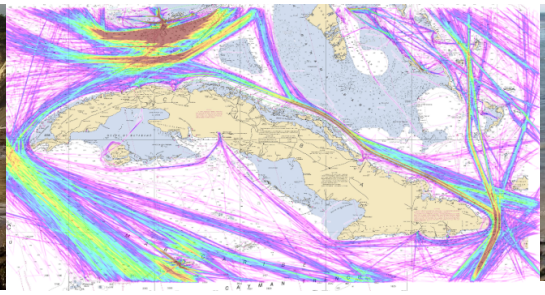


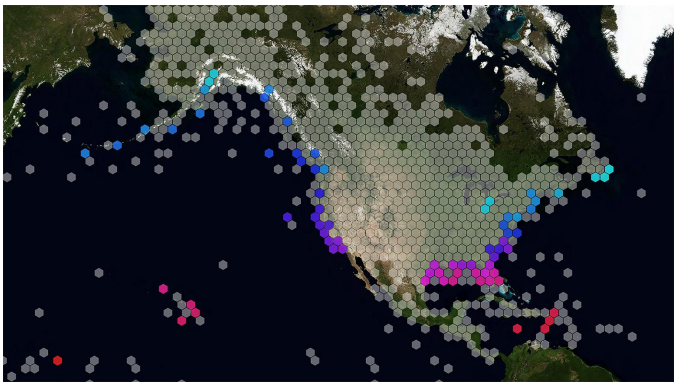

NOAA's National Ocean Service

Positioning America for the Future

More than half of us—163.8 million Americans as of the last Census— live in a coastal or Great Lakes watershed county. This number is expected to increase by nearly 10 percent—15 million more people—by 2020.

NOAA's National Ocean Service (NOS) is a leading federal provider of science-based, environmental services to people, communities, and industries working, living, and recreating along our coasts and Great Lakes. NOS's work positions America's coastal communities, economies, and ecosystems for a healthy future of sustainable economic growth and adaptation to environmental change.

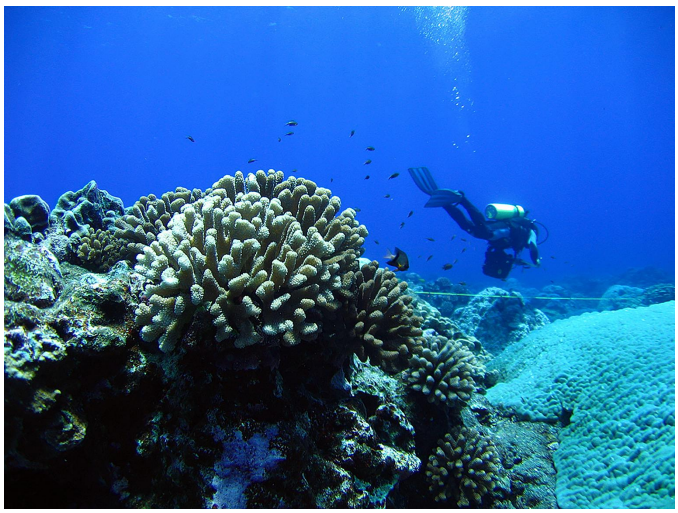
The NOS budget supports NOAA's mission to build resilient coastal communities and foster healthy oceans by focusing on three interrelated areas:



A view of the U.S. Integrated Ocean Observing System's Environmental Sensor Map. This map displays real-time environmental data collected from over 31,000 stations throughout the world.

Navigation, Observations and Positioning

NOS is the nation's provider and leading national authority on nautical charting and coastal mapping; water levels, tides and currents; and geographic positioning. Programs such as the U.S. Integrated Ocean Observing System (IOOS®), National Water Level Observation Network (NWLON), National Spatial Reference System, National Current Observation Program and the Physical Oceanographic Real-time System (PORTS®) contribute to this suite of core Federal services.



A diver collects data on the condition of coral reefs in the Mariana Islands.

Coastal Science and Assessment

NOS provides expert scientific support in response to oil and chemical spills and marine debris. Working with partners, NOS supported development of the Environmental Response Management Application (ERMA®), an online tool that integrates real-time data with mapping to aid and coordinate emergency response to coastal disasters. NOS is also a leader in ecological forecasting, providing long-term monitoring, impact assessments, and risk analysis from threats such as Harmful Algal Blooms and hypoxia.

Ocean and Coastal Management

NOS provides for effective management of our nation's coasts and special marine places such as coral reefs, marine protected areas, national marine sanctuaries, and estuarine research reserves. We provide coastal planners with the skills, tools, and data needed to manage the nation's coastal resources and communities. This includes Digital Coast, an interactive, online tool to aid and improve coastal decision making in both public and private sectors. NOS implements the Coastal Zone Management Act in partnership with the states to promote informed coastal management, as well as research, outreach, and education.

For more information, please visit: www.oceanservice.noaa.gov

Recent Mission Highlights

Aerial Imagery Aids Safe Navigation and Captures Damage to Coastal Areas

(Joint with NOAA's Office of Marine and Aviation Operations)

In August 2016, NOAA's coastal mapping and emergency response aircraft collected high resolution digital photographs to assist federal, state, and coastal managers in assessing historic flooding in Louisiana. NOAA collected and processed aerial imagery throughout the affected areas to allow the Federal Emergency Management Agency and emergency managers begin their assessment of damage to ports, waterways, coastlines, critical infrastructure, and coastal communities and make decisions on appropriate federal assistance to affected populations.

New Sensor Deployed to Better Detect Harmful Algal Blooms

(Joint with NOAA's Office of Oceanic and Atmospheric Research)

NOAA and partners deployed two Environmental Sample Processors (ESP) to monitor and provide earlier warnings for harmful algal blooms (HABs) than was allowed by past technology. The ESPs were deployed in in coastal waters of the Pacific Northwest and in Lake Erie. These devices analyze on site, continuously testing water quality and generating near-real time observations on algal toxins to inform water management, fisheries management, and other decisions that are critical to public safety and economic resilience.

PORTS® turns 25, Makes Real-Time Data Available to Three New Seaports

NOAA expanded real-time, accurate, and reliable observations in support of safe navigation to three additional seaports. NOAA's Physical Oceanographic Real Time System (PORTS®) is a suite of sensors placed in some of the busiest U.S. seaports that measure precise water levels, currents, salinity, meteorological data, and in some cases waves and bridge clearance. New systems were added in three important commercial ports: Savannah, Georgia; Cape Cod, Massachusetts; and on the Cuyahoga River in Cleveland, Ohio. More than 60 of the Nation's most economically critical seaports are now served by PORTS®.

Restoration Begins Throughout the Gulf of Mexico for the Deepwater Horizon Oil Spill

(Joint with National Marine Fisheries Service)

In 2016, NOAA, Department of Interior, Environmental Protection Agency, Department of Agriculture and the Gulf state co-trustees for the Deepwater Horizon oil spill released the Deepwater Horizon Final Programmatic Damage Assessment and Restoration Plan and Programmatic Environmental Impact Statement for the Gulf of Mexico. This document, which assessed impacts of the spill and identified the types of restoration needed to compensate the public for these impacts, was a critical step in filing a consent decree requesting the court's acceptance of the proposed comprehensive settlement with BP. With up to $8.8 billion, the Federal and state trustees will be implementing restoration for natural resources injured by the oil spill, including sea turtles, marine mammals, fish, deep sea corals, oysters, and coastal habitats, throughout the Gulf region and in the open ocean for the next 15 years.