

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

The Committee recommends a total of \$6,458,136,000 in discretionary funds for the National Oceanic and Atmospheric Administration (NOAA), which is \$1,027,529,000 above fiscal year 2021.

The Committee's program and project recommendations for NOAA are included in the consolidated funding tables below and in narrative direction throughout this report. The Committee reminds NOAA that any deviations from the amounts included in the tables below are subject to section 505 requirements of this Act. When executing its budget for fiscal year 2022, NOAA shall incorporate the funding levels established in both the table and the narrative direction.

OPERATIONS, RESEARCH, AND FACILITIES

(INCLUDING TRANSFER OF FUNDS)

The Committee recommends a total program level of \$4,689,458,000 under Operations, Research, and Facilities (ORF) for the coastal, fisheries, marine, weather, satellite, and other programs of NOAA. This total funding consists of \$4,425,787,000 in direct appropriations, a transfer of \$246,171,000 from balances in the "Promote and Develop Fishery Products and Research Pertaining to American Fisheries" account and \$17,500,000 derived from recoveries of prior year obligations. The direct appropriation of \$4,425,787,000 is \$585,487,000 above fiscal year 2021.

The following narrative and tables identify the specific activities and funding levels included in this Act.

Extramural research.—The Committee continues to support NOAA's ongoing collaboration with academia and the private sector through cooperative institutes and competitive research. These relationships build broad community engagement, leverage external funding for mission-oriented research, strengthen the science within NOAA, and advance scientific knowledge.

Climate Change Adaptation and Resilient Infrastructure.—NOAA plays a vital role in providing accurate climate data and projections to other Federal agencies, States, Tribes, and the private sector, which is essential to the Nation's ability to prepare for and adapt to the changing climate. Executive Order 14008, "Tackling the Climate Crisis at Home and Abroad", requires Federal agencies to complete, and regularly update, Climate Action Plans. NOAA shall support the effort led by the Office of Science and Technology Policy (OSTP) and in collaboration with the U.S. Global Change Research Program (USGCRP), to develop guidance to Federal agencies on the formulation of such plans. To support these efforts, and to expand the provision of forward-looking climate information generally, the recommendation includes no less than \$10,000,000 from amounts provided for broader climate services at the National Ocean Service, the Office of Oceanic and Atmospheric Research, and the National Environmental Satellite, Data, and Information Service.

As part of this larger effort to expand the provision of climate information and services, NOAA shall also identify and support the utilization by NIST of an authoritative set of climate information that emphasizes forward-looking climate data and projections to be utilized by NIST in their standard-setting process. These data shall

include projections of both chronic climate impacts, such as sea level rise, and extreme weather events, such as hurricanes and droughts. This effort shall include building internal capacity to aid both Federal and non-Federal bodies to develop standards, building codes, and voluntary standards that take into account increasingly extreme weather events and other climate change challenges. In coordination with NIST, NOAA shall provide the Committee, not later than 180 days after the enactment of this Act, an assessment of priority Federal agency needs for these data, including infrastructure planning decision support tools.

Oyster Aquaculture, Research, and Restoration.—The Committee provides up to \$10,000,000 to support ongoing research on shellfish genetics to improve shellfish survival and growth rates and to classify and preserve natural genetic variation. As part of this work, NOAA is encouraged to support regional partnerships with research institutions on the Gulf of Mexico, East, and West Coasts.

Mississippi River Restoration and Resiliency Strategy.—The Committee recognizes that the Mississippi River basin from Minnesota to Louisiana is a vital American waterway. The Committee continues to urge the National Oceanic and Atmospheric Administration to participate and coordinate as an essential federal stakeholder with the Environmental Protection Agency's development of the Mississippi River Restoration and Resiliency Strategy, as directed in House Report 116-455. NOAA is also directed to engage with the U.S. Geological Survey as they host the Mississippi River Science Forum and to contribute to the proceedings as a Federal agency with relevant scientific expertise.

Nature-based Flood Mitigation Measures.—The Committee recognizes that environment-based mitigation measures such as the creation of wetlands, conservation easements, and natural flood plains to slow the flow rate of rivers, creeks, and streams, are innovative tools to mitigate the severity of future floods in the Great Lakes region. In addition to flood protection, such mitigation and climate resiliency measures offer both aesthetic and recreational value and provide a variety of environmental and conservation benefits including erosion control, species habitat, and improved air and water quality. The Committee urges NOAA to participate and coordinate as an essential Federal stakeholder with the Department of Agriculture, Environmental Protection Agency, Federal Emergency Management Agency, and U.S. Army Corps of Engineers, as well as State, local, and Tribal governments, and business and non-profit stakeholders, on developing and supporting conservation and nature-based flood mitigation measures to reduce the impact of floods on communities, lives, and livelihoods in the Great Lakes region.

