

**DR. SAMUEL F. ATKINSON (EAB Vice Chair)**



Dr. Samuel (Sam) Atkinson is Director of the Institute of Applied Science and Regents Professor in the Department of Biological Sciences at the University of North Texas. His bachelor's degree is in biology from Oklahoma State University, and his master's and doctoral degrees are in environmental science from the University of Oklahoma's School of Civil Engineering and Environmental Science. His first position after earning his doctorate was with the U.S. Army Corps of Engineers where he initiated the use remote sensing and geographic information systems modeling technology for assessing the environmental impacts of federal projects undertaken by the Corps. Dr. Atkinson began his university career in 1986, where he continues his research on understanding the capabilities and limitations of current and future remote sensing imaging systems to examine ecosystem scale environmental questions. He is particularly interested in discovering relationships between watershed characteristics and water quality/aquatic ecosystems. He has been awarded the Decker Scholar prize for outstanding research in science and technology, Toulouse Scholar prize for outstanding teaching and scholarly achievements, and named Regents Professor in 2010. He has garnered millions of dollars in research funding which has led to his authoring or co-authoring more than one-hundred scientific publications, including two books on the effects of human activities on the environment. He currently teaches primarily graduate level courses in Remote Sensing and Environmental Impact Assessment, as well as undergraduate level to Environmental Science courses.

## **DR. MARY C. BARBER**



Dr. Mary Barber is a senior research environmental scientist with RTI International in Washington, DC. She earned her PhD in Ecology and Evolutionary Biology from Johns Hopkins University and is certified as a Senior Ecologist by the Ecological Society of America. Her current efforts relate to ecosystem services and valuation, environmental markets, ecological indicators and thresholds, and ecological and marine water quality support to the Abu Dhabi Environment Agency. Before moving to RTI she was served as the Director of the Sustainable Biosphere Initiative and Scientific Programs, Ecological Society of America, Washington, DC. Dr. Barber has worked extensively with several Federal, State and local agencies, including the DoD, on issues related to sustaining ecological systems, such as land use planning and management on public lands, ecosystem services and tradeoffs among services, habitat classification, environmental indicators, ecological forecasting, forest plans, and effects of acid rain.

## **DR. MELINDA D. DANIELS**



Dr. Melinda Daniels is an Associate Research Scientist and Director of the Fluvial Geomorphology Section at the Stroud Water Research Center in Avondale, PA. Dr. Daniels holds a Masters of Research in Environmental Science from University College of London, England, and a Ph.D. in Physical Geography from the University of Illinois at Urbana-Champaign. Her specialties include fluvial geomorphology and river restoration science and policy, with emphases on in-channel flow hydraulics, large river planform dynamics, human impacts on hydrologic and geomorphic regimes, river restoration assessment, and the interconnections between hydro-geomorphologic and ecological processes in stream ecosystems. Most of her current research focuses on Great Plains and Rocky Mountain river systems, though she has worked in stream systems in the Midwest and UK. Her work has been funded by federal, state, local, and non-governmental organizations including The National Science Foundation, the US Geological Survey, the US Department of Agriculture, and The Nature Conservancy. Currently her research focuses on legacy land use disturbances in the Rocky Mountains; effects of grassland grazing and burning treatments on prairie headwater stream morphology and sediment transport dynamics, the effects of forest loss on woody debris dynamics in the Rocky Mountains, modeling impacts of climate change on coupled human-watershed systems in the Central Great Plains, and long term research on the effects of riparian reforestation in the Northeastern U.S. Before joining the Stroud Water Research Center she was a tenured professor of geography at Kansas State University.

