

## NOAA In Your State

# Virginia

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**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. The entries are listed by statewide, region, and then by congressional districts and cities or towns.

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### VA

#### Statewide

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

NOAA's Deep Sea Coral Research and Technology Program is the only federal program dedicated to mapping, characterizing, and understanding deep-sea coral ecosystems, and sharing the information needed to conserve these habitats. The Program -- called for in the reauthorization of the Magnuson-Stevens Fishery Conservation and Management Act and within the Office of Habitat Conservation -- is working with other NOAA offices and external partners to conduct fieldwork to study the distribution, abundance, and diversity of deep sea corals and sponges. Since 2009, more than 42,500 square miles of seafloor have been mapped and surveyed for deep-sea coral habitats from Florida to Maine, in Alaska and the West Coast, and in Hawaii and the Marianas Trench. In FY 2018, research is being prioritized in two regions -- the southeast (states include VA, NC, SC, FL, AL, MS, LA, TX, and the Caribbean islands) and the west coast (WA, OR, CA).

##### **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 mile 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. 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 northern right whales, 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 Northeast Fisheries 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 Regional Fisheries 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) - [Restoration Center](#)**

The NOAA Restoration Center, within the Office of Habitat Conservation, works with private and public partners locally and nationwide to increase fisheries productivity by restoring coastal habitat. Projects support sustainable fisheries, help recover threatened and endangered species, and reverse damage from disasters like oil spills, ship groundings, and severe storms. Since 1992, they have provided more than \$750 million to implement more 3,300 coastal habitat restoration projects. In Virginia, the Restoration Center focuses on salt marsh, wetlands, and oyster reef restoration.

#### **National Marine Fisheries Service (NMFS) and National Ocean Service (NOS) - [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 \$10.4 billion 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. In Virginia, the Program is currently working to restore natural resources in cases including Pepco Mineral oil spill, and the Atlantic Wood hazardous waste site.

#### **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 – North Carolina, Delaware, Georgia, 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 (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 15 ASOS stations in Virginia.

### **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 138 COOP sites in Virginia.

### **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 11 NWR transmitters in Virginia.

### **Office of the Chief Information Officer (OCIO) - [Norfolk Regional Center](#)**

The Office of the Chief Information Officer (OCIO) at NOAA's Norfolk Regional Center (NRC) maintains staff and offices to provide support for corporate services such as networking, desktop computing, software and hardware management, and cyber security. In addition, the OCIO at NRC provides enterprise and regional IT support services for select NOAA Line and Program Offices in Mississippi, Missouri, South Carolina, Texas, Virginia, Washington, and West Virginia. This work includes IT infrastructure design and maintenance, network and server management and administration, desktop configuration and maintenance, application and system design and implementation, IT security, and telecommunications.

### **Office of the Chief Information Officer (OCIO) - [High Performance Computing and Communications](#)**

The Office of the Chief Information Officer oversees operational high performance computing in partnership with the National Weather Service. NOAA's operational supercomputers process and analyze earth observations at quadrillions of calculations per second to support weather, water, and climate forecast models. The primary supercomputer, Luna, is located in Reston, Virginia, and the secondary supercomputer, Surge, is located in Orlando, Florida.

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

NOAA's National Sea Grant College Program is a federal-university partnership that integrates research, outreach, and education. Sea Grant forms a national network of 33 programs in all U.S. coastal and Great Lakes states, Puerto Rico, and Guam. Virginia Sea Grant facilitates research, educational, and outreach activities promoting the sustainable management and use of marine resources. The program, based at the College of William & Mary's Virginia Institute of Marine Science, involves partners and researchers at other institutions of higher education throughout the Commonwealth. The partners include the University of Virginia, Old Dominion University, Virginia Tech, George Mason University, Virginia Commonwealth University, and James Madison University. Virginia Sea Grant's Marine Extension Program responds to the needs of marine-based industries and the public, and provides information that increases public understanding of the marine environment. Key topics include developing the skills of Virginia's future scientists and coastal workforce; working with coastal communities to develop coastal businesses, gain access to university expertise and plan for sea level rise; supporting research to address current scientific needs of Virginia's commercial fisheries and aquaculture; improving our knowledge of the impacts of land use and climate change on water quality and coastal habitats in the Chesapeake Bay and along Virginia's Atlantic coast; and helping local seafood businesses supply safe, high quality food to citizens in Virginia and around the world.

