



Barnegat Bay Partnership
Science and Technology Advisory Committee (STAC)
Member Expertise 2018

Ms. Alena Baldwin-Brown, NJDEP Division of Water Monitoring & Standards

Ms. Baldwin-Brown has worked for NJDEP for 31 years and currently serves as the Communications Manager as well as the Executive Assistant to the Director for NJDEP's Division of Water Monitoring & Standards. As such she oversees all communications activities of the Division (including implementation of Barnegat Bay Action Item 7) as well as works with the Director on all aspects of division management and operations. She is also the Coordinator for the statewide NJ Water Monitoring Council. Her areas of expertise include scientific communication, information and data dissemination, strategic planning, outcome-based management, environmental policy development, and environmental indicators and trends. She holds a B.S. in Biology from Trenton State College (now TCNJ) and a M.S. in Management from Thomas Edison State University.

Ms. Linda J. Brennen, PP/AICP – Monmouth County Division of Planning

For over 25 years, Ms. Brennen has served as the Supervisor of Environmental & Sustainability Planning for the Monmouth County Division of Planning. Her areas of experience include Land Use Planning and Zoning; Coastal Resiliency and Climate Adaptation Planning; Agricultural Sustainability and Right-to-Farm issues; Water Quality, Wastewater and Stormwater Management Planning; Environmental Review; and Education and Outreach for Environmental and Sustainable Planning initiatives. Ms. Brennen participates in numerous regional and state-wide committees and partnerships and has served on several state rule drafting Technical Advisory committees. She previously worked for private consulting firms as both a Land Use and Environmental Planner. Ms. Brennen received her B.S. degree in Environmental Studies from Stockton State College and her MS in Physical Geography from Rutgers University. She is a licensed New Jersey Professional Planner and a member of the American Institute of Certified Planners.

Mr. Patrick Burritt – Pinelands Commission

Mr. Burritt is a research scientist with the Pinelands Commission, where he conducts vegetation, frog, fish and dragonfly surveys. He is also responsible for sampling stream and pond water quality and conducting pond water level measurements. He has been with the Commission for 8 years.

Mr. Rick Bushnell – ReClam the Bay

Rick is the volunteer founder of RCTB and in 2015 was honored as the Rutgers Volunteer of the Year. He was President of the LBI Foundation of the Arts and Sciences and serves as the Chair of the Science Committee. Rick is very active with a number of environmental organizations and NGOs. He founded and ran a consulting firm dealing in supply chain management. Rick is an avid sailor and is deeply interested in shellfish. He is a Rutgers

Certified Shellfish Gardener and frequently lectures on shellfish and the various ecological benefits that they provide. As a citizen scientist he has studied shellfish aquaculture in various locations around the world. He encourages stewardship as he assists the public to become involved in issues dealing with sustainability of shellfish, the water quality that they improve, and the shorelines that they frequently protect.

Mr. Charles Caruso – Pinelands Preservation Alliance

Mr. Caruso is a member of the Board of Trustees and Chairman of Issues Committee of the Pinelands Preservation Alliance (PPA), a non-profit organization dedicated to the preservation and protection of the resources of the New Jersey Pinelands. He advises and comments on the legal, policy and management issues confronting the PPA. Previously, he was a patent attorney for 30 years with the pharmaceutical company Merck & Co., Inc. and has extensive experience in protecting and commercializing intellectual property, developing international laws and policies and managing legal affairs for pharmaceutical healthcare firms. He has specific expertise in patent litigation, licensing, legislation and government affairs. He has a B.S. in Chemistry from Fordham University, a M.S. Candidate in Chemical Oceanography/Environmental Chemistry from UNC at Chapel Hill, and a J.D. from Rutgers School of Law.

Mr. Robert Shertenlieb - Ocean County Utilities Authority

Mr. Shertenlieb is the Senior Director of Operations and Maintenance for the Ocean County Utilities Authority. He has worked for the OCUA for 24 years in the operation of the treatment plants. He has been the Licensed Operator of Record for both the Northern and Central Water Pollution Control Facilities. In his current position he oversees the overall operation of the Laboratory, Industrial Pretreatment Program, NWPCF, CWPCF, and SWPCF. He also possesses both a S4 and C4 NJDEP license.