**DR. ROLLIN H. HOTCHKISS (EAB Chair)**



Dr. Rollin Hotchkiss is a professor of Civil and Environmental Engineering and the Ira A. Fulton College of Engineering and Technology Leadership chair at Brigham Young University. He earned his bachelor's degree in Civil Engineering at Brigham Young University, his MS at Utah State University and his PhD at the University of Minnesota. His major research areas include mitigating reservoir sedimentation and providing passage for fish through culverts and at dams. He has worked with the Corps of Engineers on reservoir sedimentation and fish passage issues. He recently served on the Committee on Missouri River Recovery and Associated Sediment Management Issues. He recently co-authored comprehensive reports and design manuals on the design of culverts for fish passage for the Federal Highway Administration. Prior to his six years at BYU, he taught seven years at Washington State University and nine years at the University of Nebraska-Lincoln. He is a licensed professional civil engineer and a Diplomat of the American Academy of Water Resources Engineers. He currently serves as is past President of the American Society of Civil Engineers' Environmental and Water Resources Institute (EWRI). He is also a member of the International Sedimentation Initiative sponsored by UNESCO. Dr. Hotchkiss has advised over 50 graduate students and has authored or co-authored more than 100 conference papers, project reports and 40 refereed journal papers. He currently teaches fluid mechanics, stream restoration, design of hydraulic structures, leadership, and short courses to practicing engineers on hydraulic modeling with HEC-RAS, the design of culverts for peak flows and for fish passage, and storm sewer design.

## **DR. TAMMY J. NEWCOMB**



Dr. Tammy Newcomb serves as a Senior Water Policy Advisor for the Michigan Department of Natural Resources (MDNR), MI. She earned her PhD in Fisheries and Wildlife Management, at Michigan State University, MI. In her current role, she leads statewide issues for the Department such as groundwater withdrawal management, preventing Asian carp from entering the Great Lakes, and coordination of issues regarding management and research on Great Lakes Fisheries. Prior to her current appointment she served as the MDNR Fisheries Division Research Program Manager and before that as the Lake Huron Basin Coordinator where she was a member of Tribal Inland Consent Decree negotiation team. Before she began service with the MDNR, Dr. Newcomb was an Assistant Professor at Virginia Polytechnic Institute and State University with a research program focused on food habits of selected fish species and the interrelationships of freshwater mussels, host fishes, and fluctuating releases in the regulated rivers of central Appalachia. Dr. Newcomb has served on three National Academy of Science Panels regarding the Klamath River Basin and the Columbia River. She is also an adjunct faculty member at Michigan State University.

## **DR. LYDIA P. OLANDER**



Dr. Lydia Olander directs the Nicholas Institute for Environmental Policy Solutions Ecosystem Services Program. She has worked on a range of issues for the Nicholas Institute. Currently she is developing the Nicholas Institute's as well as Duke's expanding initiative on ecosystem services; coordinating Duke's Ecosystem Services Working Group; leading the National Ecosystem Services Partnership which is coordinating the Federal Resource Management and Ecosystem Services Project.

She also continues work on environmental markets and mitigation, including forestry and agricultural based climate mitigation, water quality trading, wetland, stream and endangered species mitigation and management, and, is now exploring applications in urban sustainability. Lydia is also an adjunct professor in the Nicholas School of the Environment.

Her PhD is in Biogeochemistry from Stanford University.

## **PROF. CHARLES A. “SI” SIMENSTAD**



Prof. Simenstad is a Research Professor and the Coordinator of the WETLAND ECOSYSTEM TEAM at the University of Washington, WA. He holds a MS from the School of Fisheries at the University of Washington. He has studied the organization and function of estuarine and coastal marine ecosystems from Alaska to California for over forty years. He has also worked in the Louisiana Coastal Area. His research interests focus on ecosystem-, community- and habitat-level interactions, with emphasis on predator-prey relationships; sources, organization and flow of organic matter through food webs; estuarine ecology of juvenile Pacific salmon; and, landscape-scale interaction between estuarine circulation and ecological processes. His research has been applied to restoration and rehabilitation of estuarine and coastal wetland ecosystems, and to evaluating the success of coastal wetland restoration at ecosystem and landscape scales. Prof. Simenstad is a Fellow of the American Association for the Advancement of Science, associate editor of three scientific journals and recipient of the 2009 NOAA-AFS Nancy Foster Award for Habitat Conservation.