Fire Weather.—The Committee is concerned with the increasing number and severity of wildfires, especially in the Western United States, and notes the important role NOAA plays in providing advanced notice of wildfire risks and active wildfire-weather coupled forecasts. The recommendation therefore provides a total of \$15,000,000 to fully support fire weather initiatives across NOAA. The Committee encourages NOAA to utilize its satellite and artificial intelligence assets in these efforts and to continue working with interested Federal, State, Tribal, and local partners and land

managers to improve information dissemination related to wildfire events.

The Committee is additionally concerned about the need for additional resources to ensure that our Nation's science agencies are better prepared to help in the prediction and response to wildfires and therefore directs NOAA to conduct a workforce needs assessment on the training and potential need for additional Incident Meteorologists for wildfires and other extreme events. NOAA shall brief the Committee on the results of this assessment no later than 180 days after the enactment of this Act.

National Ocean Service.—The recommendation provides \$706,500,000 for National Ocean Service (NOS) Operations, Research, and Facilities, an increase of \$86,800,000 above the fiscal year 2021 level.

NATIONAL OCEAN SERVICE
OPERATIONS, RESEARCH, AND FACILITIES
(In thousands of dollars)

Program	Amount
Navigation, Observations and Positioning	
Navigation, Observations and Positioning	\$183,000
Hydrographic Survey Priorities/Contracts	32,000
IOOS Regional Observations	50,000
	265,000
Coastal Science and Assessment	
Coastal Science, Assessment, Response and Restoration	101,000
Competitive Research	28,000
	129,000
Ocean and Coastal Management and Services	
Coastal Zone Management and Services	62,000
Coastal Zone Management Grants	82,500
National Oceans and Coastal Security Fund	38,000
Coral Reef Program	38,000
National Estuarine Research Reserve System	30,500
Sanctuaries and Marine Protected Areas	61,500
	312,500
Ocean and Coastal Management and Services	312,500
	706,500
Total, National Ocean Service, Operations, Research, and Facilities	\$706,500

Sea Level Rise.—The Committee commends NOAA for its strong proposal to increase the Nation's understanding of the risk of sea level rise and to provide information and services to State, Territory, Tribal, and local governments, as well as private citizens, to support long range coastal planning and infrastructure investments. The recommendation includes no less than \$30,000,000 for these efforts across NOS.

Navigation, Observations, and Positioning.—The Committee provides \$183,000,000 for Navigation, Observations, and Positioning, \$20,500,000 above the level provided in fiscal year 2021. As part of these efforts, the Committee directs NOS to partner with States to provide accessible, high resolution integrated ocean and coastal mapping of U.S. nearshore waters to support navigation, infrastructure, habitat mapping, restoration projects, resource management, emergency response, coastal resiliency, and hazard studies.

The recommendation also includes up to \$8,000,000 for the Regional Geospatial Modeling Grants program.

Marine Debris.—The recommendation includes an increase of no less than \$2,000,000 above the fiscal year 2021 enacted level for the Marine Debris program to address the pervasive problem of marine pollution in coastal waters around the country. Within the funds available, the Committee provides \$1,000,000 to create a regional pilot program to coordinate with Federal, State, or Tribal partners on efforts to inventory and remove derelict vessels and fishing gear, with a goal of developing a cost-effective national strategy for mitigating these sources of marine debris.

Integrated Ocean Observing System.—The Committee continues to support the Integrated Ocean Observing System (IOOS) and provides \$50,000,000, an increase of \$9,500,000 over the fiscal year 2021 enacted level. The Committee provides not less than \$3,000,000 to support the ongoing pilot IOOS, launched in fiscal year 2020 to enhance the nation’s capacity for monitoring and detection of Harmful Algal Blooms (HABs) by leveraging the expertise of the IOOS regional associations—including through expanding the deployment of in-situ observing assets—in order to improve HABs warning and forecast accuracy. IOOS is directed to coordinate with the National Centers for Coastal Ocean Science on the implementation of these funds.

