



# OCEANIC & ATMOSPHERIC RESEARCH

## FY 2012 BUDGET HIGHLIGHTS

The Office of Oceanic & Atmospheric Research (OAR) requests \$212.0M in FY 2012, reflecting a net decrease of \$237.1M from the FY 2010 Enacted. The President's FY 2012 Budget proposes to transfer \$225.9M in climate research, modeling, and service activities as the foundation for the new Climate Service line office. The remaining parts of OAR will focus on coordinating the science and research underpinnings of the entire Agency. Thus, OAR will play an even stronger role in strengthening the state of science within NOAA in support of the Agency's mission by creating advances in new scientific knowledge, new technologies, and improved services for the Nation. This budget request supports critical underlying research activities in support of NOAA's climate, weather, ocean, and coastal missions and meets the information needs of our Nation's environmental decision-makers.

**Wind Boundary Layer Research to Support Clean Energy Generation +\$2.0M:** Improved weather and climate information and predictions will allow the Nation to obtain larger amounts of energy from renewable resources. NOAA will deploy wind test beds in regions that have distinct boundary layer meteorology, such as the Pacific Northwest, offshore along the Atlantic Coast, the Appalachian region, the inter-mountain west, and California. These test beds will help determine the optimal mix of instrumentation needed for wind resource characterization and forecast improvement. Funds will support clean energy generation by advancing weather forecast quality and accuracy.

**Multi Function Phased Array Radar +\$6.0M:** NOAA working in collaboration with the FAA seeks to demonstrate that Multi-function Phased Array Radar technology can cost-effectively replace aging operational weather and aircraft-tracking radars, while offering significant service improvements. Multi-function Phased-Array Radar (MPAR) has the potential to significantly extend lead times for detecting tornadoes and other forms of severe and hazardous weather.

**Helping Coastal Communities Prepare for and Respond to Natural Hazards and Extreme Events +\$0.9M:** It is essential that residents of coastal communities understand the risks of natural hazards and extreme events and are able to adapt and learn in order

### OAR FY 2012 Budget Request (\$ Millions)

	FY 2010 Enacted	FY 2011 CR	FY 2012 Request	FY 2012 Request vs. FY 2010 Enacted
<b>ORF</b>	\$438.8	\$434.1	\$212.0	(\$226.8)
<b>PAC</b>	\$10.4	\$10.4	\$0	(\$10.4)
<b>TOTAL</b>	\$449.1	\$444.5	\$212.0	(\$237.1)

to reduce their vulnerability and respond quickly and effectively when events occur. NOAA will conduct risk assessment research in the context of hurricanes, other coastal storms, and climate-related changes and assist public and private decision-makers in creating and adopting policies, plans, and ordinances to reduce risks, manage catastrophic events, and speed recovery in coastal communities.

**Okeanos Explorer: ROV and Telepresence +\$1.5M:** The Okeanos Explorer is among the most technologically advanced platforms for ocean exploration in the U.S. Support is needed for additional days at sea to provide the operation of telepresence technology as well as the scientific and technical support to operate the ship's mission equipment. Telepresence technology enables scientists, educators, and others to participate in and even lead ocean exploration missions from remote shore-based Exploration Command Centers.

**Integrated Ocean Acidification (OA) +\$6.1M:** OA generates a unique suite of environmental changes that increasingly affect ocean ecosystems, fisheries, and other marine resources in profound ways. NOAA will increase the Nation's understanding of the processes associated with OA and how it impacts our marine environments by enhancing long-term monitoring and physiological assessments of OA effects on fisheries, developing forecasting capabilities and technologies, and creating adaptive strategies for improved management of impacted ecosystems.



NATIONAL OCEANIC & ATMOSPHERIC ADMINISTRATION