Mr. Tim Dillingham – American Littoral Society

Mr. Dillingham has led the American Littoral Society since 2003. Long interested and involved in the management of estuaries, Tim started his career developing Special Area Management Plans in coastal Rhode Island, and served as a marine resources policy specialist for the state's Coastal Resources Management Council. He has a B.S. in biology, and a graduate degree in coastal and marine resource management from the University of Rhode Island.

Dr. Ursula Howson – NOAA National Marine Fisheries Service

Dr. Howson works in the NMFS Greater Atlantic Regional Fisheries Office at the James J. Howard Marine Sciences Laboratory in Sandy Hook, NJ, where she is responsible for essential fish habitat consultations with federal agencies, as well as stewardship coordination in the New York and North Jersey region. She has worked in academia at Monmouth University, University of Delaware, and University of Arizona (including marine research in the Sea of Cortez, Baja, Mexico while at U of A). Her research experience is in fisheries biology and marine and estuarine ecology, including as the lead author on a recent comprehensive publication on zooplankton community dynamics in Barnegat Bay, part of a larger NJDEP-funded study on the health of the bay.

Ms. Heather Jensen – US Army Corps of Engineers

Mr. Rob Karl – Brick Township Municipal Utilities Authority

Mr. Karl works for the Brick Township Municipal Utilities Authority, which provides drinking water to Brick Township, Point Pleasant Borough, Point Pleasant Beach Borough, and portions of Howell and Lakewood Townships; and sewer collection services to Brick Township. His areas of experience and expertise include water supply management, drinking water treatment, watershed management, stormwater, water quality monitoring, regulatory compliance, GIS, and hazardous materials.

Dr. Elizabeth Lacey – Stockton University

Dr. Lacey is an Associate Professor of Marine Science at Stockton University. Her research is broadly interested in shallow benthic ecosystems and the services these habitats provide to nearshore water quality and commercially and recreationally important species throughout New Jersey coastal bays. In order to understand these ecosystems, plant-herbivore dynamics and the impacts of various stressors on each of the habitat components are considered (largely submerged aquatic vegetation beds and drift macroalgal fields). Dr. Lacey is responsible for the monitoring of essential fish habitat within Barnegat Bay and collaborates with local state and national agencies on developing larger scale monitoring and restoration strategies.

Mr. Steve Mars – US Fish and Wildlife Service

Mr. Mars is a senior biologist for the U.S. Fish and Wildlife's New Jersey Field Office. Steve is an experienced regulator working the first half of his Federal career as a Senior Project Manager and Supervisor in the New York and Baltimore Districts Corps of Engineers regulatory programs. Steve's experience in the Corps Regulatory Program and in the last 20 years with the USFWS both in NY and NJ lends to his ability to work on a myriad of development issues, marine construction, environmental restoration, endangered species assessments and landscape level planning.

Dr. Swarna Muthukrishnan – Clean Ocean Action

Dr. wMuthukrishnan serves as the Staff Scientist for Clean Ocean Action, NJ, where she leverages her scientific expertise to plan the direction of the science/policy research and advocacy issues on diverse and critical environmental issues of concern, both chronic and emerging. These include water quality and nonpoint source and stormwater runoff under the Rally for the Waterways, marine debris and microplastics research, monitoring, education and prevention to name a few. Prior to her tenure at Clean Ocean Action, Swarna was a postdoctoral research scientist (ORISE) at the Office of Research and Development in USEPA at Edison, NJ, where she worked on urban stormwater runoff management using BMPs; BMP maintenance; efficacies of various BMPs in pollutant attenuation. Swarna is the Joint inventor of NPXpress, an innovative and sustainable energy- and cost-efficient technology for nutrient removal in wastewater treatment systems (US8747671, US8012352B1) during her stint at American Water. She has also worked in determining the efficacy of drinking water disinfectants to help model microbial risk from main break events.

Mr. Jim Nickels – Monmouth University

Mr. Nickels is a Marine Scientist with Monmouth University. His areas of expertise include operational oceanography, coastal water quality, coastal policy, hydrography, real-time mapping and data acquisition, and vessel operations.

