

Testimony of Friends of NOAA
Before the Senate Appropriations Committee's Subcommittee on Commerce,
Justice, Science and Related Agencies Regarding NOAA FY 2017 Funding
March 25, 2016

Dear Members of Congress:

As supporters, stakeholders, employees, and partners of the National Oceanic and Atmospheric Administration (NOAA), **Friends of NOAA strongly supports funding the agency at \$6.05 billion in FY17.**

NOAA is essential to America's economy, security, environment, and quality of life. More than half of all Americans live along our coasts, over 2.8 million jobs are in ocean-dependent industries, and the insured value of coastal property now exceeds \$10 trillion. Moreover, weather and climate sensitive industries account for an overwhelming majority of the U.S. GDP. Americans need NOAA's fully integrated range of oceanic and atmospheric data, products, and services now more than ever before. Investing in NOAA in a balanced manner not only strengthens our nation's capacity for science-based innovation but also provides superior economic value by enabling businesses and government to better manage risk and optimize decision-making.

Investments in NOAA translate into an extensive list of benefits, from reduced natural hazard risks to increased national security. The following items are only some of the many contributions that NOAA makes to our nation and its citizens.

Timely and Accurate National Weather Service Forecasts and Warnings

Weather, water, and climate events cause an average of approximately 650 deaths and \$15 billion in damage per year. They are also responsible for around 90 percent of all presidentially-declared disasters. Additionally, about one-third of the U.S. economy - \$3 trillion – is weather and climate sensitive, which means that millions of people, businesses, and communities rely on National Weather Service (NWS) products every day. Sufficient funding for NWS will support the program's "**Weather Ready Nation**" campaign and the **National Water Center**, which help to build community resilience in the face of growing vulnerability to extreme weather events by increasing advanced warning times, improving how forecasts are communicated, and providing emergency managers with decision support services.

More specifically, strong support for NOAA will allow the agency to develop a new **Integrated Water Prediction (IWP)** initiative, resulting in a new generation of flooding and drought forecasts. Increased funding is also required for NOAA to maintain its **NEXRAD Weather Radars** and **Automated Surface Observing Systems**, which are essential for critical tornado and severe weather warnings and in avoiding critical data gaps.

Environmental Management to Reduce Risk

NOAA provides the essential data and information that people need to understand and prepare for climate variability and change. Long-term environmental information is essential to reducing

the natural hazard risks and limiting liabilities for agriculture, marine and freshwater resources, maritime trade and commerce, forest management, coastal resilience, and wildfire control. Drought forecasts alone are worth up to \$8 billion per year to the farming, transportation, tourism, and energy sectors, and knowledge about a changing ocean can help protect coastal properties worth \$170 billion.

Strong investments in NOAA are critical to support public and private stakeholders in carrying out careful environmental monitoring and analysis that can save time, money, and lives. Furthermore, increased funding is essential for **updating NOAA's computing capacity** and, in addition to improved baseline atmospheric and ocean data collection, will also allow the agency to **expand forecast outlooks to three to four weeks**, which do not currently exist.

Maintenance and Sustainability of Healthy Oceans and Coasts

NOAA's work in understanding our oceans and coasts is absolutely essential to our economic, ecological and public health. A healthy ocean has drawn approximately half of all Americans to live on the coasts – and coastal counties alone contribute nearly \$6.6 trillion annually to the GDP. Sustained ocean research and observations support initiatives such as managing harmful algal blooms, exploring how ocean acidification affects our communities and ecosystems, and responding to coastal emergencies like the Deepwater Horizon oil spill, NOAA helps to strengthen local ocean-dependent economies, aids place-based stewardship, and sustainably manages coastal natural resources. NOAA requires strong federal funding to continue to ensure the existence of clean beaches, healthy oceans, and sustainable coastal communities.

With increased support, NOAA can further our understanding of **ocean acidification** and its impacts on marine resources, **expand grants for critical research** on ecological, economic, and social coastal issues, and help coastal planners integrate **ecosystem-based solutions** into hazard mitigation and coastal resilience strategies.

Informed and Productive Fishery Management

Fishery stock assessments and data collection are essential for providing managers the information they need to sustain fishing opportunities while preventing overfishing. As a result of the agency's fishery management, NOAA has rebuilt 37 stocks since 2000, resulting in overfishing numbers dropping to an all-time low in 2014. Rebuilding all overfished stocks and harvesting them at their maximum sustainable yields will generate \$31 billion in sales impacts and support 500,000 jobs.

Investment in NOAA is vital to the implementation of science-based catch limits that maintain productive fisheries, secure fishing opportunities, and support the economic vitality of coastal communities. Strong funding will allow the agency to combat global and domestic **illegal, unreported, unregulated fishing**, monitor **endangered marine species**, and provide crucial **disaster assistance** to fisheries.

Innovative and Cutting-edge Geostationary and Polar Satellite Systems

All levels of government, public, industry, and military rely on NOAA satellites for weather forecasting, storm tracking, and long-term Earth observations that protect lives and

infrastructure. 39,000 people worldwide have been saved by NOAA's Search and Rescue Satellite-Aided Tracking System alone. Stable funding is essential for data acquisition efficiency, for minimizing total cost to taxpayers, and for ensuring that launch dates are not delayed, which would leave millions of Americans without detailed severe weather information they rely on every day.

Strong support for the agency will allow NOAA to maintain current launch schedules of both **GOES-R and JPSS**, as well as ensuring that following satellites in the series are developed on time. Increased funding also translates into the continuation of exploring **the potential of commercial data use** in NOAA's modeling and forecasting, completing the development of **COSMIC-2A ground stations** and enhancing NOAA's capabilities in **space weather forecasting** and imaging as DSCOVR reaches the end of its projected mission life in 2022.

World Class Research and Development

NOAA research has led to new technologies and scientific advances that have increased our understanding of the planet and improved our lives. NOAA research also engages students – the next generation's scientists - from around the country, helping to expand the agency's capacity and prepare for the future. Continuing this cutting edge work, however, will require the **comprehensive modernization of all of NOAA's observation and monitoring operational systems**, including its oceanographic fleet of vessels, fleet of aircraft, suite of in-situ ocean and coastal sensors, and remote capabilities.

Without adequate investment, for example, the NOAA fleet will decline by 50 percent, with half of its vessels set to retire in the next 10-12 years. In addition, strong funding for NOAA will allow the agency to more **efficiently transition the most promising research** into operations, applications, and commercialization, as well as **expand regional research** to help manage climate risks and support climate assessment efforts.

FoNOAA urges Congress to support a balanced budget for NOAA. From satellites and weather operations to fisheries and coastal management, every facet of NOAA serves a purpose essential to the nation. Therefore, **we strongly encourage you to recognize the unique role that NOAA plays in supporting our economy, national security, and environmental resiliency by funding the agency at \$6.05 billion in FY17.**

If Friends of NOAA can be of service or provide additional information, please contact info@friendsofnoaa.org

Thank you for your consideration of this request.

Sincerely,

**Friends
of NOAA**

AccuWeather, Inc.
Alliance for Earth Observations
American Association of Port Authorities
American Geophysical Union
American Geosciences Institute
American Rivers
American Weather And Climate Industry Association
Association for the Sciences of Limnology and Oceanography
Associaton of National Estuary Programs
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National Federation of Regional Associations for Coastal and Ocean Observing
National Marine Sanctuary Foundation
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Navocean, Inc.
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The Maritime Alliance
The Ocean Foundation
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