

Jonathan Blaes Science Operations Officer, National Weather Service Raleigh Forecast Office

Jonathan Blaes is the science operations officer at the National Weather Service Raleigh Forecast Office. He is charged with infusing science and technology in NWS products and services, while leading collaborative research projects with nearby universities and research centers. He holds a degree in meteorology from the Department of Marine Earth and Atmospheric Sciences at North Carolina State University. While at NC State, he participated as a student trainee with the NWS and subsequently served at NWS offices in Sterling, Virginia, and Albany, New York, before returning to Raleigh. Blaes and his wife Kim have two daughters, Lauren and Madison.



Russell Callender Assistant Administrator, NOAA National Ocean Service

Russell Callender is NOAA's assistant administrator for the National Ocean Service. From 2009 to 2012, he served as deputy director, then director of NOAA's National Centers for Coastal Ocean Science. From 2003 to 2009, Callender was the director of NOAA's Center for Coastal Monitoring and Assessment. He also has directed the Office of Scientific Support in NOAA's Office of Oceanic and Atmospheric Research. While he was the assistant director for the Virginia Sea Grant Program, he managed marine and coastal research and outreach projects in the Chesapeake Bay. His duties as the Oceanographer of the Navy included logistics support in Antarctica. He received a doctoral degree in geology from Texas A&M University, with expertise in deep-sea benthic paleoecology and marine geology. In the Gulf of Mexico, his ship and submersible-based research has explored deep-sea chemoautotrophic communities. He has authored 22 peer-reviewed publications in journals such as *Earth and Planetary Science Letters; Historical Biology; Lethaia*; and *Palaeogeography, Palaeoclimatology, Palaeoecology*.



John Chaffee President & CEO, NCEast Alliance

John Chaffee is the president and CEO of NCEast Alliance, a regional economic development organization representing 28 counties in eastern North Carolina. Chaffee earned bachelor's and master's degrees in economic geography, with a specialization in industrial location and regional economics. He began his economic development career in 1977 and was selected as executive director of the Pitt County Development Commission in 1983. During his tenure in Pitt County, he was involved in projects resulting in the creation of about 10,000 new primary jobs and more than \$1 billion of investment. After more than three years with the N.C. Biotechnology Center, he was named CEO of North Carolina's Eastern Region in April 2009. He became CEO of the NCEast Alliance in January 2014, leading a two-year effort to transition the public entity to a private, not-for-profit effort supported by both public and private entities. NCEast supports entrepreneurship, workforce development and STEM education efforts.



Senator Bill Cook N.C. Senate First District

In the North Carolina General Assembly, Sen. Bill Cook represents the First Senatorial District covering Beaufort, Hyde, Dare, Currituck, Camden, Gates, Pasquotank and Perquimans counties. He previously represented constituents in Beaufort and Pitt counties as a member of the N.C. House of Representatives for the Sixth District. Currently, he co-chairs the Senate's Appropriations on Natural and Economic Resources Committee, as well as the Senate's Agriculture/Environment/Natural Resource Committee. Recognizing the commercial and ecological values of Eastern North Carolina, he has moved boldly to enhance our state's position in shellfish cultivation and aquaculture activities. The General Assembly has enacted several regulatory reform provisions, as well as appropriations, to enhance our state's ability to plant cultch, to fund sanctuary development and to expand the state's oyster industry. He graduated from the University of Maryland, earning a bachelor's degree in business administration with a concentration in economics. He lives in Beaufort County with his wife, Holly.



Michelle Covi Assistant Professor of Practice, Old Dominion University/Virginia Sea Grant

Michelle Covi is an assistant professor of practice in Old Dominion University's Department of Ocean, Earth and Atmospheric Sciences. She also is part of the Virginia Sea Grant extension program. Covi conducts research and outreach activities for climate change adaptation and coastal resilience efforts for coastal Virginia, with an emphasis on Hampton Roads. Her research includes sea-level rise and resilience risk perception and communication; public participation in adaptation planning processes; and engagement/outreach practices. She co-organizes the Hampton Roads Sea Level Rise/ Flooding Adaptation Forum, a quarterly meeting of adaptation stakeholders and co-chaired the Citizen Engagement Working Group of the Hampton Roads Intergovernmental Pilot Project. She completed her doctorate in Coastal Resources Management at East Carolina University, where her focus was on sea-level rise risk communication and policy research, including several North Carolina Sea Grant projects.



