

National Weather Service

Building a Weather-Ready Nation.

NOAA's National Weather Service (NWS) is the Nation's first line of defense against severe weather. The NWS provides weather, water, and climate data, forecasts, and warnings for the protection of life and property and enhancement of the national economy.

With approximately 4,600 employees in 122 Weather Forecast Offices, 13 River Forecast Centers, 9 national centers, and other support offices around the country, NWS provides the critical national infrastructure to gather and process data worldwide from the land, sea, and air. This infrastructure enables data collection using technologies including dual-polarization Doppler radars, satellites, data buoys, weather balloons, aircraft, and surface observing systems. These data feed sophisticated environmental prediction models running on increasingly more powerful supercomputers. A highly dedicated and skilled workforce uses powerful workstations to issue life-saving forecasts and warnings. The NWS telecommunications gateway allows for the exchange of current data and products between NOAA, its public and private partners, and the international community. The communication network is used to rapidly distribute forecasts and warnings via a diverse dissemination infrastructure, including NOAA All-Hazards weather radio and mobile devices via the Wireless Emergency Alerts system.

NWS uses advances in research from the Office of Ocean and Atmospheric Research (OAR), and others, to continuously improve forecast and warning services and implement more sophisticated forecast models. The National Ocean Service (NOS), in conjunction with the National Hurricane Center, is spearheading the effort to improve the NWS hurricane storm surge forecasts and the satellite systems operated by the National Environmental Satellite, Data, and Information Service (NESDIS), provide critical information for NWS forecast models to accurately predict the weather patterns across the globe. These collaborations routinely demonstrate how NOAA science and service both work with and rely upon each other to save lives and provide stewardship of coastal and marine ecosystems and resources.

Again in 2013, weather wreaked havoc across the U.S. with destructive tornadoes, devastating floods and fires, and powerful winter storms disrupting air traffic and ground transportation. While our society is getting better at taking action to help mitigate the consequences of weather events, more needs to be done on the path to becoming a weather-ready nation. Building a "Weather-Ready Nation" (WRN) is a NOAA strategic goal to increase the resilience of the American people in the face of growing exposure to dangerous weather and water events, involving other parts of NOAA, other government agencies, researchers, and the private sector. Leading the way toward a WRN is accomplished not only through continual improvements to our observations, forecasts, and warnings, but also through the use of other innovative approaches, including the use of social science to better communicate risk and inform decisions made by the public and local authorities. This is achieved by providing information to users when and how they need it, strengthening partnerships to enhance community preparedness, and working with the emergency management community to enhance safety. At the Federal level, virtually every federal agency mission is affected by weather – building a Weather-Ready Nation is a societal effort that NOAA is partnering to achieve.

NWS is demonstrating better ways to communicate our weather forecasts and warnings by embedding our meteorologists in Federal, State, and local emergency operations centers. NWS also leverages social media and reaching the public on mobile devices through innovative partnerships with other government agencies, universities, and the private sector. The devastating impacts of extreme weather and water events can be reduced through improved readiness and improvements in demand-driven decision support services, using innovative technology, and through specialized training of our workforce to ensure a fully integrated field structure. These innovations will help pave a path forward for the stronger, more agile NWS capable of changing to meet societies' growing needs. The President's FY 2015 budget proposal for the NWS moves us further down this path to the future.



For more information, please visit:
www.noaa.gov and www.nws.noaa.gov





FY 2015 Budget Request Highlights

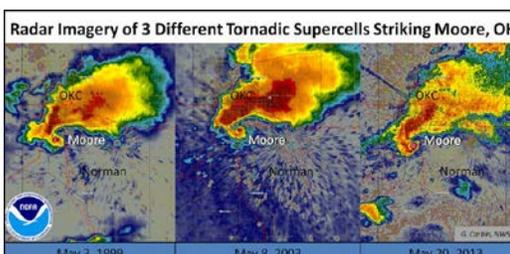
The FY 2015 President's Budget request for NWS is **\$1,063,347,000**. This budget request is critical towards building a Weather-Ready Nation through supporting NWS' advancements to weather, water, and climate products and services. To make our budget process more transparent and improve our ability to execute our mission, the NWS proposes to restructure the budget Programs, Projects, and Activities (PPAs) in FY 2015 as part of a broader effort to evolve the NWS to deliver more efficient, responsive, and advanced operations to the Nation. The program changes noted below are with respect to the FY 2015 Base (= FY 2014 Enacted + Inflationary Adjustments). Highlights include:

Mission Critical Infrastructure

- **Ground Readiness Project (+ \$6.0M)** improves weather warnings and forecasts through greater utilization of satellite, radar, and model data, which is currently at a volume that exceeds the capacity of the NWS' current information technology (IT) infrastructure. NWS must upgrade its IT infrastructure to fully leverage new observations and products.
- **Next Generation Weather Radar (NEXRAD) Service Life Extension Program (+ \$9.3M)** extends useful life of the aging NEXRAD weather radar infrastructure that underpins severe weather forecast and warning services for high-impact events. A Service Life Extension Program is required to sustain current weather forecast and warning services until the next generation of weather radars are identified, developed, and deployed. Without this investment, NEXRAD availability will degrade beginning in 2020, resulting in radar outages and gaps and negatively impacting tornado and flash flood warnings.
- **Re-architected NWS Telecommunications Gateway (NWSTG; + \$5.0M)** continues implementation of a re-architected NWSTG and backup system. The NWSTG is the central communication hub that collects and distributes time-perishable weather products to and from thousands of customers worldwide. A re-architected NWSTG will accommodate future data volumes from increased satellites, model data, and observations.
- **Relocation of the National Logistics Supply Center/National Reconditioning Center (NLSC/NRC; + \$8.1M)** relocates the NLSC/NRC from the Bannister Federal Complex in Kansas City, Missouri. General Services Administration plans to close this federally operated property. Key NWS observational infrastructure (e.g., NEXRAD), as well as FAA and DoD missions, depend on NLSC/NRC for stock items and repairs.

Scientific and Programmatic Innovation

- **Responding to Congressionally-Requested Studies of NWS (+ \$3.0M)** supports response to recommendations of two independent studies urging NWS to become a better, more agile organization. The increase will support analyses of workforce and infrastructure, enhance capacity for testing and demonstration, improve integration of stakeholder advice, and promote better evaluation of progress.
- **Centralized Water Forecasting Demonstration (+ \$4.0M)** supports the design, development, and testing of a new national hydrologic modeling and forecast system to be deployed at the National Water Center in Tuscaloosa, AL. Water is one of our Nation's most valuable resources, driving economic and emergency management decisions. Current NWS hydrologic forecast models rely on decades-old science. A centralized approach is a cost-effective way to implement scientific advancements and achieve greater consistency.



NATIONAL OCEANIC & ATMOSPHERIC ADMINISTRATION

For more information, please visit: <http://www.noaa.gov/budget>