installs and repairs sewer/water lines as well as any type/brand of septic system. River to River Onsite Septic Solutions sells and services all septic systems across the state. Bob also enjoys teaching others in the wastewater industry. This has been his passion since the early 90's. McKinney served as IOWWA's first president in 1999, and again in 2003 and 2004. He holds the record - 9 years - for the longest board term served with the Iowa Onsite Waste Water Association (IOWWA).

Barb McKusick

Barb McKusick is currently the Anoka County Community Development Coordinator and has worked for the County for 32 years in various capacities. In 2013, Anoka County became a lender for the Agricultural Best Management Practices (AgBMP) Program and wrote their first loan in August 2014. Since that time and under her coordination, over \$1.9 million, has been expended to assist 144 property owners with septic or well repair, replacement or connection to city sewer/water lines. Her previous positions with the county have allowed her the ability to make pertinent connections with city officials and inspectors which has helped in moving AgBMP projects along. Barb is a lifelong resident of Anoka where she has raised two children and participates in many community events. In her spare time, her hobbies include motorcycling, camping, boating and gardening. She is active at her church and attends Lions events with her husband. She enjoys being with family, friends and spending time with her 3 granddaughters.

Peter Miller

Peter Miller is a Senior Soil Scientist with Wenck Associates, Inc, an Engineering and Environmental Services firm headquartered in Minneapolis, Minnesota. With a Bachelor of Science degree in Environmental Studies and Natural Resources from the University of Minnesota, with a soil science emphasis, Mr. Miller holds several registrations including; Minnesota Professional Soil Scientist, North Dakota Professional Soil Classifier, Certified Wetland Delineator, and Minnesota Advanced Designer and Inspector for onsite systems. Peter has 25 years of experience in the onsite wastewater industry including: six years in Colorado working as an onsite system designer for Church Associates; two years as the Technical Coordinator for the Arizona Clean Water State Revolving Fund; and six years as President of Miller Environmental prior to joining Wenck in 2007. Peter's experience includes working with small communities as a consultant on development of wastewater and drinking water infrastructure. He has worked with many small communities on resolving septic system compliance issues and developing decentralized wastewater system solutions.

Brandon Montgomery

Brandon Montgomery is a Soil Scientist with the Minnesota Pollution Control Agency – Subsurface Sewage Treatment Systems program.

Douglas Nelson

Douglas Nelson, PE is an assistant professor in the Civil and Architectural Engineering and Construction Management department at the Milwaukee School of Engineering. A major role is that of coordinating the Civil Engineering students' senior project sequence of classes. He teaches courses related to water technology in both centralized and decentralized scenarios. Specific course titles range from plumbing design to water reuse systems. His student design teams have traveled to Jamaica, Costa Rica, India, South Africa, Tanzania, and Singapore.

Alycia Overbo

Alycia Overbo is a PhD candidate at the University of Minnesota. She received a Bachelor of Arts in Biology from St. Olaf College and a Master of Science in Public Health in Environmental Sciences and Engineering from University of North Carolina at Chapel Hill. Her past research has investigated access to safe drinking water and sanitation and its implications for policy and public health, including research characterizing pathways for unsafe return of human excreta to the environment across the processes of containment, transport, treatment, and disposal of human waste. Her current research examines sources of chloride to surface water and groundwater and identifies potential solutions for chloride reduction at household and municipal levels.

Donald Prince

Don Prince has worked for many years in the onsite wastewater industry. He is a licensed septic system designer in Vermont, a licensed septic system evaluator in New Hampshire, has an Associate's Degree in Civil Engineering, and has a lifelong interest in protecting the environment, which led him to his current position at Presby Environmental.

Jeff Pringle

Jeff Pringle is an Senior Account Manager for the Western U.S. Region at Orenco Systems Inc., a wastewater equipment manufacturing firm based in Sutherlin, Oregon. In this role, he works to manage and grow customer accounts in California, Nevada, Arizona, and Hawaii. Since joining Orenco in 2005, Jeff has become a frequent presenter for the company, providing training for regulators, engineers, installers, service providers, and electricians, as well as other Orenco customers. Jeff has an Associate of Applied Science degree in digital systems technology from Umpqua Community College in Roseburg, Oregon. In his spare time, he enjoys doing nothing at all.

Kristine Rendon

Kristine Rendon is an Environmental Quality Analyst in the Onsite Wastewater Program with the Michigan Department of Environmental Quality (MDEQ). Before working with MDEQ, Kristine worked as an Environmental Health Sanitarian with two District Health Departments. She has been working as a regulator in Onsite Wastewater for the past 7 years at local and state levels. She is a Registered Environmental Health Specialist through the National Environmental Health Association. Kristine has a B.S. Degree in Biology from Ohio Dominican University and she is currently attending The University of Saint Francis working towards a Masters Degree in Environmental Health set to graduate this December 2018.

