



NOAA In Your State



<u>NOAA</u> 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 programs based in, and focused on, your state or territory. The entries are listed by statewide, region, and then by congressional districts and cities or towns.

WV Statewide

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). 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.

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 ten ASOS stations in West 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 108 COOP sites in West 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 12 NWR transmitters in West Virginia.

WV-1 Elkins

National Environmental Satellite, Data, and Information Service (NESDIS) and Office of Oceanic and Atmospheric Research (OAR) - <u>U.S. Climate Reference Network</u>

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). NOAA's National Environmental Satellite, Data, and Information Service and NOAA's Office of Oceanic and Atmospheric Research jointly manage USCRN.

Fairmont

National Environmental Satellite, Data, and Information Service (NESDIS) - Consolidated Remote Backup Unit
The Geostationary Operational Environmental Satellite-R (GOES-R) and the Joint Polar Satellite System Programs have
established a backup facility, which will include the installation of antennas for acquiring data and commanding the future
GOES-R series and JPSS satellites, that are scheduled for launch beginning in 2016 and 2017, respectively. Once
operational, the facility will allow NOAA to continue operating the GOES-R and JPSS ground network in the event the
primary locations – the NOAA Satellite Operations Facility in Suitland, Md., and the Wallops (Va.) Command and Data
Acquisition Station – are disabled. The ground system for GOES-R and JPSS is composed of computer systems, which
control the satellites and process the satellite's data into products that scientists and meteorologists will use around the

National Weather Service (NWS) - NCEP Weather Supercomputing

world. The facility is located on leased property in a local high-technology park.

The backup of the NWS weather supercomputing capability is intended to provide the computing and communications equipment needed to assume the workload of the primary supercomputer system in case of system or communication outage. The primary system receives and processes the extensive amounts of environmental data acquired by modernized observing systems, and runs highly sophisticated numerical weather prediction models. Execution of this program promotes public safety and the protection of property by providing the NCEP with the computer systems that are capable of producing more accurate numerical weather prediction (NWP) guidance products for hurricanes, severe thunderstorms, floods, and winter storms.

Office of the Chief Information Officer (OCIO- 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.

Office of the Chief Information Officer (OCIO) - High Performance Computing and Communications

The Office of the Chief Information Officer manages research and development high performance computing for weather and climate modeling, research, and predictions, supporting improvements in areas such as the prediction of severe weather, seasonal prediction of temperature and precipitation, and forecasting the next Sandy-like storm.

Office of the Chief Information Officer (OCIO) - NOAA Cyber Security Center

The NOAA Cyber Security Center (NCSC) provides 24x7 security operations, incident response, and enterprise security services to the Department of Commerce and NOAA programs and missions across the entire nation as well as internationally. The cutting-edge NCSC provides monitoring, analysis and appropriate escalation of information security events to protect and ensure the confidentiality, integrity, availability and compliance of the information technology enterprise. The NCSC is approximately 50 personnel, both Federal Government and Contract employees. The majority are located in Fairmont, West Virginia at the Robert H. Mollohan Research Center at the West Virginia High-Tech Center (WVHTC).

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.

Tucker County

Office of Oceanic and Atmospheric Research (OAR) - <u>Atmospheric Integrated Research Monitoring Network (AIRMON)</u> site is located near Davis (Tucker County), WV. The site has been in operation since 2000 and has collected data on major ions in precipitation (rain, snow) on a daily or an event basis. The major ions collected include sulfate, nitrate, phosphorus, pH, ammonium, sodium, chloride, and soil cations. AIRMON is a sub-network of the National Atmospheric Deposition Program.

WV-2 Charleston

National Weather Service (NWS) - Weather Forecast Office

Located in Charleston, this Weather Forecast Office (WFO) is staffed around-the-clock every day, providing the best possible weather, water, and climate forecasts and warnings residents covering portions of Ohio, West Virginia, Virginia and Kentucky. 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.

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

More information for those offices may be found at NOAA.gov.

NOAA In Your State West Virginia



