

Chesapeake Bay Onsite Wastewater Nutrient Attenuation Expert Panel List and Bios

Full Name: James Anderson

Preferred First Name: Jim

Affiliation: Retired from Department Soil, Water and Climate, University of Minnesota

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Biosketch (one paragraph):

Jim Anderson is a Certified Professional Soil Scientist retired. He holds a B.S., M.S. and Ph.D. from the University of Wisconsin-Madison. He has been involved with decentralized

Full Name: Jason Baumgartner

Preferred First Name: Jason

Affiliation: Delaware Dept. of Natural Resources and Environmental Control

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Biosketch (one paragraph): Jason Baumgartner is an Environmental Scientist with the Delaware Department of Natural Resources and Environmental Control (DNREC). He has been with DNREC for 10 years and is in charge of the Innovative/Alternative on-site systems program. His involvement with the program includes: product approvals, permit review, and compliance oversight. He holds a B.S and M.S from Wesley College in Dover, DE.

Full Name: Thomas H. Boekeloo

Preferred First Name: Tom

Affiliation: NYS Department of Environmental Conservation

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Biosketch (one paragraph): B.S. in Environmental Engineering, Pennsylvania State University, 1979
NYS Professional Engineer, 1989. Presently with the NYS Department of Environmental Conservation as an Environmental Engineer II. Serves as a consultant for department Nonpoint Source (NPS) program on onsite and decentralized wastewater treatment and technical guidance development for wastewater treatment, including the revision of the Design Standards for Intermediate-Sized Wastewater Treatment Systems (2014). Serves as the Private, Commercial and Institutional General Permit Coordinator. Former NYSDEC positions included development of technical and program documents for the department's NPS program; provided oversight of the development of a statewide training network for OWTS design, installation, inspection and soils evaluation; researched and wrote components of a set of statewide water resource summary documents reporting on water resource needs of selected communities in substate regions of NYS for the department's Bureau of Water Resources; served as a Regional water program engineer conducting a sanitary survey, writing SPDES permits, and conducting treatment plant

inspections. Previous work outside of NYSDEC: project engineer for Petrex, Inc. on ten oil-water separator cover projects in six states providing compliance with hydrocarbon emission requirements for petroleum industry wastewater treatment systems.

Full Name: Marcia J. Degen

Preferred First Name: Marcia

Affiliation: Virginia Department of Health

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Biosketch (one paragraph): Dr. Degen has a B.S. in Biology, a Masters in Environmental Sciences and Engineering, and a Ph.D. in Environmental Engineering, all from Virginia Tech. She is also a licensed Virginia professional engineer. Dr. Degen's Ph.D. research was in onsite wastewater disposal systems, specifically looking at the effect of several variables on the in-ground denitrification rate. Dr. Degen's career has involved consulting and teaching at the community college level, but has primarily been with state government. She started her regulatory career with the water permit program at DEQ, moved to wastewater engineering both at VDH and DEQ as both a district engineer and team lead. Dr. Degen is currently with VDH as Technical Services Administrator in the Division of Onsite Sewage and Water.

Full Name: Judith M. Denver

Preferred First Name: Judy

Affiliation: U.S. Geological Survey

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Biosketch (one paragraph): Judy Denver has been a hydrologist with the MD-DE-DC Water Science Center of the U.S. Geological Survey located in Dover, DE for over 30 years. Much of her work has been focused on understanding the effects of agricultural practices and septic systems on water chemistry, and the transport of nutrients from natural and anthropogenic sources into groundwater and through groundwater into surface water in different hydrogeologic settings of the Coastal Plain. Most recently, her research has included a detailed study of the characteristics and difference between water chemistry and nutrient transport into groundwater beneath turf grass and from septic systems compared to transport beneath agricultural fields. Her educational background includes a B.S. in geology and M.S. in Marine Studies.

Full Name: John R. Diehl

Preferred First Name: John

Affiliation: PaDEP

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Biosketch (one paragraph): B.S. Geology, Juniata College, M.S. Geology, West Virginia University. Employed as geologist for engineering firm for 3 years. Employed as geophysicist in petroleum industry for 11 years. Employed at PaDEP as geologist in Safe Drinking Water Program and currently Chief, Sewage Management Program for 24 years.

