

NOAA In Your State



Maryland



NOAA is an agency that enriches life through science. Our reach goes from the surface of the sun to the depths of the ocean floor as we work to keep citizens informed of the changing environment around them. From daily weather forecasts, severe storm warnings, and climate monitoring to fisheries management, coastal restoration and supporting marine commerce, NOAA's products and services support economic vitality and affect more than one-third of America's gross domestic product. NOAA's dedicated scientists use cutting-edge research and high-tech instrumentation to provide citizens, planners, emergency managers and other decision makers with reliable information they need when they need it.

The following is a summary of NOAA facilities, staff, programs, or activities based in, or focused on, your state or territory: Starting with highlights, then by [congressional districts and cities or towns](#), [coastal programs](#), and then [statewide programs](#).

[Highlights of NOAA in Maryland](#)

Cooperative Oxford Laboratory	Oxford	MD-1
Choptank River Complex Habitat Focus Area	Talbot, Queen Anne's, Dorchester, and Caroline Counties	MD-1,3,5
Annapolis Field Office	Annapolis	MD-3
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Office of Satellite and Product Operations	Suitland	MD-4
NOAA Air Resources Laboratory	College Park	MD-5
Bipartisan Infrastructure Law (BIL) / Inflation Reduction Act (IRA) Projects	Project Specific	MD

The state of Maryland also has one Cooperative Institute, one Regional Office, three Labs and Field Offices, one Cooperative Science Center, three Science on a Sphere® exhibitions, one National Estuarine Research Reserve, and one Habitat Focus Area.

[Science On a Sphere®](#)

Baltimore	MD-7
Waldorf	MD-5
Silver Spring	MD-8

[Science On a Sphere \(SOS\)](#) is a room-sized global display system that uses computers and video projectors to display planetary data onto a six-foot diameter sphere, analogous to a giant animated globe. Researchers at NOAA developed Science On a Sphere® as an educational tool to help illustrate Earth System science to people of all ages. Animated images of atmospheric storms, climate change, and ocean temperature can be shown on the sphere, which is used to explain in a way that is simultaneously intuitive and captivating what are sometimes complex environmental processes. They are located at the Maryland Science Center in Baltimore, the NOAA Center for Weather and Climate Prediction in College Park, NASA Goddard Space Flight Center in Greenbelt, St. Charles High School in Waldorf, NOAA Headquarters in Silver Spring, and NOAA Gateway in Silver Spring.

[MD-1](#) [Oxford](#)

National Ocean Service (NOS) - [Cooperative Oxford Laboratory](#)

The Cooperative Oxford Laboratory (COL), part of the National Centers for Coastal Ocean Science, is situated along the Tred Avon river, a tidal estuary of the Chesapeake Bay on Maryland's Eastern Shore. Initially established to prevent the spread of fish and shellfish diseases in the Chesapeake Bay, the mission now includes helping local decision makers understand contemporary pressures on our watershed, including urbanization, climate change, and pollution.

[Princess Anne](#)

NOAA Office of Education - [Living Marine Resources Cooperative Science Center](#)

The NOAA Living Marine Resources Cooperative Science Center (LMRCSC) is led by The University of Maryland Eastern Shore in collaboration with its partner institutions Delaware State University, Hampton University, Savannah State University, the University of Maryland Center for Environmental Science Institute of Marine and Environmental Technology, Oregon State University, and the University of Miami Rosenstiel School of Marine and Atmospheric Sciences. This Center is supported through a cooperative agreement award from NOAA's Educational Partnership Program with Minority Serving Institutions (EPP/MSI) as a future workforce investment to support NOAA's mission enterprise. The purpose of the award is to expand participation in NOAA mission-aligned education, training, capacity building, and collaborative research focusing on expanding participation of groups traditionally underrepresented and historically excluded in NOAA mission aligned careers. The center focuses on Science Technology Engineering and Math (STEM), natural resources management, risk assessment, social justice and policy disciplines through the use of non-regulatory tools to protect and restore priority habitats supporting long-term sustainability of marine fisheries and protected resources. The EPP/MSI Graduate Fellowship Program (GFP) supports CSC students pursuing graduate degrees in disciplines aligned with NOAA's mission. Since 2021, one LMRCSC Scholar has been awarded a GFP scholarship. LMRCSC, in joint collaboration with the NOAA's Center for Coastal and Marine Ecosystems (CCME), and NOAA subject

matter experts, designed, and will implement, a Joint Collaborative Research Project (JCRP) that supports NOAA's strategic goals and missions, while directly aligning with each Center type. LMRCSC conducts research in the marine sciences, with areas of specialization in fisheries science, oceanography, ecology, environmental sciences, and environmental molecular biology/biotechnology. LMRCSC's primary collaborator at NOAA is the National Marine Fisheries Service (NMFS).

Salisbury

National Marine Fisheries Service (NMFS) - [Office of Law Enforcement](#)

NOAA's Office of Law Enforcement is the only conservation enforcement program (Federal or State) that is exclusively dedicated to Federal fisheries and marine resource enforcement. Its mission is to protect global marine resources by enforcing domestic laws and international treaties and obligations dedicated to protecting wildlife and their natural habitat. Our special agents and enforcement officers ensure compliance with these laws and take enforcement action if there are violations. Additionally, the Cooperative Enforcement Program allows NOAA the ability to leverage the resources and assistance of 27 coastal states and U.S. territorial marine conservation law enforcement agencies in direct support of the Federal enforcement mission. Effective fisheries law enforcement is critical to creating a level playing field for U.S. fishermen and enabling sustainable fisheries to support vibrant coastal communities. The Office of Law Enforcement's Northeast Division is headquartered in Gloucester, Massachusetts, with a Maryland field office in Salisbury.

Talbot, Queen Anne's, Dorchester, and Caroline Counties

National Ocean Service (NOS) – [Climate Resilience Regional Challenge](#)

In July 2024, NOAA announced \$575 million in funding for the Climate Resilience Regional Challenge, provided by the Inflation Reduction Act, to invest in holistic, collaborative approaches to coastal resilience at regional scales. This grant program focuses on increasing resilience to extreme weather events, such as hurricanes and storm surge, and longer-term, chronic hazards such as sea level rise, drought, wildfire, extreme heat, and coastal erosion. The program awarded 19 grants that are part of NOAA's larger Climate-Ready Coasts initiative to forge new partnerships, protect coastal habitats, and close equity gaps. They will help scale up proven best practices across 17 states and territories to take resilience and adaptation plans off paper and into coastal communities across the country.

Maryland (MD-1, MD-5) will benefit from \$1,973,267 to establish a regional collaborative to support climate resilience in rural communities in the Delmarva region, where agriculture plays a key role in the local economy and culture. The Biological Systems Engineering Department of Virginia Tech received this grant, which will be leveraged collaboratively across the shore regions of the states of Maryland and Virginia and Delaware. Project partners will conduct a needs assessment and a series of community listening sessions to identify current capabilities, challenges, and opportunities to increase resilience, particularly in low-income, minority, and agricultural communities. The project will then design and implement educational programming to help address these challenges. This project will create enduring capacity among extension professionals and rural localities to initiate climate adaptation and resilience projects more effectively and engage with resilience-building efforts more broadly.

National Marine Fisheries Service (NMFS), National Ocean Service (NOS) - [Choptank Complex Habitat Focus Area](#)

The Choptank Complex was selected as a [NOAA Habitat Focus Area](#) (HFA). HFAs are targeted places where NOAA addresses high priority habitat issues by collaborating with partners and communities. Over the past several years, NOAA, led by the [Office of Habitat Conservation](#), has selected 11 HFAs across the country which have achieved significant results for ecosystems and communities. While each HFA focuses on individual habitat conservation goals, the overarching goal is to leverage collective expertise and demonstrate results in a short time period. NOAA's Chesapeake Bay Office, Restoration Center, Greater Atlantic Regional Fisheries Office, National Centers for Coastal and Ocean Science, and Office of National Marine Sanctuaries are coordinating NOAA and partner programs within the Choptank River Complex Habitat Focus Area. Habitat Focus Areas are a non-regulatory, collaborative approach to habitat conservation that NOAA launched in 2013 to increase the effectiveness of NOAA's habitat conservation science and management efforts. The Choptank River is home to the largest native oyster restoration effort in the United States and

contains among the most important habitat for striped bass populations. As such, the river's health is vital to ensuring sustainable fisheries and coastal economies. NOAA conducts mapping and acoustic surveys in tributaries of the Choptank River and Little Choptank River to support native oyster restoration, funds in-the-water oyster restoration, and supports research to understand ecosystem conditions, evaluate threats, and quantify the ecosystem services provided by the restored oyster reefs.

[Somerset County](#)

Office of Oceanic and Atmospheric Research (OAR)- [National Trends Network](#)

A NOAA Air Resources Laboratory National Trends Network (NTN) site is located near Ewell, (Smith Island, Somerset County), MD. The site has been in operation since 2004 and has collected data on precipitation chemistry on a daily or an event basis. Since 2019, samples have been collected on a weekly basis and sent to the National Atmospheric Deposition Program (NADP) Analytical Laboratory for analysis, data entry, verification and screening. Chemistry dataThe major ions collected include sulfate, nitrate, phosphorus, pH, ammonium, sodium, chloride, magnesium and potassium.and soil cations. NTN is a sub-network of the NADP.

[MD-3](#)

[Annapolis](#)

National Marine Fisheries Service (NMFS) - [Annapolis Field Office](#)

The Greater Atlantic Regional Fisheries Office has field offices for the Habitat and Ecosystem Services Division (HESD) and Protected Resources Division co-located with NOAA Chesapeake Bay Office. HESD staff provide consultative services, technical assistance and advice to federal agencies that authorize, fund or undertake activities that may affect marine, estuarine, and migratory fish species and local support for NMFS' habitat conservation stewardship efforts in Maryland, Delaware and Pennsylvania. Conservation Division staff review coastal development projects in Maryland and provide local support for NMFS habitat conservation efforts. Protected Resources staff support the conservation of endangered species and mitigate the impacts of development projects on such species through consultations with other Federal agencies.

National Ocean Service (NOS) - [Chesapeake Bay-Maryland National Estuarine Research Reserve](#)

This 6,249-acre multi-component reserve was designated in 1985 and 1990, is managed by the Maryland Department of Natural Resources. The three sites are: Monie Bay, Otter Point Creek, and Jug Bay. This research reserve reflects the diversity of estuarine habitats found within the Maryland portion of the Bay. Research here focuses on methods to restore submerged aquatic vegetation and wild rice restoration techniques and monitoring the ability of marshes to keep pace with sea level rise. The reserve is also a partner in the NOAA Sentinel Site Program.

National Ocean Service (NOS) – [Margaret A. Davidson Graduate Fellowship](#)

The Margaret A. Davidson Graduate Fellowship program funds graduate student research and professional development opportunities within the National Estuarine Research Reserve System. The program supports collaborative research addressing local management challenges that may influence future policy and management strategies. The Davidson Fellow at the Chesapeake Bay-Maryland National Estuarine Research Reserve will focus their research on the relationship between land use and SAV ecosystem services.

National Ocean Service (NOS) - [Office for Coastal Management](#)

The NOAA Office for Coastal Management practices a partner-based, boots-on-the ground regional approach to coastal management, with staff available in the eight regions. Assistance is provided to local, state, and regional coastal resource management efforts. Constituent feedback and assessments are an important part of the effort. In addition to Silver Spring, MD, Mid-Atlantic staff are located in Annapolis, MD, York, PA, and Albany, NY.

MD-1 through 5

Chesapeake Bay Region

National Marine Fisheries Service (NMFS) - NOAA Chesapeake Bay Office

The [NOAA Chesapeake Bay Office](#), within the [Office of Habitat Conservation](#) is headquartered in Annapolis, Maryland. It focuses its science, service, and stewardship capabilities on improving the health of the Chesapeake Bay. It supports efforts to enhance sustainable fisheries, vital habitats, environmental literacy, and observations.

National Marine Fisheries Service (NMFS) - [Chesapeake Bay Interpretive Buoy System](#)

The [NOAA Chesapeake Bay Office](#) within the [Office of Habitat Conservation](#) manages a set of observation buoys that tracks data on water quality as well as meteorological and oceanographic conditions. Data from the buoys is updated every six minutes. It is used by scientists, marine safety organizations, boaters, teachers and students, and others who want to learn more about the Chesapeake Bay. Observations are available [on the web](#), at a mobile version of the website, by calling toll-free 877-BUOY-BAY, or using free mobile apps available for Android and iPhone smartphones.

National Marine Fisheries Service (NMFS) - NOAA Chesapeake Bay Office Environmental Science Training Center

- The [NOAA Environmental Science Training Center](#), managed through the [NOAA Chesapeake Bay Office](#) within the [Office of Habitat Conservation](#), provides training and in-depth experiences for environmental education professionals to advance their abilities to effectively convey the latest information on science, technology, engineering, and math to teachers and students. Trainings focus on integrating science into the classroom and field based programming, drawing on NOAA and partner expertise and capabilities. NOAA opened the training center's location at the Cooperative Oxford Laboratory campus on Maryland's Eastern Shore in 2010. Trainings provided at and by the Center communicate the work of NOAA and Cooperative Oxford Laboratory and NOAA partners like the Maryland Department of Natural Resources. The Center can also provide workshops at partner sites throughout the Bay watershed. Please reach out with interest.

Chesapeake Bay

National Ocean Service (NOS) - [Chesapeake Bay North PORTS®](#)

A Physical Oceanographic Real-Time System (PORTS®) is operated cooperatively with the local maritime community in the upper Chesapeake Bay at which real-time data are quality-controlled and disseminated to local users for safe and efficient navigation. Available observations include water level and meteorological data and tidal currents from five locations. Air gap observations are provided from 4 bridge locations.

National Ocean Service (NOS) - Office of Coast Survey - [NOAA Survey Vessel Bay Hydro II](#)

The Office of Coast Survey operates the NOAA Survey Vessel *Bay Hydro II* to acquire hydrographic survey data off the U.S. Atlantic coast, concentrating primarily in the Chesapeake Bay. The vessel is home-ported in Patuxent, Maryland. The *Bay Hydro II* is equipped with state-of-the-art hydrographic and navigation equipment to detect submerged wrecks and obstructions are used to update NOAA's nautical charts in the Chesapeake Bay area. The Office of Coast Survey also uses the *Bay Hydro II* as its primary platform to test and evaluate new and emerging hydrographic survey technologies like uncrewed systems —multiplying the amount of data NOAA's survey fleet collects. This vessel is also able to serve as a navigation response team when required.

Baltimore

NOAA Office of Education - [Science On a Sphere®](#) at Maryland Science Center.

Science On a Sphere (SOS) is a room-sized global display system that uses computers and video projectors to display planetary data onto a six-foot diameter sphere, analogous to a giant animated globe. Researchers at NOAA developed Science On a Sphere® as an educational tool to help illustrate Earth System science to people of all ages. Animated images of atmospheric storms, climate change, and ocean temperature can be shown on the sphere, which is used to explain complex environmental processes in a way that is simultaneously intuitive and captivating.

MD-4

College Park

National Environmental Satellite, Data, and Information Service (NESDIS) and the National Ocean Service (NOS) - [The Center for Satellite Applications and Research](#) and the [Center for Coastal Monitoring and Assessment \(CCMA\)](#) - [CoastWatch East Coast node, colocated with the NOAA Chesapeake Bay office, Annapolis, Maryland](#)
[NOAA CoastWatch](#) exists to help people find, choose, access, and use observations from satellites for ocean, coastal and inland water applications that inform and benefit society. Our primary users include federal, state, and local marine scientists, coastal resource managers, and the public, including commercial users. The CoastWatch Program is managed within the Center for Satellite Applications and Research in the National Environmental Satellite, Data, and Information Service (NESDIS) of NOAA in College Park, MD. The program rests on four legs". Three of the legs, the central operations; training and outreach; and research and applications science teams, are located in College Park, MD. The fourth leg is composed of the seven CoastWatch Regional Nodes, maintained in collaboration with other NOAA Line Offices and located across the US.

The CoastWatch [East Coast Node](#) is a collaboration with National Ocean Service's Center for Coastal Monitoring and Assessment. The East Coast Node provides remote sensing data products and customized decision-making applications for regions from Maine to Florida. Anyone may access data free of charge. CoastWatch data are used by local managers and scientists in a variety of ways including ecological forecasting, monitoring algal blooms, tracking sediment plumes, and studying temperature effects on fish populations. We work with regional and local stakeholders to build customized applications for environmental management and decision-making. We are hosted within the [National Ocean Service](#), Silver Spring MD, and also maintain a presence in collaboration with the [NOAA Chesapeake Bay Office](#), Annapolis, MD.

