



NOAA In Your State

South Carolina

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 South Carolina

Habitat Conservation Division Field Office	Charleston	SC-6
NOAA Hollings Marine Laboratories	Charleston	SC-6
NOAA Ships Nancy Foster and Ronald H. Brown	Charleston	SC-6
ACE Basin National Estuarine Research Reserve	Charleston	SC-6
North Inlet-Winyah Bay National Estuarine Research Reserve	Georgetown	SC-7

The state of South Carolina also has three Weather Forecasting Offices, one Regional Office, two Labs and Field Offices, and two National Estuarine Research Reserves.

[Weather Forecast Offices](#)

Columbia SC-6

Greenville/Spartanburg SC-4

Charleston SC-6

[National Weather Service \(NWS\) Weather Forecast Offices \(WFO\)](#) are staffed 24/7/365 and provide weather, water, and climate forecasts and warnings to residents of South Carolina. There are 122 [WFOs nationwide](#) of which three are in South Carolina. Highly trained forecasters issue warnings and forecasts for weather events, including severe thunderstorms, tornadoes, hurricanes, winter storms, floods, and heat waves to the general public, media, emergency management and law enforcement officials, the aviation and marine communities, agricultural interests, businesses, and others. Information is disseminated in many ways, including wireless emergency alerts, social media, [weather.gov](#), and NOAA Weather Radio All Hazards. Each WFO has a Warning Coordination Meteorologist who actively conducts outreach and educational programs that strengthen working relationships with local partners in emergency management, government, the media and academic communities. Forecasters provide Impact-based Decision Support Services (IDSS), both remotely and on-site during critical emergencies such as wildfires, floods, chemical spills, and major recovery efforts. To gather data for forecasting and other purposes, NWS WFO staff monitor, maintain and use Automated Surface Observing Stations and Doppler Weather Radar. In addition to the WFOs, NWS operates specialized national prediction [centers](#) and regional headquarters throughout the U.S. for a total of 168 operational units. Over 85% of NWS' workforce is in the field. For current South Carolina weather, visit [www.weather.gov](#) and, on the national map, click on the relevant county or district.

SC-1

[Charleston](#)

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

The NOAA Marine Debris Program (MDP) in the Office of Response and Restoration (OR&R) supports national and international efforts to research, prevent, and reduce the impacts of marine debris. The MDP Southeast Regional Coordinator, based in Charleston, 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 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 Charleston field office, located in North Charleston, is part of the Office of Law Enforcement's Southeast Division.

National Marine Fisheries Service (NMFS) - [Southeast Regional Office, Habitat Conservation Division Field Office](#)

The Southeast Regional Office has the Charleston Field Office, which is co-located with other NOAA facilities on the grounds of the South Carolina Department of Natural Resources campus near Charleston Harbor. Field Office staff

conduct mandated essential fish habitat consultations associated with extensive energy and coastal development activities, participate in state and regional habitat planning and restoration efforts, provide assistance during hazardous material incidents and hurricane events, participate in the planning processes for major federal water development projects, and restore diadromous fish habitat by working with the Federal Energy Regulatory Commission on hydropower licenses to ensure fish passage, and with stakeholders to remove dams no longer needed.

National Ocean Service (NOS) - [OR&R Preparedness Coordinator](#)

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.

- 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 region – North Carolina, South Carolina, Georgia, and Florida.

National Ocean Service (NOS) - [NOAA Hollings Marine Laboratories](#)

The Hollings Marine Laboratory (HML) is a partnership between NCCOS, the National Institute of Standards and Technology, the Medical University of South Carolina, South Carolina Department of Natural Resources, and the College of Charleston. Researchers from all partner institutions work side-by-side, combining expertise to conduct research they could not accomplish otherwise. HML is built on an approximately 8-acre site within the Fort Johnson campus of the South Carolina Marine Resources Center in Charleston, South Carolina. Dedicated in December 2000, the laboratory is a NCCOS-run facility that promotes collaborative and interdisciplinary scientific research to sustain, protect, and restore coastal ecosystems. About 130 staff work out of the 103,000 square-foot laboratory.

National Ocean Service (NOS) - [Charleston Harbor PORTS®](#)

A Physical Oceanographic Real-Time System (PORTS®) is operated cooperatively with the local maritime community in Charleston Harbor at which real-time data are quality-controlled and disseminated to local users for safe and efficient navigation. Real-time water level (tide) and meteorological data are available at one station, and bridge air gap data is monitored at 2 locations: Don Holt Bridge and Ravenel Bridge.

