

National Oceanic and Atmospheric Administration

# Policy Drivers for NOAA's International Activities

Office of General Counsel  
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## **Policy Drivers for NOAA International Activities**

The *Policy Drivers for NOAA's International Activities* identify the directives and planning documents for the implementation of various NOAA's mission and goals. The digest has three subdivisions.

The first subdivision contains documents issued by the President that guide and focus on the achievement of specific aspects of NOAA's mission while directing the Agency's attention and resources towards the accomplishment of specific administration policy or global commitments. They include Executive Orders, Presidential Decision Directives, and focused Executive Office strategic planning tools.

The second subdivision contains brief descriptions of Department of Commerce and NOAA-wide strategic planning documents. A strategic plan typically touches upon the current state of an organization's efforts and accomplishments and clarifies the organization's mission. It then sets a course of action for the future and describes, with some specificity, how the Agency intends to achieve its goals. As with the Executive Office documents, the documents within this subdivision also bear on NOAA's international activities.

The final subdivision contains descriptions of NOAA Line Office strategic plans that translate legislative mandates and policy directives into a path forward to measurable success. These plans are continually subject to revision, making this digest likewise subject to periodic update. A number of the plans identify a period of years in which the plan is expected to apply, providing an estimate of the time by which revised plan will be necessary. In some instances, the termination date may have already passed. However, those plans may continue in effect, and continue to provide the line office with overall mission guidance until superseded by a final version of a revised plan. They are, for that reason, retained as being applicable or helpful background information.

## **I. Presidential Policy Drivers**

A. **National Historical Preservation Orders.** The following presidential documents relate to the protection of historic properties and the cultural environment:

- 1) **[Executive Order 11593, Protection and Enhancement of the Cultural Environment, 36 FR 8921 \(May 13, 1971\).](#)** Pursuant to the National Historic Preservation Act of 1966 (NHPA) and other relevant statutes, this Executive Order directs federal agencies to: (1) administer the cultural properties under their control in a spirit of stewardship and trusteeship for future generations; (2) initiate measures necessary to direct their policies, plans, and programs in such a way that federally owned sites, structures, and, objects of historical, architectural, or archaeological significance are preserved, restored, and maintained for the inspiration and benefit of the people; and (3), in consultation with the Advisory Council on Historic Preservation (16 U.S.C. 470i), to institute procedures to insure that federal plans and programs contribute to the preservation and enhancement of non-federally owned sites, structures, and objects of historical, architectural, or archaeological significance.

Following issuance of this Executive Order, Section 110 was added to NHPA. Section 110, as amended in 1992, imposes a broad range of responsibilities on federal agencies. It calls for federal agencies to establish preservation programs that are commensurate with their mission and the effects of their activities on historic properties, and that provide for the careful consideration of historic properties. Section 110 also requires each federal agency to designate a qualified Federal Preservation Officer (FPO) to coordinate the agency's historic preservation activities.

- 2) **[Executive Order 13287, Preserve America, 68 FR 10635 \(March 3, 2003\).](#)** This Executive Order directs federal agencies to maximize efforts to integrate the policies, procedures, and practices of the NHPA into their program activities to efficiently and effectively advance historic preservation objectives in the pursuit of their missions. It also directs the Secretary of Commerce, working with other agencies, to assist states, Indian tribes, and local communities in promoting the use of historic properties for heritage tourism and related economic development in a manner that contributes to the long-term preservation and productive use of those properties.

- B. [Executive Order 12088, Federal Compliance with Pollution Control Standards, 43 FR 47707 \(October 13, 1978\)](#). This Executive Order calls upon the head of each executive agency to ensure that all actions are taken for the prevention, control, and abatement of environmental pollution with respect to federal facilities and activities under that agency's control. Each executive agency shall cooperate and consult with the Administrator of EPA, who shall provide technical advice and conduct such reviews and inspections as may be necessary to monitor compliance and resolve any conflicts regarding any violation. The head of any executive agency that is responsible for the construction or operation of federal facilities outside the United States shall ensure that such construction or operation complies with the environmental pollution control standards of the host country or jurisdiction. This Executive Order was amended by [Executive Order 13148, 65 FR 24604 \(April 26, 2000\)](#), which removed provisions that required each executive agency to prepare and submit to OMB an annual plan for the control of environmental pollution.
- C. [Executive Order 12114, Environmental Effects Abroad of Major Federal Actions, 44 FR 1957 \(January 4, 1979\)](#). This Executive Order directs federal agencies to establish environmental impact review procedures in the following categories of actions:
- Major federal actions significantly affecting the environment of the global commons outside the exclusive jurisdiction of any nation (e.g., the oceans, the atmosphere, the deep seabed, or Antarctica);
  - Major federal actions significantly affecting the environment of a foreign nation not participating with the United States and not otherwise involved in the action;
  - All other major federal actions significantly affecting the environment of a foreign nation, including, but not limited to, those that provide to that nation with: (a) a product, emission, or effluent that is prohibited or strictly regulated in the United States because of its toxic effects on the environment; or (b) a physical project that is prohibited or strictly regulated in the United States to protect the environment against radioactive substances; and
  - Major federal actions beyond the United States Exclusive Economic Zone (EEZ), the United States continental shelf, and beyond United States territories and possessions that significantly affect natural or ecological resources of global importance designated for protection by the President or under international agreements binding on the United States.

Certain activities having environmental impacts outside the United States require special efforts because of their international environmental significance. These include activities that:

- May threaten natural or ecological resources of global importance or that threaten the survival of any species;
- May have a significant impact on any historic, cultural, or national heritage or resource of global importance; or
- May involve environmental obligations set forth in an international treaty, convention, or agreement to which the United States is a party.

D. [\*\*Executive Order 13084, Consultation and Coordination with Indian Tribal Governments \(May 14, 1998\) 63 FR 27655 \(May 19, 1998\)\*\*](#). As domestic dependent nations, Indian tribes exercise inherent sovereign powers over their members and territory. Federal agencies, in formulating policies significantly affecting Indian tribal governments, shall be guided by principles of respect for tribal self-government and sovereignty. Each agency shall have an effective process that permit tribal governments to provide meaningful and timely input to the development of regulatory policies significantly affecting their communities. Agencies shall review the processes under which tribal governments can apply for waivers of statutory and regulatory requirements and take steps to streamline those processes. On issues relating to tribal self-government, trust resources, or treaty and other rights, each agency should explore the use of consensual mechanism for developing regulations, including negotiated rulemaking.

E. [\*\*Executive Order 13089, Coral Reef Protection, \(June 11, 1998\) 63 FR 32701 \(June 16, 1998\)\*\*](#). This Executive Order instructs all federal agencies whose actions may affect United States coral reef ecosystems to utilize their authorities to protect and enhance the conditions of such ecosystems and, to the extent permitted by law, ensure that any actions they authorize, fund, or carry out will not degrade the condition of such ecosystems. The Secretary of State, in cooperation with other members of the Coral Reef Task Force (which includes the NOAA Administrator), must assess the United States' role in international trade and protection of coral reef species and implement appropriate strategies and action in cooperation with other nations to promote conservation and sustainable use of coral reef resources worldwide.

F. [\*\*Executive Order 13112, Invasive Species, \(February 3, 1999\), 64 FR 6183 \(February 8, 1999\)\*\*](#). This Executive Order gives direction to federal agencies whose actions may affect invasive species. It also created the National Invasive Species Council and the Invasive Species Advisory Committee, which work together with stakeholders, concerned members of the public, and member departments to address invasive species. The Council

includes the Secretary of Commerce who serves as Co-Chair. The Council is directed, among other things, to develop recommendations for international cooperation in addressing invasive species. The Advisory Committee is a group of non-federal experts and stakeholders. They assist the Council in formulating a Management Plan for the nation. If recommended measures are not authorized by current law, the Council shall develop and recommend to the President through its Co-Chairs legislative proposals for necessary changes in authority.

