# WRITTEN TESTIMONY OF DR. RICHARD W. SPINRAD UNDER SECRETARY OF COMMERCE FOR OCEANS AND ATMOSPHERE AND NOAA ADMINISTRATOR

#### ON

# THE PRESIDENT'S FISCAL YEAR 2025 BUDGET REQUEST FOR THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

# BEFORE THE SUBCOMMITTEE ON ENVIRONMENT COMMITTEE ON SCIENCE, SPACE AND TECHNOLOGY U.S. HOUSE OF REPRESENTATIVES

#### **JUNE 4, 2024**

Chairman Miller, Ranking Member Ross, and members of the Subcommittee, thank you for the opportunity to testify about the National Oceanic and Atmospheric Administration (NOAA) Fiscal Year (FY) 2025 budget. NOAA appreciates the continued support of Congress, the Administration, and our broad and diverse base of stakeholders.

For FY 2025, NOAA's budget request proposes \$6.6 billion in discretionary appropriations, an increase of \$224.8 million from the FY 2024 enacted level. The FY 2025 budget builds on investments from the Inflation Reduction Act (IRA) (P.L. 117-169) and Bipartisan Infrastructure Law (BIL) (P.L. 117-58) for climate resilience, climate science, data and services, environmental observations, and fisheries and protected resources.

The FY 2025 request will prioritize investments in the critical operational and infrastructure activities that support NOAA's ability to carry out its mission. These substantial investments, along with other targeted increases, reflect my priorities as Administrator, which are to:

- 1. Build on NOAA's long history of success, and meet the needs of the future by expanding, diversifying, and enhancing climate products and services for all Americans.
- 2. Ensure that NOAA builds economic opportunities in the new blue economy and upholds our critical role of environmental stewardship.
- 3. Integrate equity across NOAA by improving capabilities and knowledge sharing, and honing product development and service delivery in Tribal and underserved communities and taking an aggressive and active role in diversifying the Federal workforce, in a just, equitable, and inclusive manner.

### **Invest in Critical Satellites**

NOAA satellites are critical for NOAA's mission, as well as the security, safety, and prosperity of the Nation. Data from these satellites provide essential support to all segments of the U.S.

economy. In FY 2025, NOAA requests an additional \$605.7 million for significant investments in NOAA's observational infrastructure, underscoring NOAA's commitment to making crucial, time-sensitive, and cost-effective investments to ensure that the Nation's next-generation satellite systems expand delivery of essential earth system observations to meet the evolving needs of the American public. The FY 2025 budget will help NOAA better forecast weather events, issue accurate warnings, and observe environmental phenomena connected to climate change-related impacts and patterns, and deliver products, information, and climate services to inform decision makers.

NOAA's current satellite constellation has proven its worth and will continue to do so into the 2030s. However, NOAA must concurrently invest in the next generation of environmental satellites with the needs of user communities in mind. FY 2025 funding for future geostationary, low earth orbit, and space weather observations will ensure critical data continuity from legacy systems, while providing significant improvements in data and products to meet the complex societal and environmental needs of the Nation. In FY 2025, NOAA will continue the development of the GeoXO satellite program, which will provide improved weather forecasting, real-time monitoring of air quality conditions, and improved ocean forecasting and fisheries management yielded from geostationary orbit observations.

The value of NOAA's world-class data is enhanced by NOAA applications and accessibility for users. The FY 2025 budget supports much-needed improvements to NOAA's data infrastructure. For example, the request includes funding to transition NOAA data from on-premise systems to a cloud-based environment for data ingest, processing, dissemination, and archiving, which will expand the size and diversity of NOAA user communities and data applications.

#### **Expand Climate Products and Services to Build Climate Resilience**

The FY 2025 budget in conjunction with investments in BIL and IRA and in collaboration with other Federal agencies will address the climate crisis and strengthen resilience. In FY 2025, NOAA requests an additional \$155.5 million to contribute to implementing Executive Order (EO) 14008 on *Tackling the Climate Crisis at Home and Abroad*. Establishing an end-to-end value chain for climate and weather data and services starts with investing in observational infrastructure and culminates in delivering services to meet a diverse set of missions. Therefore, NOAA will support observational infrastructure, decision support tools, service delivery, and conservation.