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

NOAA's navigation managers work directly with pilots, port authorities, and recreational boating organizations in South Carolina. They help identify the navigational challenges facing marine transportation in South Carolina 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 Charleston, SC co-located at the NOAA Office for Coastal Management to support mariners and stakeholders in the Southeast region.

National Ocean Service (NOS) - [ACE Basin National Estuarine Research Reserve](#)

The National Estuarine Research Reserve System is a network of protected areas focused on long-term research, monitoring, stewardship, education, and training. NOAA's Office for Coastal Management provides funding and national guidance, and each site is managed on a daily basis by a lead state agency or university with input from local partners. The 99,308 acre ACE Basin Research Reserve was designated in 1992 and is managed by the South Carolina Department of Natural Resources. This site protects cultural heritages as well as many endangered or threatened species, such as short-nose sturgeon, wood storks, loggerhead sea turtles, and bald eagles.

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.

Office of Oceanic and Atmospheric Research (OAR) - [Global Greenhouse Gas Reference Network; Halocarbon Measurements](#)

NOAA's Global Monitoring Laboratory (GML) operates a small aircraft-based North American network of sampling sites to measure vertical profiles of important greenhouse gas concentrations. Air is sampled weekly above the surface up to approximately 25,000 feet above sea level using a relatively small, light, and economical automated system developed by GML researchers. These air samples are delivered to GML in Boulder, Colorado, for measurements of CO₂, CH₄, other greenhouse gases, and ozone depleting substances. These data improve our understanding of the distribution of greenhouse gases and models of the global carbon cycle. The measurements of ozone depleting substances help determine the effectiveness of efforts to protect and restore the ozone layer, which protects the surface from the sun's ultraviolet radiation.

[Georgetown](#)

National Ocean Service (NOS) - [Centralized Data Management Office](#)

Monitoring data for each National Estuarine Research Reserve are available from the Centralized Data Management Office. Each reserve uses automated data loggers to monitor physical and chemical variables, collecting data at a minimum of four stations, at 15-minute intervals. Data collections include water temperature, water depth, salinity, pH, dissolved oxygen, and turbidity (cloudiness or clarity). These parameters are important indicators of habitat quality.

National Ocean Service (NOS) - [North Inlet-Winyah Bay National Estuarine Research Reserve](#)

The National Estuarine Research Reserve System is a network of protected areas focused on long-term research, monitoring, stewardship, education, and training. NOAA's Office for Coastal Management provides funding and national guidance, and each site is managed on a daily basis by a lead state agency or university with input from local partners. The 18,916 acre North Inlet-Winyah Bay Research Reserve was designated in 1992 and is managed by the University of South Carolina. This reserve provides habitat for many threatened and endangered species including sea turtles, sturgeons, least turns, and wood storks.

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 North Inlet-Winyah Bay National Estuarine Research Reserve will focus their research on spatial and temporal variability in dissolved organic matter sources and composition within the Winyah Bay Watershed.

McClellanville

Office of Oceanic and Atmospheric Research (OAR) - [U.S. Climate Reference Network](#)

The US Climate Reference Network (USCRN) is an operationally viable research network of more than 138 climate stations that are deployed nationwide. Data from the USCRN are used in various climate monitoring activities and for placing current climate anomalies into an historical perspective. The USCRN provides the United States with a reference network that contributes to an International network under the auspices of the Global Climate Observing System (GCOS). ARL/ATDD manage the USCRN in partnership with NOAA's NESDIS/NCEI.

Springmaid Pier

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

The National Ocean Service (NOS) operates two long-term, continuously operating tide stations in the state of South Carolina that provide data and information on tidal datums and relative sea level trends, and are capable of producing real-time data for storm surge warning. These stations are located at Springmaid Pier and Charleston. 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

SC-2

Blackville

Office of Oceanic and Atmospheric Research (OAR) - [U.S. Climate Reference Network](#)

The US Climate Reference Network (USCRN) is an operationally viable research network of more than 138 climate stations that are deployed nationwide. Data from the USCRN are used in various climate monitoring activities and for placing current climate anomalies into an historical perspective. The USCRN provides the United States with a reference network that contributes to an International network under the auspices of the Global Climate Observing System (GCOS). ARL/ATDD manage the USCRN in partnership with NOAA's NESDIS/NCEI.

Columbia

National Weather Service (NWS) - [Weather Forecast Office](#)- See [Page 2](#) for details.

