#### Nutrient Criteria Development Plan Science Advisory Council Members

1. Marcelo Ardon – NCSU, Dept. of Forestry and Environmental Resources https://cnr.ncsu.edu/directory/marcelo-ardon/

Dr. Ardon's research seeks to elucidate the mechanisms underlying ecosystem response to human accelerated environmental change in an effort to forecast the consequences and adapt to an uncertain future.

## 2. James Bowen – UNC-Charlotte, Dept. of Civil and Environmental Engineering https://cee.uncc.edu/directory/james-d-bowen-phd

Dr. Bowen's expertise is in water quality and eutrophication modeling, wastewater treatment plant modeling, greenhouse gas emission estimation, tracer methods to measure the mixing and flushing of surface water bodies, environmental fluid dynamics, and predicting harmful algal blooms.

### 3. Rachel Gittman – ECU, Dept. of Biology http://www.ecu.edu/cs-cas/biology/Rachel Gittman.cfm

Dr. Gittman is broadly interested in understanding how humans modify the coastal environment and how best to manage or mitigate the ecological consequences of those modifications to sustain ecosystem structure, functions, and services.

## 4. Jessie Jarvis – UNC-Wilmington, Dept. of Biology & Marine Biology https://uncw.edu/bio/faculty\_jarvis.html

Dr. Jarvis is a coastal plant ecologist with expertise in submerged aquatic vegetation (SAV). Her aim is to understand the effects of environmental stressors on large-scale physiological processes such as plant development and reproduction within SAV populations and to communicate these results to resource agencies and policy makers charged with their management.

# 5. Jud Kenworthy – NOAA, retired Research Fisheries Biologist https://apnep.nc.gov/about-apnep/committees/science-and-technical-advisory-

<u>https://apnep.nc.gov/about-apnep/committees/science-and-technical-advisory-</u> <u>committee/judson-kenworthy</u>

Dr. Kenworthy is a Research Fisheries Biologist, retired from NOAA and currently working as a private contractor to support NOAA and MA DEP programs. He serves on the APNEP Science and Technical Advisory Committee. Dr. Kenworthy's focus areas are coastal and estuarine ecology with emphasis on seagrass and fish and wildlife habitat utilization, and ecological restoration.

## 6. Martin Lebo – AquAeTer

http://www.aquaeter.com/application/files/5814/2048/7826/M\_Lebo\_Resume.pdf

Dr. Lebo has over 20 years of experience pertaining to water issues and remediation projects. Key aspects of support on water issues were on nutrient criteria development in diverse aquatic system from forested watersheds to rivers and estuaries and on evaluating impaired waters. An interest of Dr. Lebo is the identification of suitable metrics, of data analysis approaches, and of modeling study design to evaluate environmental performance and impacts.

#### Michael O'Driscoll – ECU, Department of Geology http://core.ecu.edu/geology/ODriscoll/ODriscoll/home.html

Dr. O'Driscoll's research focuses on the human impacts on water resources with an emphasis on the interactions of groundwater on the physical hydrology, chemistry, and ecology of lake, river, and wetland systems.

# 8. Hans Paerl – UNC-Institute of Marine Sciences

https://ims.unc.edu/people/hans-paerl/

Dr. Paerls's research addresses microbially-mediated nutrient cycling and primary production dynamics of aquatic ecosystems, environmental controls of harmful algal blooms, and assessing the causes and consequences of man-made and climatic (storms, floods) nutrient enrichment and hydrologic alterations of inland, estuarine and coastal waters. He is involved in the development and application of microbial and biogeochemical indicators of aquatic ecosystem condition and the change in response to human and climatic perturbations.

# 9. Lauren Petter – Environmental Protection Agency, Region 4

Ms. Petter was asked to join the council. She has served as the U.S. Environmental Protection Agency's (EPA) water quality standards (WQS) coordinator for Alabama, Florida, and Tennessee, and currently serves as the EPA WQS coordinator for North Carolina. She has been involved in the ongoing effort to support states and tribes in their development of numeric nutrient criteria at both the regional and national levels.

## 10. Fritz Rohde – NOAA, National Marine Fisheries Service

https://www.fisheries.noaa.gov/contact/fritz-rohde

Mr. Rohde is a Fishery Biologist with NOAA's Habitat Conservation Division, based in Beaufort, NC.

# **11.** Astrid Schnetzer – NCSU, Dept. of Marine, Earth, and Atmospheric Sciences <u>https://meas.sciences.ncsu.edu/people/aschnet/</u>

Dr. Schnetzer's research focuses on how natural and anthropogenic processes shape plankton assemblages and how changes in protistan and/or zooplankton community structure impact biogeochemical cycles in coastal and open ocean environments.

# 12. Wilson Laney – NCSU, Dept. of Applied Ecology

https://cals.ncsu.edu/applied-ecology/people/rwlaney https://www.fws.gov/southatlantic/

Dr. Laney is a Senior Biologist with the USFWS South Atlantic Fisheries Coordination Office. He has broad expertise in biological resources, with experience in hydropower relicensing, striped bass conservation, and interstate management of marine fish populations.