National Environmental Satellite, Data, and Information Service (NESDIS) – [Office of Satellite and Product Operations \(OSPO\)](#) - [Satellite Analysis Branch \(SAB\)](#)

The Satellite Analysis Branch (SAB) within the Office of Satellite and Product Operations (OSPO), produces interpretive analysis products in support of hazards mitigation and warning services for U.S. Government agencies, the international community and other users. The Branch routinely provides 24X7, quality-controlled environmental analyses for decision support applications for a variety of hazards including volcanic ash, marine pollution, and fires and smoke, all as delineated from satellite data. SAB also provides short term satellite analysis support in response to requests from NOAA components for disasters or hazard mitigation, as directed. This supports blue economy goals and improves the nation's weather forecasting. SAB tests, evaluates, and validates new interpretive satellite analysis techniques and satellite-derived products to assess their suitability for operational implementation. SAB also provides outreach, user education, and customer service activities for their interpretive products and services.

National Environmental Satellite, Data, and Information Service (NESDIS) – [Office of Satellite and Product Operations \(OSPO\)](#) - [Satellite Products Branch \(SPB\)](#)

The Satellite Products Branch (SPB) within the Office of Satellite and Product Operations (OSPO), serves as the primary user interface for NOAA's real-time, automated operational environmental Level 2 and higher satellite products. SPB leads corrective and adaptive maintenance activities, monitors quality, and evaluates system performance of product applications that are required to create products from current, future, and next generation NOAA and non-NOAA satellites. SPB ensures compliance, reliability, availability, and maintainability of the OSPO's operational applications to ingest data, generate, and distribute automated satellite products. SPB works with research partners to develop, integrate, implement and transition new science algorithms, technology and dissemination methods from current and future satellites into new operational products. SPB provides science software test and integration functions for new product applications. Additionally, SPB provides real-time 24x7 monitoring of environmental satellite data products and services to provide user notifications on products and services outages and anomalies. Lastly, SPB provides customer service answering user questions, releasing information on product and service changes, and coordinating and providing outreach activities to help users better utilize OSPO's products and services.

National Environmental Satellite, Data, and Information Service (NESDIS) - [The Center for Satellite Applications and Research \(STAR\)](#)

The Center for Satellite Applications and Research (STAR) is the science arm of NESDIS, which acquires and manages the nation's operational Earth-observing satellites. NESDIS provides data from these satellites, and conducts research to develop products, services, and solutions for users. STAR's mission is to convert satellite observations of the land, atmosphere, ocean, and climate from scientific research and development into routine operations, and to offer state-of-the-art data, products and services to decision-makers. STAR interfaces and collaborates with Cooperative Institutes and sponsors the Educational Partnership Program with Minority Serving Institutions (EPP/MSI) via The City University of New York.

National Weather Service (NWS) - [NOAA Center for Weather and Climate Prediction](#)

The National Centers for Environmental Prediction (NCEP), an arm of the NOAA's National Weather Service (NWS), is comprised of nine distinct Centers that provide national and international weather products in support of NWS field offices, government agencies, emergency managers, private sector meteorologists, meteorological organizations and societies, and private companies throughout the world. NCEP is a critical national resource in national and global weather prediction. NCEP is the starting point for nearly all weather forecasts in the United States. Headquartered in Camp Springs, the NCEP prepares and makes available national forecasts and outlooks of weather and climate. Each of the nine Centers, which comprise NCEP, has a specific responsibility for a portion of the NCEP products and services suite.

Five of the nine Centers are located at the NOAA Center for Weather and Climate Prediction on the campus of the University of Maryland in College Park. First, there is NCEP Central Operations, which sustains and executes the operational suite of the numerical analysis and forecast models and prepares NCEP products to be provided to users. It also links all nine of the national Centers together via computer and communications-related services. Second, the Environmental Modeling Center improves weather, marine, and climate predictions for the Nation by developing and improving computer models of the atmosphere and oceans using worldwide weather observations. The forecast models are the starting point for all weather forecasts, federal and private sector. Third, the Weather Prediction Center provides an array of analyses and guidance forecast products specializing in rainfall and snowfall forecasts as well as general weather pattern forecasts out to seven days. The information is used by NWS field offices and private meteorologists throughout the United States. Fourth, the Ocean Prediction Center produces and issues marine meteorological and oceanographic analyses, forecasts, and warnings for the Atlantic and Pacific oceans. Finally, the Climate Prediction Center monitors and predicts the climate for time scales ranging from weeks to seasons and provides information about the long-term global effects of climate patterns on the nation for socioeconomic benefits and improved decision-making.

Office of Oceanic and Atmospheric Research (OAR) - [Air Resources Laboratory](#)

The Air Resources Laboratory (ARL) Director's Office is located in College Park, MD with the Atmospheric Sciences and Modeling Division (ASMD). ARL conducts research on the boundary layer, the lowest part of the atmosphere where we live and breathe. World-class research on the chemistry and physics of the boundary layer contributes to accurate regional and global predictions of weather and air quality and outlooks of climate variability. ARL ASMD maintains and continually updates models which generate actionable information and highly localized forecasts issued by the National Weather Service's (NWS) local Weather Forecast Offices in responding to a variety of emergencies via ARL's flagship HYSPLIT model. Additionally, ASMD's work in this area is employed by both the NWS and the National Environmental Satellite, Data and Information Service in contributing to the work of the two international Volcanic Ash Advisory Centers operated by NOAA in Anchorage, AK; and College Park, MD. ASMD also improves understanding of climate variability and trends, the exchange of pollutants between the air and land, and the sources of chemicals that influence sensitive ecosystems.

Office of Oceanic and Atmospheric Research (OAR) - [Hydrometeorological Testbed](#)

NOAA's Hydrometeorological Testbed conducts research on precipitation and weather conditions that can lead to flooding, and fosters transition of scientific advances and new tools into forecasting operations. The Hydrometeorology Testbed

works to enhance forecaster use of probabilistic information as well as improve probabilistic winter precipitation forecasts, flash flood monitoring and forecasting, atmospheric forcings for hydrologic models, characterization of the state of the current environment, and risk communication. The testbed is located at the Weather Prediction Center (NWS) in College Park, MD and is co-managed by OAR's Physical Sciences Lab and the [Weather Program Office](#).

Office of Oceanic and Atmospheric Research (OAR) - [Climate Testbed](#)

NOAA's The Climate Testbed seeks to leverage research innovations in order to improve the sub-seasonal to seasonal models, products, and services at the NWS Climate Prediction Center (CPC) and the NWS Environmental Modeling Center (EMC). NOAA/NCEP is the lead agency with responsibility for producing US operational climate monitoring, models and predictions on time scales ranging from weeks to years. The mission of NOAA Climate Test Bed (CTB) is to accelerate research-to-operation (R2O) to improve NCEP operational climate models, monitoring and predictions, and to provide operations-to-research (O2R) support to the climate research community with access to operational models, forecast tools and datasets. The CTB facility is located at NCEP Climate Prediction Center (CPC) in the NOAA Center for Weather and Climate Prediction in College Park, MD. The NOAA CTB is jointly supported by NCEP, OAR's Weather Program Office, and NWS Office of Science and Technology Integration (OSTI). The WPO Testbeds program sponsors CTB transition projects through competitive grants, NCEP provides infrastructure support for CTB's testing and demonstration projects in an operational environment, and NWS/OSTI provides scientific coordination and programmatic support.

Office of Oceanic and Atmospheric Research (OAR) and National Environmental Satellite, Data, and Information Service (NESDIS) - [Cooperative Institute for Satellite Earth System Studies](#), [The Center for Satellite Applications and Research \(STAR\)](#) and [Satellite Climate Studies Branch \(SCSB\)](#)

The Cooperative Institute for Satellite Earth System Studies (CISESS) was awarded to the University of Maryland-College Park. CISESS serves as a mechanism to promote collaborative research between university scientists and those in NOAA. CISESS completes collaborative research that aims to enhance NOAA's ability to use satellite observations and Earth System models. This research advances the national climate mission, which includes monitoring, predicting, and communicating information on climate variability and change.

The primary NOAA research partners for CISESS are the National Environmental Satellite, Data, and Information Service (NESDIS) Center for Satellite Applications and Research (STAR) and the National Weather Service/National Centers for Environmental Prediction. CISESS conducts research under three themes: (1) satellite services; (2) Earth system observations and services; and (3) Earth system research. CISESS consists of two main campuses - one at the University of Maryland College Park and the other at the North Carolina Institute in Asheville, North Carolina. Additional associated members include: University of North Carolina System, University of Maryland- Baltimore County, University of Alabama, City College of New York, George Mason University, Oregon State University, Howard University, University of Michigan, University of South Carolina, University of Nebraska Medical Center, The Nature Conservancy, and Research Triangle Institute.

Additionally the Satellite Climate Studies Branch (SCSB) is part of the University of Maryland's CISESS. The SCSB, within STAR, utilizes the capabilities of Earth-observing satellites to study the climate variations of the atmosphere, land, and oceans. SCSB also uses remotely sensed satellite observations and model simulations to detect, monitor, and forecast the effects of climate change on the environment, including effects on its ecosystems.

Office of Oceanic and Atmospheric Research (OAR) and NESDIS- [Betty Petersen Memorial Library](#)

Betty Petersen Memorial Library is a branch of the NOAA Library jointly funded by the the tenants of the NOAA Center for Weather and Climate Prediction; National Centers for Environmental Prediction, NESDIS Center for Satellite Applications and Research and the Office of Oceanic and Atmospheric Research. The library contains a specialized meteorological and oceanographic collection of about 7,000 volumes. A small number of those volumes cover physics, mathematics, meteorology, remote sensing, historical weather information, and computer science support. In addition, the library has

atlases, a collection of World Meteorological Organization (WMO) publications, NOAA internal publications, and weather and ocean related publications from other government organizations, from other countries, and from universities. The library is also home to Science on a Sphere, a data visualization and learning tool that can project data sets onto a sphere with 4k resolution.

Office of Oceanic and Atmospheric Research (OAR) - [UrbanNet](#)

UrbanNet is a research effort designed to support urban climate and greenhouse gas (GHG) monitoring in and around the Washington D.C. area, including on the roof of the NOAA Center for Weather and Climate Prediction in College Park, with the goal of improving urban climate monitoring. UrbanNet is a revitalization of a previous similar network (DCNet) which was established during the post-9/11 time period in 2002 in order to assist with better understanding wind patterns in the event of the release of hazardous materials (e.g., radiation) in the DC area. Sensors on the UrbanNet platform collect data such as air temperature, precipitation, relative humidity, heat stress, atmospheric pressure, solar radiation, wind speed and direction and some limited observations of greenhouse gasses such as carbon dioxide and methane. These high resolution measurements are crucial for advancing our understanding of weather, how urban areas retain heat and the effects of climate change in urban areas. In addition, these observations are used to evaluate and improve numerical modeling, assimilate observations into models and provide the driving meteorological observations for atmospheric transport and dispersion models; thereby both improving the prediction of material dispersion in the urban environment and better characterizing the climate of urban areas where most people live.

[Suitland](#)

National Environmental Satellite, Data, and Information Service (NESDIS) - [Office of Satellite and Product Operations \(OSPO\)](#) - Direct Services Branch

The Direct Services Branch (DSB) ensures continuous operations of broadcast services and is the primary user interface for NOAA's satellite direct broadcast services. The DSB provides leadership for the Search and Rescue Satellite Aided Tracking (SARSAT) system, the Geostationary Satellites (GOES), the Argos Data Collection Systems and the satellite rebroadcast services including GEONETCast Americas (GNC-A), GOES Rebroadcast and the High Rate Information Transmission / Emergency Managers Weather Information Network (HRIT/EMWIN) broadcast.

COSPAS-SARSAT is an international, humanitarian search and rescue system that uses a network of satellites and ground stations to quickly detect and locate emergency beacons carried by ships, aircraft, or individuals in distress. [SARSAT](#) is the United States contribution to the international system. NOAA's polar and geostationary satellites are part of the space segment of the COSPAS-SARSAT system, and are operated by NOAA'S Satellite Operations Control Center at the NOAA Satellite Operations Facility (NSOF). NSOF is also the home of the US SARSAT Mission Control Center, which receives distress information and notifies the appropriate Rescue Coordination Center automatically when a beacon alert is detected. SARSAT is part of an international humanitarian effort helping to improve the rescue of persons in distress. SARSAT has saved more than 10,804 lives in the United States, and over 50,000 people rescued worldwide since 1982.

National Environmental Satellite, Data, and Information Service (NESDIS) – [Office of Satellite and Product Operations \(OSPO\)](#)

The Office of Satellite and Product Operations (OSPO) manages and directs the command and control of 18 satellites and acquisition of data from partner domestic and foreign satellite agencies - including legacy and new satellites in the geostationary and low earth orbits, and satellites used for space weather observations. This responsibility includes control, tracking, acquisition of data from these spacecraft from the NOAA Satellite Operations Facility (NSOF) at Suitland, MD. OSPO relies on ground stations at Svalbard, Norway; McMurdo, Antarctica; and Command and Data Acquisition (CDA) facilities at Fairmont, West Virginia, Wallops, Virginia, and Fairbanks, Alaska to control and track the satellites, and acquire their data. Under agreement with the Department of Defense, OSPO also provides control for the Defense Meteorological Satellite Program and Electro-optical Infrared Weather System Geostationary-1 (formerly GOES-15).

NSOF ingests, processes, and distributes environmental satellite data and satellite-derived products, and provides imagery and products from this data to the National Weather Service Centers and Weather Forecast Offices, and other domestic and international users. These products include, near-real time imagery of current or developing cyclones, storms, wildfires; satellite imagery of various areas of the United States; and an array of other atmospheric data products. OSPO is also responsible for operating the [SARSAT U.S. Mission Control Center](#), which is an integral part of the global satellite-assisted search and rescue system. Finally, OSPO supports the launch, activation, and evaluation of new satellites and the in-depth assessment of satellite and ground systems anomalies. Data are sent to the National Centers for Environmental Information (NCEI) for archiving and accessing purposes.

Office of Oceanic and Atmospheric Research (OAR) and Office of the Chief Information Officer (CIO) - [N-Wave NOAA Science Network](#)

N-Wave is NOAA's science network connecting NOAA, academic, and state research network communities to data and resources needed to advance environmental science.

NOAA Office of Space Commerce - [TraCSS Operations Center](#)

NOAA's Office of Space Commerce (OSC) is developing the Traffic Coordination System for Space (TraCSS) to provide basic space situational awareness (SSA) data and services to civil and private space operators and to support spaceflight safety, space sustainability, and international coordination. The secondary operations center for the Traffic Coordination System for Space will be at the NOAA facility in Suitland. The Suitland center will largely handle TraCSS systems engineering and IT support.

[MD-5](#)

[Greenbelt](#)

National Environmental Satellite, Data, and Information Service (NESDIS) - [GOES-R Program Office](#)

The Geostationary Operational Environmental Satellites (GOES) - the "R" Series - Program in the National Environmental Satellite, Data, and Information Service (NESDIS) Office of Geostationary Earth Orbit (GEO) Observations is responsible for the acquisition of NOAA's newest generation of NOAA's geostationary satellites to maintain and advance capabilities in support of NOAA's missions. While NOAA manages and funds the GOES-R Series Program, its development is a collaborative effort between NOAA and the National Aeronautics and Space Administration, with significant assistance from a nation-wide network of aerospace companies. The advanced spacecraft and instrument technologies offered by the GOES-R series of satellites provide revolutionary views of hurricanes, severe storms, wildfires, and other meteorological phenomena. Their data are used to support the U.S. weather enterprise in issuing potentially life-saving forecasts, watches, and warnings of severe weather and other environmental hazards.

GOES-R, launched in November 2016, is now known as GOES-16 and is operational as NOAA's GOES-East. GOES-S, launched in March 2018, is now named GOES-17 and serves as the primary backup. GOES-T, now GOES-18, launched in March 2022 and is operational as NOAA's GOES-West. GOES-U, the final satellite in the series, launched in 2024. Major components that fly on GOES-R Series satellites were developed in Littleton, Colorado; Stennis, Mississippi; Fort Wayne, Indiana; Rochester, New York; Palo Alto, California; Carlisle, Massachusetts; Boulder, Colorado; and Greenbelt, Maryland.

National Environmental Satellite, Data, and Information Service (NESDIS) - [Geostationary Extended Observations \(GeoXO\) Program](#)

The Geostationary Extended Observations (GeoXO) Program in the National Environmental Satellite, Data, and Information Service (NESDIS) Office of Geostationary Earth Orbit (GEO) Observations is responsible for the acquisition of NOAA's next generation of geostationary satellites, the mission that will follow the GOES-R series. GeoXO will provide real-time, high-resolution visible and infrared imagery for monitoring Earth's weather, oceans, and environment and real-time lightning mapping. GeoXO plans to add infrared sounding, atmospheric composition, and ocean color

observations from geostationary orbit. These observations would complement those from NOAA's partners in Europe and Asia, building a critical global observing system. By better understanding the connection between weather, water, and climate, scientists will have a deeper understanding of Earth as a system. This will help them to address emerging environmental challenges, respond to the effects of Earth's changing climate, and improve forecasting and warning of severe weather and environmental hazards. The first GeoXO satellite is currently scheduled for launch in 2032.