Harmful Algal Blooms.—The Committee remains highly concerned about the increasing prevalence of HABs in every U.S. State and territory and the corresponding impacts on human health, drinking water, fisheries, and the broader economy. The Committee provides \$28,000,000 for Competitive Research, including not less than \$15,000,000 for HABs research. This research shall include the impacts of HAB-causing nutrient impacts from nitrogen and phosphorus as they enter coastal areas from tributaries. Further research should prioritize development of methods of prevention, mitigation, and control to reduce the frequency, severity, and impacts of HAB events in freshwater and saltwater systems and provide special attention to research in areas most economically and environmentally impacted by HABs, including the possible contamination of drinking water. The Committee encourages NOAA to work to ensure that new technology and mitigation efforts have minimal environmental impacts. For all HABs-related work, NOAA shall coordinate with the Interagency Working Group on Harmful Algal Bloom and Hypoxia Research and Control Act.

Further, within funds provided for Coastal Science, Assessment, Response and Restoration, NOAA, in collaboration with IOOS, the National Centers for Coastal Ocean Science, and other relevant stakeholders, shall develop an implementation plan for a National Harmful Algal Bloom Observing Network (HABON). This plan shall include a discussion of how it will incorporate existing assets and research efforts, as well as a five-year funding profile for operational monitoring and forecasting of HABs nationwide. This report shall be provided to the Committee not later than 270 days after the enactment of this Act.

Great Lakes HABs.—The Committee recognizes the importance of NOAA’s work to diagnose and track the changing climate, nutrient loading, and water quality impacts within the Great Lakes. The Lakes are ecologically productive but also home to destructive an-

nual HABs that threaten the region. No later than 270 days after the enactment of this Act, NOAA shall brief the Committee on efforts to coordinate with the other Federal agencies in the Great Lakes region, its joint efforts to manage and diagnose water quality problems, and shall provide a summary of resources NOAA is making available within the Great Lakes basin to address HABs.

Blue Carbon.—The Committee notes the importance of the coastal zone as a potential carbon sink and the increased public interest in blue carbon. The recommendation includes no less than \$2,000,000 for NOAA to expand its scientific and research efforts to understand the relative emissions and absorption potential of carbon pollution associated with various human activities in the coastal zone so as to inform future planning decisions regarding their carbon impacts. The ultimate goal of this research shall be to create a national map and inventory of coastal and marine blue carbon ecosystems. The Committee encourages NOAA to collaborate with other interested Federal agencies and other non-Federal stakeholders as part of their coastal work, including the U.S. Geological Survey, as well as the National Fish and Wildlife Foundation.

Coastal Zone Management.—The Committee provides \$62,000,000 for Coastal Zone Management and Services, including no less than \$4,000,000 for implementation of the Digital Coast Act (Public Law 116–234) and activities to support it. Within these funds, the recommendation also includes no less than \$3,500,000 for Regional Ocean Data Portals.

Ocean Economy of the Territories.—The Committee looks forward to receiving the report on the steps NOAA has taken to expand the scope of the Economics: National Ocean Watch (ENOW) dataset to include the Nation’s territories. The Committee expects regular updates from NOAA on its plans to characterize the ocean economies of the five U.S. territories, and directs other bureaus within the Department of Commerce, including the Bureau of Economic Analysis (BEA) and the Census Bureau, to cooperate on this effort.

Coastal Zone Management Grants and the National Oceans and Coastal Security Fund.—The recommendation includes \$82,500,000 for Coastal Zone Management Grants and \$38,000,000 for the National Oceans and Coastal Security Fund, including for project planning and design, including watershed scale planning and technical assistance to identify where and what specific coastal resilience projects will provide the greatest benefit in preparation for expected climate impacts, such as sea level rise.

Coral Reefs.—The Committee continues to be greatly concerned by the deterioration of the Nation’s coral reefs, which are suffering from record levels of bleaching and disease. The recommendation therefore includes \$38,000,000 for the Coral Reef Program. Within the increases provided for the Coral Reef Program and Competitive Research, NOAA shall expand its collaborative work with external academic partners that conduct scientific research for the conservation of corals and coral reef ecosystems, including those that are experiencing an increasing prevalence of disease outbreaks. The Committee recognizes that science sponsored through such collaboration is imperative for management of these coral reefs for ecosystem resilience and for the effective implementation of the National Coral Reef Action Strategy, especially with regard to the

identification of local action strategies for addressing key threats in each of the jurisdictions that have coral reefs within its boundaries. Collaborative research focused on coral disease and degradation is required to address current declines in reef health and productivity in U.S waters in the Pacific, Atlantic, and Caribbean. Examples of this work include identifying the pathogens causing the disease, conducting appropriate disease interventions and remediations, researching resilient coral species and disease-resistant genetic strains of corals, and supporting restoration of appropriate and diverse coral species.