**[Chesapeake Bay Region](#)**

**National Marine Fisheries Service (NMFS) - [NOAA Chesapeake Bay Office](#)**

The NOAA Chesapeake Bay Office, within the Office of Habitat Conservation, is co-located with the state/federal Chesapeake Bay Program, enabling close collaboration with Virginia state agencies, federal government agencies, scientists, watermen, conservation groups, and other partners. The NOAA Chesapeake Bay Office administers cooperative programs on Ecosystem Science, Coastal and Living Resource Management, and Environmental Literacy programs. The NOAA Chesapeake Bay Office supports an ecosystem approach to multi-state fisheries policies by funding Bay-wide fisheries monitoring and research, blue crab stock assessment, and oyster restoration in coordination with state fisheries managers and university scientists. The NOAA Chesapeake Bay Office also operates and maintains the Chesapeake Bay Interpretive Buoy System and supports broad federal involvement in environmental education in the region, including managing the Chesapeake Bay Watershed Education and Training (B-WET) grant program. A field agent of the Chesapeake Bay Office is located in Norfolk, Virginia at the NOAA Marine Operations Center - Atlantic (see entry below). The NOAA Chesapeake Bay Office also coordinates NOAA's efforts to implement the Chesapeake Bay Watershed Agreement.

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

The NOAA Chesapeake Bay Office operates and maintains "smart buoys" in key locations throughout Virginia's portion of the Chesapeake Bay including the Elizabeth River (Norfolk), the James River (Jamestown), the Rappahannock River (Deltaville), and the mouth of the Bay (near Virginia Beach). Additional buoys—including the Upper Potomac (Washington, D.C.) and Potomac (Point Lookout buoy)—are frequently used by Virginia residents. These buoys provide real-time meteorological, oceanographic, and water-quality data 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. The ten Chesapeake Bay Interpretive Buoy System buoys also mark and interpret points along the Captain John Smith Chesapeake National Historic Trail and serve as an important component of the Chesapeake Bay Observing System.

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

The NOAA Bay-Watershed Education and Training (B-WET) Program is an environmental education program that promotes locally relevant, experiential learning in the K-12 environment. The primary delivery of B-WET is through competitive funding that promotes Meaningful Watershed Educational Experiences (MWEEs). B-WET currently serves seven areas of the country: California, Chesapeake Bay, Great Lakes, Gulf of Mexico, Hawai'i, New England, and the Pacific Northwest. 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 responds to regional education and environmental priorities through local implementation of competitive grant funds. Please see regional funding opportunity for priorities and eligibility details.

**National Marine Fisheries Service (NMFS) - [Species Recovery Program](#)**

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. 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. Twenty-five coastal states, including Virginia and U.S. territories currently participate in this program. To date, the Virginia Department of Game and Inland Fisheries has received multiple awards, including one to assess habitat needs for recovering Atlantic sturgeon.

**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, track 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 is one stranding network member 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 FY17, 33 competitive grants were awarded nationwide for a total of \$2.8 million.

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

A Physical Oceanographic Real-Time System (PORTS®) is operated cooperatively with the local maritime community in Chesapeake Bay at which real-time data are quality-controlled and disseminated to local users for safe and efficient navigation. Real-time data are available for water levels from fourteen stations, conductivity from one station, currents from six stations, air gap from two stations and meteorological data from seventeen locations.

## ***Coastal***

### **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. To date the program has protected more than 100,000 acres of land with program funds and over 16,000 acres with an in-kind match. 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. NOAA awarded eight grants in Virginia, 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 Virginia Department of Environmental Quality to implement the National Coastal Zone Management Program in Virginia. 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) - [Scientific Support Coordinator and Regional Resource Coordinator](#)**

NOAA's Office of Response and Restoration (OR&R) brings decades of experience, technical expertise and scientific analysis in response to oil and hazardous chemical spills. In addition to events that draw the national eye like Hurricane Sandy, OR&R also supports response to local emergencies. Nine regionally based Scientific Support Coordinators (SSCs) harness the input of a multi-disciplinary team to address issues such as oil slick trajectory forecasting, environmental tradeoffs, best practices, resources at risk, oil science and properties, and chemical hazard assessment to reduce risks to coastal habitats and resources. The SSC works directly with U.S. Coast Guard and the U.S. Environmental Protection Agency to provide critical scientific support to the Federal On-Scene Coordinator. OR&R also helps develop preparedness plans that identify spill response actions with the greatest environmental benefit and trains hundreds of members of the response community each year on the scientific and technical aspects of spills.