National Environmental Satellite, Data, and Information Service (NESDIS) - [Joint Polar Satellite System Polar \(JPSS\) Follow-On](#)

The Joint Polar Satellite System (JPSS) is the next generation of polar-orbiting environmental satellites. The Suomi National Polar-orbiting Partnership (Suomi NPP) satellite, part of the JPSS constellation of satellites, was launched in 2011. The second in the series, NOAA-20 (previously called JPSS-1), launched in 2017, and JPSS-2 was launched in November 2022. These satellites circle the Earth approximately once every 100 minutes, monitoring global environmental conditions, collecting, disseminating and processing data about the Earth's weather, atmosphere, oceans, land, and near-space environment. JPSS monitors the Earth from pole to pole and provides data for long-range weather and climate forecasts. The data gathered by JPSS aids in reducing the potential loss of human life and property through more efficient disaster planning and response to severe weather conditions, such as wildfires, hurricanes and floods. Citizens benefit from satellite data in the areas of general aviation, agriculture, and maritime activities, among others. Military and homeland security users benefit from JPSS tactically and strategically. JPSS collects a massive amount of precise Earth surface, atmospheric and space environmental measurements from a variety of onboard sensors. This volume of data allows scientists and forecasters to monitor and predict weather patterns with greater accuracy. In addition, JPSS also improves the speed of weather forecasting through improvement to data delivery times. These improvements are largely made possible by JPSS' ground systems that will collect and relay JPSS sensor data via a closed dedicated network to NOAA NESDIS for central processing. Major components that fly on the JPSS satellites and will fly on Polar Weather Follow-on satellites were developed in Fort Wayne, Indiana; El Segundo, California; Linthicum, Maryland; Azusa, California; Boulder, Colorado; Gilbert, Arizona; and Hampton, Virginia. The main office and staff are located in Lanham, Maryland.

National Environmental Satellite, Data, and Information Service (NESDIS) - [Near Earth Orbit Network \(NEON\)](#)

The Near Earth Orbit Network (NEON) Program in the National Environmental Satellite, Data, and Information Service (NESDIS) Office of Low Earth Orbit (LEO) Observations provides a framework to provide global measurements of earth systems. The main office and staff are located in Lanham, Maryland. These environmental measurements will be able to support a wide variety of atmospheric, terrestrial, marine, and polar observations. The data include the numerical weather prediction models, fire and flood models, atmospheric chemistry observations, and multiple land imagery products that have been a crucial piece of the NOAA strategic goal to create a "Climate-Ready Nation" and which provide essential information to NOAA's broader environmental stewardship mission. Following the recommendations from the 2017 NOAA Satellite Observation System Architecture (NSOSA) study, the NEON Program intends to use a combination of small and medium satellite platforms in a disaggregated architecture. This approach will provide an efficient means of filling gaps quickly and taking advantage of emerging remote sensing technologies. To execute a disaggregated LEO architecture and other NSOSA recommendations, the NEON Program plans to use industry's significant investment of funding, expertise, and innovation in space and space systems technology; deploy NOAA observation system assets where and when they are most needed, enabled by shorter development timelines and more frequent launches; leverage smaller instruments, satellites, and evolving small launch vehicles; and achieve greater agility to incorporate continuous advancement using new business models and partners.

National Environmental Satellite, Data, and Information Service (NESDIS) - [Office of Space Weather Observations \(SWO\) - Space Weather Follow On Program \(SWFO\)](#)

The focus of the Office of Space Weather Observations (SWO) is on flight projects, data exploitation, and execution of domestic, international, and commercial partnerships to meet NOAA's space weather observation requirements. The main office and staff are located in Lanham, Maryland. The Space Weather Follow On (SWFO) program managed by the SWO

supports the United States National Space Weather Strategy by sustaining operational space weather observation platforms and capabilities. While NOAA manages and funds the SWFO Program, its development is a collaborative effort between NOAA, National Aeronautics and Space Administration, Department of Defense, and many organizations. The SWFO program will provide continuity of essential solar coronal observations and space weather measurements that support the National Weather Service (NWS) Space Weather Prediction Center (SWPC) forecasting mission. The SWFO Program currently includes: an observatory operating at the Lagrange 1 point (SWFO-L1) providing coronal imaging and solar wind measurements and a coronagraph integrated on the GOES-19 spacecraft in geostationary orbit providing coronal imaging. SWFO-L1 will be launched as a rideshare with National Aeronautics and Space Administration's Interstellar Mapping and Acceleration Probe mission in Fiscal Year 2025. Major components of the SWFO-L1 program are being developed in Boulder, Colorado; San Antonio, Texas; Berkeley, California; Durham, New Hampshire; Washington, D.C.; and Greenbelt, Maryland. In addition, SWO manages the Space Weather Next (SW Next) program, which includes development of observational missions in extended orbits, low earth orbits, geostationary orbits, and highly-elliptical orbits. SWO is developing the SW Next Lagrange 1 (L1) project to continue and enhance NOAA's observation capability at L1 to meet space weather needs. In addition, SWO is developing the SW Next Lagrange 5 (L5) project. The L5 mission is a partnership with the European Space Agency to deliver a Compact Coronagraph 3 instrument to the Vigil Sun-Earth L5 Mission.

National Environmental Satellite, Data, and Information Service (NESDIS) - [JPSS/GOES-R: Orbits Interweave Sculpture at the NASA Goddard Visitor Center](#)

Located on the outer edge of the Rocket Garden, an exhibit by the Joint Polar Satellite System (JPSS) program, together with the Geostationary Operational Environmental Satellite - R (GOES-R) Series program, features an abstract kinetic sculpture with three mirrored orbs representing the Sun, Earth and the satellites that are activated by the wind. JPSS and GOES-R are part of a collaboration between the National Oceanic and Atmospheric Administration and NASA.

[Largo](#)

Office of the Chief Information Officer (OCIO) - [Information Technology Center](#)

The Information Technology Center (ITC) is a datacenter providing 24x7 operations and support for the financial applications of NOAA and its parent agency, the Department of Commerce (DOC). The largest such application is known as the Commerce Business System (CBS), which processes approximately 58% of the DOC budget. The ITC hosts other DOC-wide support systems including Cyber-Security Assessment and Management (CSAM) which provides a repository for documentation prepared for FISMA-mandated Certification and Accreditation of all DOC IT systems. Another DOC system at the ITC is known as SmartPay II, the system for handling all DOC Purchase, Fleet, and Travel credit cards under contract with JP Morgan/Chase and MasterCard. While hosting around 50 applications, the ITC is also being viewed as a possible location for consolidation of the financial processing of the DOC.

Office of the Chief Information Officer (OCIO) - [Service Delivery Division](#)

The Service Delivery Division provides a suite of IT services to support NOAA's mission. Our work includes IT infrastructure design and maintenance, network and server management and administration, desktop configuration and maintenance, application and system design and implementation, and IT security.

[Nanjemoy](#)

National Ocean Service (NOS) - [Mallows Bay-Potomac River National Marine Sanctuary](#) was designated on September 3, 2019. This 18-square mile area of the Potomac River lies entirely within Maryland waters and adjacent to Charles County MD. It is jointly managed by the State of Maryland and Charles County Maryland. The primary point for public access is at Mallows Bay Park, near Nanjemoy MD. The sanctuary protects and interprets the remains of the World War I-era wooden steamships – known as the “Ghost Fleet” – and related cultural heritage dating back nearly 12,000 years including the ancestral lands of three Tribes. Its significance is recognized by listing on the National Register of Historic Places and as a National Treasure by the National Trust for Historic Preservation.

Additionally, the sanctuary facilitates recreation, tourism and economic opportunity. Nearly a century of natural processes have gradually transformed the ghost fleet into ecologically valuable habitats. The overgrown hulls now form a series of distinctive islands, intertidal habitat, and underwater structure critical to commercial and recreational fisheries in addition to birds such as ospreys, blue herons, and bald eagles. Although the sanctuary does not manage or regulate these natural resources, the unique blending of history and ecology attracts and captivates visitors and serves as a living laboratory for research, education and community engagement.

Waldorf

NOAA Office of Education - [Science On a Sphere](#) at James E Richmond Science Center, in St. Charles High School. Science On a Sphere (SOS) is a room-sized global display system that uses computers and video projectors to display planetary data onto a six foot diameter sphere, analogous to a giant animated globe. Researchers at NOAA developed Science On a Sphere® as an educational tool to help illustrate Earth System science to people of all ages. Animated images of atmospheric storms, climate change, and ocean temperature can be shown on the sphere which is used to explain complex environmental processes in a way that is simultaneously intuitive and captivating.

MD-6

Germantown

NOAA Finance Office (NFO) - [Eastern Operations Branch](#)

The Eastern Operations Branch processes payments for services, supplies, and materials commonly required to support the Department's programs (i.e. lab equipment, non- personal services, travel expenses, utilities, and vessel charters). In providing these services, our staff examines vouchers and invoices, issues bills for receivables, receives and deposits receipts, pays various types of accounts payable documents, and enters other types of accounting transactions. The staff also responds to clients about finance-related concerns and problems.

Office of the Chief Information Officer (OCIO) - [Service Delivery Division](#)

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MD-7

Baltimore

NOAA Office of Education - [Coastal Ecosystem Learning Centers \(CELC\) network](#)

In Maryland, NOAA's Office of Education provides support to the [National Aquarium](#) in Baltimore as part of the Coastal Ecosystem Learning Centers (CELC) network, which is made up of 25 aquariums and marine science education centers located throughout North America. The CELC network collaborates on a variety of initiatives, ranging from youth summits to multi-institution projects, with the goal of better engaging the public in understanding, appreciating, and protecting marine and freshwater ecosystems. Through the CELC network, the Office of Education provides guidance, resources, and scientific expertise to these institutions, which collectively reach an estimated 20 million people annually across North America. By coordinating with the CELC network, NOAA helps to further its mission of engaging the public in protecting and preserving coastal and marine ecosystems.

MD-8

Silver Spring

Acquisition and Grants Office (AGO) - [Headquarters](#)

The Acquisition and Grants Office provides financial assistance and acquisition services for NOAA by overseeing and implementing all processes related to contracts and grants. For FY 2010, NOAA issued 2,306 grants, totaling over \$1.061 billion, to partner organizations and institutions throughout the United States and our territories.

National Environmental Satellite, Data, and Information Service (NESDIS) - [National Centers for Environmental Information \(NCEI\)](#)

NOAA's National Centers for Environmental Information (NCEI) are responsible for hosting and providing access to one of the most significant archives on earth with comprehensive oceanic, atmospheric, and geophysical data. NCEI is the Nation's leading authority for environmental information by and maximizing the Federal government's billion-dollar investment in environmental data, NCEI remains committed to providing products and services to private industry and businesses, local to international governments, academia, as well as the general public. NCEI headquarters are located in Asheville, North Carolina with other major locations in Boulder, Colorado; Silver Spring, Maryland; and Stennis Space Center, Mississippi.

National Environmental Satellite, Data, and Information Service (NESDIS) - [Office of Common Services \(OCS\)](#)

NOAA's Office of Common Services (OCS) provides and serves as the single organization for planning and execution of all common ground services. OCS is an effort of different ground components that will position NESDIS to effectively and efficiently develop and maintain its core ground systems capabilities. OCS sustains current NESDIS operational ground systems including the, NOAA Data Exploitation (NDE) processing system and the Product Distribution Area (PDA), Comprehensive Large Array Data Stewardship System (CLASS) system, is developing the NESDIS Common Cloud Framework (NCCF), and also is responsible for Satellite Product Development and integration for the entire organization. OCS core responsibilities include: completing analyses; defining and developing systems; acquiring, transitioning, and sustaining operations and activities for new and existing satellite ground systems; program management for IT and science development projects; and software engineering and standardization. From these responsibilities, OCS provides, develops, and sustains data acquisition, communications, control, product generation and distribution, enterprise management, algorithm operationalization, and data archival services for NOAA's environmental satellites. To ensure the ground systems and science products are delivered, OCS provides engineering and project management for ground systems architecture, design, development, integration and testing, infrastructure, and facilities. OCS participates in system verification and validation efforts and also in life cycle reviews for satellite acquisition programs and projects

National Environmental Satellite, Data, and Information Service (NESDIS) - [Office of Systems Architecture and Engineering \(SAE\)](#)

NOAA's Office of Systems Architecture and Engineering (SAE) applies systems engineering principles to optimize technical quality and to meet cost and schedule requirements across NESDIS in support of its mission. Its core responsibilities include enterprise-level system architecture, user engagement, requirements, advanced system and technology planning, management and technical policies and procedures; as well as system validation, assurance, and adjudication. SAE also performs systems engineering design, analysis, and evaluation of space flight, ground, data, and archive segments. As part of this responsibility, the program defines requirements, policies and procedures for systems engineering related to acquisitions, operations, archiving, and sustainment for implementation throughout NESDIS.

SAE maintains enterprise lessons learned toward process improvement for future NESDIS implementation and serves as the expert technical liaison relating to the end-to-end systems architecture. The office also establishes and administers the quality management system across NESDIS by identifying best practices and providing enterprise systems assurance and configuration management. This helps ensure compliance with the NESDIS quality management system through the life cycle of each NESDIS enterprise. In addition to validation and verification of user needs, the office serves as principal advocate for the assessment and mitigation of risk. This enables NESDIS to meet its mission, vision, and objectives through systems analysis of current and future enterprise architectures.

National Environmental Satellite, Data, and Information Service (NESDIS) - [Headquarters](#)

NOAA's NESDIS is the largest civil operational environmental space agency and the most extensive holder of atmospheric and oceanographic data in the world. NESDIS is dedicated to providing timely access to global environmental data from satellites and other sources to promote, protect, and enhance the Nation's economy, security, environment, and quality of life. NESDIS acquires and manages the Nation's operational environmental satellites,

completes research, and, through its National Centers for Environmental Information, provides data and information services and additional research. NESDIS is in the process of developing and acquiring its next-generation operational satellites. NESDIS has extensive partnerships with the National Aeronautics and Space Administration and the Department of Defense. It also collaborates with international partners to foster full and open data exchanges to support NOAA and the United States weather and environmental monitoring priorities. NESDIS environmental satellite observations provide important contributions to U.S. national security by providing military users with real-time and near-real-time observations for their aircraft, ships, ground forces, and facilities worldwide. NESDIS also contributes to the national economy by providing environmental data that support resource management of energy, water, and global food supplies.

National Marine Fisheries Service (NMFS) - [NOAA Seafood Inspection Program](#)

NOAA's Seafood Inspection Program conducts a voluntary inspection program for fishery products on a fee-for-service basis which assure compliance with all applicable food regulations. The office offers a wide range of professional services to the area's fishermen and fish processors including process and product inspection, product grading, lot inspection, laboratory analysis, and training. All edible foodstuffs, ranging from whole fish to formulated products, as well as fishmeal used for animal foods, are eligible for inspection and certification.

National Marine Fisheries Service (NMFS) - [Office of Law Enforcement](#)

The mission of NOAA Fisheries Office of Law Enforcement is to protect global marine resources by enforcing domestic laws and international treaties and obligations dedicated to protecting wildlife and their natural habitat. Effective fisheries law enforcement is critical to creating a level playing field for U.S. fishermen and enabling sustainable fisheries to support vibrant coastal communities.

National Marine Fisheries Service (NMFS) - [Office of Sustainable Fisheries](#)

The Office of Sustainable Fisheries (OSF) supports national domestic policy issues, provides support to the regional fishery management councils, and manages Atlantic highly migratory species. OSF works closely with NOAA Fisheries regional offices and science centers, the regional fishery management councils, and the Interstate Marine Fisheries Commissions to end and prevent overfishing, rebuild overfished stocks, and ensure healthy ecosystems. OSF's headquarters office includes the Domestic Fisheries Division, Atlantic Highly Migratory Species Management Division, and Operations and Regulatory Services Division.

National Marine Fisheries Service (NMFS) - [Office of Science and Technology](#)

The Office of Science and Technology provides support and coordination for NOAA Fisheries science programs and helps ensure a sound scientific basis for resource conservation and management decisions. ST coordinates closely with six NOAA Fisheries science centers: Alaska, Northeast, Northwest, Pacific Islands, Southeast, and Southwest. In particular, ST: 1) Supports at-sea resource surveys, stock assessments, habitat science and assessments, protected resource science and the seabird program, fisheries observer programs, cooperative research, and the independent peer review of NOAA Fisheries science products and programs; 2) Integrates and disseminates state and federal statistics about marine fisheries, and administers the surveys used to estimate recreational landings; 3) Conducts and coordinates socioeconomic research and data collection undertaken by the agency to support conservation and management of living marine resources; 4) Supports the development and coordination of science programs to advance the incorporation of ecosystem information into living marine resource management; 4) Provides mission support by maintaining and improving the quality and credibility of NOAA Fisheries' scientific activities; 5) Provides application management and development to support timely access to NOAA Fisheries data resources; and 6) Coordinates the publication of NOAA Fisheries journals and reports. OST's headquarters office includes the Fisheries Statistics Division, Assessment and Monitoring Division, Economics and Social Analysis Division, Science Information Division, MarineEcosystems Division, and the Operation, Management, and Information Division. In addition, the NOAA National Systematics Laboratory in Washington, D.C. and the NOAA Fisheries Scientific Publications Office in Seattle, WA are part of the Office of Science and Technology.

