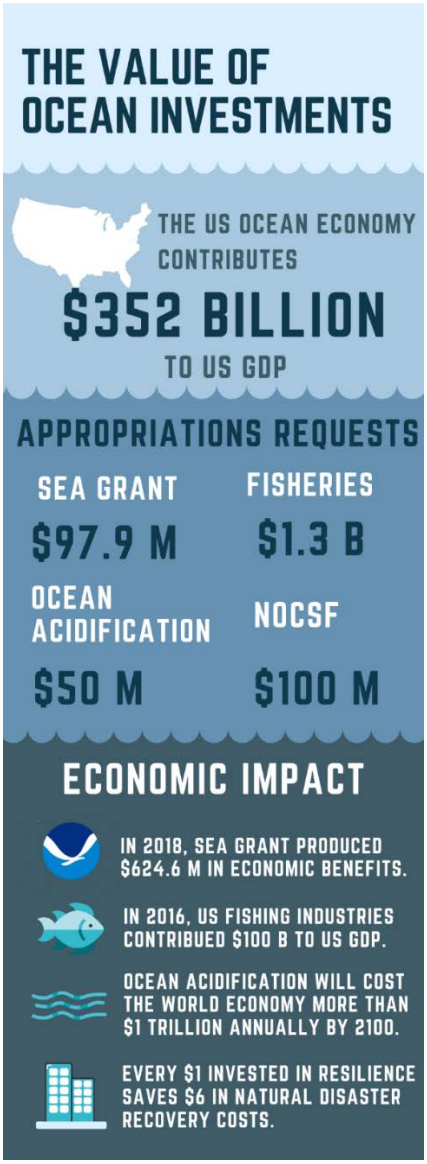
March 13, 2020

Testimony of the Joint Ocean Commission Initiative to the U.S. House Committee on Appropriations, Subcommittee on Commerce, Justice, Science, and Related Agencies for NOAA, NSF, and NASA for FY 2021

Chairman Serrano, Ranking Member Aderholt, and other distinguished Members of the Subcommittee on Commerce, Justice, Science, and Related Agencies, we thank you for the opportunity to submit written testimony regarding the Fiscal Year (FY) 2021 Commerce, Justice, Science, and Related Agencies appropriations bill. We are deeply appreciative of the comprehensive funding that you provided to ocean priorities in FY 2020. We recognize the difficulty of allocating resources in these challenging fiscal times. We laud your decision to support key ocean accounts reflective of the immense value of the ocean and coasts to a nation intrinsically reliant on and connected to the ocean. For FY 2021, we are again facing a long list of accounts that need the active support of Congress. These include bedrock staples such as Sea Grant, Coastal Zone Management Grants, ocean observations, ocean acidification, and fisheries management. Proposed cuts to these programs would undermine our investments and compromise our ability to address the ongoing impacts of a changing climate, protect and promote economic development, safeguard our citizens, and responsibly balance the use of our oceans and coasts.



The Joint Ocean Commission Initiative (Joint Initiative) is a collaborative, bipartisan effort to catalyze action and monitor progress toward meaningful ocean policy reform. We believe that a continued commitment to protecting base funding and core programs at NOAA, NSF, and NASA is an investment that will save lives, protect national security, grow our economy, and preserve the health of our oceans and coasts. Ocean observations play a critical role in maintaining our undersea superiority. Ocean and coastal resources provide fundamental goods and services, including food, minerals, transportation, medicines, tourism, and recreational opportunities. Ocean and coastal environments are often the first line of defense when it comes to promoting resilience and protecting American communities from severe weather events. Yet the ocean is disproportionately impacted by increasing emissions from human activities. It has already absorbed over 90 percent of the heat trapped by human-generated CO_2. The nexus of climate and oceans is clear, and the US needs to lead when it comes to supporting climate research, education, and adaptation. Robust support for key accounts at NOAA, NSF, and NASA is key to US leadership.

c/o Meridian Institute | 1800 M Street NW, Suite 400N | Washington, DC | 20036
202-354-6444 tell | 202-354-6441 fax | www.jointoceancommission.org

Based on the need for significant and sustained investment to invigorate public-private partnerships, address the significant link between oceans and disruptive climactic variations, and energize national, regional, state, and local initiatives, **we strongly support increasing NOAA's overall budget to a minimum of $6.7 billion, NSF's overall budget to a minimum of $9.2 billion, and NASA Earth Science's budget to a minimum of $2.2 billion**. We believe the recommendations in this testimony represent a modest investment relative to the threats and opportunities facing oceans and coastal communities, as the benefits they confer significantly outweigh the costs.

