

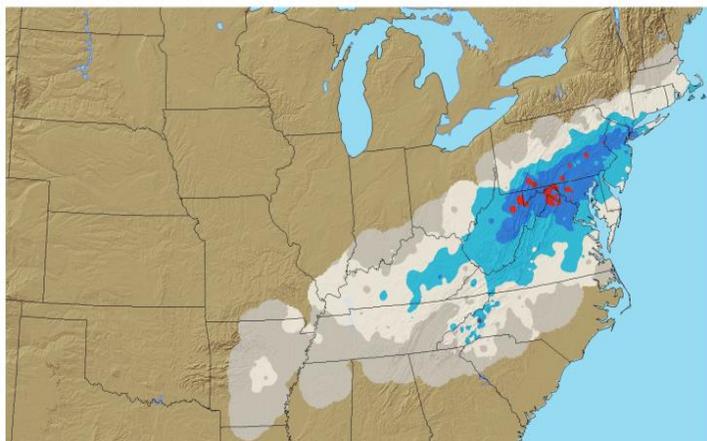


# NOAA's National Weather Service

## Evolving to Build a Weather-Ready Nation

The National Oceanic and Atmospheric Administration's (NOAA) National Weather Service (NWS) is the Nation's official source for weather, water, and climate forecasts and warnings. From information accessed on smartphones to weather broadcasts provided by local television station – the forecasts and warnings that people, businesses, and communities trust and rely on come from the NWS. All day and every day, the NWS is the first line of defense against extreme weather, water, and climate events – providing forecasts and warnings for hurricanes, tornadoes, wildfires and winter storms; and other hazards such as flash floods, dangerous heat and cold, droughts, and solar storms and geomagnetic activity.

NWS collects data using satellites, Doppler radars, data buoys, weather balloons, aircraft, and surface observing systems. These data feed sophisticated environmental prediction models running on increasingly more powerful supercomputers. The dedicated and skilled NWS workforce uses advanced technology to understand and predict the weather and water, and produce timely and accurate life-saving forecasts and warnings. More than 4,600 employees around the country constitute a local, regional, and national weather prediction and service delivery capability unmatched anywhere in the world.



Total snowfall for the January 2016 blizzard in the Mid-Atlantic. NWS forecasters provided critical information for decision makers at all levels to prepare for, respond to, and recover from the storm.

Destructive and deadly hurricanes and tornadoes, devastating floods, droughts and wildfires, and powerful winter storms impact society more than ever. The NWS is evolving to Build a Weather-Ready Nation – a Nation where communities are responsive and resilient to these extreme events.



A NWS Incident Meteorologist provides on-site decision-support to emergency managers and other officials during a critical event

To continue building a Weather-Ready Nation, NWS needs:

- A modernized observation, information technology, and facility infrastructure.
- A fully integrated forecast process to deliver consistent products and services.
- An organization that is nimble and adaptable to changing demands.
- Continued advancement in computer models to provide more accurate and reliable forecasts and warnings.
- A workforce trained and organized to meet the growing needs for impact-based decision support services and communications.
- An active and engaged partnership with stakeholders to leverage the nation's capacity to build ready, responsive, and resilient communities.

The President's Fiscal Year (FY) 2017 budget proposal lays a solid foundation for a Weather-Ready Nation equipped to save more lives and livelihoods; mitigate impacts from extreme weather, water, and climate events; and strengthen the nation's economy.



For more information, please visit:  
[www.noaa.gov](http://www.noaa.gov) and [www.nws.noaa.gov](http://www.nws.noaa.gov)





# FY 2017 Budget Request Highlights

The FY 2017 President's Budget request for NOAA's National Weather Service is \$1,119,292,000. This request will allow NOAA to continue building a Weather-Ready Nation by advancing weather, water, and climate products and services and evolve the NWS service delivery structure and operations. Highlights include:

- **Integrated Water Prediction (IWP): Driving Decisions for a Water-Prepared Nation (+9.75M)** The IWP initiative will result in a new generation of predictive forecasts that will help citizens prepare for and recover from flooding and drought. In FY17, NWS will develop and deliver dramatically improved forecasts—at a neighborhood scale—on the timing, level, and flow of water in our rivers. This work will result in an river forecast for 100 million Americans who do not currently receive one today. This request across NOAA totals \$12,250,000 and 11 additional staff in FY 2017, and includes the required supercomputing. The additional NWS employees will staff the operations center at the National Water Center in Tuscaloosa, AL.
- **Next Generation Weather Radar (NEXRAD) Service Life Extension Program (SLEP) (+\$8.5M)** to continue the multi-year investment—to be completed in 2022—to extend the useful life of the aging NEXRAD Doppler weather radar infrastructure that underpins NWS severe weather forecasts and warnings. A SLEP 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 begin degrading by 2020, resulting in radar outages and gaps, negatively impacting tornado and flash flood warnings.
- **Automated Surface Observing System (ASOS) SLEP (+\$7.5M)** to establish a SLEP for the aging ASOS which serves as the Nation's primary surface weather observing network. The ASOS SLEP is a cost effective approach to extending the life of the ASOS infrastructure and improving its reliability. In addition to extending its longevity, the ASOS SLEP will: enable high speed/high resolution data transmissions required for Federal Aviation Administration's Next Generation Air Traffic System; provide greater safety, data consistency, and accuracy; and allow for remote and cost effective maintenance, logistics, and training. This is a multi-year effort that is planned for completion in 2024. Without this investment, ASOS availability will degrade rapidly beginning in 2017, causing data outages and regional gaps.
- **Advanced Weather Interactive Processing System (AWIPS) Cyclical Refreshment (+\$5.1M)** to fully fund the cyclical refreshment of AWIPS Information Technology hardware. This request restores the minimal funding levels for AWIPS IT cyclical replacement, including servers and workstations.
- **NOAA Weather Radio (NWR) Operations and Maintenance (+\$2.0M)** to fully fund the operation and maintenance of the NWR network at minimum levels to operate all 1,029 current transmitter stations. NWR infrastructure reaches more than 98 percent of the Nation's population providing critical weather and other hazard information to the public.



**NATIONAL OCEANIC & ATMOSPHERIC ADMINISTRATION**

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