

Ocean Policy Committee
Ocean Science and Technology Subcommittee
Recommendations for Implementation of Agency R&T Needs
September 2019

Background

American innovation and investment in ocean science and technology supports efforts to reinforce our economic competitiveness, strengthen our national security, and protect our environment. Marine industries, scientists, the public, and government officials all use the products of ocean science and technology research to conserve, manage, and understand America’s ocean resources. In addition, the Federal government is engaging with the private sector and leveraging resources and expertise to advance our understanding of the ocean and to support the ocean-related scientific and technological enterprise.

Highlighting the importance of ocean science and technology to create and implement sound policy, Executive Order 13840, *Ocean Policy to Advance the Economic, Security, and Environmental Interests of the United States*, directs the Ocean Policy Committee (OPC) to “identify priority ocean research and technology needs, to facilitate: (i) the use of science in the establishment of policy; and (ii) the collection, development, dissemination, and exchange of information between and among agencies on ocean-related matters.” To implement the Executive Order, the OPC established a subcommittee to focus on ocean science and technology (the OST subcommittee), including research and technology issues across agencies with ocean equities. This function is being served by the preexisting National Science and Technology Council Subcommittee on Ocean Science and Technology (SOST).

Process

The OST subcommittee developed a [workplan](#) with three components: 1) identify priority research and technology needs; 2) identify and prioritize projects supporting agency research and technology (R&T) needs; and 3) develop recommendations for implementation. This summary provides an overview of that process and sets forth recommendations for implementation.

The OST subcommittee asked each agency member to submit its priority ocean R&T needs, and sixteen agencies submitted R&T needs. Then, the OST subcommittee asked agencies to identify proposed projects to support these needs. The projects submitted by the agencies helped the OST subcommittee identify ocean research and technology priorities. The OST subcommittee grouped the priorities into three major themes, with subthemes, describing the agencies’ areas of focus, as listed in the following section.

Results

Theme 1: Forecasting the Physical and Biological Coastal Environment

A. Predicting Coastal Storm Erosion and Physical Hazard Impacts

B. Protecting Coastal Environmental Quality

Theme 2: Exploring the Unknown Ocean

- A. Building an Ocean Inventory
- B. Observing the Ocean from Space
- C. Harnessing Big Data

Theme 3: Inspiring Next-Generation Ocean Technology

- A. Advancing Autonomy and Observation
- B. Understanding Genomics

The full OPC discussed these themes and subthemes during its June 12, 2019 meeting.

Next steps

The themes and subthemes developed as a result of this process help identify priorities for federal agencies with ocean research and technology portfolios. The OST subcommittee recommends that:

1. OST agencies, as appropriate, use these themes to inform decision-making processes about Federal ocean R&T investments, subject to available resources;
 2. OST agencies refer to these themes when considering collaboration opportunities with Federal and non-Federal partners;
 3. OST agencies nominate projects consistent with these themes for inclusion in the National Oceanographic Partnership Program (NOPP); and
 4. OST agencies advance these themes at the upcoming (Fall 2019) Summit on ocean science and technology partnerships.
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