Research, Exploration, and Observation

A critical component of America's economic, military, and diplomatic power lies in its ocean science, research, education, exploration, monitoring, and observation enterprises. Especially given the pace of observed changes in climate and ocean chemistry, we strongly urge the Subcommittee to protect vital ocean science and research capabilities.

Observation and monitoring programs, as well as other scientific and data programs, are integral to NOAA's ability to accurately forecast weather. They are central for NOAA's protection and management of America's coastal and ocean resources and for the U.S. military's navigation and extreme weather preparedness. We ask that your committee continue to support enhanced capabilities for observation and monitoring by **allocating $550 million to NOAA's Office of Oceanic and Atmospheric Research (OAR) and $53 million to NOAA's Sustained Ocean Observations and Monitoring Program.** We also suggest the committee **allocate $50 million for the Ocean Exploration program** to maintain the pace, scope, and efficiency of exploration**.**

It is also critical to **fund climate research at OAR at no less than $200 million to promote high-priority climate science** that advances our understanding of Earth's climate system and foster the application of this research in risk management and adaptation efforts

In addition, **we recommend allocating $9.2 billion for the NSF**. NSF's investment in the geosciences – which includes ocean sciences – has spurred innovations, addressed salient national and global challenges, galvanized new economic sectors, generated countless jobs, and led to the development and implementation of advanced technologies. Finally, **we recommend you allocate $2.2 billion in funding for NASA's Earth Science Division** to improve national capabilities to predict climate, weather, and natural hazards, and better manage national resources.

Education and Extension

The National Sea Grant College Program works to better understand, conserve, and utilize America's coastal resources, making it critical to coastal states, communities, and economies. Sea Grant works to extend the findings of marine and coastal research to impact American livelihoods. For example, Sea Grant programs support fisheries and aquaculture business development and help Americans plan for and respond to extreme weather events. We are alarmed by the President's proposal to eliminate funding for Sea Grant, and we urge this committee to secure the benefits that Sea Grant provides by **allocating $97.9 million to Sea Grant in FY 2021, which includes $15 million for Sea Grant Marine Aquaculture.**

Likewise, we are equally alarmed by the elimination of funding for environmental education and ocean stewardship at NOAA. We urge the committee to provide **$15 million for the Bay-Watershed**

Education and Training (B-WET) program and $8 million for Environmental Literacy Programs (ELP), which are essential for STEM education and encouraging environmental stewardship.

Resilience and Security

Variability in oceanographic and atmospheric conditions, coupled with demographic changes that increasingly crowd our coasts, make the impact of storms and flooding events more severe. Changing weather and charged geopolitical relationships heighten the already serious need for ocean and coastal security. Ocean and coastal communities must be safeguarded and made more resilient. Congress took a pioneering first step with the FY 2018 Omnibus by authorizing $30 million for the National Ocean and Coastal Security Fund (NOCSF). **We ask this subcommittee to continue leading on ocean and coastal security by allocating $100 million for the NOCSF in FY 2021**. We further recommend that at **least $4 million be allocated for regional data portals** used to support critical ocean partnerships that encourage collaboration and data sharing on the regional scale. In addition, we recommend a total **allocation of $80 million to Coastal Management Grants and a minimum allocation of $35.5 million for the National Estuarine Research Reserve System in FY 2021.** These programs support vital federal/state partnerships to help protect our coasts and preserve millions of acres of coastal habitat, buffering against rising seas and storm events.