OR&R's Regional Resource Coordinators (RRCs) provide scientific and technical expertise and timely response to oil spills or hazardous materials releases to collect information, samples, and evidence that are time dependent and critical to support natural resource damage assessments throughout the coastal US. RRCs work on multi-disciplinary scientific, economic, and legal teams and are responsible for determining and quantifying injuries to NOAA trust natural resources through determination of injuries and pathway, and demonstration of causal mechanisms. The goal of the RRCs efforts is to determine, often through the Damage Assessment, Remediation, and Restoration Program, the appropriate amount and type of restoration required to restore injured NOAA trust resources and compensate the public for their lost use.

### **National Ocean Service (NOS) - [Atlantic Environmental Response Management Application](#)**

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 Environmental Sensitivity Index maps, ship locations, weather, and ocean currents, in a centralized, easy-to-use format for environmental responders and decision makers. In the fall of 2012, Atlantic ERMA was employed as the Common Operational Picture for the U.S. Coast Guard's pollution response to Hurricane Sandy in New York and New Jersey waters.

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

The NOAA Marine Debris Program (MDP) leads national and international efforts to research, prevent, and reduce the impacts of marine debris. The program supports marine debris removal, education and outreach, and research projects in partnership with state and local agencies, tribes, non-governmental organizations, academia, and industry. In Virginia, the MDP is partnering with the Virginia Department of Environmental Quality on developing a social marketing strategy to reduce mass balloon releases. Additionally, long-term monitoring of marine debris on the Virginia coast is being conducted by the Virginia Coastal Management Program. The MDP has also worked with state and local governments, and stakeholders, to develop the Virginia Marine Debris Action Plan.

### **National Ocean Service (NOS) - [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 the 11 Regional Associations and it extends from Cape Hatteras to Cape Cod including 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 Ocean Service (NOS) and National Marine Fisheries Service (NMFS) – [Coastal Resilience Grant Award](#)**

These grants help coastal communities prepare for and recover from extreme weather events, climate hazards, and changing ocean conditions. The focus is on comprehensive regional approaches that use science-based solutions and rely on collaborative partnerships. This approach expands reach and impact, thereby ensuring maximum success. The NOAA Office for Coastal Management awarded three grants that are still ongoing in 2018, including: \$514,507 to the Mid-Atlantic Regional Council on the Ocean (MARCO), to enable partners and coastal and ocean stakeholders from New York to Virginia to implement a holistic review of how changing ocean conditions impact coastal communities and economies; \$844,487 to the City of Virginia Beach and its partners to implement a prioritized list of adaptation strategies to address sea level rise across the four watersheds and develop a finely-tuned public engagement process to share best practices across the Hampton Roads region; and \$834,991 to the Virginia Institute of Marine Sciences for a project to address flooding issues across coastal Virginia through use of nature-based infrastructure, which will include developing tools that allow local planners in 37 counties to determine suitable areas to implement natural infrastructure.

### **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.

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### Corbin

#### **National Ocean Service (NOS) - [Corbin Training Center](#)**

The National Geodetic Survey (NGS) Corbin Training Center (CTC) provides high quality training on a variety of geodetic topics and applications to public, private, and international partners to improve their geodetic positioning capacity. The CTC has a classroom, which can be configured for various training needs. It is equipped with 15 workstations for computer-based training, or the classroom can be arranged for lectures, discussion, and breakout groups. CTC has a full schedule of classes available for viewing on the website and request for new class topics are always considered.

#### **National Ocean Service (NOS) - [Instrumentation and Methodologies Branch](#)**

The National Geodetic Survey (NGS) Instrumentation and Methodologies Branch tests and evaluates geodetic instruments and equipment and assists in the preparation of standards and specifications for geodetic surveying techniques and technologies for use by all Federal agencies. The Branch develops and evaluates methods for determining instrumental capabilities. It develops methodologies and observing procedures for new technologies and instrumentation to meet stakeholder needs. The Branch provides training for Geodetic Advisors and instrument operators assigned to field units, as well as other agencies and foreign nationals.

#### **National Ocean Service (NOS) - [Remote Sensing LiDAR Test and Evaluation Site](#)**

A permanent airborne Light Detection and Ranging (LiDAR) test and evaluation site was installed at the National Geodetic Survey (NGS) Instrumentation & Methodologies Branch facility located in Corbin, Virginia. The site was created in collaboration with the National Geospatial-Intelligence Agency (NGA), and will allow NGA and others to easily access important information about the area and surrounding positional control. An interactive map of the test and evaluation site with various layers of information such as RGB (red, green, and blue bands), near-infrared and color-infrared imagery, as well as local NGS survey control are available here:

### Gloucester Point

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

This office reviews projects in Virginia, providing local support for NMFS' habitat conservation efforts. It provides consultative services for Federal activities and Federally permitted activities that could affect living marine resources or the habitats upon which they depend.

