

CHAIR

Conrad Lautenbacher, Ph.D.
GeoOptics, Inc.

VICE-CHAIR

Tom Gulbransen
Battelle Memorial Institute

MEMBERS

Tom Curtin, Ph.D.
University of Washington

Jennifer Hagen
Department of Natural
Resources, Quileute Tribe WA

Ann Jochens, J.D., Ph.D.
Texas A&M University

Val Klump
University of
Wisconsin-Milwaukee

Tony Koslow, Ph.D.
University of California – San
Diego

Anthony MacDonald
Monmouth University

Justin Manley
Just Innovation LLC

Casey Moore
Sea-Bird Scientific

Chris Ostrander
University of Hawaii at Manoa

LaVerne Ragster, Ph.D.
University of the Virgin Islands

Douglas Vandemark, Ph.D.
University of New Hampshire

EX OFFICIO MEMBERS

David Legler, Ph.D.
National Oceanic and
Atmospheric Administration

Linda Lillycrop
U.S. Army Corps of Engineers

Brian Melzian, Ph.D.
U.S. Environmental Protection
Agency

**DESIGNATED FEDERAL
OFFICIAL**

Jessica Snowden
U.S. IOOS Office

1315 East-West Highway
Second Floor
Silver Spring, MD 20910



**U.S. Integrated Ocean Observing System
Advisory Committee**

December 1, 2016

Kathryn D. Sullivan, Ph.D.
Under Secretary of Commerce for Oceans and Atmosphere
and NOAA Administrator
1401 Constitution Avenue NW, Room 5128
Washington, DC 20230

Dear Dr. Sullivan;

Please find attached the U.S. IOOS Advisory Committee's statement on U.S. IOOS and recommendations to the incoming Presidential Administration.

We hope you'll consider sharing these with President-Elect Trump's landing and transition teams.

Sincerely,

A handwritten signature in black ink, appearing to read 'C. Lautenbacher'.

VADM (ret.) Conrad C. Lautenbacher

Attachment: Recommendations of the IOOS AC

Cc: Interagency Ocean Observation Committee
NOAA's National Ocean Service

U.S. INTEGRATED OCEAN OBSERVING SYSTEM (IOOS)

RECOMMENDATIONS OF THE U.S. IOOS ADVISORY COMMITTEE

November 22, 2016

THE OCEANS AND COASTS – OUR BLUE ECONOMY

The coastal and ocean economy is the backbone of the U.S. economy—45% of the nation’s gross domestic product (GDP) is produced in coastal counties. It contributes more than \$282 billion to the U.S. GDP and supports more than 2.8 million jobs. This “blue economy” spans traditional fisheries and navigation, to tourism and recreation, to emerging marine biotechnology research and off-shore wind energy development. Sustainable job growth and opportunities supported by the blue economy, along with the health and vitality of our oceans, coasts and Great Lakes depend on the availability of timely, accurate and reliable information. A commitment to expand and sustain observations through the U.S. Integrated Ocean Observing System (IOOS) is an important opportunity for the next Administration.

COASTAL AND OCEAN INTELLIGENCE

U.S. IOOS (33 U.S.C. 3601-3610 – The Integrated Coastal and Ocean Observing System (ICOOS) Act consists of a leveraged network of regional, national and global buoys, gliders, radars, ships, satellites and other assets. IOOS provides the data and information -- the environmental intelligence -- needed to support the fishing industry, maritime commerce, and search and rescue operations, as well as to inform plans for mitigation and response to extreme weather events, ocean acidification, harmful algal blooms, oil spills and coastal flooding, among many other important economic and societal goals.

The IOOS network includes 17 federal agencies and 11 regional observing systems, led by the National Oceanic and Atmospheric Administration (NOAA). The Interagency Ocean Observation Committee (IOOC) coordinates federal agencies, linking global, national, and regional ocean observations to enable powerful new tools for understanding, predicting, and managing our coastal and ocean resources.

IOOS is a mature system that is already delivering substantial benefits to the economy and science-based management; however, it is falling far short of its full potential, especially in the context of a changing environment. Support for the following recommendations will build on the current foundation to fill critical gaps, provide sustained infrastructure support and realize even greater local, regional and national economic benefits from IOOS.

RECOMMENDATIONS

1. Enhance investment in the NOAA and IOOS Regional Associations to sustain critical observations in coastal, estuarine and deep-water environments of the US EEZ, as well as data management and integration to ensure timely and reliable delivery to users across the nation.
 - *Increase funding from \$36.2m to \$44 m annually.*
2. Work with NOAA, the Regional Associations, potential users and Congress to identify and fill critical gaps in the national IOOS infrastructure. For example, investment in the high-frequency radar system that supports search and rescue, oil spill response, and tracking of harmful algal blooms is a current priority.
 - *Support appropriation of funds for high priority ocean observation infrastructure needs.*
3. Spur innovation, public and private sector collaboration, and the development of new, cost-effective technologies for observing and monitoring our oceans and coasts, and next-generation data management and visualization techniques to facilitate seamless user access to coastal and ocean data. The IOOS Ocean Technology Transition (OTT) grant program is one example of an effort that accelerates the commercial development of prototype sensors and reliable measurement systems.
 - *Increase the OTT budget from \$5m to \$10m annually, and identify other opportunities for NOAA and IOOC to invest in tech development and transfer in collaboration with private sector partners.*
4. Work with Congress to reauthorize the ICOOS Act of 2009. As noted above, the Act provides the support for IOOS, the national network of Regional IOOS Associations, and cooperation through the IOOC. Other important provisions would provide for continued development and maintenance of ocean observation infrastructure, and certification standards for the regional systems to ensure data quality.
 - *Support reauthorization the ICOOS Act of 2009*
5. Because IOOS is a networked system spanning from the global to the regional and local, it is important to continue support for interagency ocean observing efforts and interagency coordination through the IOOC. The U.S. should continue its strong leadership role in the Global Ocean Observing System (GOOS); however, it is also important that the IOOC work closely with NOAA to assure links between global, national, and regional ocean observations.
 - *Support interagency ocean observations efforts and the IOOC.*