NOAA's National Ocean Service (NOS) is also critical for sustained resilience and security. **We strongly recommend that NOS receive an allocation of $650 million.** NOS funding supports programs that ensure safe and efficient transportation and commerce; preparedness and risk reduction; and stewardship, recreation, and tourism. For example, NOAA's Office for Coastal Management delivers technical assistance communities need to address storm preparedness, erosion, development, habitat loss, sea level rise, and threats to water quality. Moreover, the National Centers for Coastal Ocean Science provides coastal managers with the scientific information they need to protect public health, preserve valued habitats, and foster sustainable community interaction with coastal ecosystems. In addition, NOS supports the Integrated Ocean Observing System (IOOS), which plays an instrumental role in collecting and distributing data that is used at the national, regional, state, and local levels. **We recommend IOOS be supported at recommends $45.25 million** to meet the safety, economic and stewardship needs of the nation.

The NOS is also responsible for administering the Office of National Marine Sanctuaries and a range of restoration projects that dramatically enhance the resilience of coastal communities and ocean environments. **National Marine Sanctuaries require $66.5 million to protect iconic species** like migratory whales and majestic seabirds, as well as massive coral reefs and towering kelp forests, so essential to ocean health. It is worth noting that these investments pay serious economic dividends: National Marine Sanctuaries generate approximately $8 billion annually for local economies and NOAA's restoration projects create an average of 17 jobs for every $1 million invested. Moreover, every dollar invested in strengthening coastal communities against storm surge mitigates six dollars in losses. We ask the subcommittee to support the NOCSF and the NOS to bolster the nation's economic and environmental resilience and security.

Ocean Acidification

Ocean acidification is evident along every shoreline and is having major impacts on economies worldwide. By changing the chemistry of seawater, ocean acidification endangers shellfish, corals, and other marine life that form calcium shells or skeletons and disrupts marine food webs. In the

United States, ocean acidification poses a fundamental risk to our fisheries and aquaculture industries. **We strongly urge you to allocate a minimum of $50 million for NOAA's Integrated Ocean Acidification program**. Funding the Integrated Ocean Acidification program at elevated levels will support critical research, monitoring, education, and outreach. It will help develop a better understanding of the causes, impacts, and scale of ocean acidification and identify interventions to help protect fisheries and aquaculture.

Sustainable Fisheries

Fishing is a cornerstone of the ocean economy and an important aspect of American history and culture. Since 1976, we have seen tremendous progress toward creating and maintaining sustainable fisheries domestically and internationally. Much of this progress can be credited to your Subcommittee's commitment to scientifically-sound fishery management and the tireless efforts of U.S. fishermen, regional fishery management councils, state commissions, scientists, and managers.

However, America's fisheries are currently facing unprecedented challenges including changing ocean conditions, impacts from land-based activities, shifts in historic stock distributions, increasingly complex data requirements, and a rapidly growing recreational fishing sector. NOAA Fisheries requires elevated funding to address these numerous challenges. For example, better science and real-time data can improve the quality of management decisions and provide regional management councils with more tools to assess the current status of fish stocks. **To protect America's fisheries and the jobs that rely on them, we recommend allocating $1.2 billion to the National Marine Fisheries Service to fully implement the Magnuson-Stevens Fishery Conservation and Management Act. In addition we urge you to provide $179 million for fisheries data collections, with an increase of $6 million for surveys and stock assessments.** We also urge you to support full implementation of the U.S. Seafood Import Monitoring Program to address IUU fishing and other initiatives to spread sustainable fisheries management globally.

Concluding Remarks

The Joint Initiative greatly appreciates your commitment to addressing the challenges of our maritime nation, and in particular to the ocean-climate nexus, so critical to the future of our blue planet. We thank you for the substantial funding allotted to ocean priorities in FY 2020, and we appreciate your consideration of our FY 2021 request. We will continue to track progress on key ocean and coastal programs and accounts in FY 2021 and beyond, and we stand ready to assist you in advancing positive and lasting changes in the way we manage our nation's oceans and coasts.