Further, within the funds provided for the Coral Reef Program, the Committee provides up to \$10,000,000 for NOS to continue to work with academic institutions and non-governmental research organizations on innovative active restoration projects to restore degraded coral reefs. The Committee intends the funding to support coral restoration implementation and capacity building for both corals and herbivores; advancing community stewardship and restoration maintenance; and incorporation of next generation technology innovation with external partners to promote resilience and restoration efficiencies.

National Estuarine Research Reserve System.—The Committee provides an increase of \$2,000,000 over the fiscal year 2021 enacted level for the National Estuarine Research Reserve System (NERRS). The Committee strongly supports this important partnership between NOAA and the coastal States and territories that protects and studies estuarine systems and encourages the continued expansion of the network.

Sanctuaries and Marine Protected Areas.—The Committee provides \$61,500,000 for Sanctuaries and Marine Protected Areas, which is \$5,000,000 above the fiscal year 2021 enacted level. The Committee encourages the Office of National Marine Sanctuaries to collaborate with the Office of Ocean Exploration and Research to map and characterize the National Marine Sanctuaries, including through the use of telepresence technology as appropriate.

National Marine Sanctuaries Designations.—The Committee continues to support the Office of National Marine Sanctuaries and the expansion of the network of protected marine and Great Lakes areas. The Committee notes that a number of sites have languished in the inventory of successful nominations without progressing to final designation as new National Marine Sanctuaries despite support from the Committee to move them forward. Therefore, the Committee directs NOAA, no later than 30 days after the enactment of this Act, to provide the Committee with a briefing on plans to make final determinations on the areas which have been successfully nominated for consideration for designation.

Marine National Monuments.—Within funding provided for National Marine Sanctuaries, up to \$1,200,000 may be used for competitive research and management grants for existing marine national monuments administered by NOS, provided such grants are subject to a 100 percent non-Federal match.

National Marine Fisheries Service.—The Committee recommends \$1,044,590,000 for National Marine Fisheries Service (NMFS) Operations, Research, and Facilities, which is \$79,728,000 above the fiscal year 2021 enacted level. NMFS shall continue to provide

quarterly updates to the Committee consistent with direction in fiscal year 2021.

NATIONAL MARINE FISHERIES SERVICE
OPERATIONS, RESEARCH, AND FACILITIES
(In thousands of dollars)

Program	Amount
Protected Resources Science and Management:	
Marine Mammals, Sea Turtles, and Other Species	\$146,500
Species Recovery Grants	7,500
Atlantic Salmon	6,500
Pacific Salmon	70,500
Protected Resources Science and Management	231,000
Fisheries Science and Management:	
Fisheries and Ecosystem Science Programs and Services	162,000
Fisheries Data Collections, Surveys, and Assessments	192,500
Observers and Training	55,468
Fisheries Management Program and Services	133,750
Aquaculture	17,500
Salmon Management Activities	66,000
Regional Councils and Fisheries Commissions	43,000
Interjurisdictional Fisheries Grants	3,372
Fisheries Science and Management	673,590
Enforcement	78,500
Habitat Conservation and Restoration	61,500
Total, National Marine Fisheries Service, Operations, Research, and Facilities	\$1,044,590

Offshore Wind.—The Committee applauds the President’s initiative to support the growth of offshore wind energy as part of the broader goal of reducing carbon emissions. As such, the recommendation includes no less than \$20,380,000 for NMFS’ initiatives in support of wind energy.

Transition to Climate-Ready Fishery Management.—The Committee recognizes the serious impacts of climate change on fisheries and protected species, and the corresponding need for increased resources to prepare for climate-ready management of living marine resources. Sustainable fisheries management and protected species conservation is made more challenging by climate change driven impacts, including changes to the distribution, productivity, and abundance of fish stocks, protected species, and the habitats on which they depend. The Committee supports NMFS’ proposals to address these new requirements and provides \$20,000,000 overall to support this work, including \$10,000,000 within Protected Resources Science and Management to support climate vulnerable species and \$10,000,000 within Fisheries Science and Management to prioritize activities that will make fisheries and fishing-dependent communities more adaptable to climate change. NMFS is also directed to increase the scope and pace of efforts and consider new initiatives that will maintain sustainability and yield greater stability in Federal fishery and protected species management as the oceans change.