Carolyn Currin Research Scientist, NOAA National Ocean Service

Carolyn Currin is a research scientist working for NOAA's National Ocean Service in Beaufort, North Carolina. Her recent work has included investigating the response of salt marshes to sea-level rise, studying the impact of shoreline stabilization on estuarine habitats, and developing guidance for living shoreline installations. Currin leads a multi-institutional Coastal Wetlands Research group investigating climate-change impacts and the carbon cycle in salt marshes for the U.S. Department of Defense's Strategic Environmental Research and Development Program. She is a member of the North Carolina Sentinel Site Management Team, and adjunct faculty at the University of North Carolina at Chapel Hill. She holds a bachelor's degree in zoology from North Carolina State University and a doctoral degree in marine sciences from University of North Carolina at Chapel Hill.



Braxton Davis *Director, N.C. Division of Coastal Management and N.C. Division of Marine Fisheries* Braxton Davis has been the director of the N.C. Division of Coastal Management since September 2011, and the director of the N.C. Division of Marine Fisheries since April 2016. He holds a doctoral degree in marine affairs from the University of Rhode Island, a master's degree in biological sciences from Florida International University and a bachelor's degree in environmental sciences from the University of Virginia. Prior to coming to North Carolina, Davis served as policy director for the South Carolina coastal program. The N.C. Division of Coastal Management regulates development in the 20 coastal counties, balancing coastal development needs with the protection of the state's coastal and marine resources, navigation, recreation and property rights. The N.C. Division of Marine Fisheries is dedicated to ensuring sustainable marine and estuarine fisheries and habitats for the benefit and health of the people of North Carolina.



Ted Davis Founder, Aqua Plantations

Ted Davis is a North Carolina native and grew up in a family with a farming heritage. He founded Aqua Plantations, an aquaculture entity to develop and distribute farm-raised finfish, in 2006. Currently, Aqua Plantations operates three farms focused on high-value freshwater and saltwater species. The company has developed a proprietary "fish polishing" procedure to offer its buyers a unique product. Davis has formal education in business administration with graduate work in information systems. He holds a North Carolina General Certification as a Real Estate Appraiser. Early in his career, he obtained Fortune 500 experience in marketing under the supervision of John Chambers, now CEO for Cisco Systems, and Michael Dell, founder of Dell Computer Corporation. Since 1985, Davis has provided consulting services to the U.S. Department of Housing and Urban Development, FDIC banks, and real-estate developers. Davis resides in Wilmington with his wife and three sons.



Casey Dietrich Assistant Professor, North Carolina State University

Casey Dietrich received three degrees from the University of Oklahoma before moving to Notre Dame for his doctoral degree in civil engineering. He is now an assistant professor in the Civil, Construction, and Environmental Engineering Department at North Carolina State University. His research focus is on the computational modeling of coastal hazards, including hurricane waves and storm surge, flooding, and pollutant transport. He is leading a project supported by North Carolina Sea Grant to couple wave and surge models with an erosion model for beaches and dunes. His previous Sea Grant research focused on presenting storm surge information to local and state emergency managers.



Christopher Dumas Professor of Economics, University of North Carolina Wilmington

Christopher Dumas, a native of Wilmington, has been an economics professor at University of North Carolina Wilmington since 1997. He received bachelor's degrees in economics and natural resource management from North Carolina State University, and master's and doctoral degrees in natural resource economics from the University of California, Berkeley. His research and teaching focuses on the economics of fisheries, water quality, beach tourism, inlet and waterway use, hurricane impacts, and aquaculture. He has completed research projects for the U.S. Army Corps of Engineers, North Carolina Sea Grant, N.C. Division of Coastal Management, the then-N.C. Department of Environment and Natural Resources, N.C. Biotechnology Center, Pew Trusts, Oceana, and the National Commission on Energy Policy. Most recently, Dumas conducted the economic analysis for the N.C. Beach and Inlet Management Plan.