Full Name: Paul R. Finnell, Sr.

Preferred First Name: Paul

Affiliation: USDA Natural Resources Conservation Service National Soil Survey Center

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Biosketch (one paragraph): Paul Finnell has 34 years experience as a soil scientist for the USDA SCS/NRCS with experience in soil properties and soil interpretation. Paul specializes in education of soil properties and explaining how their relationships are used to develop soil interpretation. He specializes in working with teams and committees to translate criteria into soil interpretations, such as the EPA septic tank absorption field criteria and other state variations, published to the Web Soil Survey. As the national Web Soil Survey steward, he is responsible for reviewing and publishing soil reports and interpretive maps to the over 12000 users who access Web Soil Survey per day.

Full Name: John Galbraith

Preferred First Name: John

Affiliation: Virginia Tech

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Biosketch (one paragraph): John Galbraith is an Assoc. professor in soil and wetland sciences and a certified professional soil scientist with 8 years experience with USDA-NRCS and 24 years at universities. He holds a BS in Range and Wildlife Management and an MS in Range Science from Texas Tech. His Ph.D. is in Soil Science from Cornell. He has been involved in soil survey in 8 states and soil teaching, research, and extension at three universities. He is coach of the Virginia Tech soil judging team and supervisor of the Virginia Tech Soil Scientist liaison program with VA Dept. Health.

Full Name: Barry W. Glotfelty

Preferred First Name: Barry

Affiliation: Maryland Department of the Environment

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Biosketch (one paragraph): Barry Glotfelty is Chief of the Onsite Systems Division of the Maryland Department of the Environment's Wastewater Permits Program. He received a BS in Agronomy with an emphasis on soils from the University of Maryland, College Park in 1980. He began his career in environmental health in 1982 as a local health department sanitarian in Frederick County, Maryland

where he worked in the food and rabies control program and the well and septic system program. Since 1986 he has worked for the Maryland Department of the Environment in the Innovative and Alternative Sewage Disposal Program, as a Regional Consultant to counties implementing delegated on-site programs, as the Section Head of the Well Construction program, and as a Division Chief since 2008. He is a certified as a trainer for O&M Service Providers from the Consortium of Institutes for Decentralized Wastewater Training (CIDWT), and is a past President of the Mid Atlantic Association of Professional Soil Scientists.

Full Name: Robert Goo

Preferred First Name: Robert

Affiliation: USEPA

Location (City/State): Washington DC

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Biosketch (one paragraph): Robert Goo currently works for the Office of Wetlands, Oceans and Watersheds in the Office of Water at EPA HQ in Washington, D.C. One area of concentration is sustainable decentralized stormwater and wastewater treatment systems. He has worked at EPA since 1988 on a variety of issues including biosolids, centralized waste treaters, multi-media transfer of waste, low impact development approaches and practices, onsite wastewater treatment systems and management programs to promote the adoption of decentralized and integrated approaches to water management (stormwater, wastewater and drinking water).

Full Name: John Hayes

Preferred First Name: Jack

Affiliation: DNREC

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Biosketch (one paragraph): Jack Hayes is a certified professional soil scientist with over twenty years of experience in the on-site industry reviewing and classifying soils and soil evaluations for the proper siting of on-site wastewater treatment and disposal systems. He has led the rewriting efforts of the Regulations Governing the Design, Installation and Operation of On-site Wastewater Treatment and Disposal Systems.

Full Name: George Heufelder

Preferred First Name: George

Affiliation: Barnstable County Department of Health and Environment and the Massachusetts Alternative Septic System Test Center

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Biosketch (one paragraph): George Heufelder is presently the Director of the Barnstable County Department of Health and the Environment which serves the 15 towns on Cape Cod. George is also the Director of the Massachusetts Alternative Septic System Test Center which was established to provide Boards of Health with third-party information on the performance and operation of alternative septic systems that purport to remove nitrogen. George has a B.S. in Biology from Kansas State University and a M.S. from Eastern Michigan University in Aquatic Biology, is a Registered Sanitarian, Certified Soil Evaluator, System Inspector and Class 4 Wastewater Treatment Plant Operator.