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

The 3,072 acre Chesapeake Bay-Virginia Research Reserve, designated in 1991 and managed by the College of William and Mary's Virginia Institute of Marine Science, features four components, all within the York River basin: the Goodwin Islands, Catlett Islands, Taskinas Creek, and Sweet Hall Marsh. These components represent habitats along the river's salinity gradient, including salt-water and freshwater marshes, submerged aquatic vegetation, upland forests, beaches, and open water. Migratory birds, sea grasses, and many commercially important fish and shellfish are found within the reserve. Through focused scientific, education, and stewardship programs, this research reserve informs coastal resource management decision-making and supports community education and planning. Areas of focus include water quality and quantity, climate and human-induced stressors on coastal ecosystems, and integrated coastal observing systems.

### Newport News

#### **National Ocean Service (NOS) - [Monitor National Marine Sanctuary](#)**

In 1975 NOAA designated, as its first national marine sanctuary, the site of the wreckage of the USS *Monitor*, a Civil War vessel that lies off the coast of North Carolina. The *Monitor* was the prototype for a class of US Civil War ironclad warships that significantly altered both naval technology and marine architecture in the 19th century. In March 1862, the ship fought the CSS *Virginia* in the Battle of Hampton Roads. On December 31, 1862, while being towed to Beaufort, N.C., the *Monitor* encountered a great gale and sank. For over a century, the *Monitor* laid undiscovered and protected by



nature off Cape Hatteras, but in August of 1973, scientists located the *Monitor*. Various historically iconic artifacts from the shipwreck, such as the rotating gun turret, engine, condenser, propeller, and numerous smaller pieces were recovered between 1998 and 2002. These artifacts are being conserved in Newport News, Va. at The Mariners' Museum's Batten Conservation Laboratory. Many of the artifacts are out of conservation and on display in the museum's *Monitor* Center. *Monitor* NMS also works closely with its partners and school districts to support science, technology, engineering, and math education throughout the region. In order to better address current management issues, the sanctuary relies on input from a citizen advisory council representing sanctuary constituent groups who provide advice on sanctuary activities and management actions. By addressing the current issues and anticipating future challenges, we strive to preserve and protect our Nation's maritime heritage for this and future generations.

#### **National Ocean Service (NOS) – [Treasures of NOAA's Ark](#)**

The Treasures of NOAA's Ark traveling exhibit showcases an array of heritage artifacts which tell the story of how the people, technology and resources shaped NOAA and its predecessor agencies over the past two decades. NOAA's responsibilities include preserving, protecting and promoting its own heritage while at the same time sharing this history with the public through innovative programs. From 19<sup>th</sup> century maps to nautical charts and early scientific instruments, the exhibit recalls NOAA's proud heritage and legacy of service by exploring the themes of history, weather, navigation and fisheries to better understand the land, sea and sky. With a blend of art and science, there is something of interest for everyone. Beginning March 1, 2017 the exhibit will be hosted by The Mariners' Museum in Newport News, Virginia through the end of the calendar year.

#### **[Tidewater Region Cities](#)**

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

The National Ocean Service (NOS) operates seven long-term continuously operating tide stations in the state of Virginia that 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 Wachapreague, Kiptopeke Beach, Dahlgren, Lewisetta, Yorktown (USCG Training Center), Sewells Point, and Chesapeake Bay Bridge Tunnel. 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.

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#### **[Cape Charles](#)**

#### **National Environmental Satellite, Data, and Information Service (NESDIS) and Office of Oceanic and Atmospheric Research (OAR) - [U.S. Climate Reference Network](#)**

The U.S. Climate Reference Network (USCRN) is an operationally viable research network of 135 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).

#### **[Newport News](#)**

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

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 coast 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.

## ***Wallops Island***

### **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.

### **National Environmental Satellite, Data, and Information Service (NESDIS) - [Wallops Station](#)**

The Wallops Command and Data Acquisition (CDA) Station is responsible for ensuring scheduled data flow from NOAA GOES and POES satellites to designated user subsystems. The Wallops CDA Station executes spacecraft commands and schedules. It acquires, maintains, and distributes a continuous flow of meteorological satellite data. This station provides the communication link between polar orbiting and geostationary environmental weather satellites and the ground station. It sends commands and receives transmissions from the satellites. The Wallops CDA Station has ten antenna systems, which send function commands to the satellites, and perform primary data acquisition and preliminary processing. The Wallops CDA Station also processes the ground-to-spacecraft link for weatherfax broadcasts. The information is distributed to all weather offices and facilities to track and evaluate significant weather events and prepare warnings and forecasts. The Data Collection System (DCS) primary equipment is housed and operated at Wallops CDA. This system is used to relay important environmental and tracking data from remote sites to the user through NOAA and other participating satellite systems. The Station assists in developing emergency procedures to safeguard spacecraft health and safety; and executes emergency plans independently in the event of a communications outage with the NESDIS Satellite Operations Control Center, located in Suitland, Maryland.