Ms. Victoria Pecchioli – Ocean County Planning Department

Mr. John Protenensis – Ocean County Health Department

Dr. Peter Rowe – NJ Sea Grant Consortium

The NJS GC mission is to promote the wise use of New Jersey's marine and coastal resources through research, education and outreach. Dr. Peter Rowe is the Associate Director of NJS GC and Director of its Research and Extension Programs. Dr. Rowe's interests are in coastal/estuarine ecology and the early life history of marine/estuarine fauna, in particular finfish and shellfish.

Mr. Gregg Sakowicz – Jacques Cousteau National Estuarine Research Reserve

Mr. Sakowicz has expertise in environmental monitoring, (water) nutrient sampling and analysis, data management, project design, coordination and execution of field surveys (specifically marsh vegetation and SAV), and educational outreach. He has a B.S. from Eckerd College and an M.S. from Rutgers University.

Ms. Barbara Spinweber – US Environmental Protection Agency

Ms. Spinweber is EPA Region 2's Barnegat Bay Program Coordinator, assisting in the implementation of the Clean Water Act National Estuary Program in the Barnegat Bay watershed. She is also Region 2's overall National Estuary Program coordinator. She has previous experience in EPA's wetlands, nonpoint source, Great Lakes, National Environmental Policy Act, and Urban Waters programs. She obtained a B.S. in Biology at Rutgers University with a minor in Natural Resource Management and a M.A. in Environmental Management from Montclair State University.

Mr. Rob Tunstead – US Department of Agriculture Natural Resource Conservation Service

Mr. Tunstead is a soil scientist with the USDA – Natural Resources Conservation Service (NRCS). He is a co-leader on a special focus team for [Coastal Zone Soil Survey \(CZSS\)](#) and also the Hammonton Soil Survey Office leader. He has produced and published several subaqueous soil survey products through NRCS's [Web Soil Survey](#) and most notably Barnegat Bay. As soil survey office leader he oversees soil survey production within the Major Land Resource Areas of 149A, 153C, and 153D (coastal plain of DE, MD, and NJ). He obtained a B.S. in Soil and Water Resources at the University of Rhode Island.

Dr. Jim Vasslides – Barnegat Bay Partnership

Dr. Vasslides's areas of expertise include field sampling for estuarine and riverine fish, ecosystem modelling, and data management and analysis. His research interests include the role of estuaries as nurseries, the restoration of shallow water habitats, the use of ecological models in management applications, citizen science, and climate change effects on aquatic species distributions and assemblages.

Ms. Christine Weiben – US Geological Survey

Ms. Wieben has been a hydrologist with the New Jersey Water Science Center for more than 15 years. Ms. Wieben has worked on a variety of water resource topics and has experience with water-quality sampling, analyzing water-quality data, data management, developing water budgets, and mapping the water table. Ms. Wieben is currently working primarily with pesticide data, estimating pesticide use on crops.

Dr. John Wnek – Save Barnegat Bay

Dr. Louise Wootton – Georgian Court University

Dr. Wootton's areas of expertise include understanding the impact of invasive plants and animals in wetlands and dunes on community structure (*e.g.*, abundance and diversity of native species) and function (*e.g.* dune geomorphology, storm protection, sediment storage, *etc.*). Restoring resilient natural coastal plant communities, with an emphasis on growing awareness for the need for diverse plantings both to enhance ecological function and to maximize community's ability to adapt to future environmental stressors. She is also heavily involved in green infrastructure, with a focus on storm water management through improved soil health, as well as storm water management through subsurface gravel wetlands. She is active in researching and creating effective tools for environmental education and sustainability at all levels from pre-K to college, as well as for community education beyond the formal education system.

Dr. Steven Yergeau – Rutgers Cooperative Extension

Dr. Yergeau is the Environmental & Resource Management Agent in Ocean & Atlantic Counties for Rutgers Cooperative Extension. He works with municipalities, farms, schools, residents, researchers, and non-profits developing programs and solutions to environmental issues affecting these coastal counties. He has been involved in watershed management throughout the Northeast and Mid-Atlantic Regions over the past 20 years. His focus is on implementing sustainable practices that improve water quality and conserve water resources, especially practices that will improve the environmental and economic health of coastal bays and rivers.