- G. [Executive Order 13158, Marine Protected Areas, \(May 26, 2000\), 65 FR 34909, \(May 31, 2000\)](#). This Executive Order helps protect natural and cultural resources within the marine environment by strengthening the system of marine protected areas (MPAs). Among other mandates, the Executive Order directs federal agencies whose authorities provide for the establishment or management of MPAs to take action to enhance or expand protection of existing MPAs and establish or recommend new MPAs. These initiatives and actions undertaken must be consistent with international law.
- H. [Executive Order 13186, Responsibilities of Federal Agencies to Protect Migratory Birds \(January 10, 2001\), 66 FR 3853-3856 \(January 17, 2001\)](#). The United States has recognized the importance of migratory birds as a shared resource by ratifying international bilateral conventions with Great Britain/Canada, Mexico, Japan, and Russia. This Executive Order directs each federal agency that takes or is likely to take actions affecting migratory bird populations to develop and implement an MOU with the Fish and Wildlife Service that promotes the conservation of migratory bird populations. Among other things, the MOU shall promote bird conservation in international activities with other countries and international partners, in consultation with the Department of State. The Order calls for the creation of the Interagency Council for the Conservation of Migratory Birds to oversee implementation of the Order, to share the latest resource information, to develop an annual report of accomplishments and recommendations, and to foster partnerships. The Council shall include representation at the bureau director/administrator level from various departments, including the Department of Commerce.
- K. [Executive Order 13677, Climate-Resilient International Development \(September 23, 2014\), 79 FR 58229 \(Sept. 26, 2014\)](#). This [Executive Order](#) requires the integration of climate-resilience considerations into all United States international development work. United States agencies with direct international development programs and investments, which includes USAID and State Department, shall work together with agencies that participate in multilateral entities and with science and security agencies (the latter

specifically includes NOAA) shall work together through a Working Group on Climate-Resilient International Development. This Working Group identifies and develops data, decision-support tools and information to allow screening for and incorporation of considerations of climate change risks and vulnerabilities in strategies, plans, programs, projects, investments and related funding decisions, including managing overseas facilities. They shall also coordinate efforts to deliver information on climate change impacts and make data, tools, and information available to decision-makers in other countries to build their capacity as information providers and users. The Working Group is to be part of the Council on Climate Preparedness and Resilience, established under [Executive Order No. 13653](#) (Nov. 1, 2013), which develops, implements, and updates comprehensive Agency Adaptation Plans that integrate consideration of climate change into agency operations and overall mission objectives. However, [EO 13653](#) was revoked by EO 13783 [Promoting Energy Independence and Economic Growth, \(March 28, 2017\)](#) published in [82 FR 16093 \(March 31, 2017\)](#). See also [GAO Report to Congress CLIMATE CHANGE Activities of Selected Agencies to Address Potential Impact on Global Migration \(January 2019\)](#).

L. [Executive Order 13689, Enhancing Coordination of National Efforts in the Arctic, \(January 21, 2015\)](#) published in [80 FR 4189-4194 \(January 26, 2015\)](#).

This Executive Order established the Arctic Executive Steering Committee that provides guidance to executive agencies and departments and enhances coordination of federal Arctic policies across agencies and offices. Membership includes the heads or designees from the Office of Science and Technology Policy, the Council on Environmental Quality, the Domestic Policy Council, and the National Security Council, in addition to the Deputy Secretary or equivalent officer from various departments, including the Department of Commerce. The Steering Committee shall provide guidance and coordinate efforts to implement the priorities, objectives, activities, and responsibilities identified in National Security Presidential Directive 66/Homeland Security Presidential Directive 25, Arctic Region Policy (see below). It shall provide guidance on prioritizing federal activities, consistent with agency authorities, while the United States is chair of the Arctic Council, and it shall establish a working group to identify potential areas of overlap between and within agencies with respect to Arctic policy and strategic priorities. [NOAA Administrative Order 216-120](#) Operation of NOAA Arctic Program (Dec. 28, 2016) references EO 13689 as well as NOAA's 2014 Arctic Action Plan and NOAA's 2011 Arctic Vision and Strategy document set out below.

M. [Executive Order 7521, Use of Vessels for Ice-Breaking Operations in Channels and Harbors, 1 FR 2527 \(December 21, 1936\)](#). This Executive Order directs the Coast Guard to assist in keeping channels and harbors open to navigation through ice-breaking operations, in accordance with the reasonable demands of commerce. The Secretary of Commerce is directed to cooperate

with the Coast Guard in such ice-breaking operations, and to furnish, upon request, such vessels as are available and, in the opinion of the Commandant, are suitable for such service. On January 7, 2019, the Coast Guard issued a [bulletin](#) that it was commencing Operation Taconite, the Coast Guard's largest ice-breaking operation in response to ice growth in the commercial ports of Western Lake Superior and the St. Mary's River. EO 7521 was identified as authority in the bulletin.

- N. [United States Antarctic Policy Directives](#). The following presidential documents relate to the United States Antarctic policy and program:
- 1) [National Security Decision Memorandum 71 \(NSDM 71\), United States Antarctic Policy and Program \(July 10, 1970\)](#). This Memorandum reflects the decision of President Nixon that the Antarctic program should continue at a level that maintains an active and influential United States presence in Antarctica and is responsive to United States' scientific, economic and political objectives. The Memorandum directs the orderly transfer of the program from the Department of Defense to the National Science Foundation (NSF), and directs the NSF to continue to fund university research and federal agency programs related to Antarctica and draw upon the logistic support capabilities of government agencies on a reimbursement or non-reimbursement basis.
  - 2) [National Security Decision Memorandum 318 \(Feb. 25, 1976\)](#) reaffirms NSDM 71 and the importance of maintaining an active and influential United States presence in Antarctica and directs the NSF to continue to fund university research and federal agency programs and draw upon logistic support capabilities of government agencies. The use of logistic support by the Department of Defense, assisted by the Coast Guard, gives the United States important flexibility and reach to operate in that area.
  - 3) [Presidential Memorandum 6646, United States Antarctic Policy and Programs \(Feb. 5, 1982\)](#) states that the United States Antarctic Program shall be maintained at a level that provides an active and influential presence to support the range of United States Antarctic interests. That presence shall include the conduct of scientific activities in major disciplines, year-round occupation of the South Pole and two coastal stations, and availability of necessary logistics support. The NSF shall continue to fund university research and federal agency programs and draw upon the logistics support capabilities of government agencies. However, other agencies may fund and undertake directed short-term programs of scientific activity upon the recommendation of the Antarctic



Policy Group. Such activities should be coordinated within the framework of NSF support.