National Marine Fisheries Service (NMFS) - [Headquarters](#)

NOAA's National Marine Fisheries Service (NMFS) is responsible for the management, conservation and protection of living marine resources within the United States' Exclusive Economic Zone (water three to 200 miles offshore). Using the tools provided by the *Magnuson-Stevens Act*, NMFS assesses and predicts the status of fish stocks, ensures compliance with fisheries regulations, and works to reduce wasteful fishing practices. Under the *Marine Mammal Protection Act* and the *Endangered Species Act*, NMFS recovers protected marine species (i.e. whales, turtles) without unnecessarily impeding economic and recreational opportunities. With the help of the five regional offices and eight councils, NOAA's National Marine Fisheries Service is able to work with communities on fishery management issues. NMFS works to promote sustainable fisheries and to prevent lost economic potential associated with overfishing, declining species and degraded habitats.

National Ocean Service (NOS) - [Office of Response and Restoration](#)

NOAA's Office of Response and Restoration (OR&R) is a center of expertise in preparing for, evaluating, and responding to threats to coastal environments, including oil and chemical spills, releases from hazardous waste sites, disasters, and marine debris. To fulfill its mission of protecting and restoring NOAA trust resources, OR&R provides scientific and technical support to prepare for and respond to oil and chemical releases, determines damage to natural resources from those releases, protects and restores marine and coastal ecosystems, and works with coastal communities to address critical local and regional coastal challenges. The OR&R Silver Spring office is home to 37 staff who provide comprehensive expertise in coastal hazard preparedness, response, assessment and restoration, and marine debris.

National Ocean Service (NOS) - [NOAA Marine Debris Program](#)

The NOAA Marine Debris Program (MDP) in the Office of Response and Restoration (OR&R) leads national and international efforts to reduce the impacts of marine debris. Marine debris is a pervasive problem which threatens our oceans and coastal environments, navigational safety, the economy, and human health. To address this threat, the program invests in marine debris removal, prevention, and research projects in partnership with state and local agencies, tribes, non-governmental organizations, academia, and industry. The MDP Mid-Atlantic Regional Coordinator, based in Silver Spring, supports coordination efforts with regional stakeholders, provides support to grant-funded projects, tracks progress of projects, and conducts regional marine debris outreach to local audiences.

National Ocean Service (NOS) - [Center for Coastal Monitoring and Assessment](#)

The Center for Coastal Monitoring and Assessment conducts field research and data analysis to support marine resource management at local, regional, and national levels. We partner with groups ranging from Tribal organizations to state governments to other federal agencies to identify research and monitoring questions of importance to communities. Major research programs include: biogeographic assessments in support of ecosystem management, monitoring and research to help find sources of coastal contamination, assessments of the ecological impacts of climate change, and forecasts to help protect the public from harmful algal blooms.

National Ocean Service (NOS) - [Center for Sponsored Coastal Ocean Research](#)

The Center for Sponsored Coastal Ocean Research administers NCCOS extramural research – a portfolio of 11 programs consisting of many multi-year awards held by over 370 university, state, and government scientists and managers. Research program results are used to support sound coastal management decisions and an ecosystem approach to managing coastal resources. In 2012, the research portfolio focused on harmful algal blooms, hypoxia, and regional ecosystem science.

National Ocean Service (NOS) - [National Centers for Coastal Ocean Science](#)

National Centers for Coastal Ocean Science provides coastal managers with the information and tools they need to balance society's environmental, social, and economic goals. We are the primary coastal science arm within NOAA's National Ocean Service. Solving environmental problems requires knowledge and power. Scientists have knowledge, but typically limited authority to change behavior. Decision makers have power, but may lack in-depth knowledge of particular

problems. Linking these two groups brings knowledge together with power to make informed decisions that can drive social change. NCCOS works directly with managers, industry, regulators, and scientists to deliver relevant, timely, and accurate scientific information and tools. In addition to Headquarters, NCCOS consists of five Centers, two laboratories, and the NOAA RESTORE Act Science Program.

National Ocean Service (NOS) - [National Geodetic Survey Program](#)

The National Geodetic Survey's (NGS) time-tested survey expertise is the foundation for measuring the size, shape, and height of our nation's entire land area. This data comprises the National Spatial Reference System, a set of standard reference points that provide the latitude, longitude, and elevation framework necessary for the nation's land surveying, navigation, positioning, and mapping activities. Committed to making transportation and navigation safer, NGS also conducts airport surveys in the United States to position obstructions and aids to air travel. In addition, NGS conducts a coastal mapping program to provide a regularly updated and consistent national shoreline using remote sensing techniques and technology..

National Ocean Service (NOS) - [Office of Coast Survey](#)

The Office of Coast Survey is responsible for producing the suite of nautical charts that covers the coastal waters of the U.S. and its territories acquiring hydrographic data to update these charts. The Office of Coast Survey also develops hydrographic survey specifications; conducts technological development and application programs to increase efficiency in survey data acquisition, data processing, and chart production; and carries out research to develop techniques and methods for accomplishing these objectives. The Office of Coast Survey ensures safe, efficient and environmentally sound marine transportation that brings an uninterrupted flow of people and goods into and out of our nation's ports. The foundation of the United States economy is the Marine Transportation System--America's network of oceans, rivers, canals, locks and dams. Shipping on these "marine highways" moves people and cargo around the country, and connects us to the global marketplace for international trade and affordable goods.

National Ocean Service (NOS) - [Office for Coastal Management](#)

NOAA's Office for Coastal Management provides national leadership, strategic direction, and services for the coastal management community. Major initiatives housed within this organization include the Coral Reef Conservation Program; the National Coastal Zone Management Program; the National Estuarine Research Reserve, and the Digital Coast. The primary offices are located in Charleston, South Carolina and Silver Spring, Maryland. Satellite offices and other field staff are located throughout the coastal zone.

National Ocean Service (NOS) - [Coral Reef Conservation Program](#)

NOAA's Coral Reef Conservation Program brings together multidisciplinary expertise from over 30 NOAA offices and partners to protect, conserve, and restore coral reef resources. Coral reefs are some of the most biologically diverse ecosystems in the world and provide a range of benefits and vital services to coastal communities but are threatened from fishing impacts, climate change impacts, and land-based sources of pollution. In response to these threats, NOAA invests in resilience-based management initiatives to build capacity in coral reef jurisdictions, address continuing and emerging threats to the resilience of U.S. coral reef ecosystems, and support the restoration of ecosystem services they provide. The program promotes the resolution of existing gaps in coral reef ecosystem management, research, monitoring, and assessment, and addresses coral reef disasters and emergencies. The program has headquarters in Silver Spring, MD, within the NOAA Office for Coastal Management. National activities led out of Silver Spring include the Social Science Program and the National Coral Reef Monitoring Program.

National Ocean Service (NOS) - [Gateway to NOAA](#)

Gateway to NOAA is a permanent exhibit on NOAA's Silver Spring campus highlighting the ways in which NOAA takes the pulse of the planet every day and protects and manages ocean and coastal resources. The exhibit features a number of engaging displays including the "NOAA Heritage" section featuring historic scientific instruments and other tools and artifacts from the agency's 200-year history and "Earth Observations" section highlighting the ways in which NOAA

gathers information about our environment on land, sea, and sky. Do you know the difference between weather and climate? Get the answer in the “Weather and Climate” section, which focuses on NOAA’s role in forecasting the weather and understanding climate processes. In the “Water” section, the public can learn how NOAA supports safe navigation and commerce, explores the deep sea, and manages and protects coastal and ocean resources both locally and across the nation; and go behind the headlines in the “NOAA in the News” section, which features an interactive display through which visitors can explore our ocean world.

National Ocean Service (NOS) - [Office of National Marine Sanctuaries](#)

The Office of National Marine Sanctuaries serves as the trustee for a network of underwater parks encompassing more than 600,000 square miles of marine and Great Lakes waters from Washington state to the Florida Keys, and from Lake Huron to American Samoa. The network includes a system of 14 national marine sanctuaries and Papahānaumokuākea and Rose Atoll marine national monuments. Few places on the planet can compete with the diversity of the National Marine Sanctuary System, which protects America's most iconic natural and cultural marine resources. The system works with diverse partners and stakeholders to promote responsible, sustainable ocean uses that ensure the health of our most valued ocean places. A healthy ocean is the basis for thriving recreation, tourism and commercial activities that drive coastal economies. The Office of National Marine Sanctuaries also leads the [National Marine Protected Areas Center](#), the nation's hub for building innovative partnerships and tools to protect our special ocean and leads the Office of National Marine Sanctuaries' international work.

National Ocean Service (NOS) - [Headquarters](#)

NOS delivers the tools and services needed to understand, predict, and respond to the challenges we face along America's 95,000 miles of shoreline and 3.5 million square miles of coastal, Great Lakes, and deep-ocean waters. This vast area generates more than 60 percent of the nation's gross national product each year. Yet our oceans and coasts are facing unprecedented pressure from threats such as climate change, marine debris, and port congestion. In response to these threats, NOS scientists, natural resource managers, and specialists are seeking solutions that continue to grow our nation's coastal economy while sustaining a healthy and productive environment. In partnership with other NOAA offices; federal, state, and local agencies; industry representatives; members of the academic community; and others, NOS focuses on science, technology, innovation, and education to keep our oceans and coasts safe, healthy and productive.

National Ocean Service (NOS) - [U.S. Integrated Ocean Observing System Office](#)

The Integrated Ocean Observing System (IOOS) is a multidisciplinary system designed to enhance our ability to collect, deliver, and use ocean information. The goal is to provide continuous data on our open oceans, coastal waters, and Great Lakes in the formats, rates, and scales required by scientists, managers, businesses, governments, and the public to support research and inform decision-making. No single agency or organization has the capacity or resources to fully implement the U.S. IOOS on a national scale. IOOS represents a national partnership in which 17 Federal agencies and 11 Regional Associations share responsibility for the design, operation, and improvement of a national network of observations. The 17 Federal agency partners also provide our nation's contributions to advance the global component.

National Weather Service (NWS) - [Headquarters](#)

The National Weather Service (NWS) provides weather, water, and climate forecasts and warnings for the United States, its territories, adjacent waters and ocean areas, for the protection of life and property and the enhancement of the national economy. NWS data and products form a national information database and infrastructure, which can be used by other governmental agencies, the private sector, the public, and the global community. The function of headquarters is to provide national integration and oversight of the administrative, programmatic, financial, international, information technology, and other organizational management functions, and to conduct the national level strategic planning, communications, and diversity activities. There are a number of NWS headquarters offices based in Silver Spring, including the Office of the Assistant Administrator (the NWS Director), the Office of Science and Technology Integration, the Analyze, Forecast and Support Office, the Office of Observations, the Office of Central Processing, Office of Dissemination, and the Office of Facilities.

Office of Oceanic and Atmospheric Research (OAR) - [Headquarters](#)

The Office of Oceanic and Atmospheric Research (OAR) provides the research foundation for understanding the complex systems that support our planet. Working in partnership with other organizational units of NOAA, OAR provides better forecasts, earlier warnings for natural disasters and a greater understanding of the Earth. Our role is to provide unbiased science to better manage the environment, nationally and globally.

Office of Oceanic and Atmospheric Research (OAR) - [NOAA Library](#)

The NOAA Library is the premier provider of evidence-based resources, world class research services, and information expertise that enables our customers to create healthy, resilient societies and ecosystems. The NOAA Library is the primary information resource and service hub for ocean, coast, and atmospheric science, fostering innovation, collaboration, and discovery. The NOAA Library holds materials in a wide variety of formats on a large number of subjects related to NOAA research, including environmental science, ecology, fisheries, geosciences, marine and freshwater biology, meteorological and atmospheric sciences, oceanography and limnology, and more. Listed below are some of the types of materials available through the library:

- **Journals:** We currently subscribe to over 9,000 peer-reviewed electronic journals. For a list of our electronic journals, please visit our [catalog](#). Our backfile print journals can also be discovered through our [catalog](#).
- **Electronic Databases:** We provide access to a number of databases that index journals in a wide range of subject areas. To see which databases we have, and to access them directly from your desktop, you can view our [A-Z list](#).
- **NOAA Resources and Print materials:** The NOAA Library is the official repository of all NOAA publications and is the best place to find NOAA's historical print materials. All of these materials are findable through the library [catalog](#).
- **Images:** We formerly hosted the NOAA Photo Library with over 80,000 images taken by NOAA staff. These images are now findable via the [NOAA Digital Library](#). The majority of these images are in the public domain, so feel free to use them in your publications, websites, or personal projects.

The Library manages the [NOAA Institutional Repository](#), which provides access to NOAA authored and funded research publications in accordance with White House OSTP Memorandum Increasing Access to the Results of Federally Funded Research (2013). Other resources and services offered include a Rare Book room and a robust [Library Seminar speaker series](#). The Library is closed to the public but can provide reference assistance to the public via: library.reference@noaa.gov.

Office of Oceanic and Atmospheric Research (OAR) - [Climate Program Office Headquarters](#)

The OAR Climate Program Office (CPO) mission is to advance scientific understanding, monitoring, and prediction of climate and its impacts to enable and improve society's ability to plan and respond. CPO's position at the intersection of NOAA's science and service missions, the climate research community, and the broader climate enterprise enables it to lead a research agenda and forge partnerships that enhance society's ability to make effective decisions. CPO manages the competitive research programs by which NOAA funds high-priority climate science to advance understanding of atmospheric, oceanic, land-based, and snow and ice processes, and how they affect climate. CPO's foci include developing a broader user community for climate products and services; providing a focal point within NOAA for collaborative climate science and services; leading NOAA's climate education and outreach activities; and helping to coordinate international climate science and services. CPO supports interdisciplinary research projects across the nation to address societal challenges, including: reducing vulnerability to extreme weather; helping communities and businesses prepare for drought and water resource challenges; managing risks to coastlines and coastal infrastructure; managing risks to marine ecosystems; and effective ways of adapting to and/or mitigating climate-related impacts. Our research is conducted by investigators outside the federal government, such as through academic and private sectors, within federal government research labs, and in NOAA Cooperative Institutes.

Office of Oceanic and Atmospheric Research (OAR) - [Small Business Innovation Research](#)

The Small Business Innovation Research (SBIR) program is a highly competitive merit-based grant program that encourages U.S. small businesses to engage in federal Research/Research and Development (R/R&D), with the end goal of developing innovative and commercially-viable products or services. Including qualified small businesses in the nation's R&D arena stimulates high-tech innovation. The United States gains entrepreneurial spirit as it meets its specific research and development needs. NOAA's SBIR is focused on developing products and services across our mission areas, including a special focus in developing innovations in uncrewed systems, artificial intelligence, and genomics. While the NOAA SBIR program is managed from our offices in Silver Spring, MD, our awardees are located across the United States and territories. In 2023, the SBIR Program awarded \$15.3 million to small businesses developing technologies relevant to NOAA's mission. The majority of the awards were evenly distributed across the mission areas of Oceans and Coasts, Weather and Climate, and Fisheries, with the remainder in Space and Satellites. Wildfire detection and forecasting was a critical area for applications this year. The top states for NOAA awards in 2023 were California (18%), Florida, Massachusetts, and Maine (12% each). In 2024, the SBIR Program made \$16.2 million in total investments in small businesses. The awards were distributed evenly across the following NOAA mission areas: Oceans and Coasts, Weather and Climate, and Satellites and Space. Space Weather and related topics captured the largest chunk of the awards this year. The top states for NOAA SBIR awards in 2024 were California (18%) and Florida (12%).

Chief Information Officer (CIO) - [N-Wave NOAA Science Network](#)

N-Wave is NOAA's science network connecting NOAA, academic, and state research network communities to data and resources needed to advance environmental science.

NOAA Office of Education - [Science On a Sphere®](#) at NOAA Headquarters.

Science On a Sphere (SOS) is a room-sized global display system that uses computers and video projectors to display planetary data onto a six-foot diameter sphere, analogous to a giant animated globe. Researchers at NOAA developed Science On a Sphere® as an educational tool to help illustrate Earth System science to people of all ages. Animated images of atmospheric storms, climate change, and ocean temperature can be shown on the sphere, which is used to explain complex environmental processes in a way that is simultaneously intuitive and captivating.

Office of Oceanic and Atmospheric Research (OAR) - [National Sea Grant College Program](#)

The National Sea Grant College Program (Sea Grant) is a federal-university partnership administered by NOAA that integrates research, extension outreach, and education. Sea Grant forms a national network of 34 programs in all U.S. coastal and Great Lakes states, Puerto Rico, and Guam. The National Sea Grant Office headquarters is located in Silver Spring on the NOAA campus. Sea Grant encourages the wise stewardship of our marine resources through partnerships with government, academia, industry, scientists, and private citizens concerning issues surrounding our coasts, Great Lakes, and ocean waters. Get involved with Sea Grant through state and national opportunities like the John A. Knauss Marine Policy Fellowship program at seagrant.noaa.gov.