Full Name: Joyce Hudson

Preferred First Name: Joyce

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Biosketch (one paragraph): Joyce Hudson is an Environmental Engineer with over 35 years experience in environmental engineering policy and water quality management. She holds a B.S. in Civil Engineering from Howard University in Washington, DC. She has been involved in managing alternative wastewater treatment technology all of her career, beginning with the Innovative and Alternative Technology Program for municipal wastewater treatment through leading the development of US EPA's Decentralized Wastewater Management Program. She currently provides engineering and technical support for small communities and local governments interested in sustainable infrastructure options.

Full Name: David Lindbo

Preferred First Name: Dave

Affiliation: NC State University, Soil Science

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Biosketch (one paragraph): Dr. Lindbo is a Professor and Soil Extension Specialist with the Department of Soil Science, North Carolina State University. He has held his current position with NCSU since 1995 with the majority of that time working on hydric soils, wastewater and related issues. He has authored/co-authored numerous research and extension publications including practitioner training materials related decentralized wastewater, low impact development issues, hydric soils and hydropedology. He co-authored a general interest soil book specifically geared for elementary school children "Soil! Get the Inside Scoop". This book was designed to complement the Smithsonian Institution's exhibit "Dig It! The Secrets of Soils". Another recent book "Know Soil, Know Life" expands the previous book to a middle and high school age audience. He is involved with the Consortium of Institutes for Decentralized Wastewater Training (CIDWT).

Full Name: Lewis Linker

Preferred First Name: Lew

Affiliation: EPA – Chesapeake Bay Program Office

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Biosketch (one paragraph): Lewis Linker is the Chesapeake Bay Program Modeling Coordinator, and works with colleagues throughout the Chesapeake Bay Program to develop linked models of the airshed, watershed, estuary, and living resources of the Chesapeake. The linked models of the Chesapeake have provided the basis for the nutrient and sediment reductions in the historic 2010 Chesapeake TMDL. Lew received his Masters from the Johns Hopkins Whiting School of Engineering. His professional interest is in the expansion and refinement of current watershed, airshed, and estuarine models of the Chesapeake, and in expanding the capabilities and analysis of linked water quality and living resource models generally.

Full Name: Andrew J. Maupin

Preferred First Name: A.J.

Affiliation: Idaho Department of Environmental Quality

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Biosketch (one paragraph): B.S. Mechanical Engineering, University of Idaho, Moscow, ID, 1985

M.S. Mechanical Engineering, University of Idaho, Boise, ID, 2001

Idaho Professional Engineer, 1999

US EPA Certified NPDES Inspector since 2011

Presently with the Idaho Department of Environmental Quality (DEQ), Water Quality Division, Wastewater Program as the Wastewater Program Engineering Lead and Water Quality Enforcement Coordinator. As the Wastewater Program's engineering lead AJ provides guidance to the regional offices' engineering staff to maintain program consistency statewide. Additional responsibilities include reviewing and approving Recycled Water filtration technologies (micro, ultra & RO) & associated disinfection technologies (chlorination, UV, Ozone, AOP) to attain water quality standards for the various classes of recycled water under Idaho's Recycled Water Rules. AJ was the Onsite Wastewater Coordinator from 2004 through 2008. AJ continues to support Onsite Wastewater activities within the Wastewater Program by providing engineering review of structures and pressurized systems. Previous applicable project management includes the statewide septic tank effluent total phosphorus concentration study, which occurred concurrently with chairing Drainfield to Surface Water Separation Distance subcommittee of the Onsite Technical Guidance Committee (TGC). The subcommittee reported their recommendations to the TGC which resulted in development of a simple soil isotherm based model that assists DEQ in determining whether suitable soil types and volumes exist to allow drainfields to be sited closer to surface water bodies than currently allowed under Rule. The constituents of concern were both nitrates and phosphates.