### **NOAA Office of Education - [Environmental Literacy Program](#)**

NOAA's Environmental Literacy Program (ELP), administered by the Office of Education, provides grants and in-kind support to build the capacity of institutions and networks to advance NOAA's mission through formal (K-12) and informal education at national, regional, and local levels. In Virginia, ELP supports the Science Museum of Virginia (Richmond), Danville Science Center, National Maritime Center (Norfolk), and the James Madison University (Harrisonburg), all of which have permanent exhibits featuring NOAA's Science On a Sphere and are members of NOAA's SOS Users Collaborative Network. The SOS Network has more than 100 institutions worldwide, reaching over 60 million people, and shares best practices in using the sphere to bring the latest global forecasts and models to the public. ELP supports the Science Museum of Virginia and the Elizabeth River Project (Portsmouth) through Environmental Literacy Grants focused on resilience to extreme weather events and environmental change. The Science Museum of Virginia offers a new suite of public programming entitled Learn, Prepare, Act – Resilient Citizens Make Resilient Communities to help the public understand climate change and its impacts on Virginia's communities and give them tools to become resilient to its effects. With the goal of incorporating youth-focused strategies into Norfolk's Resilience Strategy, the Elizabeth River Project provides programs for K-12 students that engage and involve them in making informed decisions to address sea level rise and other climate change impacts in their communities. ELP supports the Blue Crab Bowl in Virginia, one of 25 regional competitions of the National Ocean Sciences Bowl (NOSB). The NOSB is an academic competition that engages high school students in learning about ocean sciences and related STEM careers while helping them become knowledgeable citizens and environmental stewards. ELP also supports the AMS DataStreme courses for K-12 educators through a grant and in-kind support. Local implementation teams in the state offer DataStreme courses that use weather, climate, and the ocean as contexts for teaching science and improving understanding about the Earth system. Additionally, there are other institutions providing support to and receiving support from our grant recipients to advance NOAA's mission.

**Office of Oceanic and Atmospheric Research (OAR) - [Science On a Sphere® at NASA Flight Facility Visitor 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.

**Office of Oceanic and Atmospheric Research (OAR) - [Total Column Ozone Measurements](#)**

NOAA's Earth System Research Laboratory Global Monitoring Division (ESRL/GMD) makes measurements of the column amounts of ozone between the earth's surface and the top of the atmosphere at a number of locations around the United States, including Wallops Island, VA. The observations are obtained with ground-based spectrometers that measure the attenuation by ozone of ultraviolet light. This integrated ozone amount is critical in determining the amount of ultraviolet radiation reaching the earth's surface. Excess ultraviolet radiation is responsible for human skin cancer and is also harmful to other biogenic organisms. Column ozone measurements monitor changes in the stratospheric ozone layer resulting from human-produced chlorine and bromine compounds that destroy ozone. With controls now in place on the manufacture and use of these ozone-destroying compounds, it will be important to monitor the ozone layer for the expected recovery and determine whether other factors such as long-term climate change are influencing this recovery.

***Hampton***

**National Marine Fisheries Service (NMFS) - [Port Agent Field Office](#)**

The Greater Atlantic Region's Port Agent Team works directly with the fishing industries of the region to provide in-person advice and support to fishermen and seafood dealers. Port agents also serve as a conduit for industry to relay information to the Regional Administrator and other NOAA staff about fishing industry concerns, thoughts and activities. Team members assist seafood dealers and vessel operators and owners with data reporting requirements, in navigating the permitting process, and with other Agency regulations and processes. They collect biological samples of seafood landed by commercial fishermen for use in fisheries stock assessments. They also provide the general public with information on fisheries and the marine environment by attending public events and through ad-hoc interactions.

**National Marine Fisheries Service (NMFS) - [Inspection Office](#)**

NOAA's Seafood Inspection Program conducts a voluntary inspection program for fishery products on a fee-for-service basis. The Program offers a wide range of services to the area's fishermen, fish processors and fish brokers 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.