- 4) [Presidential Decision Directive/National Security Directive PDD/NSC-26, U.S. Antarctica Policy \(March 9, 1996\): Funding of the US Antarctic Program, including South Pole Station.](#) The Directive notes the important foreign policy and national security interests the United States has in Antarctica. They are expressed in the Antarctic Treaty of 1959, such as the freedom of scientific research and prohibiting military and nuclear activities. It notes that the Treaty and program have helped prevent the spread of regional conflicts such as the Beagle Channel or the Falklands war. It then highlights the importance of a year-round presence in Antarctica, particularly at the station for scientific research and protecting the environment and conserving Antarctic resources. It recognizes that there are budget constraints but then highlights that it is essential that the United States continues to maintain an active and influential presence in Antarctica, particularly through the year-round operation of South Pole Station for scientific research, environmental protection and conservation of Antarctic resources. The United States presence at South Pole Station demonstrates its commitment to assert its rights in Antarctica, its basis of claim, and conduct cutting-edge scientific research there.
- O. [United States Arctic Policy Directives.](#) The following presidential documents relate to the United States Arctic policy and program:
- 1) [National Security Decision Memorandum 144, United States Arctic Policy and Arctic Policy Group \(December 22, 1971\)](#) This memorandum provides for the support of sound and rational policy development in the Arctic and calls for mutually beneficial international cooperation. The Memo also provides essential security interests in the Arctic and preserves the principle of freedom of the seas. It establishes the Interagency Arctic Policy Group, which includes the Secretary of Commerce, to oversee implementation of United States Arctic Policy, and it approves the development of a coordinated plan for scientific research, including cooperative projects with the eight Arctic states and other nations.
  - 2) [National Security Presidential Directive/Homeland Security Presidential Directive NSPD-66/HSPD-25, Arctic Region Policy \(Jan. 9, 2009\)](#) This directive establishes United States policy with respect to the Arctic region. It provides, *inter alia*, that United States policy protects the Arctic environment and conserves its biological resources, ensuring that natural resource management and economic development in the region are environmentally sustainable, and strengthens institutions for cooperation among the eight Arctic nations. It identifies the Department

of Commerce as one of the several federal agencies directed to cooperate with other nations to respond effectively to increased pollutants and other environmental challenges; to identify ways to conserve, protect, and sustainably manage Arctic species; and ensure adequate enforcement presence to safeguard living marine resources.

- 3) [Interagency Arctic Research Plan 2017-2021 \(December 2016\)](#) This five-year plan by the Interagency Arctic Research Policy Committee (IARPC) builds on the previous five-year Arctic research plan [National Science and Technology Council, Arctic Research Plan: FY 2013-2017 \(February 2013\)](#). Over the next five years, it will guide the IARPC implementation in collaboration with Federal and non-Federal stakeholders. The IARPC was established under the [Arctic Research Policy Act of 1984](#). The IARPC plays a crucial role in advancing scientific knowledge and understanding of the changing Arctic and its regional and global impacts. Comprising 14 Federal agencies, offices, and departments, the IARPC is responsible for developing and implementing 5-year Arctic Research Plans in consultation with the [U.S. Arctic Research Commission](#), the Governor of the State of Alaska, residents of the Arctic, the private sector, and public interest groups. Many of the joint research successes are documented in IARPC [annual reports](#) and the [2015 Biennial Report](#). Some highlights include:

- The establishment of the Distributed Biological Observatory to detect biophysical responses to climate change in the Pacific Arctic, from the northern Bering Sea through the Chukchi Sea to the eastern Beaufort Sea.
- Deployment of advanced sensors and platforms (unmanned aerial systems, unmanned underwater vehicles supported by acoustic communications and navigation) to gain new insights into ocean surface wave-ice interactions and feedbacks in the marginal ice zone of the Arctic Ocean pack ice.
- The establishment of the Sea Ice Prediction Network, who investigates the predictability of sea ice and explores methods to improve sea ice predictions.
- Automated atmospheric data discovery through the adoption of common metadata standards by the International Arctic Systems for Observing the Atmosphere consortium of 10 observatories distributed around the Arctic.

[\(White House Blog on the Updated Plan Outlines Arctic Research Goals Dec, 15, 2016\)](#) by Martin Jeffries, Assistant Director for Polar Sciences and Executive Director of IARPC in the White House Office of Science and Technology Policy; Sandy Starkweather, Program Manager with the Arctic Research Program in the NOAA Climate Program Office and Simon Stephenson is Head of the Arctic Sciences Section in the Division of Polar Programs, National Science Foundation).

- 4) [National Strategy for the Arctic Region \(May 2013\)](#) This document sets forth United States strategic priorities for the Arctic Region as it endeavors to respond to challenges and emerging opportunities arising from increases in Arctic activity due to diminishing sea ice. The strategy builds on three lines of effort. First, it advances U.S. security interests; not only national defense but supporting lawful commerce and international legal principles of freedom of navigation, supporting scientific operations, and achieving greater awareness of activity in the region. Second, it pursues responsible Arctic region stewardship to protect the environment and conserve its resources and establishes an Arctic management framework. Third, it strengthens international cooperation through bilateral relationships and multilateral bodies, while pursuing arrangements that advance collective interests and working toward accession of the Law of the Sea Convention.

In January 2014, the White House issued the [Implementation Plan for the National Strategy for the Arctic Region](#) The plan outlines the methodology, process, and approach for executing the strategy. This Plan complements and expands existing initiatives by federal, state, local, and tribal authorities, the private sector, and international partners, while focusing efforts where opportunities exist, and action is most needed. It reflects the reality of a changing Arctic environment; supports our national interests in safety, security and environmental protection; and works with international partners to pursue global objectives in addressing climate change.

- P. [Presidential Decision Directive/NSC-19, Environmental Policy on the Multilateral Development Banks and the Global Environment Facility \(January 5, 1994\)](#) This Directive provides for the implementation of United States environmental policy related to the multilateral development banks (MDBs) and the Global Environment Facility (GEF). The GEF is the largest public funder of projects to improve the global environment. As an independently operating financial organization, the GEF provides grants for projects related to biodiversity, climate change, international waters, land degradation, the ozone layer, and persistent organic pollutants. The GEF is critical to United States' efforts to address threats to the global environment, including global warming, loss of biodiversity, and pollution of international waters. The goals identified in this directive are intended to ensure that the development agenda of the MDBs is both environmentally sustainable and socially equitable, and that the GEF is an effective vehicle for funding projects that achieve global environmental benefits. The directive identifies specific objectives with respect to both the MDBs and the GEF to ensure a focused agenda and to promote United States leadership.

- Q. [Presidential Review Directive/NSC-43, U.S. Environmental Policy in Latin America and the Caribbean \(March 23, 1994\)](#) This Directive defines United States objectives regarding environmental protection in Latin America and the Caribbean and develops a strategy to achieve those objectives. These issues are addressed on a regional basis (there are six regions), rather than a nation-by-nation basis, meaning that the United States addresses key environmental issues categorized in four broad subjects: (1) financial resources; (2) multilateral commitments; (3) capacity building; and (4) trade and development. An interagency working group—coordinated by the State Department, chaired by the Bureau of Inter-American Affairs and co-chaired by the Office of Oceans and International Environmental and Scientific Affairs at the State Department—will prepare this review.
- R. [Presidential Decision Directive/NSC-28, U.S. Policy Toward Latin America and the Caribbean \(September 8, 1994\)](#) This Directive outlines a long-term strategy for Latin America and the Caribbean to foster a hemisphere of democratic nations with capable and efficient governments, vibrant societies, dynamic economies that provide rising living standards, and export market expansion for United States products. The United States, *inter alia*, will seek to advance its global environmental agenda with nations in the hemisphere by convincing those countries of the importance of joining Biodiversity, Ozone Protection, and Global Climate Conventions. Trade and investment agreements should be predicated on the principle of sustainable development. The United States will work with governments in the region to increase their institutional capacity to manage environmental problems and promote sustainable development policies, as well as support sustainable development programs. The implementation of these policy decisions should be reviewed periodically in Interagency Working Group meetings.
- S. [Presidential Decision Directive/NSC-36, United States Policy on Protecting the Ocean Environment \(April 5, 1995\)](#) This Directive directs the implementation of United States policy for protecting the ocean and coastal environment and conserving living marine resources. The United States has five principal objectives in this area: (1) becoming a party to U.N. Convention on the Law of the Sea; (2) ensuring sustainable management of ocean fisheries; (3) supporting integrated coastal resource management and reducing marine and coastal pollution; (4) promoting the conservation of marine biodiversity, including whales and other protected species; and (5) conducting scientific research and ocean monitoring, both to support these objectives and to more fully understand oceanic and atmospheric processes of global importance.
- T. [National Security Presidential Directive NSPD-41/Homeland Security Presidential Directive HSPD-13, Maritime Security Policy \(December 21,](#)