Protected Resources Science and Management.—The recommendation includes \$231,000,000 for Protected Resources

Science and Management, an increase of \$25,336,000 above the fiscal year 2021 enacted level. Within this amount, the Committee provides no less than \$5,000,000 for the John H. Prescott Marine Mammal Rescue Assistance grant program. The Committee further directs NMFS to continue to prioritize reducing the backlog of Endangered Species Act and Marine Mammal Protection Act permit applications.

The Committee recognizes that the existing backlog is due, in part, to disagreements between NMFS and the U.S. Army Corps of Engineers regarding the consideration of environmental baselines for in-water construction permit applications. This continued inter-agency dispute is unacceptable. The Committee therefore directs NOAA, no later than 15 days after the enactment of this Act, to report to the Committee on plans for resolving the ongoing inter-agency conflict and finding resolution on the backlog of pending permit applications in a timely manner.

North Atlantic Right Whales.—Within Marine Mammals, Sea Turtles, and Other Species, the Committee provides no less than \$16,900,000 for research and monitoring of North Atlantic right whales. Within this funding, up to \$3,500,000 is provided for NOAA to address State and industry priorities addressing fishery data gaps to support improved modeling and analysis to inform future regulatory changes, including vessel or gear tracking or other harvester reporting enhancements to improve co-occurrence models of fishing activity and whale presence.

Southern Resident Killer Whales.—The Committee provides not less than \$2,000,000 for the Southern Resident Killer Whales program for research and monitoring to improve the recovery of the species. The Committee further encourages NMFS to support existing partnerships between Federal and State agencies, Native American tribes, public ports, and nonprofits to monitor and reduce noise impacts on this endangered species.

Foreign Fisheries.—The Committee provides \$1,000,000 to NMFS to ensure sufficient implementation of the Fish and Fish Product Import Provisions Section 101(a)(2) of the Marine Mammal Protection Act. NMFS shall use these funds to analyze the data provided by nations and to provide technical assistance to nations to comply with these provisions. NMFS shall prioritize the use of any funds for technical assistance to those fisheries interacting with endangered species. NMFS may use contractors to ensure that deadlines are met, but shall prioritize hiring staff with the increased funds for this initiative.

Pacific Salmon.—The Committee provides \$70,500,000 for Pacific Salmon, \$3,500,000 above the fiscal year 2021 enacted level. The recommendation provides no less than \$5,000,000 within Pacific Salmon to implement NMFS' Hatchery and Genetic Management Plans (HGMPs) and to continue to address the backlog of HGMPs as directed in previous fiscal years.

The Committee directs NOAA to examine opportunities to leverage the existing civilian conservation corps model to develop a dedicated workforce to accomplish priority salmon habitat improvement projects and other priority near-shore restoration goals that have been identified as part of the recovery strategy for one or more of the twenty-eight populations of salmon and steelhead currently

listed as threatened or endangered under the Endangered Species Act.

Fisheries Data Collections, Surveys, and Assessments.—The Committee provides \$192,500,000 for Fisheries Data Collections, Surveys, and Assessments, \$16,573,000 above the fiscal year 2021 enacted level. Within these funds, no less than \$24,000,000 is provided for Fisheries Information Networks, the State-Federal cooperative programs that coordinate data collection, data management, and informational management essential for accurate monitoring of commercial and recreational fishing impacts. The Committee encourages NMFS to support collaborative programs focused on improving recreational fishery data collection. The recommendation also directs NMFS to deliver technical support, as needed, to the Gulf States to prioritize and ensure successful implementation of each State plan.

South Atlantic Reef Fish.—NMFS is encouraged to leverage efficiencies learned through the Gulf of Mexico red snapper process to better the science and management of the South Atlantic red snapper and other reef fish. NMFS shall consider employing the independent and alternative stock assessment strategies used in the Gulf of Mexico to supplement NMFS assessments of reef fish in the South Atlantic. The Committee provides up to \$1,800,000 for these activities and encourages NMFS to incorporate this data into the agency's own stock assessments as expeditiously as possible.

State Management for Recreational Red Snapper.—Within the amount provided for Fisheries Data Collections, Surveys, and Assessments, the Committee encourages NMFS to continue to work with the Gulf States to ensure successful implementation of State management for recreational red snapper. These efforts shall be a priority for NOAA and shall be done in coordination with the Gulf States. In addition, state agency independent data should be incorporated into NOAA stock assessments as expeditiously as possible.