Edwin Swanson

Edwin K. Swanson, P.E., Owner, Arizona Onsite Engineering. Mr. Swanson is a consultant who is engaged in research, design, regulatory analysis, and compliance assistance to domestic and foreign clients relating to water conservation, wastewater and liquid waste facilities. His most recent work has included decentralized wastewater/recycling facilities design and expert witness services. He participated in an innovative technology project, obtaining permits for a sludge processing facility using E-C treatment. Previous assignments included planning, rule development and permitting for implementation of the federal Clean Water Act and the Arizona aquifer protection program. He served on the rulemaking staff for the Arizona Department of Environmental Quality to develop the general permit program for on-site and decentralized wastewater facilities. He is a founding member for the Arizona Onsite Wastewater Recycling Association. He holds a BS degree from Lehigh University and is a Registered PE in AZ and PA. He has resided in Arizona since the early 1970s, enjoying outdoor activities in the deserts and mountains of the southwest.

Kevin Sherman

Kevin Sherman has Bachelor of Science degrees in Biology and Civil Engineering, Masters Degrees in Biology and Public Health and a Ph.D. in Biological Oceanography. He has written 50 technical papers on decentralized and individual onsite wastewater systems over his career. Before becoming a technical specialist for Presby Environmental, Inc., Kevin was Vice President of Engineering for Clearstream Wastewater Systems. Dr. Sherman was also formerly the Director of Engineering for Quantics, Inc., executive vice president of the Florida Onsite Wastewater Association and before that worked for 14 years at the Florida Department of Health. Kevin is past president of the Florida Environmental Health Association and this association. He is a professional engineer in thirteen states and a registered sanitarian. He has achieved the distinction of being named a diplomat of Water Resources Engineering.

Louis Sigtermans

Mr. Sigtermans joined Wenck Associates in 2014 and has worked on a variety of projects focusing on industrial wastewater treatment, municipal wastewater management, construction stormwater management, and environmental compliance. He has worked with both municipalities and private industry throughout the state of Minnesota. Specialties include wastewater treatment; water supply; stormwater pollution prevention planning; and environmental permitting.

Joseph Soulia

Joseph Soulia is a Senior Government Relations Representative with Orenco Systems, Inc., a wastewater equipment manufacturing firm based in Sutherlin, Oregon. In this role, he works with state and county regulators to gain approval for Orenco's AdvanTex treatment technologies, as well as other Orenco products. He has participated extensively in the testing of Orenco's nitrate-reducing textile filter technologies, setting up dozens of field-test sites. Joseph also provides trainings and workshops to distributors, regulators, designers, and engineers. Before joining the government relations staff, he was part of Orenco's Southwestern Region sales team. Joseph has a Bachelor of Science degree in atmospheric science from Oregon State University. While at OSU, he also studied fluid dynamics and thermodynamics. In his spare time, he enjoys providing his friends with accurate, detailed weather reports and analyses.

Larry Stephens

Larry Stephens is the President and Owner of Stephens Consulting Services, PC in the Lansing, MI area, an engineering firm he founded in 1980. He is a licensed professional

engineer in Michigan and Ohio, and specializes in wastewater collection and treatment . . . particularly in rural areas. Larry is active in NOWRA and is the current President of MOWRA, the Michigan affiliate association. During his career as a consultant and business owner, he has had the opportunity to help thousands of clients with their onsite and community wastewater collection and treatment needs. Larry has found solutions for some of the most challenging projects one could imagine.

John Linc Stine

John Linc Stine was appointed commissioner of the MPCA by Gov. Mark Dayton effective May 14, 2012.

Matthew Summers

Matthew Summers is a small community wastewater specialist and licensed Minnesota SSTS Inspector. He has authored or participated in numerous small-community septic inventories and community-based onsite system feasibility studies. He has a degree in Environmental Science, Policy, and Management from the University of Minnesota and works for Wenck Associates, Inc, a Twin Cities-based engineering and environmental consulting firm.

Christl Tate

Christl Tate has a degree in Environmental Health and has worked for the National Environmental Health Association for the past 20 years. Her focus has been on building partnerships and developing resources that focus on improving public health.

Debby Tipton

Debby Tipton is an Environmental Consultant in the Florida Department of Health Onsite Sewage Section. In her role in the Engineering and Research program, she works on technical aspects of the Department's nitrogen research program and reviews product approvals. She holds a B.A. in Earth and Environmental Sciences from Wesleyan University and an M.S. in Hydrologic Sciences from the University of California, Davis. She has over fifteen years of experience as an environmental scientist.