## **DR. FRED H. SKLAR**



Dr. Fred H. Sklar has a Masters in Oceanography and a Ph.D. in Wetland Ecology. He has been studying, evaluating and managing coastal and freshwater ecosystems of the United States since 1976. He is an Associate Editor for the Ecological Society of America's journal: *Frontiers in Ecology and the Environment* and is the Director of the Everglades Systems Assessment Section of the South Florida Water Management District (District) in West Palm Beach.

Dr. Sklar studies the hydrology, soil, plant and animal processes associated with both the degradation and restoration of wetland and coastal ecosystems, and specializes in the design and implementation of landscape-scale, adaptive management programs and pilot studies. His success in the Everglades has been due to a focus on applied science, cost-effective monitoring and collaborations with academic institutions. Dr. Sklar became national recognized for his post-doctoral studies in Louisiana, where he was the first person to ever integrate super-computer numeric and graphic processing to simulate wetland evolution and succession as a consequence of river diversions, natural carbon sequestration by wetlands and sea level rise.

After his post-doctoral studies with Robert Costanza (Editor of *Ecological Economics and Solutions*), Dr. Sklar became the scientific coordinator for the North Inlet Long-Term Ecological Research (LTER) program at the University of South Carolina. LTER's are specially selected monitoring sites that the NSF deems critical for unraveling the complexities of ecosystem health and sustainability. Sedimentation and Erosion Tables (SETs) that he helped design are still being used in North Inlet to assess the ability of the wetland communities to continue to accrete organic matter and sequester carbon in the face of rising sea levels.

Fred Sklar has published over 100 papers and book chapters in the field of ecosystem assessment, modeling and restoration. He currently manages six significant Everglades monitoring and assessment programs (LILA, RECOVER, DPM, CERP, Florida Bay, and AMI) with a SFWMD staff of 20, an external academic staff of 15, a USCOE collaboration of 6, and a total annual expenditure of around \$6 Million. These programs are helping water managers do a better job of preserving and rehabilitating the natural systems without compromising the value of water supply or the risks of flooding.

## **DR. CHARLES C (Chuck) SOMERVILLE**



Dr. Chuck Somerville is a Professor of Biological Sciences and the Dean of the College of Science at Marshall University in Huntington, West Virginia. He earned his PhD in Marine Microbiology in 1989 under the direction of Dr. Rita Colwell at the University of Maryland, College Park. He then went to work as a Postdoctoral Fellow at the Biological Station in Roscoff, France, where he studied the evolution of photosynthetic organelles in marine algae. From northern France, he moved to the EPA Environmental Research Laboratory in Gulf Breeze Florida where he worked as government contractor on the biodegradation of chlorinated solvents, and later to the US Air Force Environics Lab at Tyndall Air Force Base in Panama City, Florida where he worked on the biodegradation and bioremediation of nitroaromatic compounds. Chuck joined the faculty at Marshall University in 1997 as an Assistant Professor of Biological Sciences, where he studied the biodegradation of chlorinated solvents in mixed wastes, and microbial community dynamics in large river systems. He served as Head of the Division of Biological Sciences from 2005 to 2009, and has been dean of the College of Science since 2009. In 2011 he was elected as a Fellow of the Linnean Society of London.

Chuck has served as the Marshall University Trustee to the Ohio River Basin Consortium for Research & Education (ORBCRE) since 1998, and is currently a member of the ORBCRE Executive Committee. He also serves as a member of the West Virginia Science & Research Council, the West Virginia Environmental Quality Board, the West Virginia NASA Space Grant Consortium Board of Directors, and the Marshall University Research Corporation Board of Directors. He has been a member of the Steering Committee for the Ohio River Basin Alliance (ORBA) since 2010, and is currently serving as the Chair of the ORBA Steering Committee, and as the ORBA representative to the Steering Committee of America's Watershed Initiative (AWI). Both groups (ORBA and AWI) are working to bring attention to the value of large river systems to America's water security, ecosystem services, and economic development.

