



SUMMARY OF THE 2019 WHITE HOUSE SUMMIT ON PARTNERSHIPS IN OCEAN SCIENCE & TECHNOLOGY

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&
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About the Office of Science and Technology Policy

The Office of Science and Technology Policy (OSTP) was established by the National Science and Technology Policy, Organization, and Priorities Act of 1976 to provide the President and others within the Executive Office of the President with advice on the scientific, engineering, and technological aspects of the economy, national security, homeland security, health, foreign relations, the environment, and the technological recovery and use of resources, among other topics. OSTP leads interagency science and technology policy coordination efforts, assists the Office of Management and Budget with an annual review and analysis of Federal research and development in budgets, and serves as a source of scientific and technological analysis and judgment for the President with respect to major policies, plans, and programs of the Federal Government. More information is available at <http://www.whitehouse.gov/ostp>.

About the Council on Environmental Quality

The National Environmental Policy Act (NEPA) established the Council on Environmental Quality (CEQ) in 1970 within the Executive Office of the President. CEQ oversees Federal agency NEPA implementation and develops and recommends national policies to the President that promote the improvement of environmental quality and meet the Nation's goals. In addition, CEQ is assigned various duties and responsibilities under other statutes, Executive Orders, and Presidential Memoranda, including with regard to Federal ocean policy, Federal sustainability, and timely environmental review and permitting processes for infrastructure development, and other matters. More information is available at <http://www.whitehouse.gov/ceq>.

About the Ocean Policy Committee

The Ocean Policy Committee was established in 2018 by Executive Order 13840, "Ocean Policy to Advance the Economic, Security, and Environmental Interests of the United States," to coordinate Federal actions related to ocean issues. The Executive Order directed the Ocean Policy Committee to engage and collaborate with the ocean community to identify priority ocean research and technology needs, and leverage resources and expertise to maximize the effectiveness of Federal investments in ocean research.

About the Document

This document provides a summary of the 2019 White House Summit on Partnerships in Ocean Science & Technology. This summary includes background information regarding Federal ocean policy. This document captures key takeaways from discussions during the Summit, but does not detail all aspects of the conversation.

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“We have extraordinary opportunities before us to steward, explore, and utilize the vast resources of America’s oceans by embracing public-private partnerships in ocean science and technology.”

Kelvin Droegemeier

Director, White House Office of Science and Technology Policy

“Expanding our understanding of the ocean can improve our economic competitiveness, strengthen our national security, protect our environment, and promote continued prosperity.”

Mary Neumayr

Chairman, Council on Environmental Quality

Background

On November 14, 2019, Office of Science and Technology Policy (OSTP) and the Council on Environmental Quality (CEQ) hosted *The White House Summit on Partnerships in Ocean Science and Technology (Ocean S&T Summit)*. The *Ocean S&T Summit* brought together over 100 leaders and experts from philanthropy, the private sector, academia, and the Federal government to identify opportunities for partnerships to develop and employ science and technology (S&T) for the conservation, management, and balanced use of America's oceans.

The United States can harness S&T advances to dramatically increase our understanding and effective management of the ocean environment. New and emerging technologies allow us to more efficiently explore and understand the ocean at a level of detail and geographic scale never before possible. For example, advances in computing, artificial intelligence, and machine learning will empower fleets of autonomous vehicles to gather extraordinary volumes of information about the ocean. This new information can improve our understanding of the countless ecosystems that support the health and productivity of the ocean and the planet, the vast array of natural resources, such as critical minerals, energy, and marine-derived pharmaceutical compounds, which will collectively enhance our prosperity, security, and health.

The Trump Administration has made partnerships in ocean S&T a priority. President Trump signed [Executive Order 13840, titled "Ocean Policy to Advance the Economic, Security, and Environmental Interests of the United States,"](#) on June 19, 2018, to coordinate Federal actions related to ocean issues. The Executive Order established a high-level interagency Ocean Policy Committee (OPC) and directed it, in part, to engage and collaborate with the ocean community to identify priority ocean research and technology needs, and leverage resources and expertise to maximize the effectiveness of Federal investments in ocean research.