Office of Oceanic and Atmospheric Research (OAR) - [Ocean Acidification Program](#)

The Ocean Acidification Program pursues science to improve our understanding of how (and how fast) the chemistry of the ocean is changing, how variable that change is by region, and what impacts these changes are having on marine life, people, and the local, regional, and national economies. The OAP's support staff are based in Silver Spring, MD. In support of NOAA's mission to understand changes in the world's oceans, share that knowledge, and conserve coastal and marine ecosystems, the OAP plays an integral role in maintaining long-term ocean acidification monitoring; conducting research designed to understand marine ecosystems sensitivity to acidification; promoting relevant educational opportunities; engaging in national public outreach activities related to ocean acidification and its impacts; and coordinating activities with other agencies and appropriate international ocean science bodies. As part of its responsibilities, the OAP provides grants for critical research projects that explore the effects on marine organisms, ecosystems and the socioeconomic impacts that can lead to potential adaptive strategies. Additionally, the Ocean Carbon and Acidification Data System ([OCADS](#)) ensures data collected from OAP-funded research and other sources is archived

and accessible for ocean carbon and ocean acidification analyses, forecasting capabilities, and better assessments of marine resource vulnerability. OCADS is envisioned as the best data management services to support regional to global ocean carbon cycling and ocean acidification research. It builds upon a U.S. National ocean acidification data management and integration service required by the Federal Ocean Acidification Research and Monitoring (FOARAM) Act of 2009. The project is seated in National Centers for Environmental Information (NCEI) in Silver Spring, MD and hosts data collected from the nationwide observing network.

Office of Oceanic and Atmospheric Research (OAR) - [NOAA Ocean Exploration \(NOAA Office of Ocean Exploration and Research\)](#)

NOAA Ocean Exploration is dedicated to exploring the unknown ocean, unlocking its potential through scientific discovery, technological advancements, partnerships, and data delivery. The office works with partners to identify priority areas for exploration; support innovations in exploration tools and capabilities; and encourage the next generation of ocean explorers, scientists, and engineers to pursue careers in ocean exploration and related fields. The data and information collected during expeditions and exploration funding awards provide resource managers, the academic community, and the private sector information they need to identify, understand, and manage ocean resources for this and future generations. The office leverages resources via partnerships in and outside of NOAA, and also is a key partner in exploring the limits of the U.S. Extended Continental Shelf in support of the interagency National Strategy for Mapping, Exploring, and Characterizing the United States Exclusive Economic Zone. NOAA Ocean Exploration headquarters is located on the NOAA Campus in Silver Spring and the national program is managed from this location. The telepresence technology on NOAA Ship Okeanos Explorer, on Ocean Exploration Trust's E/V Nautilus, a partner vessel supported through NOAA's Ocean Exploration Cooperative Institute, enables scientists from all over the country to participate in the expeditions occurring at sea. This technology uses satellite and internet to transmit data in real time from the Okeanos Explorer's and Nautilus's remotely operated vehicles to shore-based centers around the country, as well as other parts of the world. This allows the ship to operate with the majority of its participating scientists remaining on shore, which expands the breadth of available expertise and increases the pace and efficiency of exploration. It also allows NOAA Ocean Exploration to stream seafloor imagery over standard Internet connections, bringing the excitement of ocean exploration and discoveries live into classrooms, newsrooms, and living rooms around the world - strengthening and engaging the community of ocean explorers and increasing their ability to make informed decisions about important ocean issues. For larger events in which Ocean Exploration prefers to get all of the on shore participants together, they have an Exploration Command Center which can be utilized 24/7. The Exploration Command Center in Silver Spring is located in the NOAA Science Center.

Office of Oceanic and Atmospheric Research (OAR) - [Weather Program Office](#)

OAR's Weather Program Office (WPO) supports world-class weather research to save lives, reduce property damage, and enhance the national economy. WPO works closely with the National Weather Service (NWS) to help develop and transition weather research, including hurricanes, severe thunderstorms, heavy precipitation, and air pollution. Additionally, WPO utilizes social science to learn how to deal with the uncertainties weather presents and to inform its engagement and communication with researchers, funders, and the public. WPO selects and funds research that supports and fosters collaborations — within NOAA's research laboratories and across the weather enterprise (i.e., NOAA, other Federal agencies and entities, state and local governments, academia, and the private sector). WPO's programs include the Observations Program, the Earth Prediction Innovation Center (EPIC), the Joint Technology Transfer Initiative (JTII), the Subseasonal to Seasonal (S2S) program, the Air Quality (and Fire Weather) Program, The Supplemental Appropriations Program, the Social Science Program, and the Testbeds Program that co-manages the testbeds (Hurricanes and Oceans Testbed located in Miami, FL; Hazardous Weather Testbed located in Norman, OK; Hydrometeorology Testbed and [Climate Testbed](#), both located in Maryland). WPO also coordinates portfolios for various disaster-related supplemental appropriations.

Office of Oceanic and Atmospheric Research (OAR) - [Global Ocean Monitoring and Observing Program](#)

The Global Ocean Monitoring and Observing Program (GOMO) is the U.S. Federal source and international leader for sustained, in situ global ocean observations and information in support of research, monitoring, and prediction. GOMO

supports half of the world's ocean observing research and has encouraged the participation of over 100 nations in developing the current distributed ocean observing system. These global ocean observations provide the foundation for describing the changes over time in our ocean, and they are used every day in weather, marine, and ocean prediction models, helping us understand our changing ocean and benefiting those who use the wide range of NOAA products and services. Global ocean observations and research are conducted on ships, as well as by robotic observing instruments such as Argo floats, gliders, drifting buoys, moored buoys, uncrewed surface vehicles such as Saildrones, and an increasing array of innovative tools designed to detect environmental change. GOMO works with partners across NOAA and the Cooperative Institutes, as well as other national and international partners, to collect data and information across the global ocean, and to share that knowledge to serve society. The mission of the GOMO program is to provide and support high quality global ocean observations and research to improve our scientific understanding and inform society about the ocean's role in environmental change. GOMO's staff office is located in Silver Spring, MD. GOMO also supports research conducted at the Atlantic Oceanographic and Meteorological Laboratory in Miami, Florida, the Pacific Marine Environmental Laboratory in Seattle, Washington, and the Physical Sciences Laboratory in Boulder, Colorado.

Office of Oceanic and Atmospheric Research (OAR) - [Earth System Science and Modelling Division Competitive Research Programs](#)

The NOAA Climate Program Office (CPO)'s Earth System Science and Modeling (ESSM) Division supports research to advance understanding of the Earth system via five competitive research programs: Climate Variability & Predictability (CVP); Modeling, Analysis, Predictions, and Projections (MAPP); Atmospheric Chemistry, Carbon Cycle, & Climate (AC4); Climate Observations and Monitoring (COM); and Earth's Radiation Budget (ERB). ESSM programs fund numerous projects in 32 states, each with a goal of understanding and predicting changes in climate, weather, oceans, and coasts.

Office of the Chief Administrative Officer (CAO) - [Headquarters](#)

The Office of the Chief Administrative Officer (CAO) provides comprehensive, NOAA-wide technical, programmatic guidance and staff support to the Office of the Under Secretary in the areas of: facilities Management, including real estate (lease management, real property acquisitions), and construction project planning, design and engineering; logistics Management, including personal property, transportation, supply chain and building management; *Freedom of Information Act*, competitive sourcing guidance, OIG/GAO liaison; Safety and Environmental Compliance programs; Civil Rights and Equal Employment Opportunity programs; NOAA Deemed Export program; and Directives and Records Management.

Office of the Chief Information Officer (OCIO) - [Headquarters](#)

The NOAA Office of the Chief Information Officer (OCIO) ensures that NOAA's programs make full and appropriate use of information technology. The NOAA OCIO oversees the expenditure of approximately \$1 billion each year in information technology (IT) spending alone - computer hardware, software, services, networking, and telecommunications. Its focus includes high performance computing and communications, cyber security, homeland security, radio frequency management, and service delivery. NOAA is constantly adopting improved means to manage and deliver data and information to citizens and businesses regarding weather and water forecasts, search and rescue, climate change, environmental images, coastal maps, and ecosystems management. The OCIO manages and provides enterprise-wide services to NOAA, enabling Line Offices to focus on their core missions. The OCIO also manages NOAA's implementation of the Federal Information Technology Acquisition Reform Act, which enhances the authority of the federal Chief Information Officer to improve IT efficiency. NOAA OCIO and its Line Office OCIOs are key partners with NOAA to meet NOAA missions and strategic goals.

Office of the Federal Coordinator for Meteorological Services and Supporting Research (OFCM) - [Headquarters](#)

The Office of the Federal Coordinator for Meteorological Services and Supporting Research (OFCM) is an interdepartmental office established in 1964 in response to Public Law 87-843. The OFCM fosters the effective use of Federal meteorological resources by leading the systematic coordination of operational weather requirements and services, and supporting research, among the Federal agencies. Fifteen Federal departments, agencies, or offices are engaged in meteorological activities and participate in the OFCM's coordinating groups. The Office of Management and

Budget and the Office of Science and Technology Policy in the Executive Office of the President also participate in and support the Federal meteorological coordinating infrastructure. In addition to sponsoring this coordinating infrastructure, the OFCM prepares operations plans, conducts studies, and responds to special inquiries and investigations. Current focus areas include supporting interagency development of a strategic plan for coordinating meteorological activities; updating surface observing standards; helping transition previous and ongoing Multifunction Phased Array Radar risk reduction research efforts into the Spectrum Efficient National Surveillance Radar feasibility study; supporting the Space Weather Operations, Research, and Mitigation Subcommittee; planning the 2017 Tropical Cyclone Operations and Research Forum, and establishing new coordination initiatives related to interagency research, the Earth System Prediction Capability initiative, and climate services.

Office of Marine and Aviation Operations (OMAO) - [Headquarters](#)

The Office of Marine and Aviation Operations (OMAO) operates a wide variety of specialized aircraft and ships to complete NOAA's environmental and scientific missions. OMAO is also responsible for the administration and implementation of the NOAA Diving Program, Small Boat Program and Aviation Safety Program, to ensure safe and efficient operations in NOAA-sponsored underwater activities and aviation and small boat operations. NOAA's fleet of aircraft operate in some of the world's most remote and demanding flight regimes--over open ocean, mountains, coastal wetlands, Arctic pack ice, and in and around hurricanes and other severe weather--with an exemplary safety record. NOAA's ship fleet provides hydrographic survey, oceanographic and atmospheric research, and fisheries research vessels to support NOAA's strategic plan elements and mission. The vessels are located in various locations around the United States. NOAA's aircraft and ship fleet is operated and managed by a combination of NOAA Corps Officers, professional mariners, and civilian employees. The aircraft and ship's officers and crew provide mission support and assistance to embarked scientists from various NOAA laboratories as well as the academic community.

NOAA Commissioned Officer Corps (NOAA Corps) - [NOAA Corps](#)

The NOAA Commissioned Officer Corps is one of the eight uniformed services of the United States. The service, consisting of approximately 321 commissioned officers, is an integral part of NOAA. The NOAA Corps traces its roots back to the former U.S. Coast and Geodetic Survey, founded in 1807. The NOAA Corps today provides a cadre of professionals trained in engineering, earth sciences, oceanography, meteorology, fisheries science, and other related disciplines. Officers operate ships, fly aircraft, manage research projects, conduct diving operations, and serve in staff positions throughout NOAA.

NOAA Commissioned Officer Corps (NOAA Corps) - [Commissioned Personnel Center](#)

The NOAA Commissioned Officer Corps Commissioned Personnel Center (CPC) provides the full spectrum of human resources and career management services to NOAA Corps Officers. The Officer Career Management Division establishes and maintains an appropriate depth and breadth of professional expertise within the NOAA Commissioned Corps to meet the requirements of the agency. It accomplishes this through selective recruiting and training, participation in the assignment process, and career counseling. It directs and supports the activities of the NOAA Corps Officer Training Center (NCOTC). The Personnel Management Division manages officer promotions, awards, records, transfers, appointments, benefits, retirements, evaluation processing, personnel actions and entitlement programs, managing Officers' entire careers from the day they enter Basic Officer Training until retirement and beyond.

Office of Program Planning and Integration (PPI) - [Headquarters](#)

The Office Program Planning and Integration (PPI) brings all of NOAA's talent, resources, and capabilities together to meet the needs of national and regional stakeholders in a unified manner. PPI coordinates NOAA's many lines of service with the nation's many needs for environmental information and stewardship. It ensures that agency investments and actions are guided by a strategic plan, are based on sound social and economic analysis, adhere to executive and legislative science, technology and environmental policy, and integrate the full breadth of NOAA's resources, knowledge and talent to meet its mission goals.

Workforce Management Office (WFMO) - [Headquarters](#)

The Workforce Management Office (WFMO) provides NOAA-wide leadership to workforce management functions including strategic human capital planning, labor-management, about labor relations, employee relations, performance management, and incentive awards, executive resources, distance learning, leadership development, training and career development, and human resources data management and automation initiatives. The Workforce Management Office employees in the Norfolk Office provide client centric human resources operational support to the National Weather Service's Headquarters and Eastern Region, National Ocean Service, and Office of Oceanic and Atmospheric Research.

[Coastal](#)

Office of Oceanic and Atmospheric Research (OAR) - [Ocean Acidification Observing Network \(NOA-ON\)](#)

The NOAA Ocean Acidification Observing Network (NOA-ON) is a sustained investment in ocean chemistry observing networks in U.S. waters and abroad. There are currently 16 buoys sponsored by the [NOAA OAR Ocean Acidification Program](#) in coastal, open-ocean and coral reef waters that contribute to this network. The long-term datasets collected from these moorings are key to understanding how ocean chemistry and other ocean conditions are changing over time, and their impacts on marine and coastal ecosystems. These buoys are located in Alaska ([Gulf of Alaska](#), [Bering Sea](#)), American Samoa ([Fagatele Bay](#)), California (California Current Ecosystem [1](#) & [2](#)), [Chesapeake Bay](#) (MD, VA), Louisiana ([Coastal LA](#)), Florida ([Cheeca Rocks](#)), Georgia ([Grays Reef](#)), Hawaii ([Kāne'ohe Bay](#) and [CRIMP-II](#), both in O'ahu) Oregon ([Coos Bay](#)), Maine ([Gulf of Maine](#)), Puerto Rico ([La Parguera](#)), Washington ([Cha'ba](#)), and Lake Huron ([Thunder Bay](#)).

National Marine Fisheries Service (NMFS) - [Deep-Sea Coral Research and Technology Program](#)

NOAA's Deep Sea Coral Research is administered by NOAA Fisheries' [Office of Habitat Conservation](#). Mandated by the Magnuson-Stevens Fishery Conservation and Management Act, it is the nation's only federal research program dedicated to increasing scientific understanding of deep-sea coral ecosystems. Deep-sea corals occur off of every coastal state in the country, and create important habitats for countless species, including many fish species. The Program collaborates closely with partners, including other NOAA offices, to study the distribution, abundance, and diversity of deep sea corals and sponges. This work then informs critical management decisions in the waters of the United States and its territories. These decisions enhance the sustainability of deep-sea fisheries and other ocean uses, while conserving deep-sea coral and sponge habitats.

The Program works with partners to complete multi-year regional fieldwork initiatives, as well as smaller projects around the country, centered on integrating new and existing information on these vulnerable and biologically diverse habitats. The first research initiative took place from 2009 to 2011 in the U.S. South Atlantic region and provided valuable information to help decision-makers refine protected area boundaries. To date, the Program has completed one or more initiatives in each region of the United States.

National Marine Fisheries Service (NMFS) - [Restoration Center](#)

The [NOAA Restoration Center](#), within the [Office of Habitat Conservation](#), works with partners across the nation to restore habitat to sustain fisheries, recover protected species, and maintain resilient coastal ecosystems and communities. We have over 30 years conducting habitat restoration through competitive funding opportunities and technical assistance. We also work to reverse habitat damage from disasters like oil spills, ship groundings, and severe storms. In Maryland, the Restoration Center provides funding and technical guidance to restore coastal habitat in Maryland and nationwide. Recently, they provided funding for the removal of Bloede Dam and for engineering design to remove the Daniels Dam on Maryland's Patapsco River, part of a larger effort with partner American Rivers to restore more than 65 miles of spawning habitat for blueback herring, alewife, and American shad, and more than 1800 miles for American eel, ensuring sustainable populations of these target species. Two other dams on the Patapsco River (Simkins and Union Dams) were

also removed in 2010 as part of this effort. See the interactive [Restoration Atlas](#) to find habitat restoration projects near you. Site visits to see habitat projects may be available in your state, please inquire if interested.

In addition, the Office of Habitat Conservation is responsible for executing an unprecedented \$1.4 billion in funding under [Bipartisan Infrastructure Law and Inflation Reduction Act for habitat restoration and fish passage](#). We are working with our partners to do this through our expert technical assistance and four funding competitions: Fish Passage, Tribal Fish Passage, Transformational Habitat Restoration, and Habitat Restoration for Tribes and Underserved Communities. We have funded 214 awards totaling \$985M in rounds one and two with more to come in round 3. We are funding work all over the country, [explore them on our interactive map](#).