[2004](#)) This Directive addresses all areas and objects of, on, under, relating to, adjacent to, or bordering on a sea, ocean, or other navigable waterway, including all maritime-related activities, infrastructure, people, cargo, and vessels and other conveyances. The Maritime Domain facilitates a unique freedom of movement and flow of goods while allowing people, cargo, and conveyances to transit with anonymity not generally available by movement over land or by air. The United States must deploy the full range of its operational assets and capabilities to prevent the Maritime Domain from being used to commit acts hostile to the United States, while recognizing that maritime security policies are most effective when the strategic importance of international trade, economic cooperation, and the free flow of commerce are considered. This Directive establishes a Maritime Security Policy Coordinating Committee, which includes the Secretary of Commerce, to oversee the development of a National Strategy for Maritime Security and eight supporting implementation plans; including one to provide a framework to coordinate initiatives undertaken with foreign governments and international organizations and to develop international support for an improved global maritime security framework. In addition, the Directive calls for a Maritime Commerce Security plan to define supply-chain security requirements.

U. [Our Ocean 2014 \(June 16-17, 2014\)](#). In June 2014, the State Department hosted an “Our Ocean” conference, bringing together experts, practitioners, lawmakers, and members of the international ocean and foreign policy communities to offer unique perspectives and to pledge effective actions and commitments to protect “Our Ocean.” The conference produced the following two outcome documents:

- 1) [Our Ocean Action Plan](#) This document describes actions and commitments that the United States will pursue with other nations and stakeholders in the international community. Four focus areas are identified. First, “Sustainable Fisheries” describes commitments to end overfishing of marine fish stocks by 2020 and to restore overexploited, deplete, and recovering stocks. It also includes commitments to prevent illegal, unreported, and unregulated fishing. Second, “Marine Pollution” includes commitments to reduce both marine debris and nutrient pollution of the marine environment. Third, “Ocean Acidification” includes commitments to stop the increase in ocean acidification by reducing carbon emissions and to create a worldwide capability to monitor ocean acidification. Fourth, “Protect Ocean Areas” reflects commitments to create more marine protected areas and to protect coastal ecosystems that provide critical services.
- 2) [Our Ocean Initiatives](#). This 2014 DOS document reflects initiatives, commitments, and partnerships that representatives of governments, international organizations, and civil society are committed to take to address the challenges facing the oceans. The focus is on protecting

unique and valuable ocean areas, promoting sustainable fisheries, reducing marine pollution, preventing and monitoring ocean acidification, building capacity, supporting coastal communities, and mapping and understanding the ocean.

- V. [\*\*Council on Environmental Quality: Final Guidance for Federal Departments and Agencies on Consideration of Greenhouse Gas Emissions and the Effects of Climate Change in National Environmental Policy Act Reviews \(August 2016\)\*\*](#). Federal actions, including permitting and authorizations, can have the potential to contribute to climate change by producing greenhouse gas emissions. At the same time, the effects of climate change, such as rising sea level, extreme weather, and drought conditions, may impact federal actions. This guidance assists agencies in predicting and describing these environmental impacts. This will allow decision makers and the public to understand more fully the potential climate impacts of proposed federal actions and assist agencies in identifying and comparing alternatives to mitigate the impacts of climate change. The guidance also: (1) advises agencies to quantify greenhouse gas emissions whenever the necessary tools and data are available; (2) encourages agencies to draw on their experience and expertise to determine the appropriate NEPA review level (programmatic or project or site specific); (3) counsels agencies to consider alternatives that would make the action and affected communities more resilient; and (4) reminds agencies to use existing information and science when assessing proposed actions.
- W. [\*\*Executive Order 13840, Ocean Policy to Advance the Economic, Security, and Environmental Interests of the United States, \(June 19, 2018\), 83 FR 29431 – 29434\) \(June 22, 2018\)\*\*](#). This Executive Order is intended to advance the economic, security, and environmental interests of the United States through improved public access to marine data and information, efficient Federal agency coordination on ocean related matters, and engagement with marine industries, the science and technology community, and other ocean stakeholders, including Regional Ocean Partnerships. The Order creates the interagency Ocean Policy Committee, which includes the Secretary of the Interior. This Executive Order revokes and replaces [Executive Order 13547, Stewardship of the Ocean, Our Coasts, and the Great Lakes, July 19, 2010](#).
- X. [\*\*Executive Order \(EO\) 13834: Efficient Federal Operations \(May 17, 2018\), 83 FR 23771-23774 \(May 22, 2019\)\*\*](#). This [EO](#) affirms the policy of the United States that agencies meet energy and environmental performance statutory requirements in a manner that increases efficiency, optimizes performance, eliminates unnecessary use of resources, and protects the environment. In implementing this policy, federal agencies are tasked to prioritize actions that reduce waste, cut costs, enhance the resilience of Federal infrastructure and operations, and enable more effective accomplishment of its mission. The [Implementing Instructions for EO 13834](#), issued [April 2019](#), provide instructions to Federal agencies including agency planning, reporting requirements, and accountability. This EO revoked [EO 13693, Planning for Federal Sustainability in the Next Decade of March 19, 2015](#).

## **II. Department of Commerce and NOAA Policy Drivers**

- A. **[U.S. Department of Commerce, Strategic Plan 2018-2022](#)**. The Department's new Strategic Plan has five strategic goals and objectives, all of which directly involve NOAA. Under Strategic Goal 2 (Enhance Job Creation), NOAA is to support research and other work to advance marine aquaculture, ensure that fisheries are sustainable, and that United States fishermen are not disadvantaged by illegal or unregulated fishing, unfair trade practices by other nations, or deceptive labeling of seafood products. It also looks to NOAA to help increase the use of private and commercial data for weather, water, and climate enterprise, and improve flood inundation mapping to mitigate flood impacts.
- B. **[NOAA Fisheries Strategic Plan for 2019-2022](#)** This Plan sets out goals and key strategies focused on addressing our highest priorities: to amplify the economic value of fisheries and to recover and conserve protected marine species. The plan's three strategic goals reflect the vision of the Department of Commerce and NOAA to help the American economy grow and a practical approach to managing our fisheries and marine resources:
- Amplify the economic value of commercial and recreational fisheries while ensuring their sustainability.
  - Conserve and recover protected species while supporting responsible fishing and resource development.
  - Improve organizational excellence and regulatory efficiency.

Our high-priority areas of focus highlighted in this plan are to maximize the economic yield of United States fisheries, reduce bycatch and entanglement, foster United States marine aquaculture, and focus species recovery on the most at-risk ESA-listed species.

To help the Agency achieve the three strategic goals and act effectively in its priorities, the Plan identifies some of the key challenges in today's strategic landscape—which NOAA Fisheries will address by investing in the people, programs, and technology platforms that most advance our highest priorities. The Plan also reflects our continued commitment to improving our operations and streamlining our regulatory processes to execute our stewardship mission efficiently.

The Plan acknowledges that we must be willing to move in new directions, while choosing what must be phased out, to achieve these strategic goals. We will continue to address our high-priority activities, while minimizing or eliminating efforts on low-priority activities, to provide the best value to the American public. Read the [2019-2022 Strategic Plan document](#).