Cindy Tiemann

Cindy Tiemann is Co-owner of Fiedler Your Pumping Specialists, Inc. Fiedler's has a total of 11 employees providing wastewater system maintenance and service to residents and businesses in a 5 county area in Central Minnesota. Prior to her current role in wastewater, Cindy worked as a Registered Nurse for over 30 years. She holds a master's degree in nursing education and is MPCA certified as a Type 4 wastewater operator, Maintainer and Service Provider. She currently serves on the MOWA Board and the MPCA SSTS Advisory Committee. Cindy and her husband Jeff own and operate a crop farm near Royalton, MN where they also raise poultry for Pilgrim's Pride. In her spare time she enjoys camping and spending time with family especially her 3 grandchildren.

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 in Biology from Missouri State University with an emphasis in Aquatic Biology. Tammy has done educational presentations all around southwest Missouri pertaining to stream ecology, lake ecology and wastewater treatment. As the Executive Director of Missouri Smallflows Organization (MSO), she coordinates educational presentations around the state for

continuing education opportunities. Tammy is the Co-Director of Green Leadership Academy for Diverse Ecosystems (GLADE) which is a week-long nature-immersion, leadership camp for high school students. She is also the Projects Assistant for Missouri Project Learning Tree, Project Water Education for Teachers (WET), and Flying WILD at Missouri State University. Here she conducts training workshops for teachers to incorporate water ecology, forestry, and bird ecology into their curriculum. Finally, Tammy 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.

Eric VanDyken

Eric VanDyken – Assistant Zoning Administrator, Kandiyohi County, Minnesota: Eric graduated from Dordt College with a degree in Biology in 1993. After 7 years of working in dairy and swine production, he began working for Renville County and became certified as an SSTS inspector. He has worked in his current position at Kandiyohi County since 2004 and has added intermediate inspector and service provider to his SSTS certification. Eric has had the pleasure of serving several terms on the SSTS Advisory Committee and has served on the SSTS Implementation and Enforcement Task Force since it was created. His duties at Kandiyohi County focus on SSTS and regulation of riparian development. Included in his SSTS duties is running the county low-income grant and low-interest loan programs.

Dan Wheeler

Dan Wheeler is a Research Fellow – Pedology and Instructor with the University of Minnesota – Onsite Sewage Treatment Program.

Dwight Wilcox

Dwight Wilcox is a graduate of the University of Minnesota, College of Agriculture, with a BA in Fisheries Management and Animal Science. He has worked with the Minnesota Department of Agriculture since 1995 in the AgBMP Loan Program, a revolving loan fund that helps individuals finance solutions to pollution and environmental problems, including more than 6,600 septic systems with \$57 million in loans. He oversees the revolving corpus of \$75 million and works with the state's 87 counties and over 250 local lenders. The program has financed in total more than 13,000 loans valued at \$220 million. Prior to his current position, he worked for Minnesota Aquafarms for 5 years. This private company produced farm-raised salmon in abandoned iron mines in northern Minnesota. His responsibilities included environmental monitoring, fish production, and staff supervision. From 1979 to 1990, served as the Reservation Biologist for the White Earth Indian Nation, assisting the tribe to develop its conservation program. He has also worked for the Minnesota Department of Natural Resources, US Fish and Wildlife Service, and the US Bureau of Land Management.

Joelle Wirth

Joelle Wirth, is a Registered Sanitarian with over 30 years' experience with onsite wastewater in management planning, permitting, design and administration. She has a Bachelor of Science from Northern Arizona in Resource Management. She has been actively involved in the Aquifer Protection Rule writing process that has spanned from 1999 to today's date. Joelle is a member of the Arizona Environmental Health Association, the National Environmental Health Association, the National Sanitation Foundation's Joint Committee for Onsite Wastewater, and has participated with the ISO-ANSI Standard 30500 and the Reinvent the Toilet Challenge. Her current work is directed towards the Beneficial Reuse of Treated Effluent from Onsite Wastewater systems.

Joe Witlox

Joe compliments newterra's seasoned water and sewage treatment team with a unique combination of experience in the land development sector – from field service to engineering to project and operations management. Since joining the company in 2013, Joe's technical background and problem-solving acumen have allowed him to advance newterra's focus on robust, operator-friendly treatment solutions. He is also applying his significant expertise in plant optimization and process refinement to our sustainable communal and decentralized treatment offerings.

Jim Ziegler

Jim Ziegler has been with the MPCA for 29 years and has worked in a variety of programs. He has been manager of the SSTS program for just over 4 years. Jim works out of the Detroit Lakes office, and has lived in the Detroit Lakes area most of his life.