Full Name: Randall J. Miles

Preferred First Name: Randy

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Biosketch (one paragraph): Dr. Miles' current research deals with on-site wastewater treatment and disposal and soil site characteristics. He is Director of the Missouri Small Flows Wastewater Education/Research Training Center. He is Director of Historical Sanborn Field, the third oldest continuous research field in the world. He is also curator of the Historical Duley-Miller soil erosion plots. Dr. Miles also works in the soils and archaeology arena. He also works in the soil genesis, morphology and soil survey area. His major emphasis in these areas has been in soil landscape and fragipan formation. Additionally, he has worked with land application of biosolids and assessment of soil acidity and aluminum activity. His major teaching responsibilities include: Introduction to Soil Science; Genesis of Soil Landscapes; and Pedology. He also serves as coach of the MU Soil Judging Team. He also serves as technical advisor for the Missouri Soil Health and Characterization Laboratory in support of the Missouri Cooperative Soil Survey and Soil Health Programs.

Full Name: David Montali

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Biosketch (one paragraph): Dave is the TMDL program manager for West Virginia and is responsible for 303(d) list preparation and TMDL development. He has served in this capacity since 2000. He has been employed with the agency since 1981 with prior experience as the pretreatment coordinator and NPDES permit team leader. He holds a BS in Environmental Engineering from Penn State. He was involved in the Chesapeake Bay TMDL development and remains involved in multiple aspects of implementation as related to West Virginia. He serves on the Water Quality Goal Implementation Team and the Wastewater Treatment Workgroup and participates in multiple other workgroups. He is currently co-chairing the Modeling Workgroup charged with improving modeling tools for consideration in the Midpoint Assessment process.

Full Name: Michael O'Driscoll

Preferred First Name: Mike

Affiliation: East Carolina University, Associate Professor of Geological Sciences and Director, Coastal Water Resources Center

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Biosketch (one paragraph): Dr. O'Driscoll has been a faculty member of the Geological Sciences Department at East Carolina University (ECU) since 2004 and Director of the Coastal Water Resources Center since 2013. He holds graduate degrees in Geology, Environmental Pollution Control, and Forest Resources from Penn State University and an undergraduate degree in Geology from the University of Connecticut. His research focuses on utilizing tracers and other hydrogeological, geochemical, and

geophysical techniques to develop insights into the geological controls and land-use effects on surface water-groundwater interactions and contaminant transport. Since 2009, he has been researching onsite wastewater treatment systems and their nutrient inputs to the groundwater and surface water systems of coastal North Carolina.

Full Name: Richard Piluk

Preferred First Name: Rich

Affiliation: Anne Arundel County Health Department

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Biosketch (one paragraph): MS from the Civil Engineering Department of the University of Maryland. Public Health Engineer for the Anne Arundel County Health Department since 1973 designing onsite wastewater treatment systems. Specializing in the design of nitrogen reducing systems for the last thirty years.

Full Name: Sushama Pradhan

Preferred First Name: Sushama

Affiliation: Onsite Water Protection Branch, NC Division of Public Health

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Biosketch (one paragraph): Sushama Pradhan is with Onsite Water Protection Branch of NC Division of Public Health working as an Environmental Sr. Specialist. She serves as a coordinator for Nonpoint Source (NPS) program and specifically engages in prevention of surface and ground water quality degradation from onsite systems. She received her Ph. D degree from North Carolina State University in 2004. Dr. Pradhan is a license Soil Scientist with over 10 years of research experience on onsite water management, onsite system technologies' performance evaluation and modeling onsite systems derived pollutant loadings using GIS based hydrologic model at various scales ranging from subdivision scale to watershed scale. She has successfully managed/completed numerous onsite system failure rate field surveys, onsite system nutrient contribution studies, efficacy of septic system additives on system management study, decentralized water/wastewater reuse (DWR) projects in partnership with the U.S. Centers for Disease Control (CDC) in Atlanta. She has also worked with health agencies and environmental organizations throughout North Carolina, the U.S. Environmental Protection Agency (EPA) and NSF International. Formerly she was with Soil Science Department at North Carolina State University working as a Soil and On-Site Water Technologies Researcher Scientist.