- C. [NOAA Education Strategic Plan, 2009-2029](#). This Strategic Plan was prepared by NOAA's Education Council, which consists of members representing all education programs across NOAA. NOAA's education mission is to advance environmental literacy and to promote a diverse workforce in ocean, coastal, Great Lakes, weather and climate sciences to encourage stewardship and increase informed decision-making for the nation. NOAA's role in science education is defined by the statutes that underlie the functioning of its various offices; such as the National Marine Fisheries Service, the National Marine Sanctuaries, the National Sea Grant College Program, the Coral Reef Conservation Program, and, most recently, the America COMPETES Act. This Act directs NOAA to actively engage the education and research communities to ensure that future ocean, coastal, and climate workforce needs are met while building a workforce that is literate in science, technology, engineering, and mathematics disciplines that are critical to maintaining America's competitiveness. The America COMPETES Act also directs NOAA to develop a 20-year strategic plan in partnership with ocean and atmospheric science and education experts and interested members of the public. The Plan is to be evaluated and updated every five years.
- D. [NOAA Strategic Plan for Deep-Sea Coral and Sponge Ecosystems: Research Management and International Cooperation, NOAA Technical Memorandum CRCP 11 \(2010\)](#). This Strategic Plan represents a concerted effort to identify exploration, research, management, and international cooperative activities that provide the information needed to implement appropriate management measures to protect and conserve deep-sea coral and sponge ecosystems. Because deep-sea coral and sponge communities occur both within and beyond national jurisdictions, effective and comprehensive research, conservation, and management measures will benefit from complementary national, regional, and global initiatives. NOAA's objectives to enhance international conservation of deep-sea coral and sponge communities include:
- Promoting international partnerships to conserve deep-sea coral and sponge ecosystems through the sustainable management of deep-sea fisheries activities impacting those resources;
  - Ensuring that international trade in deep-sea coral and sponge species, and their parts and products, is sustainable; and
  - Increasing international exploration and research of deep-sea coral and sponge ecosystems.
- E. [NOAA Ocean and Great Lakes Acidification Research Plan \(April 2010\)](#). The overarching goals of this Plan are to predict how ecosystems will respond to acidification and to provide information that resource managers can use to address acidification issues. International cooperation will be coordinated through the Integrated Marine Biogeochemistry and Ecosystem Research (IMBER) and Surface Ocean-Lower Atmosphere Study (SOLAS) Working



Group on Ocean Acidification. This joint international working group has two main goals: (1) coordinate international research efforts in ocean acidification; and (2) undertake synthesis activities in ocean acidification at the international level. Two members of the United States Interagency Working Group on Ocean Acidification are also members of the IMBER/SOLAS Working Group on Ocean Acidification and will carry out the coordination activities between the two groups.

**NOAA Next Generation Strategic Plan**. This Plan represents our assessment of the highest priority opportunities for NOAA to contribute substantially to the advancement of society. The central challenges we must face if we are to improve human welfare and sustain the ecosystems we depend on include: the availability and quality of freshwater; the exposure of people and communities to high-impact weather; stresses of urbanization of the coasts; the exploitation of ocean and coastal resources; and above all, the pervasive effects of climate change on society and the environment. These are the challenges that define NOAA's strategic goals. Through the concerted efforts of NOAA and many other organizations, we can navigate our way toward a future where people, communities, and ecosystems prosper and are resilient in the face of change.

- G. **Coral Reef Conservation Program Strategic Plan 2018** sets out long-term goals to reduce the threats to coral. There is an additional plan for international engagement: **Coral Reef Conservation Program: International Strategy, 2010-2015**. The Coral Reef Conservation Program's International Strategy is designed to bring greater focus to the Program's international activities on subjects and in regions where the Program can have the greatest impact in applying NOAA's strengths, in building partnerships, and in leveraging resources and expertise. The major focus will be to support activities related to marine protected area capacity building in four key international regions (the wider Caribbean, Micronesia, Samoa and the Southwest Pacific, and the Coral Triangle). Through this International Strategy, the Program will:
- Work with regional initiatives to build Marine Protected Area networks and strengthen local management capacity to improve and maintain the resilience of coral reef ecosystems;
  - Develop and implement tools and practices to more effectively observe, predict, communicate, and manage climate change impacts in priority international locations;
  - Strengthen local and national capacity and policy frameworks to reduce impacts of fishing on coral reef ecosystems; and
  - Strengthen policy frameworks and institutional capacities to reduce impacts to coral reef ecosystems from pollution originating in land-based activities.

- H. [Coral Reef Conservation Program: Goals and Objectives, 2010-2015](#). The decline of coral reef ecosystems has significant social, cultural, economic, and ecological impacts on people and communities in the United States and around the world. The Coral Reef Conservation Program will emphasize efforts to understand and address the top three recognized global threats to coral reef ecosystems: (a) climate change impacts, (b) fishing impacts, and (c) impacts from land-based sources of pollution. Development of these goals and objectives is but one step in a multistep process. Using this document as a keystone, the Program will be engaged in concurrent efforts to assess jurisdictional governance and capacity gaps, improve performance measures, and develop an education, outreach, and communication strategy.
- I. [NOAA's Arctic Strategy and Action Plan](#). The following two documents describe NOAA's goals with respect to the Arctic and the agency's efforts to support the *National Strategy for the Arctic Region*:
- 1) [NOAA's Arctic Vision and Strategy \(February 2011\)](#). NOAA envisions an Arctic where decisions and actions related to conservation, management, and use are based on sound science and support healthy, productive, and resilient communities and ecosystems. The Agency seeks a future where the global implications of Arctic change are better understood and predicted. NOAA will focus its efforts on the following six priority goals needed to realize this vision:
    - Ensuring that accurate, quantitative, daily forecasts to decadal predictions of sea ice are provided to support safe operations and ecosystem stewardship;
    - Strengthening foundational science to understand and detect Arctic climate and ecosystem changes;
    - Improving weather and water forecasts and warnings to ensure society can prepare for and respond appropriately to weather-related routine and extreme events;
    - Enhancing international and national partnerships to promote cooperation and sharing of data, observational platforms, and intellectual resources. Science and technology agreements and memoranda of understanding with Russia, Norway, Sweden, Finland, Canada, and Denmark support NOAA's work in these Arctic countries in areas such as weather, climate, aviation, marine observations, forecasts, ecosystem management, fisheries, and ice monitoring. NOAA must continue and expand these relationships through partnerships and formal bilateral arrangements;
    - Improving stewardship and management of ocean and coastal resources in the Arctic; and
    - Advancing resilient and healthy Arctic communities and economies.

- 2) [\*\*NOAA's Arctic Action Plan: Supporting the National Strategy for the Arctic Region \(April 2014\)\*\*](#). NOAA's Arctic Action Plan describes NOAA's many diverse efforts in the Arctic and how it implements NOAA's *Arctic Vision and Strategy* (February 2011) as well as support and harmonize with the *National Strategy for the Arctic Region* (May 2013). The Plan lays out concrete objectives in setting priorities, leveraging partnerships (including international partnerships), and building upon accomplishments. Specific actions and outcome targets for fiscal years 2014 and 2015 are described in an appendix to the Plan. The geographic scope of the Plan includes the Aleutian Islands, the Bering Sea, the Chukchi Sea, the Beaufort Sea, and vast terrestrial areas of northern and western Alaska. NOAA currently has active programs in all these Arctic geographic subareas.
- J. [\*\*Department of Commerce, Policy Memorandum, Addressing Climate Change Impacts at the Department of Commerce in Operations and Programs \(June 1, 2011\)\*\*](#). This memorandum prescribes policies and establishes responsibilities and procedures for the Department of Commerce to follow to integrate climate change adaptation planning and actions into Departmental operations, policies, and programs. It is the policy of the Department to undertake comprehensive climate change adaptation planning to ensure that the Department fulfills its mission and maintains its programs and operations in a changing climate. The Policy calls for establishment of a Coordinating Committee to develop and implement an integrated strategy for responding to climate change impacts on the Department's programs. The Coordinating Committee shall develop and publish a Department-wide Climate Adaptation Plan (CAP) and update it every five years. The CAP shall provide an analysis of the Department's vulnerability to climate change and identify priority climate change adaptation actions the Department may take to improve resilience to climate change across its programs and trust resources. Among other things, the CAP shall recognize and incorporate into the integrated strategy the Department's unique role as the primary federal source of climate science and services.
- K. [\*\*The National Global Change Research Plan 2012-2021: A Strategic Plan for the U.S. Global Change Research Program \(April 2, 2012\)\*\*](#). This plan coordinates and integrates scientific research across 13 agencies of the United States government whose missions focus, to some degree, on changes to the global environment and their implications for society. Included among the mentioned agencies is the Department of Commerce. The Plan, mandated by the Global Change Research Act of 1990 (the Act), builds around four strategic goals: (1) to advance science, (2) inform decisions, (3) conduct sustained assessments, and (4) to communicate and educate. The Plan emphasizes the importance of national and international partnerships that leverage federal investments and provide for the widest use of program