Annette Dunlap *Agribusiness Developer, N.C. Department of Agriculture and Consumer Resources* Annette Dunlap is an agribusiness developer in the marketing division of the North Carolina Department of Agriculture and Consumer Services. She works with economic developers to help them with food processing projects and provides one-on-one assistance to food businesses that are ready to scale up. Prior to joining NCDA&CS in 2008, Dunlap worked in value-added and alternative agriculture with North Carolina State University. She holds a bachelor's degree in government from the University of Arizona and a Master of Business Administration degree from Washington University at St. Louis. In her spare time, Dunlap knits, sews and writes. She is the author of three biographies and numerous articles that have appeared in several of the state's newspapers.



Evan Ferguson *Foods and Nutrition, and Marketing Education Teacher, Cape Hatteras Secondary School* Evan Ferguson is the Cape Hatteras Secondary School of Coastal Studies (CHSSCS) foods and nutrition and marketing education teacher in Dare County on the Outer Banks. She was the 2015–2016 CHSSCS Teacher of the Year and a 2016–2017 N.C. Electric Cooperative Bright Ideas Tar Heel Teacher of the Week. She is the principal investigator of the Cape Shark Project with North Carolina Sea Grant. Her foods program, in its third year, focuses on sustainability, local foods, beekeeping and seafood. She also has worked with and received support from EducationNC, Resourceful Communities, BCBSNC Foundation, Dare Education Foundation, and Hatteras Island Youth Education Fund.



Jason Fine Hydrologist, U.S. Geological Survey

Jason Fine is a hydrologist with the U.S. Geological Survey's South Atlantic Water Science Center in Raleigh. During his career, he has focused on groundwater modeling studies in the coastal plain regions of the Carolinas. Fine also has managed many research projects focusing on hydrogeologic frameworks, water-quality assessments and groundwater availability. He began working with the USGS in 1995 as a contract employee, assessing the groundwater resources of North Carolina's military bases. In 1997, Fine was hired as a USGS hydrologic technician and was became a hydrologist seven years later. As a member of the Hydrologic Modeling and Investigations Section, Fine currently works on a variety of groundwater and surface-water projects throughout the Southeastern United States. He has a bachelor's degree in geology from East Carolina University and has authored or co-authored numerous USGS publications.



Patrick Flanagan Planning Director, Eastern Carolina Council of Governments

Patrick Flanagan began his career in 2009 as a professional planner and now is the planning director at Eastern Carolina Council of Governments, or ECC. The ECC Planning Department is the lead agency in a multi-jurisdictional economic development grant focusing on resiliency efforts after Hurricane Matthew. Flanagan currently is managing the agency's water quality projects for the Towns of Newport and Beaufort (FY 2017). He was also the ECC project manager for five previous water-quality projects. He earned a bachelor's degree in community and regional planning and a master's degree in public administration with a concentration in emergency planning, both from Appalachian State University in Boone. He has been with ECC since his internship for his master's program.



Andrew Fox Associate Professor, North Carolina State University

Andrew Fox is an associate professor and university faculty scholar in North Carolina State University's Department of Landscape Architecture. He is also a professional landscape architect, certified by the American Society of Landscape Architects. At North Carolina State University, he is a Center for Geospatial Analytics Faculty fellow, a Community Engaged Faculty fellow, and co-founder and co-director of the Coastal Dynamics Design Lab. Known as CDDL, the lab is an interdisciplinary research and design initiative housed within the NC State College of Design that addresses critical ecological and community development, hazard mitigation, and disaster preparedness challenges in coastal regions. Fox's research, engagement and teaching activities specialize in the areas of resilient community design, green infrastructure and sustainable stormwater management, high-performing public landscapes, and public involvement. He was among the leaders of a Design Week project focusing on Hurricane Matthew recovery.