National Marine Fisheries Service (NMFS) - [Cooperation with States Program](#) and [Species Recovery Grants](#)

Under the authority of section 6 of the Endangered Species Act, the Cooperation with States Program brings states, NMFS, and other partners together to recover threatened and endangered species. A total of 25 U.S. territories and coastal states, including Maryland, currently participate in this program. Competitive grants are awarded to states through the Species Recovery Grants to States Program to support management, monitoring, research and outreach efforts for species that spend all or a portion of their life cycle in state waters. The funded work is designed to prevent extinctions or reverse the decline of species, and restore ecosystems and their related socioeconomic benefits. The Maryland Department of Natural Resources has received multiple awards through this program, including grants to support projects focused on Atlantic sturgeon, shortnose sturgeon, and sea turtles.

National Marine Fisheries Service (NMFS) - [Sea Turtle Salvage and Stranding Network](#)

The Sea Turtle Stranding and Salvage Network (STSSN) was formally established in 1980 to collect information on and document strandings of marine turtles along the U.S. Gulf of Mexico and Atlantic coasts. The network, which includes federal, state and private partners, encompasses the coastal areas of the eighteen-state region from Maine to Texas, and includes portions of the U.S. Caribbean. Data gathered by the Network helps inform bycatch reduction efforts, monitor factors affecting turtle health, and provide other information needed for sea turtle management and population recovery.

National Marine Fisheries Service (NMFS) - [National Marine Mammal Stranding Network](#) and [John H. Prescott Marine Mammal Rescue Assistance Grant Program](#)

The National Marine Mammal Stranding Network and its trained professionals respond to dead or live marine mammals in distress that are stranded, entangled, out of habitat or otherwise in peril. Our long-standing partnership with the Network provides valuable environmental intelligence, helping NOAA establish links among the health of marine mammals, coastal ecosystems, and coastal communities as well as develop effective conservation programs for marine mammal populations in the wild. There are two stranding network members in the state. NOAA Fisheries funds eligible members of the Stranding Network through the competitive John H. Prescott Marine Mammal Rescue Assistance Grant Program. For fiscal year 2020, 43 competitive Prescott Grants were awarded totaling \$3.7 million nationwide, with one award for \$62,239 going to one recipient in Maryland: Maryland Department of Natural Resources.

National Ocean Service (NOS) – [Bipartisan Infrastructure Law](#)

The Bipartisan Infrastructure Law is helping coastal communities build the future they want to see. The legislation provides a historic investment in coastal protection and restoration that will increase community resilience to climate change and extreme weather events, and improve how we manage our ocean resources. Projects funded under this law protect and restore ecologically significant habitats, including conserving lands that play a critical role in helping communities become more resilient to natural hazards. Maryland received funding for one project in FY22 and one project in FY23, as well as funds to build the state's capacity to protect its coastal communities and resources.

National Ocean Service (NOS) - [Navigation Manager](#)

OCS navigation managers are strategically located in U.S. coastal areas to provide regional support to federal and state agencies in order to assist with navigational challenges. NOAA's navigation managers work directly with pilots, port

authorities, and recreational boating organizations in the mid-Atlantic region. They help identify the navigational challenges facing marine transportation in Maryland and provide NOAA's resources and services that promote safe and efficient navigation. Navigation managers are on call to provide expertise and NOAA navigation response coordination in case of severe coastal weather events or other marine emergencies. The Office of Coast Survey has a navigation manager in Norfolk, VA to support mariners and stakeholders in the Chesapeake and Delaware Bay region.

National Ocean Service (NOS) - [National Water Level Observation Network](#)

The National Ocean Service (NOS) operates six long-term continuously operating tide stations in the state of Maryland, which provide data and information on tidal datum and relative sea level trends, and are capable of producing real-time data for storm surge warning. These stations are located at Ocean City Inlet, Cambridge, Bishops Head, Baltimore, Annapolis and Solomon's Island. Each station is associated with a set of tidal benchmarks installed in the ground that is used to reference the height of the water levels and helps connect the water level to land. Station data feeds into many CO-OPS products that are used to support safe navigation, mitigate coastal hazards, and protect communities. Such products include:

- Coastal Inundation Dashboard - view water levels in real-time and during storms
- High Tide Flooding Outlooks
- Sea level trends and maps
- Real-time current measurements
- Hydrodynamic models
- Tidal and water level datums

National Ocean Service (NOS) - [Coastal and Estuarine Land Conservation Program](#)

The Coastal and Estuarine Land Conservation Program brings conservation partners together to protect coastal and estuarine lands considered important for their ecological, conservation, recreational, historical, or aesthetic values. Subject to availability of funding, the program provides state and local governments with matching funds to purchase coastal and estuarine lands or obtain conservation easements for important lands threatened by development. Since 2002, the program has protected more than 110,000 acres of coastal land nationally, including over 16,000 acres protected as in-kind matching contributions. Six projects were successfully completed in Maryland, and these lands are protected in perpetuity.

National Ocean Service (NOS) – [National Coastal Zone Management Program](#)

Through a unique federal-state partnership, NOAA's Office for Coastal Management works with the Maryland Department of Natural Resources to implement the National Coastal Zone Management Program in Maryland. NOAA provides the state coastal management program with financial and technical assistance to further the goals of the Coastal Zone Management Act and ensure coastal waters and lands are used in a balanced way to support jobs, reduce use conflicts, and sustain natural resources.

National Ocean Service (NOS) – [Digital Coast](#)

The Digital Coast is a focused information resource developed to meet the unique needs of coastal communities. Developed and maintained by NOAA's Office for Coastal Management, content comes from hundreds of organizations, including federal, state, and local agencies, plus private sector and non-profit contributors. The Digital Coast website provides not only site-specific coastal data, but also related tools, training, and information needed to make these data useful for coastal decision makers. The Digital Coast Act authorizes the Digital Coast as a standing national program and supports NOAA's efforts to increase access to authoritative data, tools, and training that enable coastal communities to plan for long-term resilience, manage water resources, and respond to emergencies.

The National Coastal Resilience Fund restores, increases, and strengthens natural infrastructure to protect coastal communities while also enhancing habitats for fish and wildlife. The National Fish and Wildlife Foundation (NFWF) executes this program in partnership with NOAA to invest in conservation projects that restore or expand natural features,

such as coastal marshes and wetlands, dune and beach systems, oyster and coral reefs, forests, coastal rivers and floodplains, and barrier islands, which minimize the impacts of storms and other naturally occurring events on nearby communities. In Maryland, 13 projects have been funded: one in FY20, one in FY21, four in FY22, and seven in FY23.

National Ocean Service (NOS) – [Emergency Coastal Resilience Fund](#)

The Emergency Coastal Resilience Fund is a partnership effort between NOAA and the National Fish and Wildlife Foundation (NFWF) to increase the resilience of coastal communities within federally-declared disaster areas impacted by hurricanes and wildfires in 2018, 2020, and 2021. In Maryland, the ECRF awarded a project in 2021.

National Ocean Service (NOS) – Regional Ocean Partnerships: [Mid-Atlantic Regional Council on the Ocean](#)

The Mid-Atlantic Committee on the Ocean (MACO) is a committee established by the [Mid-Atlantic Regional Council on the Ocean](#) (MARCO) to foster collaboration among states, federal agencies, the Mid-Atlantic Fishery Management Council, and federally recognized tribes to enhance the vitality of the region's ocean ecosystem and economy through increased communication and collaboration. To maintain quality constituent service, staff from NOAA Office for Coastal Management lead NOAA's engagement with MACO, MARCO and state coastal management programs to improve the delivery of NOAA products and services in this region. With funding provided through the Bipartisan Infrastructure Law, NOAA is investing approximately \$56 million nationwide over five years to enhance and support the priorities of established regional ocean partnerships, including coordinating interstate and intertribal management of ocean and coastal management issues, and enhancing sharing and integration of data.

National Ocean Service (NOS) - [OR&R Preparedness, Response, and Restoration Coordinators](#)

NOAA's Office of Response and Restoration (OR&R) is a center of expertise in preparing for, evaluating, and responding to threats to coastal environments, including oil and chemical spills, releases from hazardous waste sites, disasters, and marine debris. To fulfill its mission of protecting and restoring NOAA trust resources, OR&R provides scientific and technical support to prepare for and respond to environmental threats that coastal communities face; determines damage to natural resources from those releases; protects and restores marine and coastal ecosystems; and works with coastal communities to address critical local and regional coastal challenges.

- Eleven regionally based **Scientific Support Coordinators (SSC)** harness the input of a multi-disciplinary team to address issues such as oil slick trajectory forecasting, environmental trade offs, best practices, resources at risk, and chemical hazard assessment to reduce risks to coastal habitats and resources. The SSC for Maryland is based in Point Pleasant, New Jersey at the USCG Station Manasquan.
- OR&R identifies and quantifies environmental injury caused by releases of oil and hazardous materials. Our network of **Regional Resource Coordinators** work with multidisciplinary scientific, economic, and legal teams with the goal of securing the appropriate amount and type of restoration required to restore injured NOAA trust resources and compensate the public for their lost use. We collaborate with NMFS Restoration Center and NOAA General Council through the Damage Assessment, Remediation, and Restoration Program (DARRP) to ensure the process is efficient, legally defensible and restoration focused. The RRCs serving the Northeast/Great Lakes region are based in Boston, Massachusetts and New York, New York.
- The **Regional Preparedness Coordinator (RPC)** is strategically placed within the region to ensure that NOS and our partners are able to effectively prepare for, respond to, and recover from all hazards, including coastal disasters. The RPC serves as a liaison between NOS and its federal, state, and local disaster preparedness and emergency response partners. A key role of the RPC is to better understand the needs and opportunities within the region and to ensure partners have the tools and resources necessary to inform decision-making. The RPC has expertise across the spectrum of emergency management and provides preparedness, response, and recovery services including planning, training, exercises, response coordination, continuous improvement, and long-term recovery. The RPC, based in Charleston, South Carolina, serves the Southeast and Caribbean region – Delaware, Maryland, Virginia, North Carolina, South Carolina, Georgia, Florida, Puerto Rico, and the U.S. Virgin Islands

National Ocean Service (NOS) - OR&R [Atlantic Environmental Response Management Application](#) and [Response Tools for Oil and Chemical Spills](#)

Assessing important spatial information and designing successful restoration projects rely upon interpreting and mapping geographic information, including the location, duration, and impacts from oil spills, other hazardous materials, or debris released into the environment. Atlantic Environmental Response Management Application (ERMA®) is an online mapping tool that integrates both static and real-time data, such as ship locations, weather, and ocean currents, providing an easy-to-use common operating picture for environmental responders and decision makers. ERMA staff continued to work closely with Federal and State agencies for drills, hurricane response, and incidents. Maintained habitat data for sensitive species. Ensured data was kept up-to-date and data collection methods were kept consistent. In addition to ERMA, the Office of Response and Restoration (OR&R) offers a suite of [tools](#) to support emergency responders dealing with oil and chemical spills. From Environmental Sensitivity Index (ESI) maps and data which provide concise summaries of coastal resources including biological resources and sensitive shorelines to GNOME, a trajectory and fate model that predicts the route and weathering of pollutants spilled on water, and so much more, these tools provide easy-access to critical data that support a wide range of needs for emergency responders, ultimately supporting our coastal communities.

National Ocean Service (NOS) - [Marine Debris Projects and Partnerships in Maryland](#)

The NOAA Marine Debris Program (MDP) in the Office of Response and Restoration (OR&R) leads national and international efforts to reduce the impacts of marine debris. The program supports marine debris removal, prevention, and research projects in partnership with state and local agencies, tribes, non-governmental organizations, academia, and industry. The MDP Mid-Atlantic Regional Coordinator, based in Silver Spring, supports coordination efforts with regional stakeholders, provides support to grant-funded projects, tracks progress of projects, and conducts regional marine debris outreach to local audiences. The MDP also works with local communities and organizations to remove and research marine debris. In Maryland, the MDP is working with the Metropolitan Washington Council of Governments, using funding provided under the Bipartisan Infrastructure Law, to conduct removals of abandoned and derelict vessels and other large debris along the tidal Anacostia River in Washington, DC and Maryland. The University of Maryland Center for Environmental Sciences - Chesapeake Biological Laboratory is expanding their “Wave of Plastics” curricular unit into two new Maryland counties, to help reduce marine debris in the Chesapeake Bay watershed. A separate study conducted by the University of Maryland Center for Environmental Science is examining the role marshes and underwater plant life have in determining what happens to plastic debris as it moves down the Choptank River. The Mid-Atlantic Marine Debris Action Plan, covering Maryland, the District of Columbia, Delaware, Virginia, New Jersey, and New York, was published in 2021. This plan is facilitated by the MDP with the participation of 96 organizations. The plan establishes a road map for strategic progress in making the Mid-Atlantic, its coasts, people, and wildlife free from the impacts of marine debris. The MDP continues to work with state and local governments, and other stakeholders, to develop and implement the Maryland Marine Debris Emergency Response Guide.

National Ocean Service (NOS) - [U.S. Integrated Ocean Observing System](#) ([Mid-Atlantic Regional Association Coastal Ocean Observing System](#))

The U.S. Integrated Ocean Observing System, or IOOS®, is a federally and regionally coordinated observing system with 17 interagency and 11 regional partners. The System addresses regional and national needs for coastal, ocean, and Great Lakes data and information. This includes gathering and disseminating regional observations; data management; modeling and analysis; education and outreach; and research and development. The Mid-Atlantic Regional Association Coastal Ocean Observing System (MARACOOS) is one of eleven U.S. IOOS Regional Associations in the United States focused on ocean observing. Our region extends from Cape Hatteras to Cape Cod and includes all the estuaries and the continental shelf waters. MARACOOS provides the necessary ocean observing, data management, and forecasting capacity to systematically address prioritized regional themes including maritime safety, ecosystem based management, water quality, coastal inundation, and offshore energy development.

National Weather Service (NWS) - [National Data Buoy Center Buoys](#)

The National Weather Service (NWS), through its National Data Buoy Center (NDBC), develops, deploys, operates, and maintains the current national data buoy network of moored and drifting weather buoys and land stations that serve all of the Nation's coastal states and territories. Within this network, 110 of the buoys and 51 of the land stations are maintained directly by NDBC. Located at NASA's Stennis Space Center in Mississippi, supports weather and marine warning and forecast services in real time by providing deep ocean and coastal meteorological and oceanographic observations. These data provide valuable information used by NWS supercomputers to produce computer-generated model forecasts of the atmosphere and climate. NDBC manages the Volunteer Observing Ship program to acquire additional meteorological and oceanographic observations supporting NWS mission requirements. NDBC also supports operational and research programs of NOAA and other national and international organizations.

Statewide

National Marine Fisheries Service (NMFS) - [Greater Atlantic Regional Fisheries Office](#) and [Northeast Fisheries Science Center](#)

NMFS is responsible for the management, conservation and protection of living marine resources within the United States' Exclusive Economic Zone (water three to 200 miles offshore). Using the tools provided by the *Magnuson-Stevens Act*, NMFS assesses and predicts the status of fish stocks, develops and ensures compliance with fisheries regulations, restores and protects habitat and works to reduce wasteful fishing practices, and promotes sustainable fisheries. Under the *Marine Mammal Protection Act* and the *Endangered Species Act*, NMFS recovers protected marine species (e.g. whales, turtles).

The Greater Atlantic Regional Fisheries Office (located in Gloucester, MA) includes divisions that promote sustainable fisheries, habitat conservation, and recovery of protected species, and conducts statistical analysis and programs supporting these divisions. Key fish species managed in the Greater Atlantic Region include the northeast "multispecies complex" (cod, haddock, yellowtail flounder etc.), Atlantic sea scallops, herring, lobster, and summer flounder. Key marine endangered species in this region are North Atlantic right whales, leatherback, loggerhead, and Kemp's ridley sea turtles, Atlantic salmon and Atlantic and shortnose sturgeon. NMFS is the lead agency coordinating the Large Whale and Sea Turtle Disentanglement Program activities and the Marine Mammal Health and Stranding Response Program activities. The core functions of these programs include coordinating volunteer networks to: respond to entanglements and strandings, investigate mortality events, and conduct biomonitoring, tissue/serum banking, and analytical quality assurance. The Office also fosters sustainable [aquaculture](#) in the region, with two Regional Aquaculture Coordinators that act as a liaison between federal and state agencies to assist in permitting and coordination activities, supporting aquaculture outreach and education, and collaborating with industry, academia and other stakeholders on regional marine aquaculture issues.

The Northeast Science Center (headquartered in Woods Hole, MA) focuses on collection, analysis, and presentation of scientific information about the Northeast Shelf ecosystem, its condition, and its marine life. In addition to its five laboratories, the Center uses four research vessels to support its work. They are: the NOAA ships *Henry B. Bigelow*, and the small research vessels *Gloria Michelle*, *Victor Loosanoff*, and *Nauvoo*. The Greater Atlantic Fisheries Regional Office and the Science Center are responsible for the District of Columbia and the following states: Maine, New Hampshire, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Pennsylvania, Delaware, Maryland, Virginia, and North Carolina; and the inland states of Vermont, Minnesota, Michigan, Wisconsin, Illinois, Indiana, Ohio, and West Virginia.

