



DR. MARY C. BARBER (EAB Chair)



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.

PROF. CHARLES A. “SI” SIMENSTAD (EAB Vice-Chair)



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. JAMES BOYD



Dr. Boyd is a Senior Fellow and holds the Thomas Klutznick Chair in Environmental Policy at Resources for the Future (RFF), in Washington DC. He is also the Director of Social Science and Policy at the National Socio-Environmental Synthesis Center (SESYNC), in Annapolis MD. He earned his PhD from the Wharton Business School, University of Pennsylvania and has been a visiting professor at Stanford University and Washington University in St Louis. Boyd's research emphasizes collaboration between ecologists and economists in order to guide decisions that affect natural resources. His work considers how natural systems contribute to economic wealth and social wellbeing and how policies can be designed to protect and enhance valuable ecosystem goods and services. Dr. Boyd works with diverse partners from government, NGO, and private sector institutions and emphasizes close collaboration between decision-makers and academic researchers to generate science that is useful and practical in real world settings.

DR. MARTIN DOYLE



Dr. Doyle is a Professor at Duke University focused water resources management. Over the past 25 years, Doyle's research has focused on reservoir operations, sedimentation, and aging infrastructure, as well as emerging environmental markets and impact investing in water. He has published over 100 journal articles and law reviews, along with two books - *The Source* (a history of America's rivers, Norton Press) and *Streams of Revenue* (a history and analysis of mitigation banking, MIT Press). In addition to these academic roles, Doyle was a co-founder of the Internet of Water, and served at the Department of Interior where he helped with an initiative to enable private investment in water infrastructure, water marketing, and increase the use of markets and mitigation banks for species conservation. In 2009-2010, he was the inaugural Frederick J. Clarke Scholar at the Corps of Engineers - Institute for Water Resources, tasked with assisting the Corps with regulatory policy analysis particularly focused on mitigation banking and regulatory jurisdiction. Doyle has received a Guggenheim Fellowship, an Early Career Award from the National Science Foundation, and recognized as a Kavli Fellow for the Frontiers of Science from the US National Academy of Sciences. He received a PhD in Earth Science from Purdue University, a Masters in Civil Engineering from the University of Mississippi, and undergraduate degrees in Physics and Math from Harding University.

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. Dr. Olander 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. Dr. Olander is also an adjunct professor in the Nicholas School of the Environment. Her PhD is in Biogeochemistry from Stanford University.

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 nationally 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.

Dr. 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. Dr. Somerville 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.

Dr. Somerville 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.