Full Name: Jay Prager

Preferred First Name: Jay

Affiliation: Maryland Department of the Environment

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Biosketch (one paragraph): Currently the Deputy Program Manager for MDE's Wastewater Permits Program responsible for discharges to surface and ground water. The Program includes MDE's regional consultants who provide technical assistance and oversight to local approving authorities for on-site water and wastewater systems. Previously at MDE I served as Chief of the On-site Systems Division, a regional consultant, and section head and project manager for the Innovative and Alternative On-site Sewage Disposal Program. Currently serves on the State Board of Environmental Health Specialists.

Full Name: Carol Ptacek

Preferred First Name:

Affiliation:

Location (City/State):

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Biosketch (one paragraph):

Full Name: Eberhard Roeder

Preferred First Name: Eb

Affiliation: Florida Department of Health

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Biosketch (one paragraph): Eberhard Roeder is a registered professional engineer working for the Onsite Sewage Program of the Florida Department of Health in Tallahassee. He started in the program in 2004 as coordinator of the onsite sewage research program. In late 2005 his position changed to emphasize technical assistance and engineering review. He joined the Department after five years of groundwater modeling and teaching environmental science and geology in South Carolina, Finland and Florida. He is a graduate of the University of Minnesota, Twin Cities (B.C.E), Technische Universität Braunschweig (Dipl.-Ing.), and Clemson University (Ph.D.), with degrees in civil and environmental systems engineering.

Full Name: David Sample

Preferred First Name: David

Affiliation: Virginia Tech, Biological Systems Engineering

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Biosketch (one paragraph): Dr. Sample's research focuses upon improving our management of urban stormwater. He has conducted research on several existing treatment practices, bioretention, rainwater harvesting, and an emerging technology, floating treatment wetlands. He has also conducted research on evaluation of proprietary stormwater treatment technologies. The result of this work is improved performance at lower costs, helping municipalities achieve their water quality goals required for the

Chesapeake Bay Total Maximum Daily Load (TMDL). Dr. Sample is a member of the U.S. Chesapeake Bay Program Science and Technical Advisory Committee (STAC), and has served on the Virginia Stormwater BMP Clearinghouse. He has been a member of the Urban Water Resources Research Council of the American Society of Civil Engineers/Environmental and Water Resources Institute since 2003, and co-chairs a Task Committee on implementing Low Impact Development in Combined Sewer Areas.

Full Name: Durrelle Scott

Preferred First Name: Scotty

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Biosketch (one paragraph): Durrelle is an Associate Professor at Virginia Tech. His research group seeks to improve water resources through a combination of fundamental research and application to applied stream / wetland restoration. Current research ranges from examining the effects of climate change on glacier recession in Alaska to evaluating the effects of freshwater diversions on nutrient export to the Mississippi River Delta. He has authored publications on nitrogen biogeochemistry, from biochemical reactions at the pore scale to continental studies highlighting nitrogen speciation in streams and rivers. He currently holds a 50:50 research teaching position.

Full Name: Robert L. Siegrist

Preferred First Name: Bob

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Biosketch (one paragraph): Robert L. Siegrist, Ph.D., P.E., BCEE is a University Professor Emeritus of Environmental Science and Engineering at the Colorado School of Mines (CSM). During a transitional retirement period, he is sustaining his affiliation with CSM as a Professor in the Civil and Environmental Engineering Department. From 2001 to 2010, Dr. Siegrist served as Director of the Environmental Science and Engineering Division at CSM. Dr. Siegrist earned his B.S. (High Honors) and M.S. in Civil Engineering and his Ph.D. in Environmental Engineering at the University of Wisconsin. During his career, Dr. Siegrist has held academic and research positions with the University of Wisconsin, Norwegian Institute for Georesources and Pollution Research, Oak Ridge National Laboratory, and the Colorado School of Mines. Since 1995 he has been a faculty member with the Colorado School of Mines. During his career, he has graduated 33 Ph.D. and M.S. students, developed and taught a variety of undergraduate and graduate courses, and directed interdisciplinary research projects with budgets totaling \$15 million dollars. Dr. Siegrist is an internationally recognized expert in onsite water reclamation using natural systems and appropriate technology, and in situ remediation of contaminated soil and groundwater using active and passive physicochemical and coupled bioprocess technologies. He has published 300 technical papers and two reference books and holds two U.S. patents. He has also given invited talks at more than 100 workshops and conferences in the U.S. and around the world; during the past few years, he has delivered invited lectures in Australia, Norway, Denmark, Spain,