results. The Act requires that the Program (a) coordinate with other national and international organizations on global change research projects, (b) promote international access to scientific data and information, and (c) participate in international global change research by developing nations. Many United States global change observing systems benefitted greatly from international collaborations. For example, NOAA and the European Organization for the Exploitation of Meteorological Satellites have undertaken a series of satellite missions to establish a 20-year stable, highly accurate, and well-calibrated global sea level time series.

- L. [United States Coast Guard and NOAA Cooperative Maritime Strategy \(February 2013\)](#). This Strategy outlines joint objectives in the maritime domain over the next 10 years consistent with President Obama's National Ocean Policy. It outlines three strategic priorities to guide the formal partnership between the Coast Guard and NOAA:

- Promote a safe and sustainable marine environment;
- Enhance regional collaboration; and
- Foster innovation in science, technology, and youth education.

Additional factors that will help ensure long-term success include: (1) implementing the National Ocean Policy, (2) joining the Convention on the Law of the Sea, (3) establishing effective partnerships, (4) leveraging administrative and training efficiencies, and (5) planning for adaptation to the effects of climate change.

The NOAA Research Council is the corporate body responsible for developing and maintaining NOAA's R&D strategic planning documents. Links to current and past planning documents and related material are available at this [link](#), including the NOAA 20-Year Research Vision that NOAA developed its 20-Year Research Vision in 2005 following on a review and recommendations from our Science Advisory Board. The document describes the vision of NOAA at the forefront of informing decision-makers and is available for download in a [PDF format](#). The [NOAA Research Plan 2020-2016 \(DRAFT June 2019\)](#) and the previous [Research and Development at NOAA: Five-Year Research and Development Plan, 2013-2017](#).

- M. [Policy and Procedure for Compliance with the National Environmental Policy Act and Related Authorities \(Including Executive Order 12114 – Environmental Effects Abroad of Major Federal Actions\) \(January 13, 2017\)](#). NOAA Administrative Order 216-6A (NAO) establishes NOAA's policy and procedures for compliance with NEPA, Executive Order 12114, and other authorities. Under the NAO, the NOAA Administrator has delegated authority to oversee NEPA compliance to NOAA General Counsel who, in turn, may

delegate responsibilities to appropriate staff, including a NOAA NEPA Coordinator. The NAO also authorizes development of the Companion Manual to provide additional, specific policies that are intended to make the NEPA process more useful to NOAA decision makers and the public. Executive Order 12114 applies to actions or impacts that occur outside the United States, its territories, possessions, or territorial sea, which may affect resources not subject to the management authority of the United States. The Executive Order identifies several categories of major federal actions (those affecting the global commons or those affecting foreign nations under specific scenarios). The Companion Manual provides guidance on the appropriate level of environment review (an EIS, a bilateral or multilateral study, and/or a concise review of the environmental issues involved).

### **III. NOAA Line Office and Program Policy Drivers**

- A. [NOAA Fisheries, Fisheries Strategic Plan 2019-2022](#). Reflecting the vision of the Department of Commerce and NOAA to help the United States economy grow, this Strategic Plan sets out three Strategic Goals: (1) amplify the economic value of commercial and recreational fisheries while ensuring their sustainability; (2) conserve and recover protected species while supporting responsible fishing and resource development; and (3) improve organizational excellence and regulatory efficiency.

#### [NOAA Fisheries, NMFS Strategic Plan for Fisheries Research \(August 2007\)](#).

- B. [NOAA Fisheries, Office for Law Enforcement: National and Division Enforcement Priorities for 2018-2022](#). The NOAA Office for Law Enforcement (OLE) has established a 5-year priority-setting process to help accomplish our mission, guide our strategic planning, and focus the use of our enforcement assets where they are most needed. To guide this process, OLE uses NOAA's strategic plans, historical enforcement data, emerging threat information, and stakeholder input to identify areas in greatest need of enforcement effort, whether to maintain an existing level of compliance or to target areas where increased compliance may be required.
- C. [NOAA Fisheries, Office of Sustainable Fisheries, Strategic Plan, 2016-2020](#). The two overarching objectives of this Plan are sustainable, resilient fisheries and fishing communities and "operational excellence." With respect to the former objective, the goals include:
- developing and strengthening national policy and regulatory support to improve sustainability of stocks;
  - advancing and strengthening ecosystems approached to fisheries management;
  - improving fishery performance monitoring;

- improving the sustainability of Atlantic Highly Migratory Species (HMS) by, *inter alia*, supporting and participating in the International Commission for the Conservation of Atlantic Tunas (ICCAT), and supporting and advancing U.S. interests and policies at ICCAT, consistent with the Atlantic Tuna Conventions Act;
- improving consumer confidence in fishery products by advancing methods to address seafood fraud and supporting effective international management of fishery resources;
- developing and strengthening effective partnerships, including those with international fisheries organizations; and
- improving outreach and communication.

D. **[NOAA Fisheries: Marine Aquaculture Strategic Plan, FY 2016-2020](#)**. Since 2016, NOAA Fisheries has placed a new emphasis on the contribution that aquaculture can make to seafood security. This Strategic Plan was developed by the Offices of Aquaculture to support a robust marine aquaculture sector that creates jobs, provides sustainable seafood, and supports healthy oceans. The Plan advances four key goals: (1) to develop a coordinated, consistent, and efficient regulatory process for the marine aquaculture sector; (2) to encourage environmentally responsible marine aquaculture using best available science; (3) to develop technologies and provide extension services for the marine aquaculture sector in collaboration with international, industry, NGO, and academic partners; and (4) to improve public understanding of marine aquaculture by, *inter alia*, partnering with other government agencies, industry groups, and international partners to develop collaborative communications approaches.

E. **[NOAA Fisheries Strategic Science Plans](#)**. The NMFS mission—stewardship of living marine resources through science-based conservation and management and the protection and restoration of healthy ecosystems—embraces a wide range of scientific disciplines and expertise, which is reflected in our strategic plans. The NOAA Fisheries Strategic Science Plans [website](#) has Strategic Plans for each of the regional Science Centers as well as Individual Scientific Strategic Plans. See also the **[NOAA Fisheries, Office of Science and Technology: Strategic Science Plan \(April 2013\)](#)**. The Office of Science and Technology (S&T) serves as a liaison for NOAA Fisheries scientists in the regions and NOAA leadership. As NOAA moves into a more comprehensive ecosystem-based approach to managing resources, S&T is working to incorporate key ecological, climate, and social drivers in marine resources assessments—a high priority. International partnerships enhance NOAA Fisheries’ ability to achieve many of its marine resource goals. NOAA Fisheries international science activities are a critical component for providing the best available science to inform and guide the conservation of marine resources. NOAA Fisheries, *inter alia*, provides critical support for efforts to meet United States obligations to provide science

advice to Regional Fishery Management Organizations and international bodies. It supports participation in bilateral and multilateral science agreements; and it supports efforts to strengthen fishery science capacity in other countries.

