

Who We Are

The National Oceanic and Atmospheric Administration (NOAA) is a Department of Commerce government agency. NOAA conducts research and gathers data about the oceans, atmosphere, space, and sun and apply this knowledge to science and services that touch the lives of all Americans.

NOAA supports six operating branches -

National Weather Service National Ocean Service National Marine Fisheries Service National Environmental Satellite, Data, and Information Service Office of Oceanic and Atmospheric Research Program Planning and Integration

In addition, NOAA Research and operational activities are supported by the NOAA Corps, the nation's 7^{th} uniformed service.

NOAA's National Weather Service is the primary source of weather, hydrologic, and climate data and provider of forecasts and warnings for the United States.



What We Do



The National Weather Service employs about 4,800 people with an operating budget of approximately \$930 million. There are 122 Weather Forecast Offices, 13 River Forecast Centers, and other specialty centers throughout the country. The goals of the agency are presented in the mission statement:

"The National Weather Service (NWS) provides weather, hydrologic, and climate forecasts and warnings for the United States, its territories, adjacent waters and ocean areas, for the **protection of life and property and the enhancement of the national economy**. NWS data and products form a national information database and infrastructure which can be used by other government agencies, the private sector, the public, and the global community."

NWS forecasts are critical to the labor-intensive construction industry, the agricultural sector, the air, sea, and ground transport industries. Decisions involving billions of dollars are made throughout the year based on NWS forecasts and warnings.

Additionally, NWS offices can provide non-routine, weather information and services for decision-support activities during weather and non-weather emergencies. Possible decision-support services include:

- On-site Incident Meteorologists (IMETs) for wild fires,
- On-site meteorologist in State Emergency Operation Centers during major floods, severe weather outbreaks, and winter storms,
- Plume modeling for hazardous material spills and explosions,
- GoToMeetings & GoToWebinars, conference calls, meetings, and spotter training classes,
- Utilization of HAZCollect for tone-activation of non-weather-related, emergency messages on NOAA Weather Radio All Hazards. <u>http://www.weather.gov/os/hazcollect/</u>

How We Do It



Each year, Americans cope with an average of 10,000 severe thunderstorms, 5,000 floods, 1,000+ tornadoes, 2 land-falling hurricanes, as well as winter storms, intense summer heat, high winds, and other deadly weather impacts.

The employees of the NWS gather data from satellites, Doppler radar, buoys, computer models, and high-speed communication systems. Technological data is then combined with cooperative



trained community volunteers (storm spotters) to aid in making accurate outlooks, forecasts, and warnings.

Where to Find Us



National Weather Service broadcasts The information during severe weather events and other hazardous situations on the NOAA Weather Radio Hazards network. The NWS All website (www.weather.gov) also reaches a growing number of the population. Information on the Internet includes official forecasts and warnings as well as outlooks and summaries on climate topics. In addition, we rely on our partners in emergency management and the media to help relay severe weather warnings and critical forecasts to keep communities safe.



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The Benefits

- Highly accurate long-term predictions are estimated to have saved California approximately \$1 billion in losses during the 1997-98 El Niño episode.
- NOAA's National Weather Service forecasts, warnings, and the associated emergency responses result in a \$3 billion savings in a typical hurricane season. Two-thirds of this savings, \$2 billion, is attributed to the reduction in hurricane related deaths, and one-third of this savings, \$1 billion, is attributed to a reduction in property-related damage because of preparedness actions.
- Installation of Doppler radar by the NWS reduced [tornado] fatalities by 45% and injuries by 40% from their already historically low levels in the late 1980s and early 1990s.
- Between 1992 and 2004, the NWS's NEXRAD radar system prevented over 330 fatalities and 7800 injuries from tornadoes, at a monetized benefit of over \$3 billion.
- Weather and climate sensitive industries, both directly and indirectly, account for about one-third of the nation's GDP.

Statistics were found at www.publicaffairs.noaa.gov/pdf/economic-statistics-may2006.pdf

The National Weather Service is committed to continually improving forecast techniques and accuracy to ensure the safety of the public. Ongoing research and development efforts yield breakthroughs in all areas of weather, hydrologic, and climate forecasting. These important advances in the sciences of meteorology and hydrology, coupled with major new technological capabilities for observing and analyzing the atmosphere, allow the National Weather Service to continue providing unparalleled weather services to the nation.

<u>Find out more</u>... Contact your local National Weather Service office for more information about the National Weather Service and the services we provide.

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