Greece, Romania, Serbia, Nepal, Thailand, Vietnam, and Ireland. Dr. Siegrist has served as an expert panel member and advisor for many U.S. agencies including the U.S. Environmental Protection Agency, Department of Energy, Department of Defense, National Research Council, and Government Accountability Office, as well as for several foreign government organizations. He has been a Fellow with the NATO Committee for Challenges to Modern Society. During his career, he has received recognitions and awards for his service activities and achievements.

Full Name: Kang Xia

Preferred First Name: Kang

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Biosketch (one paragraph): Dr. Kang Xia received Ph.D degree in Soil Chemistry from the University of Wisconsin-Madison in 1997. She has served as faculty member at Kansas State University, University of Georgia, and Mississippi State University before joining Virginia Tech in 2011. She was the director for the Research Division and Analytical Division of Mississippi State Chemical Laboratory from 2006 to 2011. Currently she is an Associate professor of Environmental Chemistry in the Department of Crop and Soil Environmental Sciences at Virginia Tech. Since 1998, she has served as PI and co-PI on various federal and state projects totaling more than \$5M. She has served as ad hoc reviewer for many scientific journals and panelist for funding agencies. She is current associate editor for the Journal of Environmental Quality. Up to date, she has supervised a total of 12 graduate students, three postdoc researchers, and a number of undergraduate students. One of her current research areas is to investigate the occurrence and fate of emerging contaminants in wastewater, and biosolids and animal manure-affected soil and water environment.

Full Name: Victor D'Amato

Preferred First Name: Vic

Affiliation: Tetra Tech

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Biosketch (one paragraph): Victor D'Amato is a registered professional engineer with over 20 years of water quality engineering, wastewater process design, and applied environmental research experience. He holds a BS in Civil Engineering from Penn State and an MS in Water Resources Engineering from the University of North Carolina at Chapel Hill. He has been involved in decentralized and distributed wastewater for most of his professional career, beginning with his tenure as an engineer with North Carolina's On-Site Wastewater Section. With Tetra Tech for the past six years, his focus is on helping governments, communities, builders, and utilities plan and implement sustainable water management strategies that decrease capital and recurring costs, increase energy efficiency, and effectively address emerging challenges.

Full Name: James F. Kreissl

Preferred First Name: Jim

Affiliation: Tetra Tech, Inc.

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Biosketch (one paragraph): Until he retired in January, 2001, Jim Kreissl was the USEPA's principal technical expert for small community wastewater collection, treatment and reuse systems and onsite wastewater systems. He has since served on WERF's Decentralized Research Advisory Council and its predecessor organization National Decentralized Water Resources Capacity development Project, as an affiliate of the National Environmental Services Center of West Virginia University, and as chair of WEF's Small Communities Committee. Through Tetra Tech, Inc., he has co-authored most of the USEPA's reports designed to promote effective management of decentralized/distributed systems, and helped develop a federal strategy for onsite systems located in the Chesapeake Bay watershed, a separate Bay project on nitrogen removal by onsite systems, a general permit for onsite systems in Illinois, and has made dozens of presentations at domestic and international conferences and workshops on small community wastewater topics.

Full Name: Ning Zhou

Preferred First Name: Ning

Affiliation: Virginia Tech – Chesapeake Bay Program Office (CBPO)

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Biosketch (one paragraph): Ning Zhou is the coordinator for the Chesapeake Bay Program Wastewater Workgroup and manages the CBPO wastewater data. He has been employed with Virginia Tech and worked at the CBPO since 1998. He has been involved with the development of the Chesapeake Bay TMDL and the jurisdiction watershed implementation plans as related to wastewater, combined sewer overflow and onsite treatment system. He develops the wastewater input decks to feed the Bay models for the watershed implementation progress tracking and various management scenarios.