

April XX, 2009

The Honorable Barbara Mikulski
Chair
Senate Appropriations Committee
Subcommittee on Commerce, Justice, and
Science
Washington, DC 20510

The Honorable Richard Shelby
Ranking Member
Senate Appropriations Committee
Subcommittee on Commerce, Justice, and
Science
Washington, DC 20510

Dear Chairwoman Mikulski and Senator Shelby:

We request your assistance in providing \$96 million in the Fiscal Year 2010 Commerce, Justice and Science appropriations bill for the Integrated Ocean Observing System (IOOS) and the regional ocean observing systems under the National Oceanic and Atmospheric Administration's (NOAA) National Ocean Service. In March, President Obama signed the Omnibus Public Lands Bill (PL 111-11) that included the Integrated Coastal and Ocean Observing System Act of 2009. The legislation implements the vision put forth by the U.S. Commission on Ocean Policy, the U.S. Ocean Action Plan, the Ocean Research Priorities Plan, and other scientific organizations on the crucial need for a comprehensive, sustained, and integrated ocean observing system to monitor and facilitate sound management of our nation's coasts, oceans, and Great Lakes.

As America moves forward in addressing our environmental and economic security, the need for a sustained data collection and public dissemination system has never been greater. IOOS will facilitate actions to address a changing climate, contribute to national security, assist in the management of marine resources, help reduce ocean pollution and improve response efforts, facilitate maritime safety and efficiency, and help to forecast and mitigate natural hazards. The type of sustained observations provided by IOOS will help to detect and document ecological and other shifts and to provide communities the detailed information required to understand the risks involved and adapt accordingly. Already IOOS is demonstrating success:

- *The Rescue of US Flight 1549* - Boat captains involved in the rescue effort utilized real-time information on the speed and direction of currents in the Hudson River. This information, provided by the Stevens Institute of New Jersey, was instrumental in the safe removal of passengers from the downed aircraft.
- *Cosco Busan Oil Spill, San Francisco Bay* - High frequency radar data from arrays in California enhanced spill-response efforts by providing real-time data related to surface current transport of oil near the spill site.
- *Public Safety* - Pacific Island communities are particularly vulnerable to hazardous wave conditions, coastal inundation, and erosion. The Pacific Islands Coastal Ocean Observing System provides these communities with an early-warning system and assists in their efforts at long-term planning and mitigation.

- *Offshore Renewable Energy* - Numerous coastal states and members of the private sector are utilizing regional observing systems to aid in determining appropriate sites for offshore facilities. Many of these companies have already expressed an interest and willingness to share non-proprietary information with IOOS.
- *Fisheries Management* – Fisheries managers in New England and nationwide are using sea surface temperature data provided by IOOS to determine seasonal migration patterns of managed species.
- *Marine Operations* - IOOS data can augment the NOAA PORTS program by providing additional data related to waves and sea state, as well as other environmental conditions. This additional data is being used by the US Coast Guard to dramatically improve Search & Rescue Operations.
- *Great Lakes* - As the largest source of surface fresh water on the planet, the Great Lakes provide drinking water to 40 million people and make possible an extensive water-dependent economy. As such, resource managers need timely and accurate information on contaminants, invasive species, and the effects of climate change on lake levels, as well as information on overall ecological health.
- *Arctic Change* - According to the latest results in climate modeling, the Arctic will warm at a much faster rate than the rest of the world. The Alaska Ocean Observing System, a collaboration between Federal, state, and local agencies, as well as oil & gas industry representatives, will contribute to an increased understanding of change in the Arctic.
- *Harmful Algal Blooms* - Researchers in the Gulf of Mexico and elsewhere are designing systems to monitor and predict the outbreak of harmful algal blooms. This will have profound implications for public health, recreational opportunities, and the extensive shellfish industry in the Gulf.
- *Modernizing Coastal Ocean Information* - Innovative web services and open source software allows rapid access to a range of data from both Federal and non-Federal sources. As a result, 80 percent of the data flowing through NOAA's National Data Buoy Center is from non-Federal sources. The addition of this data allows scientists to improve the accuracy of models and predictions by checking it against actual observations, at a minimal cost to taxpayers.

Although the U.S. Commission on Ocean Policy recommended an initial annual budget of \$138 million for IOOS development, we recommend Committee support for a total request of \$96 million in Fiscal Year 2010. This request includes \$50 million for regional observing systems, \$30 million for the NOAA IOOS program office and associated programs, \$10 million for data management and communications, and \$6 million for the global observing system. These funding levels are needed to support the System as well as to address key provisions of the legislation, such as the development of an independent cost estimate within the first year of the program, the establishment of a System Advisory Committee, and the development of policies

related to public-private partnerships enacted through the System.

We further emphasize the need to dedicate \$50 million to regional associations. These regional associations provide fine-scale resolution in gathering data and fill critical gaps in information collection and assimilation, as well as dissemination to end users, not met by other institutions. Unfortunately, these regional associations have faced a significant funding shortfall in recent years. In FY 2005 Congress provided \$42.4 million for the regional associations to build and expand their capacity and performance. This funding fell to as low as \$20.4 million in FY 2008. Although funding increased slightly in FY 2009, to \$26 million, this level is still far short of what is needed. As a result, many regions have had to shut down high frequency radar systems that monitor surface currents, remove buoys from the water, and eliminate data collection for oceanographic and climate modeling applications – all of which are counterproductive to the purpose of providing continuous and comprehensive ocean data necessary to achieve the significant public benefits of IOOS. The majority of regional funding should be awarded through performance and merit-based multi-year contracts that promote the long-term investment and development of a sustained regional ocean observing system that meets local, state, and national needs.

We are encouraged by the promising steps that have already been taken by NOAA, other Federal agencies, and the network of 11 regional systems. We ask that you make this important system a national science priority and continue to invest in its development, so that IOOS and the regional associations can realize the full potential of returning benefits to the nation.

Sincerely,