***Norfolk***

**Acquisition and Grants Office (AGO) - [Eastern Acquisition Division](#)**

The Acquisition and Grants Office provides financial assistance and acquisition services for NOAA by overseeing and implementing all processes related to contracts and grants. 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 Ocean Service (NOS) - [Atlantic Hydrographic Branch](#)**

The Atlantic Hydrographic Branch (AHB) is co-located with the Atlantic Marine Center in Norfolk, Virginia. AHB manages the office processing of hydrographic survey data acquired by NOAA hydrographic vessels, Navigation Response Teams, and performs contract oversight for hydrographic surveys conducted under contract. The Branch serves as the contact for East Coast, Gulf Coast and Great Lakes hydrographic survey requests and data processing, and verifies, evaluates, and analyzes acquired survey data. The NOAA Ships *Thomas Jefferson* and *Ferdinand R. Hassler*, as well as the survey vessel *Bay Hydrographer* conduct the hydrographic surveys analyzed by AHB and then AHB produces final survey data, significant features and soundings for display on nautical charts and related products to support safe navigation on the East and Gulf coasts.

### **National Ocean Service (NOS) - [Geodetic Field Operations Branch](#)**

Field Operations Branch personnel conduct geodetic surveys to support the National Spatial Reference System, shoreline mapping, nautical and aeronautical charting, and hydrography. Many of these surveys provide information that is incorporated into the National Airspace System in accordance with specifications of the Federal Aviation Administration. The Branch coordinates survey activities with other Federal, state, and local governments having interests in particular projects. The Branch supports NOAA's ship-based personnel by providing training in geodetic survey techniques and sometimes through performance of the surveys themselves. The Branch performs many different types of geodetic surveys for: crustal motion, airport obstructions, airport navigational aids, tidal datum's, and other special purposes.

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

NOAA's navigation managers work directly with pilots, port authorities, and recreational boating organizations in Virginia. They help identify the navigational challenges facing marine transportation in Virginia 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, Virginia co-located at the Atlantic Hydrographic Branch to support mariners and stakeholders in the Mid-Atlantic region.

### **NOAA-wide - [NOAA @ Nauticus](#)**

NOAA @ Nauticus is a partnership between NOAA and Nauticus, the National Maritime Center, located on the City of Norfolk's waterfront. Nauticus attracts over 300,000 visitors a year with special programs and exhibits focused on exploring the power of the sea. Working together, NOAA and Nauticus are implementing outreach and education programs and exhibits such as NOAA's Science on a Sphere® that will help achieve NOAA's overall mission priority of improving scientific and environmental literacy.

### **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.

### **Office of Marine and Aviation Operations (OMAO) - [Marine Operations Center- Atlantic](#) and the [NOAA Ship Thomas Jefferson](#)**

The Marine Operations Center-Atlantic (MOC-A) serves as homeport to the NOAA Ship *Thomas Jefferson*. MOC-A also provides regional management to NOAA ships on the East Coast, supporting the *Ronald H. Brown* and *Nancy Foster* in Charleston, South Carolina; the *Ferdinand R. Hassler* in New Castle, New Hampshire; the *Henry B. Bigelow* in Newport, Rhode Island; the *Okeanos Explorer* in Davisville, Rhode Island; and *Oregon II*, *Pisces*, and *Gordon Gunter* in Pascagoula, Mississippi. These NOAA vessels primarily operate in the Atlantic and Pacific Oceans, the Gulf of Mexico, and the Caribbean and perform research that supports the work of all NOAA line offices. The *Ronald H. Brown* also operates worldwide. The NOAA Ship *Thomas Jefferson* operates in the North Atlantic conducting hydrographic survey

missions for the National Ocean Service. All vessels support NOAA's mission to protect, restore, and manage the use of coastal and ocean resources through an ecosystem approach to management.

NOAA vessels are operated under the direction of officers from the NOAA Commissioned Officer Corps. The NOAA Corps provides a cadre of professionals trained in engineering, oceanography, meteorology, fisheries science, and other related disciplines. Officers operate ships, fly aircrafts, manage research projects, and serve in staff positions throughout NOAA.

#### **Workforce Management Office (WFMO) - [Norfolk Office](#)**

The Workforce Management Office in Norfolk provides consultative and support services to customers as needed for employee and labor relations matters throughout NOAA. ERB addresses employee performance issues, including disciplinary actions, by conducting investigations and providing recommendations to management on how to most aptly address issues with formal or informal action. The Branch also recommends and implements suitability actions in cases involving covered positions that are subject to investigation. ERB advises managers and supervisors regarding performance and conduct cases.

#### ***Richmond***

#### **Office of Oceanic and Atmospheric Research (OAR) - [Science On a Sphere® at the Science Museum of Virginia](#)**

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.