Barbara Garrity-Blake Cultural Anthropologist, Duke University

Barbara Garrity-Blake is a cultural anthropologist and co-author of *Living at the Water's Edge, Fish House Opera*, and author of *The Fish Factory*. She has served on the N.C. Marine Fisheries Commission, and was involved in the development of the state's Fisheries Reform Act, as well as efforts to protect public access and working waterfronts along coastal North Carolina. She currently teaches marine fisheries policy at the Duke University Marine Lab in Beaufort, and lives in Gloucester with her husband, Bryan Blake, where they organize the annual Gloucester Mardi Gras and Wild Caught festivals.



Emlyn Koster Director, N.C. Museum of Natural Sciences

Emlyn Koster has been director of the N.C. Museum of Natural Sciences since 2013. A geologist educated in England and Canada, he previously led of several premier museums in the United States and Canada, leading landmark expansions of their facilities, exhibitions, programming and outreach. At the Liberty Science Center in New Jersey, he turned financial struggles into a \$109 million expansion and renewal, including a model contract with state government to assist at-risk communities. He also led the Ontario Science Centre, Canada's largest science center. Earlier, he directed the Royal Tyrrell Museum of Paleontology in Alberta, launching it and opening a satellite field station in Dinosaur Provincial Park, which was designated as a World Heritage Site by the United Nations Educational, Scientific and Cultural Organization, as well as integrating this new institution into the heritage tourism and scientific research professions. He is a graduate of the University of Sheffield, England, and holds a doctoral degree in geology from the University of Ottawa.

Wayne Litaker Supervisory Ecologist, NOAA, Center for Coastal Fisheries and Habitat Research



After completing a doctoral degree in marine biology at Duke University, Wayne Litaker joined the University of North Carolina Medical School for 14 years, where he was a faculty member in molecular biology and biotechnology. His innate curiosity and early love of plankton and coastal ecology brought him back to the North Carolina coast in 2002, when he joined the staff at NOAA's Beaufort laboratory. Since that time he has worked with the Harmful Algal Bloom (HAB) group to apply molecular skills to address issues concerning ecology, taxonomy and detection of HAB species and their toxins. He has collaborated with numerous researchers in the United States, Europe and Asia, and now leads the HAB program. His working group has received the Provasoli Award, the Tyge Christiansen Prize, NOAA's Technology Transfer Award, and the U.S. Department of Commerce Gold Medal for Distinguished Achievement in recognition of their outstanding research contributions. He is the author of over 120 publications.



Johnny Martin Coastal/Hydraulic Engineer, Moffatt & Nichol

Johnny Martin has been serving as a coastal/hydraulic engineer with Moffatt & Nichol for over 22 years. He received bachelor's and master's degrees in civil engineering with a concentration in coastal engineering/ water resources from North Carolina State University. During his tenure at Moffatt & Nichol, he has spent a majority of his time involved in coastal engineering design, and hydrologic and hydraulic modeling for projects on both U.S. coasts and internationally. Recently, he has served as the project manager for the N.C. Beach and Inlet Management Plan, the Terminal Groin Study, the Carteret County Master Beach Nourishment Plan, and the Post-Irene Renourishment Project.



Representative Pat McElraft N.C. House District 13

Rep. Pat McElraft serves the 13th District of the N.C. House, covering Carteret and Jones counties. She is vice chair of the Appropriations Committee; and also chairs Appropriations on Agriculture and Natural and Economic Resources, and the Environment Committee. She serves on ethics, insurance, regulatory reform and state personnel committees. A retired technical sales representative for a national microbiology products company, she is a former commissioner for Carteret County, as well as Emerald Isle. She is a part-time real estate broker. McElraft received the N.C. Recreation and Park Association's 2013 Distinguished Legislator honor. She also was a 2016 Woman of Excellence honoree by the National Foundation for Women Legislators. A member of the N.C. Travel & Tourism board, she holds an associate of science degree in medical terminology from Coastal Carolina Community College. She lives in Emerald Isle with her husband, retired U.S. Marine Col. Roger McElraft. She has two children and is a grandmother of two.