National Marine Fisheries Service (NMFS) - [Chesapeake Bay Watershed Education and Training Program](#)

The NOAA Bay Watershed Education and Training (B-WET) program is a competitive grants program that provides funding for locally relevant environmental education projects for K-12 audiences. The [NOAA Chesapeake Bay Office](#), a

division of NOAA Fisheries' [Office of Habitat Conservation](#), administers B-WET grants for the Chesapeake Bay watershed on behalf of the NOAA Office of Education. The Chesapeake B-WET program recognizes that knowledge and commitment built from firsthand experience, especially in the context of one's community and culture, is essential for achieving environmental stewardship. Chesapeake B-WET regional grant competitions are responsive to local education and environmental priorities and are supportive of partnerships between school districts and community organizations and institutions that are run by and/or serve marginalized groups, particularly minority communities. State-level capacity building grants are typically available on an every-other-year basis. Please see the funding opportunities for specifics.

National Marine Fisheries Service (NMFS), National Ocean Service (NOS), and NOAA General Counsel - [Damage Assessment, Remediation, and Restoration Program](#)

NOAA's Damage Assessment, Remediation, and Restoration Program (DARRP) assesses and restores habitat, fisheries, protected species, and recreational uses that have been harmed by oil spills, chemical releases, and ship groundings. Working with federal, state, and tribal entities, and responsible parties, we have recovered funding from responsible parties for restoration of critical habitats, fisheries, protected species, and recreational uses nationwide. These projects promote recovery of the ecosystem and provide economic benefits from tourism, recreation, green jobs, coastal resiliency, property values, and quality of life. Maryland is a co-trustee with NOAA for assessment and restoration after pollution incidents in Maryland. For more information about our work in Maryland, visit: [DARRP in Your State](#) (and use the top menu to navigate to "Maryland & Washington, DC") and this [interactive map](#).

National Ocean Service (NOS) - [Regional Geodetic Advisor](#)

The Regional Geodetic Advisor is a National Ocean Service (NOS) employee that resides in a region and serves as a liaison between the National Geodetic Survey (NGS) and its public, academic and private sector constituents within their assigned region. NGS has a Regional Geodetic Advisor stationed in Woodford, Virginia serving the Mid-Atlantic region including Maryland. The Geodetic Advisor provides training, guidance and assistance to constituents managing geospatial activities that are tied to the National Spatial Reference System (NSRS), the framework and coordinate system for all positioning activities in the Nation. The Geodetic Advisor serves as a subject matter expert in geodesy and regional geodetic issues, collaborating internally across NOS and NOAA to ensure that all regional geospatial activities are properly referenced to the NSRS

National Ocean Service (NOS) - [Coastal Management Fellowship](#)

The NOAA Coastal Management Fellowship matches postgraduate students with state and territory coastal zone programs to work on two-year projects proposed by the state or territory. The Maryland Department of Natural Resources' Chesapeake and Coastal Service is hosting a fellow from 2024-2026 who is helping to develop data-led adaptive management approaches to guide transparent state investments in resilient, nature-based restoration projects based on site-level project successes; advance support for adaptation industries by helping to build Maryland's coastal natural resource-based workforce.

National Ocean Service (NOS) - [Phytoplankton Monitoring Network](#)

The Phytoplankton Monitoring Network (PMN) is a nationwide community-based volunteer program of citizen scientists monitoring for the presence of organisms that can lead to Harmful Algal Bloom (HAB) formation. Volunteers serve as data collectors for marine and freshwater blooms at more than 200 coastal and inland sites in the U.S. and Caribbean. Monitoring is conducted year-round and volunteers are trained to measure salinity, air and water temperatures, and how to collect phytoplankton samples using a plankton net. Samples are then analyzed for any HAB organisms via microscopy. Data collected by PMN volunteers enhances the Nation's ability to respond to and manage the growing threat posed by HABs by collecting important data for species composition and distribution in coastal and freshwater environments and creating working relationships between volunteers and professional marine biotoxin researchers. Event monitoring can assist state and federal agencies to issue timely warnings about shellfish consumption and other public health concerns.

National Ocean Service (NOS) - Aquaculture Phytoplankton Monitoring Network

The Aquaculture Phytoplankton Monitoring Network (AQPMN) is a volunteer-based network that works with coastal US aquaculture farms and organizations. The network has adapted its protocols to specifically monitor for species known to have adverse effects on shellfish and finfish aquaculture. Participating hatcheries and growers receive training on methods to collect and identify local phytoplankton and potential HAB species. NOAA supplies each network member with plankton nets, thermometers, salt refractometers and digital microscopes free of charge.

National Ocean Service (NOS) - [Mussel Watch Program](#)

The National Oceanic and Atmospheric Administration (NOAA) Mussel Watch Program (MWP) monitors the status and trends of chemical contaminants and biological stressors in the nation's coastal waters. MWP began in 1986, and is based on the periodic collection and analysis of bivalves (oysters and mussels) and sediment from a network of more than 300 monitoring sites nationwide. Contaminants monitored at each site include the EPA's Priority Pollutant List of toxic substances and a suite of chemicals of emerging concern such as flame retardants, PFAS, pharmaceuticals, and current use pesticides.

National Ocean Service (NOS) - [NOAA Ocean Guardian School Program](#)

A NOAA Ocean Guardian School makes a commitment to the protection and conservation of its local watersheds, the world's ocean, and special ocean areas, like national marine sanctuaries. Funds are provided to schools at \$4,000 per year if the school makes this commitment by proposing and then implementing a school- or community-based conservation project. Once the school has completed its project, the school receives official recognition as a NOAA Ocean Guardian School. To date, the Ocean Guardian School Program has reached more than 88,797 students and 3,599 teachers.

National Ocean Service (NOS) - [NOAA Ocean Guardian Youth Ambassador Program](#)

Youth aged 13-18 from across the United States and its territories that are committed to ocean conservation and stewardship of our blue planet can apply to become a NOAA Ocean Guardian Youth Ambassador. This year-long program looks for enthusiastic youth with new ideas and a unique perspective who want to learn more about [America's underwater treasures](#) and share their passion with others. Youth learn how to become a leader at their school or in their local community to make a difference in the conservation of the ocean through marine protected areas.

National Weather Service (NWS) - [Automated Surface Observing Systems Stations](#)

The Automated Surface Observing Systems (ASOS) program is a joint effort of the National Weather Service (NWS), the Federal Aviation Administration (FAA), and the Department of Defense (DOD). ASOS serves as the Nation's primary surface weather observing network. ASOS is designed to support weather forecast activities and aviation operations and, at the same time, support the needs of the meteorological, hydrological, and climatological research communities. ASOS works non-stop, updating observations every minute, 24 hours a day, every day of the year observing basic weather elements, such as cloud cover, precipitation, wind, sea level pressure, and conditions, such as rain, snow, freezing rain, thunderstorms, and fog. There are six ASOS stations in Maryland.

National Weather Service (NWS) - [Cooperative Observer Program Sites](#)

The National Weather Service (NWS) Cooperative Observer Program (COOP) is truly the Nation's weather and climate observing network of, by and for the people. More than 10,000 volunteers take observations on farms, in urban and suburban areas, National Parks, seashores, and mountaintops. The data are representative of where people live, work and play. The COOP was formally created in 1890 under the NWS Organic Act to provide observational meteorological data, usually consisting of daily maximum and minimum temperatures, snowfall, and 24-hour precipitation totals, required to define the climate of the United States and to help measure long-term climate changes, and to provide observational meteorological data in near real-time to support forecast, warning and other public service programs of the NWS. The data are also used by other federal (including the Department of Homeland Security), state and local entities, as well as private companies (such as the energy and insurance industries). In some cases, the data are used to make billions of

dollars' worth of decisions. For example, the energy sector uses COOP data to calculate the Heating and Cooling Degree Days which are used to determine individuals' energy bills monthly. There are 31 COOP sites in Maryland.

National Weather Service (NWS) - [NOAA Weather Radio All Hazards Transmitters](#)

NOAA Weather Radio All Hazards (NWR) is a nationwide network of radio stations broadcasting continuous weather information directly from the nearest National Weather Service (NWS) forecast office. NWR broadcasts official NWS warnings, watches, forecasts and other hazard information 24 hours a day, 7 days a week. Working with the Federal Communication Commission's (FCC) Emergency Alert System, NWR is an "All Hazards" radio network, making it the single source for comprehensive weather and emergency information. In conjunction with federal, state, and local emergency managers and other public officials, NWR also broadcasts warning and post-event information for all types of hazards – including natural (such as earthquakes or avalanches), environmental (such as chemical releases or oil spills), and public safety (such as AMBER alerts or 911 Telephone outages). Known as the "Voice of NOAA's National Weather Service," NWR is provided as a public service by the NWS. NWR includes 1,100 transmitters covering all 50 states, adjacent coastal waters, Puerto Rico, the U.S. Virgin Islands, and the U.S. Pacific Territories. There are four NWR transmitters in Maryland.

Office of Oceanic and Atmospheric Research (OAR) – [Maryland Sea Grant College Program](#)

The National Sea Grant College Program (Sea Grant) is a federal-university partnership administered by NOAA that integrates research, extension outreach, and education. Sea Grant forms a national network of 34 programs in all U.S. coastal and Great Lakes states, Puerto Rico, and Guam. Headquartered adjacent to the University of Maryland's College Park campus, Maryland Sea Grant supports a statewide program of research, education, and extension services that promote the wise use of our coastal and marine resources with a strong ethic of stewardship. We work closely with our stakeholders to improve understanding of coastal ecosystem health and economics and to help inform decision makers and the public. Our research program focuses on critical issues facing the Chesapeake and coastal bays including water quality, nutrient dynamics, harmful algal blooms, and aquatic invasive species. The research we fund also addresses the challenges of restoring submerged aquatic vegetation and degraded streams and improving ecosystem based fisheries management. We work from the local to regional scale and often support efforts with national and global significance. Through active communications and extension efforts, Maryland Sea Grant informs industry, policy makers, and the public on many issues including aquaculture; commercial and recreational fishing; natural resources conservation and biodiversity; and seafood processing and marketing. We actively support environmental literacy and education by funding graduate and undergraduate research fellows and through ongoing collaborations with public high schools and middle schools. We promote efforts to improve Maryland's coastal resiliency through better understanding of the effects of coastal flooding, sea level rise, and climate change on threatened communities and ecosystems. We produce communications materials for a variety of audiences including award-winning videos; a magazine, Chesapeake Quarterly; web-based information; and educational activities. Our external advisory council of coastal community leaders provides guidance for our program's activities and strategic goals, which align with those of NOAA. Administrative offices are located in College Park. Extension agents are located in Cambridge, Queenstown, Cockeysville, Derwood, Upper Marlboro, Baltimore, Princess Anne, Clinton, St. Leonard, and Orono. Get involved with Sea Grant through state and national opportunities like the John A. Knauss Marine Policy Fellowship program at seagrant.noaa.gov.

NOAA National Marine Fisheries Service (NOAA Fisheries) - Office of Aquaculture

Headquartered in Silver Spring, Maryland, NOAA Fisheries Office of Aquaculture supports cutting-edge science and research as well as federal policy making and regulation to grow sustainable aquaculture in the United States while supporting commercial and recreational fisheries. We also support science, policies, and regulations that allow communities to reap the social, economic, and environmental benefits of aquaculture. We foster responsible aquaculture that provides safe, sustainable seafood; creates employment and business opportunities in coastal communities; and complements NOAA's comprehensive strategy for maintaining healthy and productive marine populations, ecosystems, and vibrant coastal communities.

NOAA Commissioned Officer Corps (NOAA Corps) - [Leadership, Staff Support, and Operations](#)

The NOAA Commissioned Officer Corps stations multiple officers in the State of Maryland in addition to those present at its headquarters in Silver Spring. These officers perform a variety of duties, including serving as technical specialists and vessel operations coordinators in Annapolis; in Suitland, serving as joint command technology officer with the USCG and US Navy, as well as Technical Director of the Office of Satellite and Product Operations; in College Park, serving as Ocean Prediction Center Operations Coordinator and local outreach and education officer, as well as Executive Officer for the Satellite Products and Services Division; and in Solomons, serving as OIC for the R/V *Bay Hydro II*, performing necessary navigation response surveys in the Chesapeake Bay.

[Bipartisan Infrastructure Law \(BIL\) / Inflation Reduction Act \(IRA\) Projects](#)

The National Oceanic and Atmospheric Administration (NOAA) was entrusted with billions of supplemental federal funding dollars with passage of the Bipartisan Infrastructure Law on November 15, 2021 and the Inflation Reduction Act on August 16, 2022. This historic infrastructure funding has been invested in communities across the nation to build resilience in the face of climate change. NOAA distributed funding to communities, tribal, state and local governments, higher education programs, businesses, non-profit organizations, and facilities in need. NOAA funded billions of dollars in grants and cooperative agreements across the country to fund projects that enhance climate resilience, restore coastal and marine habitats, improve safety, and create jobs. For an interactive map of NOAA BIL and IRA investments in your state, visit <https://www.noaa.gov/bil-ira-awards-explorer>.

[BIL](#)

CISESS NC: Weather and Climate Change Monitoring and Research Support of the Atmospheric Turbulence and Diffusion Division of National Oceanic and Atmospheric Administration's Air Resources Laboratory, \$112,998

In order to optimize collaborative research to operation transitions, designated Oak Ridge Associated Universities (ORAU) researchers and technical staff will work on-site in the NOAA Air Resources Laboratory's Atmospheric Turbulence and Diffusion Division (ARL/ATDD) offices. ORAU scientists and technicians will provide scientific, engineering, and technical expertise and contribute to the advancement of ATDD mission-related research and development activities as prioritized by the ATDD Director during the proposed project period.

Updating Leaf Area Index (LAI) and Fraction of Absorbed Photosynthetically Active Radiation (FAPAR) Product for Climate Research, \$197,090

The leaf area index (LAI) and fraction of absorbed photosynthetically active radiation (FAPAR) are essential variables for climate study. These products are extensively used for climate change research and in multiple applications of long-term societal benefit, including agriculture and forest monitoring. The project updates these products by deriving data for a new generation of Visible Infrared Imaging Radiometer Suite (VIIRS) instruments. Work is being performed by the Cooperative Institute for Satellite Earth System Studies (CISESS) at University of Maryland.

Improving NOAA's Coastal and Inland Flood Inundation Mapping, Forecasting and Water Modeling, \$312,757

The objective of this project is to better inform life and property decisions and mitigate flooding impacts to the U.S. by exploiting current and emerging satellite data. This project will develop an algorithm to integrate Visible Infrared Imaging Radiometer Suite (VIIRS) daily flood products and enhanced Synthetic Aperture Radar (SAR) products, validate the integrated products, and deliver reliable satellite flood products to NOAA's National Water Center. Work is being performed by the Cooperative Institute for Satellite Earth System Studies (CISESS) at University of Maryland.

Using Satellite Geostationary Lightning Mapper Data to Improve Wildland Fire Forecasting, Detection, and Response, \$298,200

This project supports Geostationary Lightning Mapper (GLM) integration into NOAA's fire application system. The project will help incorporate the GLM into different phases of the fire lifecycle response (i.e., pre-ignition, detection, and

forecasting). Initial focus will be on improving the timeliness of detecting lightning-ignited wildfires. Work is being performed by the Cooperative Institute for Satellite Earth System Studies (CISESS) at University of Maryland.

Snow Water Equivalent and Quantitative Precipitation Estimation from Snowfall Rate Retrievals - Applications in Alaska, \$33,340

The lack of radar and in-situ snowfall data during the winter over most of Alaska makes it very challenging to provide realistic inputs of snowfall into hydrologic models. A satellite precipitation product, CMORPH2, can significantly improve the snow water equivalent (SWE) and Quantitative Precipitation Estimation (QPE) information required for a hydrologic model of Alaska. The snowfall rate (SFR) product in CMORPH2 can be improved with machine learning algorithms. Work is being performed by the Cooperative Institute for Satellite Earth System Studies (CISESS) at University of Maryland.

This award supports work in AL.

Development of High-Resolution Surface Type Dynamics Data Sets, \$334,255

Surface type plays important roles in weather and climate, but existing global surface type products cannot provide up-to-date information at a very detailed level, which could cause uncertainties for weather forecasts. Here we propose to develop a suite of new high-resolution global surface type percentage products, which will be updated on an annual or sub-annual basis using the latest Visible Infrared Imaging Radiometer Suite (VIIRS) satellite observations. Work is being performed by the Cooperative Institute for Satellite Earth System Studies (CISESS) at University of Maryland.

Evapotranspiration and Evaporative Stress Index Data Using LEO and GEO Satellite Observations, \$353,131

Land surface evapotranspiration (ET) is one of the main energy sources for atmospheric dynamics and a critical component of the local, regional, and global water cycles. Accurate estimation of ET from satellite platforms is needed to evaluate model simulations like the National Water Model (NWM). Assimilating ET into the NWM is expected to improve model performance and weather forecasts. Work is being performed by the Cooperative Institute for Satellite Earth System Studies (CISESS) at University of Maryland.