F. [NOAA International Affairs Council Statement of International Goals \(November 2005\)](#). Internationally, NOAA supports and promotes policies and interests in ecosystem-based management, climate science, earth observation, water management, and weather forecasting. NOAA's strategy is to foster adherence to interagency and international environmental programs and policies consistent with the Agency's goals. NOAA works to leverage multilateral and bilateral relationships to take full advantage of the development and use of research, observations, environmental science, and ecosystem management. This statement identifies three sets of NOAA goals: (1) overarching goals for international engagement; (2) international goals attendant to NOAA mission goals; and (3) international goals attendant to cross-cutting priorities.

G. [National Ocean Service Priorities 5 year Roadmap \[2017-2021\] \(Oct 2016\)](#)  
The NOS Roadmap guides NOS's priorities over the next three to five years. The Roadmap includes integrated outcomes and strategies. NOS Offices are developing cross office annual actions that support the Roadmap outcomes and strategies therefore they are no longer part of the Roadmap document. These actions are closely tied to the program's yearly execution and aligned with the NOS Annual Operating Plan. This roadmap identifies three priorities:

(1) Coastal Resilience – Resilience requires a well-thought-out process of threat and vulnerability identification, planning, response actions, recovery plans and actions, and continuous adaptation. Resilience also relies on accurate foundational data,

(2) Coastal Intelligence – Coastal Intelligence provides timely, actionable information developed from reliable and authoritative science to provide insight into present and future conditions. The maritime community relies on coastal intelligence for a range of decisions, from how much cargo to load choosing the most efficient and safest route between two points.

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(3) Place-Based Conservation – Involves expanding protection at special and valuable places; raising awareness of the value of special places and the importance of stewardship; assessing and prioritizing critical problems confronting special places; implementing better measures to address threats to special places; and assessing the social, economic, and cultural values that are derived from special places and factor them into their management. This plan builds upon the previous plan. [National Ocean Service, Strategic Plan of the National Ocean Service, 2005-2010](#).

H. .

- I. [NOAA/NOS's Office of National Marine Sanctuary System, Our Vision for America's Treasured Ocean Places \(2017-2022\) \(September 2017\)](#). This Plan sets a five-year course for managing some of our nation's most amazing ocean and Great Lakes areas. Charged with caring for more than 600,000 square miles, we have multiple responsibilities, finite resources, and increasing needs. And we are growing; as communities around the country recommend new areas for protection, we are responding. There are 5 Goals.

GOAL 1 ENSURE THRIVING SANCTUARIES AND OTHER OCEAN PARKS.

OBJECTIVE 1.1: Reduce threats to key species and marine habitats.

OBJECTIVE 1.2: Protect significant maritime heritage resources.

OBJECTIVE 1.3: Promote responsible human uses.

OBJECTIVE 1.4: Promote resilience and adaptation.

GOAL 2 SAFEGUARD MORE UNDERWATER TREASURES AS NATIONAL MARINE SANCTUARIES.

OBJECTIVE 2.1: Incorporate additional nationally significant resources into existing sanctuaries.

OBJECTIVE 2.2: Implement designation processes for new areas.

OBJECTIVE 2.3: Identify additional resources of national significance.

GOAL 3 INCREASE SUPPORT FOR SANCTUARIES.

OBJECTIVE 3.1: Expand recognition of national marine sanctuaries.

OBJECTIVE 3.2: Increase sanctuary engagement.

OBJECTIVE 3.3: Create a vision for the next 50 years of sanctuaries.

GOAL 4 DEEPEN OUR UNDERSTANDING OF SANCTUARIES.

OBJECTIVE 4.1: Learn more about our sanctuaries.

OBJECTIVE 4.2: Track and predict conditions and trends.

OBJECTIVE 4.3: Understand the value of sanctuaries to our nation.

GOAL 5 ENSURE THE OFFICE OF NATIONAL MARINE SANCTUARIES IS A GREAT PLACE TO WORK.

OBJECTIVE 5.1: Encourage a culture of collaboration, inclusion and respect.

OBJECTIVE 5.2: Increase staff satisfaction and performance.

OBJECTIVE 5.3: Invest in our people and their professional development.

It builds upon the previous 5 year plan: [National Ocean Service, Our National Marine Sanctuaries, Strategic Plan 2005-2015 \(April 2005\)](#)

- J. [National Ocean Service, Our National Marine Sanctuaries, International Program: Action Plan, Protocols and Programs \(August 2006\)](#). This international action plan has been prepared by the Sanctuary Program to describe how it will fulfill a legislative directive: "to cooperate with global



programs encouraging conservation of marine resources.” The plan also helps the program achieve its strategic goals, objectives, and performance measures for international activities. The primary goal for international activities, as stated in the National Marine Sanctuaries Program Strategic Plan (NMSP Strategic Plan), is Goal 6: “work with the international community to strengthen global protection of marine resources, investigate and employ appropriate new management approaches, and disseminate NMSP experience and techniques.” The following strategies and activities are needed to attain the goals of the NMSP Strategic Plan:

- Build a structure for the NMSP International Program;
- Build operational and technical capacity and experience within NMSP based on international exchanges and experience;
- Identify and maximize use of legal and other international mechanisms to help protect sanctuary resources;
- Improve the ability of the NMSP to exchange expertise and services to facilitate the design, designation, implementation, and management of marine protected areas, including research and education activities; and
- Develop a long-term international strategy for NMSP engagement in international activities.

K. [National Ocean Service, Office of Ocean and Coastal Resource Management: Strategic Plan, 2007-2012](#). The mission, vision, goals, objectives, and strategies outlined in this Plan were established to highlight Ocean and Coastal Resource Management’s (OCRM) cross-program priorities and to facilitate cooperative support of OCRM partners. The Plan bridges the broad programmatic mandates contained in the Coastal Zone Management Act, the Marine Protected Area Executive Order (Executive Order No. 13158), and the Coral Reef Conservation Act with specific strategic objectives established by each OCRM program. OCRM brings federal, regional, state, local, international, and nongovernmental partners together to direct knowledge, technical capacity, and financial resources to important coastal and ocean issues. OCRM contributes to its partners’ success by providing technical assistance, training, information, tools, and science, and by administering federal funds to address priority areas. Strategies include coordinating regional, national, and international activities among existing marine protected areas and identifying areas for future designation. It also includes transfer of coastal and ocean monitoring technologies and methodologies internationally.

L. [National Ocean Service, NOAA Center for Operational Oceanographic Products and Services \(CO-OPS\): Strategic Plan 2010-2015](#). CO-OPS is at the center of NOAA’s vision for an informed society that uses a comprehensive understanding of the role of the oceans, coasts, and atmosphere in the global ecosystem to make the best social and economic decisions. This five-year

strategic plan establishes goals and necessary strategies to achieve its mission of serving as the authoritative source for accurate, reliable, and timely tide, water level, current, and other oceanographic information that support safe and efficient navigation, sound ecosystem stewardship, coastal hazards preparedness, and response, and the understanding of climate change—turning operational oceanographic data into meaningful information for society.

M.

N. [National Ocean Service, Great Lakes Environmental Research Lab \(GLERL\) Strategic Plan \(2012\)](#). This plan includes several initiatives including the Great Lakes Restoration Initiative (GLRI). In early 2009, the GLRI has provided more than \$1 billion to support Great Lakes restoration, including more than \$110 million to NOAA in its first four years. Administered through the Great Lakes Regional Collaboration Team, the GLRI supports NOAA's mission-focused work in the areas of toxic chemical remediation, habitat restoration, aquatic invasive species, nearshore modeling, observation and ecosystem forecasting, and work related to climate change. It also includes the Great Lakes Water Quality Protocol of 2012, which is an updated agreement between the United States and Canada to restore and protect the physical, chemical, and biological integrity of the Great Lakes, with many of its provisions codified in the Clean Water Act. This agreement is the foundation for many regional priorities and governance structures that exist in the region today.