## **MINDY SIMMONS (Designated Federal Officer, EAB)**



Ms. Mindy Simmons has been a Senior Policy Advisor in the Planning Division at Headquarters, U.S. Army Corps of Engineers (Corps) since January 2015. Her responsibilities include managing the Corps' Aquatic Ecosystem Restoration Program (including developing and defending the annual budget), guiding related research and development, overseeing the Estuary Habitat Restoration Program, and providing environmental-related policy guidance to senior leaders at the Corps. She will also serve as the Designated Federal Officer (DFO) for the EAB. For two years prior, Mindy was as a Senior Program manager assisting with budget development and defense for the Corp's inland and coastal Navigation Program, and also served as the Designated Federal Officer for the Inland Waterways Users Board.

Before arriving in Washington, DC in 2012, Mindy served as a Program Manager for the Corps' Portland District, where she managed programs related to fish recovery in the Pacific Northwest, primarily in response to the Endangered Species Act and emerging science related to fish hatchery management. Prior to joining the Corps as a Fish Biologist in 2006, Mindy worked for the National Marine Fisheries Service on non-Federal hydropower project licensing and decommissioning projects throughout Oregon. She also helped develop critical habitat designations and draft recovery plans for ESA-listed salmonids.

Mindy is a native Oregonian who received a Bachelor of Science in Fisheries Science from Oregon State University in 1998. She continued to study both fisheries science and civil/water resources engineering at OSU for her Master of Science, which included researching fish communities, riparian tree communities, and geomorphic characteristics of the Willamette River. Mindy spends her free time outdoors whenever possible. She enjoys bicycle riding/racing, CrossFit, skiing, fishing, gardening, hiking, cooking, and exploring rivers. She also enjoys traveling and connecting with friends and family over good food and drink.

## **DR. ROBERT W. BRUMBAUGH (Interim & Alt Designated Federal Officer)**



Robert (Bob) Brumbaugh is the Senior Manager/Deputy Director of IWR. During his 25 years at IWR as a policy analyst, he has been involved in studies and issues relating to regulatory, coastal management, climate change, water supply, drought, watershed management, and multi-criteria decision support. He has been principal policy advisor to the Corps Regulatory Community of Practice, working especially in the mitigation banking arena since the early 1990's when he managed the National Wetland Mitigation Banking Study and helped Corps regulatory and interagency teams develop Federal guidance and rules for compensatory mitigation and the Mitigation Rule issued in 2008. He also assisted the National Study of Water Management During Drought in the early 1990s that helped to launch the concept now known as Shared Vision Planning, led preparation of a Programmatic EIS on Nationwide Permits, and directed the National Shoreline Management Study, 2001-2004. He co-prepared the "Water in the Sand" report (an examination of water issues on major rivers in the Middle East) during the Gulf War in 1991, which served as a base from which emerged the IWR International program. He currently directs technical support to the Chief of Engineers Environmental Advisory Board as an Interim Designated Federal Officer. Prior to coming to IWR, he managed water resources planning studies in the Los Angeles District and participated in the Corps Water Resources Planning Associates Program. Among the study reports he prepared was one approved by the then Board of Engineers for Rivers and Harbors and the U.S. Congress.

Bob received his B.A. and M.A. in Geography from the University of Arizona and a Ph.D. from UCLA where his studies focused on fluvial geomorphology with sub-emphases on plant ecology and paleo-environmental analysis. He taught earth sciences, meteorology, plant geography, environmental studies, and physical geography in the California State University system.

Next career/life: prepping trekking guides (maybe for Crete); doing hair-raising activities; and after this winter, visiting Yakutsk Siberia in the winter to see what cold really is.

**MS. RUTH ANNE CANN (Alt Designated Federal Officer, EAB)**



Ms. Anne Cann is a Water Resource Planner and Group Manager at IWR. She currently works on PIANC (World Association for Waterborne Transport Infrastructure), Strategic Planning and Future Directions initiatives, and a partnership with the Natural Resources Conservation Service. Previously she worked on Great Lakes water quality and quantity issues at the Canada Centre for Inland Waters in Burlington, Ontario.

She holds a BS in Environmental Sciences from Michigan State University and is also a Registered Nurse specializing in emergency trauma surgery. Other accomplishments include competitive Masters rowing.

