



## **NATIONAL ASSOCIATION OF MARINE LABORATORIES FY 2022 PUBLIC POLICY AGENDA June 2021**

The National Association of Marine Laboratories (NAML) is a network of place based marine and Great Lakes laboratories. NAML's geographic network includes estuaries, the coastal zone, the Great Lakes and inland watersheds, the global ocean including polar regions, and the sea floor. NAML labs provide scientists, students, public and civic leaders with leading edge science, environmental and coastal intelligence, and professional training that contributes to the understanding, management, and stewardship of our ocean, coastal zones, and the Great Lakes. The research, observational, and education activities we carry out contribute to the nation's economic, environmental, and national security.

NAML labs operate on the frontline of a constantly changing environment. The ocean, coasts, and the Great Lakes are vital resources and an integral part of our national identity and our nation's future. The ocean and our Great Lakes fuel our economy with an estimated 3 million jobs, give mobility to our commerce and Armed Forces, feed our nation, secure our borders, and provide places for recreation. Understanding the physical, chemical, biological, and geological changes in the ocean and our Great Lakes is vital to the survival and prosperity of our country. The U.S. depends on our healthy marine and freshwater resources, yet many human activities and natural events impact coastal community resilience, thereby jeopardizing jobs, wages, our gross domestic product, human health, and well-being.

At the same time, deadly and expensive weather- and climate- related hazards have increased at an alarming rate. Since 1980, the Nation experienced 285 weather and climate disasters where overall damages reached or exceeded \$1 billion. The total cost of these 285 events exceeds \$1.875 trillion. Over the last five years (2016-2020), the Nation was subjected to 81 events that resulted in nearly 4000 deaths and damages that exceed \$600 billion. Weather and climate hazards challenge the resilience of coastal communities via damage to critical infrastructure, disrupt water and food supplies, and cause social instability, unemployment, and governance challenges.

The ocean, coastal, and Great Lakes research and education enterprise -- through its use and support of NAML laboratories -- provides the knowledge and training for decision makers concerned about the economic, environmental, and national security of our coastal communities. To support the vital role of marine and Great Lakes laboratories in this enterprise, we recommend prioritizing the Federal Government's investment in extramural, merit-based, research, education, observational, and infrastructure programs at NSF, NOAA, NASA, EPA, DOI, USGS, and other ocean, coastal, and Great Lakes related agencies. Investments in federally funded extramural research, education, observations, and the infrastructure (physical, cyber related, data management, etc.) to support these activities are essential for new knowledge, a diverse workforce, an ocean-literate society, science-based decision-making, and technological innovations needed to power the nation's economy, improve human health, and sustain a strong national defense and vibrant society.

*The National Association of Marine Laboratories (NAML) is a nonprofit organization representing the ocean, coastal and Great Lakes interests of member laboratories that employ thousands of scientists, educators, engineers, and professionals nationwide. NAML labs conduct high quality research and education in the natural and the social sciences and translate that science to improve decision-making on important issues facing local, state, regional, national, and international entities.*