NOAA provides timely and actionable environmental observations on global, national, and regional scales from satellites, radar, surface systems, atmospheric greenhouse gas sampling stations, ocean buoys, uncrewed systems, aircraft, and ships. With the funding requested in FY 2025, in addition to the funding provided through IRA, NOAA will finalize the acquisition of a second G-550 for its high-altitude jet program. Additionally, NOAA will invest in Days at Sea

and Flight Hours to support critical mission priorities, and the NOAA Corps officers needed to safely and effectively operate ships and aircraft.

NOAA's weather forecasts and climate projections and information must be reliably delivered to users to inform decision making. Forty percent of the U.S. population lives and works in coastal counties, making a disproportionate segment of our society and economy at increasing risk to hazards such as hurricanes and coastal inundation. The National Weather Service will provide more Impact-based Decision Support Services, and NOAA is expanding its service delivery with more products and services to more communities across the country. The foundation for expanded service delivery is the Advanced Weather Interactive Processing System (AWIPS) in the cloud. AWIPS in the cloud will allow for more products across NOAA to use this dissemination system and reach local offices across the country. As a result, AWIPS in the cloud will push out a greater amount of information to reach a larger number of communities to provide greater decision support services. Therefore, the FY 2025 request will transform AWIPS into a modern, extensible cloud-based framework.

Planners and decision makers face challenges when seeking Federal data to support resilience-building efforts. In FY 2025, NOAA, in collaboration with other agencies under the U.S. Global Change Research Program, will enhance the accessibility and usability of Federal climate data through the Climate Resilience Information System and Climate Mapping for Resilience and Adaptation, a publicly accessible, interoperable architecture that makes it easy for people to find and use Federal agencies' decision-relevant data to support climate adaptation and mitigation planning. NOAA will support this enhancement and expansion to include information specific to additional environmental hazards, integrate stakeholder feedback, and improve the systems' functionality.

NOAA will also invest in increasing conservation and protection in an expanded sanctuary system, which is an integral part of NOAA's contribution to the implementation of the *America the Beautiful* initiative that includes the goal to conserve at least 30 percent of U.S. lands and waters by 2030. NOAA's FY 2025 request will enhance NOAA's sanctuary management capacity as new sanctuaries are designated. NOAA will work to identify gaps in marine protection, train the next generation of Marine Protected Area professionals, and expand technology use in sanctuaries to support management priorities.

#### **Provide Science and Data to Inform Economic Development**

NOAA will continue to foster environmental stewardship and optimize advances in science and technology, with a particular focus on the New Blue Economy: supporting development framed around an information and knowledge-based approach to support fisheries, transportation, shipping, renewable energy, recreation, and livelihoods. In 2023, the Bureau of Economic Analysis, in partnership with NOAA, released the official Marine Economy statistics that the

U.S. marine economy contributed about \$432.4 billion, or 1.9 percent, to the Nation's gross domestic product, an increase from 1.7 percent, or \$363.2 billion<sup>1</sup> and supports 2.3 million jobs annually.<sup>2</sup> In FY 2025, NOAA requests an additional \$55.1 million in support of the expansion of offshore wind energy, salmon populations of the Columbia River basin and beyond, and improvements in our tsunami and space regulatory infrastructure.

NOAA is an important Federal collaborator in support of the Administration's goal to responsibly deploy 30 gigawatts (GW) of offshore wind energy by 2030. In FY 2025, NOAA will continue to work closely with the Department of the Interior's Bureau of Ocean Energy Management (BOEM), the lead Federal agency for offshore wind siting, leasing, and permitting, and others to maximize the benefits of offshore wind; minimize the effects of offshore energy projects on protected marine resources, fisheries, and important habitats; and mitigate impacts to NOAA assets, fisheries surveys, and other activities.

NOAA will continue supporting the production of 42 million hatchery fish, which represents about 30 percent of the total hatchery salmon and steelhead released in the Columbia River Basin, as well as their associated monitoring programs. Salmon smolts from hatchery programs funded through the Mitchell Act translate into the harvest of about 250,000 fish that add to commercial, recreational, and Tribal fisheries. Fish from the Columbia River Basin also reflect an important component of Canadian and Alaskan ocean fisheries. These funds will complement the \$60 million in IRA funds for Mitchell Act hatchery deferred maintenance, repair, and modernization.

