

United States Senate

WASHINGTON, DC 20510

April 11, 2014

The Honorable Barbara A. Mikulski, Chairwoman
Subcommittee on Commerce, Justice, Science, & Related Agencies
Committee on Appropriations
United States Senate
Washington, DC 20510

The Honorable Richard C. Shelby
Subcommittee on Commerce, Justice, Science, and Related Agencies
Committee on Appropriations
United States Senate
Washington, DC 20510

Dear Chairman Mikulski and Ranking Member Shelby:

We are writing to request your continued support for ocean acidification monitoring and research programs in the Fiscal Year 2015 budget. Specifically, we urge you to support the President's request for the National Oceanic and Atmospheric Administration (NOAA) Integrated Ocean Acidification Program and provide robust support the Integrated Ocean Observing System (IOOS) base funding for the national network of regional programs. We believe that supporting these programs is absolutely critical to supporting the shellfish industries in our home states and the tens of thousands of sustainable aquaculture jobs supported by this growing industry.

The rate of ocean acidification is higher than at any time in the last 300 million years. On the West Coast, a \$270 million shellfish industry was near collapse because young oysters have been drastically impacted by ocean acidification. Shellfish growers now use real time ocean acidification monitoring data provided by NOAA and IOOS to measure changes in corrosive sea water and adapt their growing practices. After ocean acidification sensors were deployed near major hatcheries in the Pacific Northwest, young oyster productivity rose from 20 percent of historical levels to 70 percent, helping support 3,200 family wage jobs in Washington state's coastal economies alone. This collaboration is a best practice of how business, real time scientific data, and public data sharing can support businesses and grow our coastal economies.

Ocean acidification is a significant threat to coastal economies across the nation. In New England, decreases in soft-shell and quahog clam populations are thought to be caused by ocean acidification and in Maine, fishermen are concerned about the implications of ocean acidification for the state's iconic lobster industry. However, only one ocean acidification sensor is deployed within the Gulf of Maine to help monitor and potentially mitigate impacts of ocean acidification in this environmentally and economically vital area. Emerging research from

Alaska indicates that ocean acidification could have devastating impacts on commercially valuable red king crab and Tanner crab stocks.

In addition to economic value, shellfish play a vital role in water quality and ecosystem health in estuaries across the United States, including in the Chesapeake Bay, Delaware Bay, Great South Bay, Mobile Bay, Humboldt Bay, Narragansett Bay, Damariscotta River, and the Puget Sound. Oyster reefs filter water, slow coastal storm surges, and provide habitat for fish and other commercially valuable and economically important species. In the Gulf of Mexico, over 170 species of fish and invertebrates are found to live in oyster reefs. However, ocean acidification threatens these valuable societal benefits and services, which is why we urge you to support the President's proposed increases to NOAA's Integrated Ocean Acidification Program. These would enhance our ability to quantify, understand, and eventually adapt to the impacts of ocean acidification today, and prevent further ocean acidification in the future.

We appreciate your continued support of NOAA's valuable ocean acidification programs that help monitor and research ocean acidification and its significant impacts. While ocean acidification can have vast impacts on coastal ecosystems, there are still many ecosystems that do not have adequate ocean acidification sensors, leaving huge data gaps which must be addressed. We urge your continued robust support of the Integrated Ocean Acidification program and the Integrated Ocean Observing System (IOOS) base funding for the national network of regional programs at the President's budget request.

Sincerely,



Maria Cantwell
United States Senator



Mazie K. Hirono
United States Senator



Elizabeth Warren
United States Senator



Barbara Boxer
United States Senator



Richard Blumenthal
United States Senator



Sheldon Whitehouse
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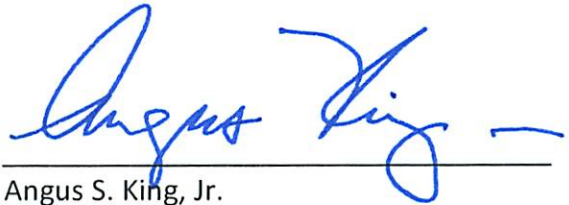
Brian Schatz
United States Senator



Christopher S. Murphy
United States Senator



Benjamin L. Cardin
United States Senator



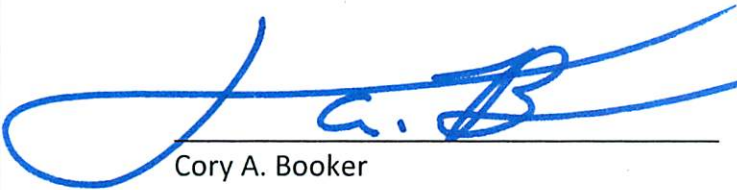
Angus S. King, Jr.
United States Senator



Robert Menendez
United States Senator



Jeffrey A. Merkley
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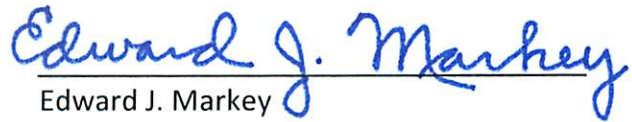
Cory A. Booker
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