Craig McLean Assistant Administrator, NOAA Oceanic and Atmospheric Research

Craig McLean is NOAA's assistant administrator the Office of Oceanic and Atmospheric Research (OAR). He directs and implements NOAA's research enterprise, including a network of laboratories and programs, such as the Climate Program, National Sea Grant and Ocean Exploration. McLean serves as the U.S. representative to the Intergovernmental Oceanographic Commission, and co-chairs the U.S. European Union Marine Working Group. Founding director of OAR's Office of Ocean Exploration and Research, he also served for nearly 25 years in NOAA's Commissioned Corps, where he had the rank of captain and was the first commanding officer of the *NOAA Ship Gordon Gunter*. He led NOAA's planning for the Smithsonian Institution's Sant Ocean Hall, and is recognized for securing the *NOAA Ship Okeanos Explorer*. An attorney, McLean has received numerous honors from the U.S. Department of Commerce and NOAA Corps. He is a fellow of the Explorers Club and the Marine Technology Society, as well as past president and chairman of the Sea-Space Symposium.



Sharon Paynter Assistant Vice Chancellor, Public Service and Community Relations, East Carolina University

A native of North Carolina, Sharon Paynter earned her bachelor and master of public administration degrees from the University of North Carolina at Chapel Hill, a master of legal administration from the University of Denver, and a doctorate from North Carolina State University. She currently serves as an associate professor of political science, and is the assistant vice chancellor for Public Service and Community Relations at East Carolina University.



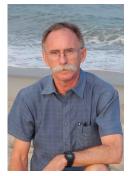
Jonathan Pennock Director, National Sea Grant College Program

Prior to joining NOAA as director of the National Sea Grant College Program in 2016, Jonathan Pennock was director of New Hampshire Sea Grant and deputy director of the School of Marine Science and Ocean Engineering at the University of New Hampshire. Pennock is a nationally known coastal scientist with expertise in oceanography and estuarine sciences. He is a past president of the national Sea Grant Association, and served as the group's representative on NOAA Research's Senior Research Council. He also previously worked for Delaware and Mississippi-Alabama Sea Grant programs. His research has focused on understanding human impacts on coastal marine food webs. Pennock has a doctoral degree in oceanography and a master's degree in marine studies from the University of Delaware, as well as bachelor's degree in biology from Earlham College.



Michael Regan Secretary, N.C. Department of Environmental Quality

As secretary of the N.C. Department of Environmental Quality, Michael Regan leads an agency with a mission to protect the state's environment and natural resources. At the Environmental Defense Fund, he had been associate vice president and southeast regional director. At the Environmental Protection Agency in the Clinton and Bush administrations, he designed programs to reduce pollution, and develop market-based solutions for energy efficiency, air quality and climate-related challenges. He also founded M. Regan & Associates, LLC, a firm to help organizations solve complex energy, environmental and economic challenges. He has served on boards for the University of North Carolina School of Law Center for Climate, Energy, Environment and Economics; Green 2.0; N.C. Commission on Global Climate Change; and the N.C. Energy Policy Council. A Goldsboro native, he has a bachelor's degree in earth and environmental science from N.C. Agricultural and Technical State University, and a master's degree in public administration from George Washington University. Regan and his wife, Melvina, live in Raleigh with their son.



Spencer Rogers Coastal Construction and Erosion Specialist, North Carolina Sea Grant

Spencer Rogers joined North Carolina Sea Grant in 1978 as a coastal engineering extension specialist in hurricane-resistant construction techniques, shoreline erosion, coastal management and marine construction. His serves on faculty at the University of North Carolina at Wilmington's Center for Marine Science and as adjunct faculty with the North Carolina State University's Department of Civil Engineering. He was previously employed by Florida Bureau of Beaches and Shores. He holds a bachelor's degree in engineering from the University of Virginia and a master's degree in coastal and oceanographic engineering from the University of Florida. He has participated in FEMA's Hurricane Katrina Mitigation Assessment Team, and conducted damage assessments for American Society of Civil Engineers following hurricanes Katrina and Ike, as well as for the Corps of Engineers following Hurricane Sandy.