In FY 2025, NOAA will support the multi-agency National Strategy to Develop Statistics for Environmental-Economic Decisions. This request is part of a multi-agency initiative, and will further develop statistics to measure the contribution of environmental resources and environmental-economic activities to the U.S. as valuable efforts that directly support employment, income, productivity, and growth. As a result of this work NOAA will develop the methodology to expand the Marine Economy Satellite Account to include a natural capital component that builds toward a comprehensive and integrated accounting of ecosystem usage by industry, contributing to ocean intelligence.

To further address tsunamis' unpredictability and potentially disastrous consequences to life and property along vulnerable U.S. coastlines, NOAA will provide a common framework that supports the National Tsunami Warning Center, located in Alaska, and Pacific Tsunami Warning Center, located in Hawai'i. Funding will ensure continuity of operations by eliminating

<sup>&</sup>lt;sup>1</sup> Bureau of Economic Analysis, *Marine Economy Satellite Account*, 2021, <a href="https://www.bea.gov/news/2023/marine-economy-satellite-account-2021">https://www.bea.gov/news/2023/marine-economy-satellite-account-2021</a> (accessed January 22, 2024)

<sup>&</sup>lt;sup>2</sup> Bureau of Economic Analysis and NOAA, *Marine Economy*, <a href="https://coast.noaa.gov/states/fast-facts/marine-economy.html">https://coast.noaa.gov/states/fast-facts/marine-economy.html</a> (accessed January 25, 2024)

discontinuities within existing systems, and providing consistent guidance to all users, independent of location.

NOAA's role in providing data for sustainable economic development extends beyond the Earth environment and into the space environment. Our Office of Space Commerce is making significant progress in the development of the new Traffic Coordination System for Space (TraCSS), which will provide space situational awareness (SSA) data and space traffic coordination safety services to commercial and civil space operators. Such information is critical to spaceflight safety and space sustainability as Earth's orbits become increasingly congested with satellites and debris. TraCSS will be a modern, cloud-based IT system leveraging commercial innovation and data to ensure it remains on the cutting edge and responsive to stakeholder needs. We recently completed setting up part of the infrastructure for cloud storage, selected and onboarded our system integrator, and held 29 demonstrations with commercial vendors as part of market research for the TraCSS user interface. We are in the middle of a pathfinder project involving commercial SSA data and services to work out the processes and metrics of acquiring, ingesting, evaluating, and validating such data and services for the operational system. TraCSS is on track to go live with a Phase 1.0 capability for a limited set of beta users by the end of this fiscal year. In FY 2025, the Office of Space Commerce will continue to build on this success by integrating additional capabilities into TraCSS's operational service, including data quality monitoring, mission planning, a public user interface, and additional commercial SSA capabilities.

#### **Bolster Equity**

NOAA will continue to support Executive Order 13985 on Advancing Racial Equity and Support for Underserved Communities Through the Federal Government and Executive Order 14091 on Further Advancing Racial Equity and Support for Underserved Communities Through the Federal Government. NOAA will integrate equity across the organization including by implementing the Ocean Justice Strategy, improving capabilities and knowledge sharing, and honing product development and service delivery in Tribal and underserved communities.

### **Update and Maintain Crucial Facilities**

Safe and modern facilities are vital to support NOAA's mission of science, service and stewardship. In FY 2025, NOAA requests an additional \$26 million to reduce the deferred maintenance and repair (DM&R) backlog in order to maintain operations, address safety issues, and ensure mission capability. Funding will also support design needs for facilities such as science centers and laboratories which will support future new construction and renovation projects.

## **Summary**

NOAA is working hand-in-hand with Federal and non-federal partners locally and sharing best practices globally. People know they can turn to NOAA for reliable climate and extreme weather information to help make informed decisions that help save lives and livelihoods. In FY 2025, NOAA will invest in its world class satellite program; expand Federal climate products and services to improve climate resilience; foster environmental stewardship and economic development by optimizing advances in science and technology with a focus on the New Blue Economy; integrate equity across the organization and in our work; and support ongoing investments in NOAA's aircraft, ships, and facilities. NOAA will be well-positioned to help support the communities we serve, particularly those most vulnerable to climate change and its impacts. Through this budget, NOAA will support the whole-of-government effort to address the climate crisis, boost resilience, and promote economic growth.