Also in 2018, the Trump Administration issued [Science and Technology for America's Oceans: A Decadal Vision](#), which identified five goals to advance U.S. ocean S&T in the coming decade, including: (1) understand the ocean in the earth system; (2) promote economic prosperity; (3) ensure maritime security; (4) safeguard human health; and (5) develop resilient coastal communities. The *Decadal Vision* also described areas of immediate ocean research and technology opportunities, including (1) fully integrating Big Data approaches in Earth system science; (2) advancing monitoring and predictive modeling capabilities; (3) improving data integration in decision-support tools; (4) supporting ocean exploration and characterization; and (5) supporting ongoing research and technology partnerships.

Building on the Executive Order and the *Decadal Vision*, the *Ocean S&T Summit* engaged a cross-section of the U.S. ocean community to discuss how to elevate, empower, and transform how we work together to build and sustain partnerships, and to lay the foundation for a broadly defined but common direction to advance marine science, promote new technologies, and explore the unknown ocean.

Following the *Ocean S&T Summit*, on November 19, 2019, President Trump issued a [Presidential Memorandum titled, "Ocean Mapping of the United States Exclusive Economic Zone and the Shoreline and Nearshore of Alaska."](#) It directs Federal agencies to develop a national strategy to map the United States Exclusive Economic Zone (EEZ) and a strategy to map the Alaskan coastline to advance our understanding of our oceans and coastlines and to promote efficient permitting related to ocean exploration activities. The Presidential Memorandum will drive innovation, transforming cross-sector

partnerships between philanthropy, the private sector, academia, and the Federal government to advance marine science, promote new technologies and explore the unknown ocean.

Event Summary

The *Ocean S&T Summit* began with opening remarks from CEQ Chairman Mary Neumayr, who highlighted the importance of partnerships in the ocean S&T enterprise to the economic, security, and environmental interests of the United States. Chairman Neumayr also addressed the importance of exploring and increasing our understanding of the ocean, as well as engaging with members of Congress, conservation organizations, the private sector, and other nations to address the global challenge of marine debris.

OSTP Director Dr. Kelvin Droegemeier, described the Trump Administration's commitment to unleashing innovation and the importance of partnerships. Dr. Droegemeier also emphasized the value of a sustained commitment to collaboration in ocean S&T, and of ensuring that the discussion continues around the country following the *Ocean S&T Summit*.

The Assistant to the President and Director of the Domestic Policy Council, Joseph Grogan, spoke about environmental accomplishments under the Trump Administration and the President's forward-looking oceans agenda, and emphasized the Administration's support for partnerships in ocean S&T.

Dr. France Córdova, Director of the National Science Foundation, moderated a panel discussion with philanthropic, academic, private sector, and government leaders. The panel addressed characteristics of successful partnerships, challenges to partnerships and how they can be addressed, and recommendations for how the Federal government can help build and sustain cross-sector partnerships in the future.

Attendees participated in breakout sessions and a closing plenary discussion moderated by key leaders across all partnership sectors, which identified opportunities for partnerships in ocean S&T that can advance our knowledge and ability to address specific ocean-related issues. Discussion topics and U.S. government moderators included:

- **Exploring the Ocean:** retired Navy Rear Adm. Tim Gallaudet, PhD., Assistant Secretary of Commerce for Oceans and Atmosphere and Deputy Administrator, National Oceanic and Atmospheric Administration;
- **Conserving Living Marine Resources:** Dr. Stuart Levenbach, Chief of Staff, National Oceanic and Atmospheric Administration;
- **Protecting Coastal Health and Safety:** Nicole LeBoeuf, Acting Assistant Administrator for Ocean Services and Coastal Zone Management, National Oceanic and Atmospheric Administration;
- **Sustaining Ocean Observations:** Dr. Tom Drake, Head, Ocean Battlespace and Expeditionary Access Department, Office of Naval Research, Department of Defense;
- **Promoting Food Security:** Chris Oliver, Assistant Administrator for Fisheries, National Oceanic and Atmospheric Administration;
- **Enabling Ocean Energy:** Daniel Simmons, Assistant Secretary for Energy Efficiency and Renewable Energy, U.S. Department of Energy;
- **Characterizing Ocean Life:** Dr. Paula Bontempi, Acting Deputy Director, Earth Science Division, National Atmospheric and Space Administration; and

