



Office of Oceanic and Atmospheric Research

A world leader in observing, understanding, and predicting the Earth system.

The Office of Oceanic and Atmospheric Research (OAR) is NOAA's central research line office that integrates research across the agency. OAR, along with our partners, strengthens the science that underpins NOAA's operational products and services. OAR supports laboratories and programs across the United States and collaborates with both internal and external partners, such as NOAA-funded Cooperative Institutes and thirty-two Sea Grant Institutions. OAR research contributes to accurate weather forecasts, enables communities to plan for and respond to climate events such as drought, and enhances the protection and management of the Nation's coastal and ocean resources.

Climate Research

Individuals, businesses, and communities are turning to NOAA as a trusted source for science and information to help them understand how and why climate conditions are changing and how they can prepare for those changes. NOAA's regional climate information tools are supported by our strong foundation in science, including global climate observation and monitoring networks, world-renowned scientists, and state-of-the-art climate models.



Chief Scientist Molly Baringer and Survey Tech Darcy Balcarce recover CTD aboard NOAA ship *Ronald H. Brown*.
Credit: Bruce Cowden

Weather and Air Chemistry Research

NOAA not only works to improve current weather forecasting, but also works to anticipate and address the needs of the future. For example, OAR is developing innovative techniques for earlier detection of tornadoes and other severe weather to provide more advanced forecasts to the public.



Front of NOAA WP-3D Orion During Southeast Nexus (SENEX) Air Quality-Climate Research Study, Smyrna, TN, June, 2013.
Credit: Steven Fine

Ocean, Coastal, and Great Lakes Research

NOAA, in collaboration with its research partners, explores and investigates ocean, coastal, and Great Lakes habitats and resources. We provide scientific results to help manage and understand fisheries, conserve and protect our coasts, and build a stronger economy.



Sampling shoreline muck in Lake St. Clair for detection of harmful bacteria, June 18, 2012.
Credit: NOAA



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



National Severe Storms Laboratory Mobile Mesonets





FY 2015 Budget Request Highlights

The FY 2015 President's Budget request for OAR is **\$462,173,000**. The program changes noted below are with respect to the FY 2015 Base (= FY 2014 Enacted + Inflationary Adjustments). Highlights include:

Mission Critical Infrastructure

- **Greenhouse Gas Monitoring (+ \$8.0M)** to build upon an observation and analysis system to determine uptake and emissions of greenhouse gases across North America.
- **Atmospheric Baseline Observatories (+ \$3.0M)** to continue long-term data records which document trends and distributions of atmospheric constituents influencing global climate, ozone depletion, and changes in baseline air quality.
- **High Performance Computing Software Engineering (+ \$3.0M)** to allow NOAA to take advantage of next-generation research computing technologies and more efficiently use our high performance computing assets, which will lead to improvements in modeling environmental events such as hurricanes and Arctic sea ice cover.

Services to Enhance Community Resilience

- **National Integrated Drought Information System (+ \$1.9M)** to develop the Regional Drought Early Warning System (RDEWS) for the Pacific Northwest, the Mid-west agricultural belt, the Southern Plains states, and the Carolinas, as well as enhance drought planning in California.
- **Regional Integrated Sciences and Assessments (+ \$4.64M)** for development of new information about the impacts of climate on communities, natural and managed resources, infrastructure, transportation, and health in the Mid-Atlantic and Midwest.
- **Climate Resilience Toolkit and the NOAA Climate.gov Portal (+ \$2.3M)** to facilitate public online access to NOAA's climate data, information, resources, and services.
- **Assessments (+ \$3.97M)** to support climate assessments at national and regional scales that examine the latest climate research, uncertainty, effects of global change, and emerging trends.
- **NOAA Arctic Research (+ \$2.19M)** for NOAA's Arctic Observing Network and informational products related to Arctic Ocean changes, sea-ice extent, ecosystem evolution, and weather/climate linkages.

Scientific and Programmatic Innovation

- **Integrated Ocean Acidification (+ \$8.87M)** to improve understanding of the impacts of ocean and coastal acidification and to develop tools and adaptive strategies for affected industries and stakeholders.
- **U.S. Global Change Research Program (+ \$4.5M)** for research on carbon sources and sinks in North America, extreme climate and weather events, and effects on marine ecosystems.
- **Enhancing Readiness Levels (+ \$3.0M)** to accelerate the transition of weather-related research projects to operational use.



NATIONAL OCEANIC & ATMOSPHERIC ADMINISTRATION

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