Gulf of Mexico Reef Fish.—Within funding for Fisheries and Ecosystem Science Programs and Services, the Committee encourages NMFS to continue to support Gulf of Mexico reef fish surveys, research, and sampling.

For-Hire Electronic Monitoring and Reporting Implementation.—The agreement provides no less than \$2,250,000 within Fisheries Management Programs and Services and \$1,500,000 within Enforcement to support the continued and timely implementation of electronic monitoring and reporting.

Video Review of Electronic Monitoring Data.—Within funding provided for Fisheries Management Programs and Services, the Committee provides no less than \$400,000 for the video review of the West Coast Groundfish electronic monitoring data and \$400,000 for the video review of the Gulf of Alaska partial coverage electronic monitoring data.

Pacific Bluefin Tuna.—The Committee continues to be concerned with the depleted status of the iconic Pacific bluefin tuna and therefore encourages NMFS to take a strong position in international negotiations, including by supporting the adoption of strict and more precautionary harvest control rules that ensure measurable interim progress in rebuilding the stock, in order to recover the population to sustainable levels by no later than 2034. The Committee provides up to \$2,000,000 to continue and expand ef-

forts to support the rebuilding of this stock and directs NMFS to provide resources to support engagement of the Pacific Fishery Management Council and U.S. stakeholders in the formulation of a strong U.S. position throughout the international negotiations to ensure continued progress on the international recovery plan.

Carbon Sequestration Through Aquaculture.—The Committee recognizes advances in aquaculture such as deep-water kelp sequestration and oyster farming play an important role in mitigating the impacts of a changing climate. Like land forests, kelp forests act as powerful carbon banks, removing up to 20 times more carbon per acre than land forests. The Committee encourages NOAA and the Office of Aquaculture to support sustainable carbon sequestration demonstration projects in deep ocean water.

Salmon Management Activities.—The Committee provides an increase of \$4,000,000 above the fiscal year 2021 enacted amount for Salmon Management Activities. This level includes no less than \$41,500,000 for the Pacific Salmon Treaty activities and no less than \$24,000,000 for Mitchell Act Hatcheries.

Illegal, Unregulated, and Unreported Fishing.—The Committee is troubled by the increasing accounts of Illegal, Unregulated, and Unreported (IUU) fishing—not only in the U.S. Exclusive Economic Zone but around the world—which is a threat to the health of the oceans, undermines honest businesses and fishers who play by the rules, and enables human trafficking, forced labor, and other criminal activity. The recommendation includes an increase of \$3,500,000 above the fiscal year 2021 enacted level for Enforcement to address IUU fishing, among other enforcement priorities. Within these funds, the Committee directs NMFS to expand efforts to detect and deter IUU fishing through the use of emerging technologies available from the private sector.

Lionfish.—The Committee encourages NOAA to award competitive grants to address invasive Lionfish in the Atlantic Ocean and Gulf of Mexico.

Horseshoe Crabs.—Adequate data is required to ensure States and interstate managers can effectively manage the Horseshoe Crab population, which is important to the biomedical and commercial fishing industries, as well as to the ecology of the Mid-Atlantic region. The Committee directs NMFS to continue the Horseshoe Crab survey to generate the data necessary to ensure that the Horseshoe Crab stock remains on a sustainable path.

Oceanic and Atmospheric Research.—The Committee recommends \$684,500,000 for Oceanic and Atmospheric Research (OAR) Operations, Research, and Facilities, which represents an increase of \$113,910,000 over fiscal year 2021.

OFFICE OF OCEANIC AND ATMOSPHERIC RESEARCH

OPERATIONS, RESEARCH, AND FACILITIES

(In thousands of dollars)

Program	Amount
Climate Research:	
Climate Laboratories and Cooperative Institutes	\$120,000
Regional Climate Data and Information	59,000
Climate Competitive Research	74,000

OFFICE OF OCEANIC AND ATMOSPHERIC RESEARCH—Continued
OPERATIONS, RESEARCH, AND FACILITIES
(In thousands of dollars)