Brian Roth Mayor, Town of Plymouth

Brian Roth has been the mayor of Plymouth for 16 years. Roth completed the four-year naval science and industrial technology programs at the University of Michigan and Eastern Michigan University. As a commissioned naval officer, he served aboard EA-6B Prowler jets as an electronic countermeasures officer. He flew missions from the USS Ranger and USS Midway aircraft carriers. He later served the Navy as assistant program manager for testing and evaluation in Washington, D.C., developing numerous advanced weapon systems. Recent awards include the NOAA Walter B. Jones Sr. Award for Excellence in Local Government and the N.C. Wildlife Federation's Governor's Award for Municipal Conservationist of the Year.



Bland Simpson Chair, Kenan Distinguished Professor of English and Creative Writing, University of North Carolina at Chapel Hill

Bland Simpson is the author of *The Coasts of Carolina: Seaside to Sound Country, Into the Sound Country,* and *The Inner Islands.* A longtime member of the Tony Award-winning Red Clay Ramblers, he regularly appears on UNC-TV's "Our State." He is chair and Kenan Distinguished Professor of English and creative writing at the University of North Carolina at Chapel Hill. He has received numerous awards, including the UNC Chapel Hill General Alumni Association's Faculty Service Award and the North Carolina Award for Fine Arts, the state's highest civilian honor.



Gavin Smith Director, U.S. Department of Homeland Security's Coastal Resilience Center of Excellence, University of North Carolina at Chapel Hill

Gavin Smith is director of the U.S. Department of Homeland Security's Coastal Resilience Center of Excellence, as well as an associate research professor in the Department of City and Regional Planning, both at University of North Carolina at Chapel Hill. He currently leads the Hurricane Matthew Disaster Recovery and Resilience Initiative, advises state officials on state and federal recovery policies and programs, and assists communities in developing disaster recovery plans. Co-editor of *Climate Change Adaptation: Lessons from Natural Hazards Planning*, Smith previously served as North Carolina's assistant director for Hazard Mitigation. Following Hurricane Katrina, he worked in the Mississippi Office of the Governor, directing the Office of Recovery and Renewal. His range of consulting includes working with the U.S. State Department to discuss connectivity between climate-change adaptation and disaster management in Hong Kong and the Philippines, assisting Vermont following Hurricane Irene, and advising FEMA to implement the new National Disaster Recovery Framework.



Mike Sprayberry Director, North Carolina Emergency Management Division

In February 2013, Mike Sprayberry was appointed director of the N.C. Emergency Management Division in the N.C. Department of Public Safety. He had joined the agency in July 2005 as deputy director and operations section chief, responsible for the division budget, emergency and human services functions, 24-hour communications center, and field staff for disaster prevention and response. He has spearheaded development and implementation of plans to better prepare and protect North Carolinians during disasters, including the coastal region evacuation and sheltering plan, and the long-term care facility disaster plan. Sprayberry previously served in the U.S. Marine Corps and the N.C. Army National Guard for 25 years. He is a graduate of the Army Command and General Staff College. Sprayberry holds bachelor's and master's degrees from the University of North Carolina at Charlotte. He and his wife, Laura, reside in Raleigh and have two daughters.



Jill Stewart Associate Professor, University of North Carolina at Chapel Hill

Jill Stewart is an environmental health microbiologist who develops novel tools to detect and track pathogens in water. With these tools, Stewart conducts studies to characterize impacts of nonpoint source pollution, and to evaluate how human activities such as development and stormwater management affect distribution of microbial contaminants. Recent research projects include (1) epidemiology studies of bathing beaches affected by nonpoint source pollution; (2) development of a stress-response model for forecasting the impacts of land-use change within watersheds; and (3) evaluating the occurrence and persistence of antibiotic resistance elements in aquatic systems. At UNC-Chapel Hill, Stewart also serves as the deputy director for the Center for Galapagos Studies and on the Provost's Environmental Task Force. Overall, her work is leading to a greater understanding of how environmental conditions can affect human health, and how humans themselves influence this process.