- **Leveraging Big Data:** Dr. Erwin Gianchandani, Deputy Assistant Director for Computer and Information Science and Engineering, National Science Foundation.

In addition to senior staff from the White House, Federal government participants included representatives of the OPC, including the Departments of Agriculture, Commerce, Defense, Energy, Interior, Justice, State, Transportation, as well as the Environmental Protection Agency, National Aeronautics and Space Administration, National Oceanic and Atmospheric Administration, National Science Foundation, the Bureau of Ocean Energy Management, the U.S. Geological Survey, the Army Corps of Engineers, and U.S. Coast Guard. The breadth of representation from senior officials across the Federal government illustrates the commitment of the Trump Administration to building partnerships in ocean S&T that advance the economic, security, and environmental interests of all Americans.

Key Takeaways from the Ocean S&T Summit

- **The U.S. is poised to lead a new era of bold innovation in ocean S&T** — Attendees discussed the importance of partnerships in ocean S&T to U.S. economic, security, and environmental interests, and of ensuring continued U.S. global leadership. Participants recognized that the visibility of ocean issues has significantly increased, and with that, the opportunity to leverage social and institutional support for a collaborative ocean S&T enterprise. Additional discussion focused on the importance of an ocean-literate workforce, the economic opportunity of exploration and discovery, and communicating the value of ocean S&T to the public and policy-makers.
- **Partnerships across academia, philanthropy, the private sector, and government are essential to advancing ocean S&T** — Leaders in these fields addressed how partnerships can align the strengths of their respective organizations to achieve results that cannot be accomplished individually. To do so, partners require a clear understanding of each other's interests and capacities. The breakout sessions provided opportunities for individuals representing a broad cross-section of the U.S. ocean community to explore strategies and considerations for building partnerships in the context of specific ocean S&T topics. Attendees also discussed potential new partnership models, the value of prompt action, and the importance of government policy and regulation that supports a partnership-focused approach to ocean S&T.
- **A collaborative and dynamic strategy for partnerships in ocean S&T will coordinate, focus, and catalyze a national effort** — Successful partnerships rely on alignment of priorities to leverage resources, including expertise, technologies, and funding. Participants discussed the value of a community-wide effort to address common goals and key lines of effort for partnerships in ocean S&T. For example, the *Decadal Vision* identifies goals and priorities that could inform ocean S&T partnerships. Attendees also recognized the value of enhancing and supporting existing partnership mechanisms, like the National Oceanographic Partnership Program (NOPP), that already bring together government, industry, academia, and philanthropic organizations to advance ocean science research and education.

Next Steps and Conclusion

Innovative and collaborative advancements in ocean S&T will promote American security and prosperity while conserving the marine environment for present and future generations. Doing so will require investments in and coordination of ocean S&T across all levels of government, private sector, academia, and philanthropic organizations moving forward.

The *Ocean S&T Summit* engaged a cross-section of the ocean community to begin an important conversation, but it is critical that stakeholders from all regions of the country have an opportunity to participate in this important discussion.

Therefore, follow-up sessions will be held in various locations throughout the country at academic conferences and regional ocean S&T centers. The first session will take place in San Francisco on December 12, 2019, at the American Geophysical Union's annual meeting; further details on this session and other locations will be provided in the coming weeks.

At the conclusion of these regional sessions, a proceedings report will be developed that will present the results of the community discussion and that will inform how all of us, across the ocean community, can collaborate to advance the ocean S&T enterprise.