#### **VA- 3**

#### **NOAA Office of Education - [Environmental Literacy Program](#)**

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#### VA- 4

##### **Chesapeake**

###### **National Ocean Service (NOS) - [Center for Operational Oceanographic Products and Services](#)**

The CO-OPS Chesapeake Facility operates and maintains the East Coast and Great Lakes portion of the National Water Level Observation Network (NWLON) for the collection, analysis and dissemination of water level observations and long-term sea level trends. NWLON is nationally composed of 210 primary and long-term control tide stations, which provide basic tidal data for U.S. coastal and marine boundaries and for charting data. Other uses range from storm surge warnings to commercial and recreational vessel navigation to global climate change and tectonic studies.

##### **Wakefield**

###### **National Weather Service (NWS) - [Weather Forecast Office](#)**

Located between Petersburg and Suffolk in southeastern Virginia, the NWS Weather Forecast Office (WFO) in Wakefield is staffed around-the-clock every day, providing the best possible weather, water, and climate forecasts and warnings central and eastern Virginia (including Richmond and Norfolk), the lower Maryland eastern shore (including Salisbury and Ocean City), and northeast North Carolina (including Elizabeth City). The office also provides marine forecasts and warnings for the Atlantic coastal waters from Fenwick Island, DE to Currituck Beach Light, NC, the Chesapeake Bay south of Smith Point, and the Currituck Sound. Highly trained forecasters issue warnings and forecasts for events, including severe thunderstorms, tornadoes, winter storms, floods, and heat waves. This essential information is provided 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 through dedicated government channels, satellite, the Internet, and NOAA Weather Radio All Hazards.

Forecasters also provide Impact-based Decision-Support Services (IDSS), both remotely and on-site, during critical emergencies, such as wildfires, floods, chemical spills, and for major recovery efforts such as those following the Joplin and Moore tornadoes, Hurricanes Katrina and Sandy, and the Sept. 11, 2001, terrorist attacks in New York City and Washington D.C. The WFO collects and disseminates precipitation, river, and rainfall data, and prepares local climatological data. Each WFO has a Warning Coordination Meteorologist who actively conducts outreach and educational programs, which helps build strong working relationships with local partners in emergency management, government, the media and academic communities. The WFO operates Automated Surface Observing Stations (ASOS), as well as the local Doppler Weather Radar, which provides critical information about current weather conditions. The radar data enables forecasters to issue warnings for tornadoes, severe thunderstorms, and flash floods.

#### VA- 5

##### **Charlottesville**

###### **National Environmental Satellite, Data, and Information Service (NESDIS) and Office of Oceanic and Atmospheric Research (OAR) - [U.S. Climate Reference Network](#)**

The U.S. Climate Reference Network (USCRN) is an operationally viable research network of 135 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).

##### **Danville**

###### **Office of Oceanic and Atmospheric Research (OAR) - [Science On a Sphere® at the Danville 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.

## **NOAA Office of Education - [Environmental Literacy Program](#)**

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### **VA- 6**

#### **[Harrisonburg](#)**

#### **Office of Oceanic and Atmospheric Research (OAR) - [Science On a Sphere® at James Madison University](#)**

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### ***Shenandoah National Park***

#### **Office of Oceanic and Atmospheric Research (OAR) - Tall Tower Carbon Measurements**

NOAA's Earth System Research Laboratory Global Monitoring Division (ESRL/GMD) operates trace gas monitoring sites at tall television transmitter towers in eight states, including Virginia. The sites were established to extend ESRL/GMD's monitoring network into the interior of North America in order to provide data to aid estimation of the net carbon balance of the continent. Variations of trace gases, especially carbon dioxide (CO<sub>2</sub>), are largest near the ground, so existing tall (> 400 meters) transmitter towers are utilized as platforms for in situ and flask sampling for atmospheric trace gases. The tower site in Virginia is operated in Shenandoah National Park by the University of Virginia.

### **VA- 8**

#### **NOAA Office of Education - Environmental Literacy Program**

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**Office of Oceanic and Atmospheric Research - [Mid-Atlantic Regional Integrated Sciences and Assessment](#)**

The Mid-Atlantic Regional Integrated Sciences and Assessment (MARISA) program was established in September 2016 and has an overarching mission to support integrated, flexible processes for building adaptive capacity to climate variability and change in diverse settings in the Mid-Atlantic region, with an initial focus on the Chesapeake Bay Watershed. Building on decades of research in this region, MARISA emphasizes use-inspired research that integrates social and physical science methods to generate, analyze, and translate climate information at multiple spatial and temporal scales for diverse stakeholders. MARISA focuses on five objectives: (1) assess climate risks, uncertainties, and vulnerabilities; (2) support adaptation planning, decision making, and adaptive management by connecting existing models and data to better understand options for improved water quality, best management practices, flood risk, and erosion reduction; (3) support regional climate assessments and services and develop research-to-operations decision-support tools; (4) train a new generation of leaders in climate change adaptation and risk management; and (5) advance program performance through measurements and evaluation of MARISA's impacts. MARISA is a collaborative effort led by the RAND Corporation in partnership with Penn State University and Johns Hopkins University.