Jay Styron President, North Carolina Shellfish Growers Association

President of the North Carolina Shellfish Growers Association, Jay Styron is the owner of Carolina Mariculture Company located on Cedar Island. His business combines his passion for working on the water with providing safe, sustainably harvested seafood. Styron is also the director of Marine Operations at the University of North Carolina Wilmington's Center for Marine Science and a member of the New Hanover County Farm Bureau Board of Directors. He grew up on Cedar Island in a family with a long history of commercial fishing. He received his degree in marine biology from UNCW. Styron is an advocate for shellfish mariculture and works with other growers to help them begin their businesses, and participates in research projects to improve the industry.



Lauren Thie Environmental Program Consultant, North Carolina Department of Health and Human Services Lauren Thie is an environmental program consultant for the N.C. Department of Health and Human Services. She serves as the principal investigator for the Climate and Health Adaptation and Monitoring Program cooperative agreement with the Centers for Disease Control and Prevention. Thie has collaborated on public-health projects in Kenya, Mali, Southern California and Vietnam. She is a graduate of the University of North Carolina at Chapel Hill's Gillings School of Global Public Health.



Chad Thomas Coastal Fisheries Supervisor, North Carolina Wildlife Resources Commission

Chad Thomas is currently the coastal fisheries supervisor with the N.C. Wildlife Resources Commission and is stationed in Elizabeth City. He has been with the Division of Inland Fisheries for 24 years, previously holding positions as coastal research coordinator, District 1 fisheries biologist (Northeastern N.C.), and District 7 assistant biologist (Northwestern N.C.). His current work responsibilities include overseeing regional research and survey programs intended to conserve aquatic resources while promoting recreational angling opportunities in coastal North Carolina. Thomas has a master's degree in fisheries biology from Tennessee Technological University, and a bachelor's degree in fisheries and wildlife sciences from North Carolina State University.



David Titley Director, Center for Solutions to Weather & Climate Risk, Pennsylvania State University

David Titley is a professor of international affairs at Pennsylvania State University. He is the founding director of Penn State's Center for Solutions to Weather and Climate Risk. A U.S. Navy officer for 32 years, he rose to the rank of rear admiral. Titley's career included duties as commander of the Naval Meteorology and Oceanography Command and oceanographer and navigator of the Navy. While serving in the Pentagon, Titley initiated and led the U.S. Navy's Task Force on Climate Change. After retiring from the Navy, Titley served as the federal deputy undersecretary of commerce for operations, the chief operating officer position at the National Oceanic and Atmospheric Administration. Titley serves on numerous advisory boards and National Academies of Science committees, including the Science and Security Board of the Bulletin of the Atomic Scientists. Titley is a fellow of the American Meteorological Society.



Shannon Vickery Director of Production Partnerships and Business Development, University of North Carolina Public Television

Shannon Vickery is the director of production partnerships and business development for UNC-TV, working in collaboration with UNC-TV's content team, which produces more than 240 hours of original North Carolina-based programming each year. She is also an award-winning correspondent and producer. She has been working for UNC-TV since October 1995. Shannon is a graduate of the University of Missouri-Columbia with bachelor's degrees in broadcast journalism and political science. She also has a master's degree with an emphasis in health policy from Duke University.



John Virdin Director, Ocean and Coastal Policy Program, Duke University

John Virdin is the director of the Ocean and Coastal Policy Program at Duke University's Nicholas Institute for Environmental Policy Solutions. His areas of expertise include assisting governments in developing countries to reform and strengthen governance of their ocean resources and particularly their fisheries, to help reduce poverty and enhance sustainability. His work has focused most recently on governance reform in West Africa and Western Pacific tuna fisheries, as well as governance for the blue economy in the Caribbean, among others. Virdin holds a doctoral degree in marine policy from the University of Delaware's School of Marine Policy, a master's degree in environmental studies from Yale's School of Forestry and Environmental Studies, and a bachelor's degree in political science from Wake Forest University.