Beech Island

Office of Oceanic and Atmospheric Research (OAR) - [Global Greenhouse Gas Reference Network](#)

NOAA's Global Monitoring Laboratory (GML) operates trace gas monitoring sites at tall towers in eight states, including South Carolina. The sites were established to extend GML's monitoring network to provide data to aid estimation of the net carbon balance of the continent. Variations of trace gases, especially carbon dioxide, are largest near the ground, so we utilize existing tall towers as platforms for in situ and flask sampling for atmospheric trace gases. Flask samples are

delivered to GML in Boulder, Colorado for analysis. These data improve models and our understanding of the distribution of greenhouse gases, including sources and sinks of carbon in North America.

SC-4

Greenville/Spartanburg

National Weather Service (NWS) - [Weather Forecast Office](#)- See [Page 2](#) for details.

SC-6

Charleston

National Weather Service (NWS) - [Weather Forecast Office](#)- See [Page 2](#) for details.

NOAA Chief Information Officer - [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 — [Coastal Ecosystem Learning Centers \(CELC\) network](#)

In South Carolina, NOAA's Office of Education provides support to the South Carolina Aquarium in Charleston County 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.

Office of Marine and Aviation Operations (OMAO) - [NOAA Ships Ronald H. Brown and Nancy Foster](#)

The NOAA Ships *Ronald H. Brown* and *Nancy Foster* are homeported in Charleston at the Charleston Support Facility, and managed by the OMAO Marine Operations Center-Atlantic (MOC-A) in Norfolk, Virginia. The NOAA Ship *Ronald H. Brown* primarily supports the science and research missions of NOAA's Office of Oceanic and Atmospheric Research plus a wide range of academic research institutions. The NOAA Ship *Nancy Foster* operates in support of NOAA's Office for Coastal Management and the National Sea Grant College Program. Both vessels are operated under the direction of officers from the NOAA Commissioned Officer Corps in concert with NOAA Professional Mariners. 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 aircrafts, conduct diving operations, and serve in other NOAA staff positions. NOAA Professional Mariners perform the deck, engineering, steward, and survey tech functions aboard NOAA vessels, providing critical support to OMAO marine operations.

Columbia

Coastal

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) - [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 South Carolina, 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 South Carolina Department of Natural Resources has received multiple awards through this program, including grants to support projects focused on loggerhead sea turtles and Atlantic and shortnose sturgeon.

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 three 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. In FY20, 43 competitive grants were awarded nationwide for a total of \$3.7 million, with two awards totalling \$114,803 going to South Carolina: Coastal Carolina University and Lowcountry Marine Mammal Network.

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 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. South Carolina received funding for one project in FY22, as well as funds to build the state's capacity to protect its coastal communities and resources.

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. Three projects have been completed in South Carolina, and these lands are protected in perpetuity. In addition, a land conservation project was funded in FY22 in South Carolina under the CELCP authority with funding through the Bipartisan Infrastructure Law.

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

Through a unique federal-state partnership, NOAA's Office for Coastal Management works with the South Carolina Department of Health and Environmental Control to implement the National Coastal Zone Management Program in South Carolina. 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.

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

The National Coastal Resilience Fund is a partnership effort between NOAA and the National Fish and Wildlife Foundation (NFWF) to restore, increase, and strengthen natural infrastructure to protect coastal communities, while also enhancing habitat for fish and wildlife. In South Carolina, the NCRF has awarded eleven projects, one in FY18, two in FY19, one in FY20, two in FY21, and five in FY22.

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. South Carolina received funds to implement four projects in 2019.

National Ocean Service (NOS) - [Navigation Response Team](#)

The Office of Coast Survey (OCS) maintains the nation's nautical charts and publications for U.S. coasts and the Great Lakes. 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. The Office of Coast Survey's Navigation Response Branch (NRB) conducts routine and emergency hydrographic surveys; and working with the regional Navigation Managers, navigation response teams (NRT) work around-the-clock after storms to speed the reopening of ports and waterways. During emergency response, the NRTs provide time-sensitive information to the U.S. Coast Guard or port officials, and transmit data to NOAA cartographers for updating the Coast Survey's suite of navigational charts. NRT-Fernandina is assigned to Fernandina Beach, FL and is able to respond within 24 to 48 hours.

National Ocean Service (NOS) - [OR&R 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 tradeoffs, best practices, resources at risk, and chemical hazard assessment to reduce risks to coastal habitats and resources. The SSC for South Carolina is based in Miami, Florida.
- 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 RRC serving the Southeast/Gulf of Mexico region is based in St. Petersburg, Florida.