O. [NOAA Satellites and Information Service Strategic Plan, FY 2005-2010](#). NESDIS contributes to the outcomes and strategies of all the NOAA goals and programs by providing long-term archives and access services for environmental observations and information. These include:

- Changes in critical ecosystems, such as coral reefs, can be detected through monitoring and development of ecosystem baseline conditions. Ecosystem monitoring platforms will be validated and monitored for quality.
- NESDIS is the nation's official source of data on climate change. High-quality data from an integrated observing network provides end-to-end links between research, operations, and climate users. NESDIS plans to ingest, process, archive, and access data on a truly continuous, round-the-clock basis.
- NESDIS' role in collecting, processing, distributing, and archiving environmental data must continue to evolve to meet the national requirement for timely, accurate weather data and forecasts.
- NESDIS information products and services are essential for safe and efficient transportation and commerce systems. New products and

algorithms in support of transportation safety will be developed. The capability to deliver reliable and accurate distress alerts will be enhanced.

- Knowledge gained from NESDIS' applied research enterprise ensures continuing improvements in satellite observations and the accuracy of satellite data and derived products.
- The National Polar-orbiting Operational Environmental Satellite System will provide the next generation of national polar-orbiting environmental satellites and NESDIS will be processing data and distributing products from the European Organization for the Exploitation of Meteorological Satellites.
- NESDIS will be engaged in building international partnerships addressing governance policy issues relating to the Global Earth Observation System of Systems, ensuring user access and facilitating the sharing of new observation data.

P. [NOAA Coastal Services Center: Strategic Plan, 2010-2015 \(March 2010\)](#).

The strategies described in this Plan support the missions and visions of Department of Commerce, NOAA, and the National Ocean Service. Priorities are driven by the needs of coastal managers and represent societal goals for sustainable coastal communities and economies. They seek to support an informed society in anticipating and responding to changing climate and its impacts. The plan addresses two key strategic issues facing coastal communities: (1) adapting to the impacts of coastal hazards and climate change; and (2) balancing the competing uses of critical coastal resources. There is an urgent need to build capacity to address these issues.

Q. [Oceanic and Atmospheric Research \(OAR\) Strategic Plan \(April 2014\)](#).

OAR's role as NOAA's centralized research office is critical to NOAA's ability to carry out its mission of science, stewardship, and service. In meeting the challenges of the 21<sup>st</sup> century, the availability of relevant scientific information that is unbiased and appropriate to key stakeholders is of utmost importance. OAR's vision is to be a trusted world leader in observing, modeling, understanding and predicting the Earth system. OAR's position at the intersection of NOAA's science and service missions, on the one hand, and the broader research community on the other enables it to lead a research agenda and forge partnerships that advance understanding and prediction of the Earth System to enhance society's ability to make effective decisions. OAR works with partners to reduce the vulnerability of social and ecological systems in the short-term, and to help society avoid and adapt to long-term environmental changes. OAR conducts research that is concerned with both "fundamental understanding" and "ultimate use"—it is use-inspired research. To improve capabilities for scientific research for NOAA's service lines and for partners around the world, OAR develops sensors, models and other tools. OAR works to transition the results of its activities so that they are useful to society. Transition includes

transferring technology and knowledge to stakeholders' operations. It may include physical instruments and tools as well as methodologies. Whether improving warning lead times for tornadoes or hurricanes or understanding the response of ecosystems in a rapidly changing ocean environment, OAR's research enables solutions that prevent loss of life, improve management of natural resources, build an understanding of the Earth System, and strengthen the economy.

- R. **NOAA Office of Ocean Exploration and Research: Strategic Plan FY 2011-FY 2015 (May 2011)**. The mission of NOAA's Office of Ocean Exploration and Research (OER) is to develop and use state-of-the-art technology to increase our scientific knowledge of the Earth's largely unknown ocean, in all its dimensions, and to support NOAA and its national objectives. To accomplish this mission, OER has set four strategic goals:
- Conduct scientific baseline characterizations of unknown or poorly known ocean basin boundaries, processes, and resources (OER's exploration endeavor embraces the U.S. and international ocean science communities and all disciplines of oceanography);
  - Transition ocean exploration discoveries to new research areas and research results to new applications to benefit society;
  - Expand the pace, scope, and efficiency of exploration and research through the advancement of underwater technologies; and
  - Engage diverse audiences through innovative means by integrating science, education, and outreach.
    - OER supports a continuum of ocean science that makes discoveries via exploration and research, and it transitions the new knowledge and capabilities to the rest of NOAA as well as the national and international science, technology, and ocean management communities.
- S. **NOAA's Tsunami Program, 2008-2017: Strategic Plan (July 2008)**. The Tsunami Warning and Education Act identifies NOAA as the lead agency responsible for operating the United States Tsunami Warning System and for providing technical assistance and training to the Global Tsunami Warning System. A sustained United States tsunami effort will result in critical outcomes that include the following:
- Timely and accurate tsunami forecast and warning products;
  - Tsunami products that are understandable and usable;
  - Resilient communities inhabited by a public educated to take appropriate action
  - Reliable and coordinated data, communications, and dissemination infrastructure, and the capability to acquire and exchange relevant tsunami data and information that supports the tsunami mission;

- Interdisciplinary science and research results leading to more effective and affordable tsunami warning and mitigation products and services;
- Technical assistance, training, and capacity development both at global and regional levels, supporting the fully operational tsunami warning system; and
- Integration with other relevant national, regional, and global ocean and coastal observation, warning, mitigation, and risk management systems.

T. **[Weather-Ready Nation: NOAA’s National Weather Service Strategic Plan 2011](#)**. This strategic plan advances the Service’s mission to provide weather,

water, and climate data, as well as forecasts and warnings for the protection of life and property and the enhancement of the national economy key goals that will support its vision of a Weather-Ready Nation. The National Weather Service (NWS) fosters global collaboration, working through the United Nations process and international agreements. Global cooperation on observations, data exchange, modeling research and development is important to continued success. Providing global leadership in setting meteorological standards and building partnerships to protect lives and property is also critical. The Plan identifies six goals that focus on critical weather-dependent issues:

- Improve weather decision services for events that threaten lives and livelihoods;
- Deliver improved weather forecasting services to support management of the Nation's water supply;
- Enhance climate services to help communities, businesses, and governments understand and adapt to climate-related risks;
- Improve sector-relevant information in support of economic productivity;
- Enable integrated environmental forecasting services to support healthy communities and ecosystems; and
- Sustain a highly skilled, professional workforce equipped with the training, tools, and infrastructure to accomplish the Service’s mission.

U. **[NOAA’s Climate Program Office: Strategic Plan, 2015-2019 \(last modified June 26, 2014\)](#)**. The mission of NOAA’s Climate Program Office is to advance scientific understanding, monitoring, and prediction of climate and its impacts to enable effective decision-making. The Office seeks to ensure that its science helps citizens, businesses, and governments make intelligent choices. The Plan describes how NOAA’s capabilities will be used to address critical Societal Challenges, including weather and climate extremes, climate impacts on water resources, coastal and climate resilience, and the sustainability of marine ecosystems. The Plan calls for a high degree of collaboration with partners across NOAA and elsewhere in government, academia, the private sector and internationally. For example, the Office has set the strategic objective of engaging the international research and development community to identify common goals, support research and observing activities, increase capabilities, and encourage productive international climate research endeavors.