Blended Satellite Soil Moisture Long Time Series Data, \$461,987

Soil moisture is one of the essential variables of most numerical weather, climate, and hydrological prediction models. This project will improve soil moisture information derived from satellite observations, including development of high-resolution soil moisture data products. Work is being performed by the Cooperative Institute for Satellite Earth System Studies (CISESS) at University of Maryland.

Fire Emissions Data Reprocessing, \$200,000

Biomass burning from wildfires releases a large amount of GreenHouse Gas (GHG) into the atmosphere. Quantifying long-term GHG emissions and investigating their trends and spatial patterns across the globe could significantly improve our understanding of the GHG impacts on our society and economics, as well as support policy making to mitigate the impacts. South Dakota State University will receive funding through this grant to update and analyze satellite-derived fire emissions data. *This award supports work in MD and SD.*

CISESS NC: Science and Services IIJA - Enhancing NOAA Weather and Climate Prediction Capabilities and Services, \$4,861,450

Cooperative Institute for Satellite Earth System Studies (CISESS) scientists will utilize remotely sensed and in situ observations to further enhance NOAA weather and climate prediction capabilities and services. It is particularly focused on weather and climate extremes such as wildfires, floods, and excess rainfall, and supports the nation's weather and climate prediction, monitoring and modeling infrastructure. CISESS NC will support NCEI and NOAA in its collaborative research efforts to help inform societal decision-making to foster healthy, resilient and prosperous communities and businesses.

MBRI: Patapsco Delta Sustainable Fishery and Ecosystem Resilience Project, \$5,600,000

This project will restore marsh habitat in an urban ecosystem in Baltimore City. The project is part of a larger initiative called "Reimagine Middle Branch" a community-led initiative to reconnect South Baltimore residents to the nearby river. The project will increase public access to the river and will help reduce erosion and flooding.

CBNERR-MD Infrastructure Investment and Jobs Act Capacity-Building, \$300,000

This funding will build the capacity of the Chesapeake Bay MD National Estuarine Research Reserve (CBNERR-MD) within the MD Department of Natural Resources to plan for and implement habitat restoration and conservation projects proposed through funding opportunities connected to the Bipartisan Infrastructure Law. Specifically, CBNERR-MD will hire a long term contractual employee (Natural Resources Planner III) to plan and implement restoration and conservation initiatives within the Reserve's 3 targeted watersheds, and advance the science of restoration practice to ensure the projects are designed for maximum water quality and resilience benefits.

MD CZM IJA Capacity Building Award Proposal, \$450,000

This funding will build the capacity of MD's federally-approved coastal management program within the Department of Natural Resources to plan for and implement habitat restoration and conservation projects proposed through funding opportunities connected to the Bipartisan Infrastructure Law. Specifically, the MD Coastal Zone Management Program will use these funds to build and enhance partner networks and community connections with under-served communities through a unique approach with a leading non-profit organization; assist in the identification of restoration sites and the development and submission of project applications; create and share communication materials; and build a support structure for fund administration.

Jug Bay Wetlands Sanctuary Stream and Shoreline Restoration, Phase I, \$992,728

This project will result in the creation of a freshwater tidal marsh living shoreline and the restoration of three severely incised headwater streams coupled with the installation of upland stormwater best management practices in the Jug Bay Wetlands Sanctuary in Anne Arundel County, MD. The shoreline work will protect Sanctuary property from erosion and enhance the tidal marsh's resilience to sea level rise and climate hazards. The stream restoration and stormwater best management practices will significantly reduce the amount of sediment and nutrient pollution going into Chesapeake Bay while reconnecting streams with their floodplains to enhance resilience to increased rainfall intensity.

High-Impact and Large Marine Debris Removal throughout the National Marine Sanctuary System, \$14,999,292

The National Marine Sanctuary Foundation is leading a multi-site project to remove large marine debris and foster partnerships within the National Marine Sanctuary System that will benefit coastal and marine habitats and communities throughout the nation. *This award supports work in CA, LA, TX, and WA.*

ADVs - Leveraging Strategic Partnerships for Removal, Disposal, Prevention and Education, \$10,000,000

BoatUS Foundation is leading a national competitive grant program for the removal of abandoned and derelict vessels, developing a database to track abandoned and derelict vessels across the country, and is supporting outreach and education on the issue.

Developing a proof-of-concept Neutral Density Monitoring and Alert Service for satellite operators, \$149,625

Ensemble intends to develop a proof-of concept Neutral Density Monitoring and Alert Service. Ensemble will create the foundational architecture for Neutral Density Alerts and Notifications for commercial satellite operators using functionalized NOAA Space Weather Prediction Center (SWPC) WAM-IPE output data to 1) generate density profiles across LEO altitudes and 2) generate local density drag profiles based on a satellite's two-line element. Using this information, we will compute global average density profiles.

Community Flooding Social Science Liaisons, \$749,211

The objective of this project is to build bridges that enhance networks and communications to integrate flood inundation mapping services (FIMS), its tools, and technologies into local community planning efforts. The project will use techniques from the social, economic and behavioral sciences that are informed by local and community needs, particularly in traditionally underserved and heavily impacted areas affected by environmental injustice. The overall goal is to affect a positive change on health and well-being in flood prone areas and provide tailored assistance and information for better flood visualization and planning.

CISESS: CUNY BIL Probable Maximum Precipitation for the Greater NYC Region: Understanding its Relation to Climate Change and Developing Risk Mitigation Strategies, \$265,289

Extreme precipitation, and in particular its impacts on built infrastructure, threaten life and property. New York City (NYC) is an especially at-risk area in terms of its combined high population density, highly urbanized built environment, and climatological flood risk. This project will use new data and more appropriate non-stationary analysis methods to provide updated and improved meteorological context for extreme events. By using the improved precipitation data to drive state-of-the-art hydrology models, results will also quantify potential benefits of specific NYC stormwater mitigation projects. This work will help NYC stakeholders make informed decisions regarding infrastructure investments impacted by flood risk. *This award supports work in NY.*

Enhancing NOAA Weather and Climate Prediction, \$345,210

This project will develop, collect, process, analyze, distill and summarize critical and timely U.S. flood and inundation data from a variety of satellite and non-satellite data sources. The information will include visualizations and analysis that makes satellite data much easier for non-experts to use and understand. Work is being performed by the Cooperative Institute for Satellite Earth System Studies (CISESS) at North Carolina State University.

Popes Creek Waterfront Park Living Shoreline Design, \$120,865

The purpose of this proposed effort is to design and permit a living shoreline along 2,175 linear feet of the Potomac River where it meets Popes Creek in Charles County, Maryland.

2030 Knauss Fellowship, \$73,000

The Knauss Fellowship offers a one-year educational experience in an executive or legislative branch office to enhance knowledge of the policy-making process related to marine and coastal issues. It allows students to apply academic knowledge while contributing to programs, aiding their long-term career goals.

IRA

Improving Satellite Flood Monitoring and Mapping in Alaska, \$87,475

Satellite remote sensing provides a useful approach to detecting, determining, mapping and estimating the extent of floods, as well as damage and impact over rivers and land bodies. The Cooperative Institute for Satellite Earth System Studies (CISESS) at University of Maryland will assist with customizing algorithms to overcome unique challenges in using satellite data for Alaska flood observations, such as frequent cloud cover, snow melt, dense forest cover, ice jams, and unmanaged rivers. *This award supports work in MD and AL.*

mCDR 2023: Quantifying the Efficacy of Wastewater Alkalinity Enhancement on mCDR and Acidification Mitigation in a Large Estuary, \$1,864,561

The goal of this research project is to evaluate carbon removal and ocean acidification mitigation from alkalinity enhancement at a wastewater treatment plant in Chesapeake Bay. Manipulating wastewater treatment plant procedures and discharge to enhance carbon removal is practical because of the current readiness of infrastructure to deliver alkalinity to the coastal ocean. Many wastewater facilities already treat wastewater with alkalinity and permits to allow alkalinity discharge already exist. This project will add alkalinity and monitor its impacts at a single wastewater treatment plant. *This award supports work in MD and VA.*

Raising Awareness of Marine Pollution in Underserved Populations (RAMP-UP), \$254,305

The Maryland Sea Grant was awarded \$254,305 to increase awareness about marine debris, environmental degradation, and connections to environmental justice among minority youth in Maryland. The coalition will enhance community literacy about marine debris through formal education and training at two Historically Black Colleges and Universities and informal education in conjunction with summer youth programs. *This award supports work in MD and VA.*

Artificial Intelligence and Machine Learning Methods to Optimize Satellite Data Assimilation for Weather Prediction, \$378,748

Radiative transfer models are a key element in global and regional data assimilation systems that use satellite data for weather forecasting. This project will develop fast, efficient radiative transfer models based on state-of-the-art artificial intelligence and machine learning techniques. The development and use of these efficient models will directly benefit global and regional weather forecasting.

Community-Friendly Use of the U.S. Integrated Ocean Observing System Regional Associations and Data Assembly Centers, \$544,110

The National Centers for Environmental Information (NCEI), under agreement with the U.S. Integrated Ocean Observing System (IOOS) Office, provides long-term scientific stewardship of environmental data collected and assembled under the governance of the U.S. IOOS Regional Associations (RAs). These data help develop activities of environmental intelligence in monitoring climate stressors on marine ecosystems and connected communities.

Research on Satellite Monitoring of Flood Inundation, \$83,000

This project will research flood inundation monitoring with Visible/Infrared Imaging Radiometer Suite (VIIRS) and Synthetic Aperture Radar (SAR) images from satellites. The goal is to provide more accurate flood inundation mapping, particularly in cloudy conditions and during the night. Work is being performed by the Cooperative Institute for Satellite Earth System Studies (CISESS) at University of Maryland.

Climate Hub for Analytical Research and Monitoring (CHARM), \$1,500,000

The Cooperative Institute for Satellite Earth System Studies (CISESS) has developed a prototype Climate Hub for Analytical Research and Monitoring (CHARM). This Hub will deliver user-centric access to NOAA's climate information and tools to inform data-driven decisions.

CISESS: IRA Ocean Carbon and Acidification Data System – Marine Carbon Dioxide Removal Data, \$79,792

This project will support marine Carbon Dioxide Removal (mCDR) efforts by adapting the Ocean Carbon and Acidification Data System (OCADS) at NOAA's National Centers for Environmental Information (NCEI) to archive, provide access to, and utilize research and monitoring data. mCDR research and monitoring will utilize these existing data already available in OCADS in concert with data sets unique to mCDR efforts, thereby leveraging and expanding the existing tool.

Enhancing the Value of NOAA Climate Products via Emerging Technologies and Industry Engagement, \$12,389,107

This project will improve private sector access to NOAA climate information. Priorities include industry engagement, new and enhanced products and services, and improved delivery leveraging cloud technologies. Industries including Insurance, Architecture and Engineering, and Retail will have additional information to properly price insurance policies, update building codes for safety and energy efficiency, and diversify supply chains based on risk modeling.

Reef Base Construction and Oyster Restoration, \$10,000,000

This project will construct approximately 50 acres of reefs within existing oyster sanctuaries in Maryland's Chesapeake Bay. The restored oyster reefs will provide fish habitat and water filtration, and will serve as a source of broodstock to both sustain the new reefs over the long term and to bolster oyster populations on nearby harvest reefs. This work builds a

decade of collaboration across partners and successful techniques developed as part of a large-scale effort to build oyster reefs in the Chesapeake Bay.

DISCOVERING WONDER: Advancing public awareness and community engagement in support of expanding the National Marine Sanctuary System, \$15,154,000

The National Marine Sanctuary Foundation, working cooperatively with the NOAA Office of National Marine Sanctuaries, proposes to guide the community engagement needed to create the will for sanctuary designation, bring to light indigenous people's legacy with our waters, and ensure that all Americans are aware of the value of not just an individual sanctuary, but the entire network of special places across U.S. waters that is our National Marine Sanctuary System.

Maryland Coastal Management Program - Capacity Building for Inflation Reduction Act noncompetitive, \$875,000

This funding will build the ability of the state's federally-approved coastal management program within the Maryland Department of Natural Resources to implement projects, initiatives, and programs that increase the climate resilience of coastal communities within coastal counties. Specifically, the Maryland Coastal Management Program will support Maryland's coastal communities in enhancing resilience and adapting to climate impacts by integrating coastal habitat conservation and nature-based solutions into their plans and strategies, build upon its service delivery structure of financial and technical assistance to broaden its reach in two regions (Upper Bay and Southern Maryland), support the design of resilient natural infrastructure projects, develop an adaptation solutions guidebook, and provide training to staff and partners around equity and the guidebook.

CBNERR-MD Inflation Reduction Act Non-Competitive Capacity Grant, \$400,000

This funding will build the ability of the Maryland Chesapeake Bay National Estuarine Research Reserve (CB-NERR) within the Maryland Department of Natural Resources to implement projects, initiatives, and programs that increase the climate resilience of coastal communities within coastal counties. Specifically, the Maryland CB-NERR will use these funds to increase the climate resilience of coastal communities within Maryland's coastal counties by focusing on the three priority watersheds that constitute the CB-NERR's three separate components. Funding will also support administrative needs of the Maryland CB-NERR to foster partnerships and deliver resources to the local level; supplement park naturalist staff to allow for more space and time for resiliency work; connect emerging networks on the Lower Eastern Shore of Maryland; and continue support of the Deal Island Peninsula Partnership.

Strengthening Opportunities for Adaptive Response (SOAR), \$2,000,000

The goal of this project is to elevate the voices and priorities of vulnerable people in the coastal areas and remote islands of the Federated States of Micronesia, and provide the technical and financial resources needed to jumpstart the priority resilience projects needed to set the stage for sustained collaboration beyond the life of the project. The Strengthening Opportunities for Adaptive Response (SOAR) project aims to reach 30,000 individuals across 39 coastal communities (14 in Chuuk and 25 in Yap), where they will build a network of learning and foster coordination that leverages existing research, stewards resources, and creates evidence to scale up coastal resilience-focused work in the near and long term.

Real-Time Aerosol Monitoring for Harmful Algal Blooms and Toxins via MALDI-TOF MS, \$174,707

This project will evaluate the health risks associated with aerosolized toxins from harmful algal blooms (HABs). Current research is limited by the challenge of accurately measuring exposure levels due to the transient nature of these toxins. We aim to develop a portable, automated MALDI-TOF mass spectrometer for rapid, accurate, and affordable screening of coastal aerosol environments. This system will provide real-time toxin identification, allowing local officials to respond swiftly to emerging algal blooms, thereby better protecting coastal communities and industries.

Climate impacts on foundational nearshore habitats: status and trends as indicators of sanctuary health, \$385,214

The project aims to quantitatively link climate and other environmental drivers to the extent, quality, and services of foundational benthic ecosystems, including corals, seagrasses, mangroves, salt marshes, and rocky intertidal, in two National Marine Sanctuaries: the Florida Keys and Greater Farallones. These ecosystems are critical habitats that provide a wealth of benefits, including enhanced biodiversity and significant stores of carbon, and are therefore central to the mission and management of sanctuaries. The project will leverage existing survey data from these two sanctuaries. *This award supports work in Ca and FL.*

Piloting NOAA Climate Projection Services, \$960,000

This project aims to provide climate information for the 30 to 50-year timeframe, addressing risks like heavy precipitation, temperature extremes, drought, and coastal flooding. It will use NOAA's existing resources and new cloud-based platforms to disseminate climate projections to users. The goal is to create sustainable online tools to help decision-makers plan for future climate conditions, supporting NOAA's mission to build a Climate-Ready Nation.

A Multi-University Consortium for Advanced Data Assimilation Research and Education (CADRE), \$708,709

The next-gen NOAA Unified Forecast System Data Assimilation (DA) faces significant challenges associated with earth system modeling and observations. Serious gaps in DA inhibit addressing these challenges. A Multi-University Consortium for Advanced Data Assimilation Research and Education will partner closely with NOAA to advance DA education and research. Supported will be 12 DA research thrusts and their implementation to the UFS. The projects will deliver improvements to DA, the workforce, and improve short range to S2S forecasts.

Leveraging Cooperative Extension to Build an Enduring Capacity for Equitable and Inclusive Rural Resilience across the Delmarva Region, \$1,973,267

This project will establish a regional collaborative to support climate resilience in rural communities in the Delmarva region, where agriculture plays a key role in the local economy and culture. Project partners will conduct a needs assessment and a series of community listening sessions to identify current capabilities, challenges, and opportunities to increase resilience, particularly in low-income, minority, and agricultural communities. The project will then design and implement educational programming to help address these challenges. Led by the Virginia Polytechnic Institute and State University, this project will create enduring capacity among extension professionals and rural localities to initiate climate adaptation and resilience projects more effectively and engage with resilience-building efforts more broadly. *This project was funded through the [Climate Resilience Regional Challenge](#) and supports work across VA, MD, and DE.*

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