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. One of our key ERMA project managers is based in Charleston, SC. 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 South Carolina](#)

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 Southeast Regional Coordinator, based in Charleston, 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 research and remove marine debris. The MDP is partnering with the South Carolina Department of Natural Resources to map and remove derelict crab traps found in South Carolina coastal estuaries. The collected traps will then be used to build oyster reef

habitats to reduce erosion and habitat loss. The Southeast Marine Debris Action Plan, covering Georgia, North Carolina, and South Carolina, was published in 2019. This plan is facilitated by the MDP, and it establishes a road map for strategic progress in making the Southeast, 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 South Carolina Marine Debris Emergency Response Guide.

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

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 Southeast Coastal Ocean Observing Regional Association (SECOORA) is one of eleven Regional Associations that partner with the NOAA led Integrated Ocean Observing System (U.S. IOOS®) to address regional and national needs for coastal and ocean data and information. Headquartered in South Carolina, SECOORA coordinates coastal and ocean observing activities in the southeast. Its mission is to observe, understand, and increase awareness of our coastal ocean; promoting knowledge, economic and environmental health through strong regional partnerships. SECOORA invests in buoys and other technologies to collect information about the ocean to help keep South Carolinians safe.

National Weather Service (NWS) - [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) - [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. See the interactive [Restoration Atlas](#) to find habitat restoration projects near you. In South Carolina, the Restoration Center works to rebuild native oyster beds, establish wetland buffers, and restore tidal wetlands. Site visits to see habitat projects may be available in South Carolina, please inquire if interested.

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

NMFS studies, protects and conserves living marine resources to promote healthy, functioning marine ecosystems, afford economic opportunities and enhance the quality of life for the American public. NMFS' Southeast Regional Office (headquartered in Saint Petersburg, FL) and Southeast Fisheries Science Center (headquartered in Miami, FL) are responsible for living marine resources in federal waters of the Gulf of Mexico, South Atlantic, and U.S. Caribbean. Using the authorities provided by the *Magnuson-Stevens Fishery Conservation and Management Act*, *Endangered Species Act*, *Marine Mammal Protection Act* and other federal statutes, the Southeast Regional Office and Southeast Fisheries Science Center partner together to assess and predict the status of fish stocks, marine mammals and sea turtle populations, as well as other protected resources, including coral. Additionally, in collaboration, they develop and ensure compliance with fishery regulations, restore and protect habitat, and recover threatened and endangered species in waters off South Carolina and throughout the Southeast Region. The Southeast Regional Office is responsible for over 40 percent of all federal fishery management plans nationwide, which cover hundreds of species, ranging from diverse, relatively sedentary and vulnerable coral reef fish, like the popular snappers and groupers, to wide ranging pelagic species, like mackerel and mahi mahi. More than 90 marine mammal stocks and 27 threatened or endangered species, including the North Atlantic right whale and smalltooth sawfish, sixfive sea turtle species, Johnson's seagrass, and seven coral species, also occur in this region. The Office consults on approximately 50 percent of the nation's coastal development permits, provides fish passage and ecological flow recommendations at dozens of barriers, supports large-scale conservation and restoration programs aimed at protecting essential fish habitat and coastal communities from development, subsidence, sea level rise, and storms, and engages partners in regional collaboration. While 99% of the nation's outer continental shelf oil production is in this region, it is also the focus of new wind energy development off the Carolinas and in the Gulf of Mexico. The Southeast Regional 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.

National Marine Fisheries Service (NMFS) - The [Southeast Fisheries Science Center](#) provides the scientific advice and data needed to effectively manage the living marine resources of the Southeast region and Atlantic high seas through the following divisions.

[Fisheries Assessment, Technology, and Engineering Support](#) division provides essential services and development of new innovative technologies to support the center's mission. The branches of Biology and Life History, Advanced Technology, Gear Research, and Gear and Vessel Support branches provide state-of-the-art life history information and innovative solutions to reduce bycatch and optimize the performance of biological and fishery monitoring programs across the science center.

[Fisheries Statistics](#) division provides extensive support to management and science through the collection, management, and dissemination of commercial and recreational fisheries statistics. The branches of Commercial Fisheries Monitoring, Recreational Fisheries Monitoring, Survey Design, Data Management and Dissemination, Catch Validation and Bio-sampling, and Observer Program works extensively with various internal and external partners to collect the fishery dependent information used to support marine resource management in the region.

[Marine Mammals and Sea Turtles](#) division supports and conducts science that leads to improved knowledge and meaningful conservation of marine mammals and turtles and their habitats in a changing environment, helping to achieve NOAA Fisheries' mission of implementing the Marine Mammal Protection Act and Endangered Species Act and making a positive impact on society.