Program	Amount
Climate Research	253,000
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Weather and Air Chemistry Research:	
Weather Laboratories and Cooperative Institutes	87,500
U.S. Weather Research Program	33,750
Tornado Severe Storm Research/Phased Array Radar	17,000
Joint Technology Transfer Initiative	13,000
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Weather and Air Chemistry Research	151,250
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Ocean, Coastal, and Great Lakes Research:	
Ocean Laboratories and Cooperative Institutes	37,500
National Sea Grant College Program	85,000
Sea Grant Aquaculture Research	14,500
Ocean Exploration and Research	44,500
Integrated Ocean Acidification	17,000
Sustained Ocean Observations and Monitoring	59,750
National Oceanographic Partnership Program	2,000
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Ocean, Coastal, and Great Lakes Research	260,250
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Innovative Research and Technology:	
High Performance Computing Initiatives	18,000
Uncrewed Systems	2,000
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Innovative Research and Technology	20,000
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Total, Office of Oceanic and Atmospheric Research, Operations, Research, and Facilities	684,500

Climate Research.—The Committee continues to be alarmed by the impacts of the changing climate and notes the critical importance of NOAA’s climate change science and research to inform decisions about how best to prepare and adapt to these changes. The Committee, therefore, provides \$253,000,000 for Climate Research, an increase of \$71,000,000 above the fiscal year 2021 enacted level.

Methane Emissions.—Like carbon dioxide, methane is a powerful greenhouse gas that is increasingly more prevalent in our atmosphere. Unlike carbon dioxide, however, methane only remains in the atmosphere for a relatively short amount of time, and as such, mitigation of these emissions can have a more near-term effect on the climate system. Unfortunately, there is limited understanding of the natural and anthropogenic sources and drivers of methane emissions that limits the accuracy of climate models and inhibits the proper prioritization of mitigation efforts. As part of the increase provided for Sustained Atmospheric Observations, the Committee directs OAR to increase its focus on methane as an important greenhouse gas and to increase efforts to improve the understanding of the sources and drivers of both anthropogenic and natural methane emissions.

Atmospheric Baseline Observatories.—The Committee supports the work of the Global Monitoring Laboratory and its Atmospheric Baseline Observatories, which have provided measurements of the level of carbon dioxide in the atmosphere for over 60 years that are the basis of the world-renowned Keeling Curve and whose data is used by more than 500 external partners and stakeholders. The Committee provides not less than \$4,500,000 to modernize these

observatories' aging infrastructure to ensure measurement integrity and safety of the observatory facilities.

Earth's Radiation Budget.—The Committee provides \$11,000,000 for continued modeling, assessments, and, as possible, observations and monitoring of stratospheric conditions and the Earth's radiation budget. Within these funds, the Committee directs OAR, in coordination with other Federal agencies, as appropriate, to improve the understanding of the impact of atmospheric aerosols on radiative forcing, as well as on the formation of clouds, precipitation, and extreme weather to include observations and modeling of the impact of the introduction of material into the stratosphere from changes in natural systems, increased air and space traffic, and modeling of proposals to inject material to affect climate and solar climate interventions.

Climate Services.—As the Nation continues to experience the increasingly disruptive impacts of climate change, NOAA's role as a provider of climate data, models, projections, and services is becoming more prominent and critical to the continued prosperity of our society. The Committee directs NOAA, across line offices, to coordinate efforts to provide improved and expanded climate services in order to improve customer service and integrate climate products. Further, a number of community project funding awards will support efforts to expand climate research and the provision of climate services. Where feasible, NOAA shall partner with these local efforts to meet the rapidly growing needs of the Nation for high quality climate products and information.

As part of these efforts, the Committee supports the proposed expansion of the Regional Integrated Climate Sciences and Assessments (RICSA) program, formerly known as the Regional Integrated Sciences and Assessments program, with the long-term goal of comprehensive coverage of the Nation to provide high quality climate information and extension services to help local, State, and private leaders make informed decisions as they adapt to the changing climate. As such, the Committee includes \$25,000,000, which is \$3,200,000 above the requested amount, to launch the Climate-Smart Communities Initiative and expand the RICSA program. The Committee further encourages NOAA to more proactively engage with local stakeholders to provide extension services.

Infrasonic Weather Monitoring Research.—Within funding for the U.S. Weather Research Program, the recommendation provides no less than the fiscal year 2021 enacted level to support external opportunities with academic institutions in promising areas of weather-related research that may advance NOAA's mission and benefit society, including infrasonic methods of monitoring extreme weather.

VORTEX-USA.—The recommendation includes no less than \$7,000,000 for the VORTEX-SE program within the VORTEX-USA initiative. The Committee looks forward to a briefing on OAR's proposed plan for the VORTEX USA initiative as directed in Public Law 116-260.