**VA- 9**

***Blacksburg***

**National Weather Service (NWS) - [Weather Forecast Office](#)**

Located on the campus of the Virginia Polytechnic Institute and State University, the NWS Weather Forecast Office (WFO) is staffed around-the-clock every day, providing the best possible weather, water, and climate forecasts and warnings residents in southeast West Virginia, southwest Virginia and northwest North Carolina. Highly trained forecasters issue warnings and forecasts for events, including severe thunderstorms, tornadoes, winter storms, floods, and heat waves. This essential information is provided 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 through dedicated government channels, satellite, the Internet, and NOAA Weather Radio All Hazards.

Forecasters also provide Impact-based Decision-Support Services (IDSS), both remotely and on-site, during critical emergencies, such as wildfires, floods, chemical spills, and for major recovery efforts such as those following the Joplin and Moore tornadoes, Hurricanes Katrina and Sandy, and the Sept. 11, 2001, terrorist attacks in New York City and Washington D.C. The WFO collects and disseminates precipitation, river, and rainfall data, and prepares local climatological data. Each WFO has a Warning Coordination Meteorologist who actively conducts outreach and educational programs, which helps build strong working relationships with local partners in emergency management, government, the media and academic communities. The WFO operates Automated Surface Observing Stations (ASOS), as well as the local Doppler Weather Radar, which provides critical information about current weather conditions. The radar data enables forecasters to issue warnings for tornadoes, severe thunderstorms, and flash floods.

**VA-10**

***Sterling***

**Office of Oceanic and Atmospheric Administration (OAR) - [Surface Radiation Measurement Network](#)**

NOAA's Earth System Research Laboratory Global Monitoring Division (ESRL/GMD) operates surface-based radiation monitoring sites in seven states. ESRL's Integrated Surface Irradiance Study (ISIS) monitoring network is based in the continental United States and is collaboration with NOAA's SURFRAD Network.

### ***Washington Metropolitan Area***

#### **National Weather Service (NWS) - [Center Weather Service Unit](#)**

Housed in the Federal Aviation Administration's Washington Air Route Traffic Control Center (ARTCC), the NWS Center Weather Service Unit (CWSU) provides aviation forecasts and other weather information to ARTCC personnel for use in directing the safe, smooth flow of aviation traffic in Maryland, DC, Delaware, Virginia, and North Carolina.

#### **National Weather Service (NWS) - [Weather Forecast Office](#)**

Located at the NWS Research and Development Center at Dulles International Airport in Sterling, this NWS Weather Forecast Office (WFO) provides the best possible weather, water, and climate forecasts and warnings for residents of the District of Columbia, much of Maryland, the northern third of Virginia, and the eastern panhandle of West Virginia. This office also issues marine and coastal waters forecasts for the tidal Potomac and Chesapeake Bay. Highly trained forecasters issue warnings and forecasts for events, including severe thunderstorms, tornadoes, winter storms, floods, and heat waves. This essential information is provided 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 through dedicated government channels, satellite, the Internet, and NOAA Weather Radio All Hazards. Forecasters also provide Impact-based Decision-Support Services (IDSS), both remotely and on-site, during critical emergencies, such as wildfires, floods, chemical spills, and for major recovery efforts such as those following the Joplin and Moore tornadoes, Hurricanes Katrina and Sandy, and the Sept. 11, 2001, terrorist attacks in New York City and Washington D.C. The WFO collects and disseminates precipitation, river, and rainfall data, and prepares local climatological data. Each WFO has a Warning Coordination Meteorologist who actively conducts outreach and educational programs, which helps build strong working relationships with local partners in emergency management, government, the media and academic communities. The WFO operates Automated Surface Observing Stations (ASOS), as well as the local Doppler Weather Radar, which provides critical information about current weather conditions. The radar data enables forecasters to issue warnings for tornadoes, severe thunderstorms, and flash floods.

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## ***NOAA In Your State***

# **Virginia**

**NOAA** NATIONAL OCEANIC AND  
ATMOSPHERIC ADMINISTRATION  
UNITED STATES DEPARTMENT OF COMMERCE