[Population and Ecosystems Monitoring](#) division provides data, analytical products, research, and expertise to support NOAA Fisheries priorities. The branches of Ocean and Coastal Pelagics, Trawl and Plankton, Gulf and Caribbean Reef Fish, Atlantic and Caribbean Reef Fish and Habitat Ecology carry out fishery-independent surveys and applied research focused on fisheries and habitat ecology, and provides support for ecosystem- and climate-related initiatives in the region.

[Sustainable Fisheries](#) division works in partnership with fisheries managers and constituents to provide reliable scientific advice that enhances the stewardship of living marine resources. The branches of Gulf of Mexico Fisheries, Atlantic Fisheries, Highly Migratory Species, Caribbean Fisheries, and Data Analysis and Assessment Support also strive to advance scientific knowledge and promote diverse and sustainable fisheries through innovative research and development activities, and the use of advanced technologies.

[Social Science Research Group](#) conducts research and data collections to assess the social and economic performance of fisheries and regulatory impacts.

National Ocean Service (NOS) - [Gray's Reef National Marine Sanctuary](#)

Gray's Reef National Marine Sanctuary partners with the South Carolina Aquarium (Charleston, SC) and Riverbanks Zoo and Aquarium (Columbia, SC) hosting exhibit kiosks where guests can explore the resources of live-bottom habitats on the continental shelf like those at Gray's Reef. The touchscreen exhibits guide guests discovering the habitat types and what marine life regularly resides or visits, virtual dives using 360° photos and videos, interactive games, and photo slideshows of NOAA research happening in the sanctuary.

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. South Carolina is a co-trustee with NOAA for assessment and restoration after pollution incidents in South Carolina. For more information about our work in South Carolina, visit: [DARRP in Your State](#) (and use the top menu to navigate to "South Carolina") and this [interactive map](#).

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) - [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 Raleigh, North Carolina serving the Mid-Atlantic region – Delaware, Georgia, North Carolina, Puerto Rico, Maryland, South Carolina, the Virgin Islands, Virginia, and Washington D.C. 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 Weather Service - [NEXRAD \(WSR-88D\) Systems](#)

NEXRAD is used to warn the people of the United States about dangerous weather and its location. This radar technology allows meteorologists to warn the public to take shelter with more notice than ever before. The NEXRAD network provides significant improvements in severe weather and flash flood warnings, air traffic safety, flow control for air traffic, resource protection at military bases, and management of water, agriculture, forest, and snow removal. NEXRAD radar has a range of up to 250 nautical miles, and can provide information about wind speed and direction, as well as the location, size, and shape of precipitation. There are 159 operational NEXRAD radar systems deployed throughout the United States and overseas, of which two are in South Carolina.

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 12 ASOS stations in South Carolina.

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 128 COOP sites in South Carolina.

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 15 NWR transmitters in South Carolina.

Office of Oceanic and Atmospheric Research (OAR) – [South Carolina 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 South Carolina Sea Grant Consortium is a statewide program that generates and provides science-based information to enhance the practical use and conservation of coastal and marine resources that foster a sustainable economy and environment. The Consortium develops balanced and integrated scientific research, as well as formal and informal education, extension, and communications programs, which are driven by stakeholders' needs at the local, state, and regional levels. A 30-member Program Advisory Board and extension specialists' advisory committees help prioritize research and outreach projects. Five focus areas guide research, education, and outreach programs: understanding coastal and ocean ecosystems; supporting sustainable coastal development and economies; enhancing hazard resilience in coastal communities; promoting sustainable fisheries and aquaculture industries; and fostering scientific literacy and workforce development. Administrative offices are located in Charleston. Get involved with Sea Grant through state and national opportunities like the John A. Knauss Marine Policy Fellowship program at seagrant.noaa.gov.

National Ocean Service (NOS) - Students for [Zero Waste Week](#)

Students are inviting their local communities to "Go Green and Think Blue" by joining them in the annual *Students for Zero Waste Week campaign*. During this campaign led by the Office of National Marine Sanctuaries, students focus on reducing land-based waste in order to protect the health of local marine environments. These young leaders are raising awareness of how single-use plastic and other types of litter affect the health of local watersheds, national marine sanctuaries, and the ocean. In addition, some schools are looking at ways to reduce their energy use on campus with hopes of raising awareness of how the burning of fossil fuels also impacts the health of the ocean.

NOAA In Your State is managed by [NOAA's Office of Legislative and Intergovernmental Affairs](#) and maintained with information provided by NOAA's Line, Corporate, and Staff Offices. Questions about specific programs or offices should be directed to the NOAA Line, Corporate, or Staff Office listed.

More information for those offices may be found at [NOAA.gov](#).