Holly White Principal Planner, Town of Nags Head

Holly White is a principal planner with the Town of Nags Head Planning Department where she focuses on long-range planning, grant writing, special project management, floodplain management, and the Community Rating System. Prior to becoming a planner with the Town of Nags Head, Holly was employed by the Currituck County Planning Department as a senior planner and by Town of Kitty Hawk as an environmental planner. White holds a Bachelor of Science degree in urban and regional planning, with a focus in coastal planning, and a minor in geology from East Carolina University. She enjoys spending time with family doing most any outdoor activity, especially those on the water, and volunteering.



Susan White Executive Director, North Carolina Sea Grant

Susan White is executive director for North Carolina Sea Grant and the Water Resources Research Institute for the University of North Carolina. Both programs provide research, outreach and education projects to address critical coastal, ocean and water resource issues in the state and within the region. White also currently serves as interim director of North Carolina Space Grant, a partnership of the National Aeronautics and Space Administration and the UNC system. White previously was director of the National Oceanic and Atmospheric Administration's Hollings Marine Laboratory in Charleston, S.C. Formerly the national research coordinator for NOAA's Estuarine Reserves Division and National Estuarine Research Reserve System, she has served on national and regional steering committees on topics including technology transfer, integrated drought monitoring and early warning, and climate's connections to health. White earned a doctoral degree from the University of Georgia and a bachelor's degree from Duke University.



John Whitehead Professor, Appalachian State University

John Whitehead is a professor in the Department of Economics at Appalachian State University. He received his doctoral degree in economics from the University of Kentucky. Whitehead's research focuses on the valuation of environment and natural resources for benefit-cost analysis, primarily in the context of coastal and marine recreation and tourism. He has published over 100 peer-reviewed articles and book chapters and co-edited two books. He is an associate editor at *Marine Resource Economics* and on the editorial council of the *Journal of the Association of Environmental and Resource Economists*. He is a member of the Socioeconomic Panel of the Statistics and Scientific Committee of the Association of Environmental and Resource Economists and as president of the Socioeconomic Section of the American Fisheries Society.



Randy Woodson Chancellor, North Carolina State University

As North Carolina State University's 14th chancellor, Randy Woodson is a recognized scholar and academic leader guiding the state's largest university, with more than 34,000 students and a budget of \$1.4 billion. In his tenure, NC State has had many transformative changes, such as the opening of the James B. Hunt Jr. Library on Centennial Campus and the launch of the College of Sciences. Woodson is known as a strategic planner who achieves greater effectiveness, efficiency and — most importantly — student success. He came to NC State from Purdue University, where he most recently served as executive vice president for academic affairs. Woodson is an internationally renowned plant molecular biologist specializing in reproductive processes in agricultural crops. He earned his bachelor's degree in horticulture from the University of Arkansas, and his Master of Science and doctoral degrees in plant physiology from Cornell University.



Robert Young *Director, Program for the Study of Developed Shorelines, Western Carolina University* Robert Young is the director of the Program for the Study of Developed Shorelines(PSDS) at Western Carolina University. He is also a professor of geosciences and a licensed professional geologist in Florida, North Carolina and South Carolina. PSDS is a research and policy outreach center serving the global coastal community. The primary mission of PSDS is to conduct scientific research into coastal processes, storm impacts and sea-level rise, and to translate that science into management and policy recommendations through a variety of professional and public outreach mechanisms. The program specializes in evaluating the design and implementation of coastal engineering projects and helping communities develop coastal adaptation strategies. Young provides frequent service to government and nongovernmental agencies at all levels, including providing testimony before the U.S. Congress, advising federal agencies and working with international environmental groups.