Sensor Fusion for Snow Water Resource Management.—The Committee supports NOAA's activities to improve snow water resource monitoring to improve operational forecasts at NOAA's National Water Center (NWC). The Committee encourages NOAA to pursue

research activities to demonstrate and integrate into the NWC's National Water Model accurately calibrated and validated snow water equivalent estimates at high resolution through extensive airborne and field experiments throughout the western United States.

Wind Turbine Radar Interference.— The Committee supports the rapidly growing wind energy industry as part of the effort to reduce carbon emissions. The Committee recognizes, however, that without proper mitigations and considerations, wind farms can interfere with NEXRAD weather radars. To ensure maximum compatibility between wind energy development and NEXRAD systems, the Committee encourages NOAA, working with the Wind Turbine Radar Interference Mitigation working group and industry, to identify, test, and validate proposed technical solutions to reduce potential wind turbine impacts to NEXRAD radar data. The Committee also encourages NOAA, the Wind Turbine Radar Interference Mitigation Working Group, and industry to fully explore other non-technical mitigation options. Not later than 270 days after the enactment of this Act, NOAA shall, in collaboration with other Federal agencies, industry, and academia, provide the Committee with an update to the 2019 Joint USAF/NOAA Report to Congress that details the status of scientific research of technical solutions and cooperation between government and industry on non-technical mitigation options.

Flood Mapping Technologies.—The Committee recognizes that innovative, science-based flood mapping technologies help communities and businesses to better prepare for and mitigate flood-related disasters. Weather-based technologies provide real-time information on soil moisture, watersheds, precipitation, and stream levels to ensure communities in flood susceptible areas have the proper resources to respond before flooding disasters occur, and to help minimize impacts and associated damages. The Committee encourages NOAA to continue to support advancing weather and flood mapping technologies and enhanced data collection, and to partner with interested Federal agencies, Tribes, institutions of higher education, and State centers to become more resilient to flood disasters, such as with Joint Technology Transfer Initiative (JTTI) activities.

Ocean, Coastal, and Great Lakes Research Laboratories and Cooperative Institutes.—The Committee provides \$37,500,000 for Ocean, Coastal, and Great Lakes Research Laboratories and Cooperative Institutes. NOAA shall expand its works on genomics within the increased funds, including work on HABs with regard to real-time forecasting of HABs and their toxicity, and testing of remote observing systems and environmental sample processors. Further, the Committee expects NOAA to fully fund these cooperative institutes at appropriate levels in future years, including well-established institutes focused on watershed impacts on marine and Great Lakes ecosystems, remote sensing, and long-term monitoring of the impacts of environmental hazards on marine and Great Lakes ecosystem health. NOAA shall further support partnerships with universities on ocean observations, hurricane monitoring, ocean glider research, and research related to offshore wind energy.

Sea Grant Resilient Coasts Initiative.—Of the funds provided for Sea Grant, no less than \$10,000,000 shall be for the Sea Grant Re-

silient Coasts Initiative. As part of this program, the Committee encourages NOAA to support mitigation and relocation efforts of coastal tribal communities that are seeking to mitigate the threat of severe weather storms and promote public safety.

Sea Grant Support for the Seafood Industry.—The U.S. fishing and seafood sector experienced broad declines in 2020 as a result of the COVID–19 pandemic. The Committee supports the ongoing work of NOAA programs such as Sea Grant in assisting in business diversification and economic recovery during the COVID–19 pandemic for fishermen, aquaculturists, and recreational charters through state Sea Grant programs. The Committee encourages the National Sea Grant program to identify areas of collaboration within the Department of Commerce and other federal agencies to advance business diversification efforts of coastal businesses to make the coastal industries more viable and resilient to disruptions in their economic markets as well as disruption to access or changing ocean conditions. Further, the recommendation includes up to \$2,000,000 for Sea Grant to work with NMFS to build a consortium of researchers, government officials, technical assistance providers, and fishing and aquaculture community partners to support local and regional seafood systems (LRSS). Catalyzing LRSS will help to ensure the seafood sector is resilient to future shocks and will also contribute to the economic prosperity of coastal communities.

Highly Migratory Species.—The Committee provides an additional \$2,000,000 within Sea Grant to collaborate with the NMFS Highly Migratory Species (HMS) Research Initiative, for competitive extramural research exclusively for Atlantic and Gulf of Mexico HMS. Additional research is needed for collection of NOAA-prioritized scientific information to significantly improve fisheries management at both the domestic and international levels for these species that inject hundreds of millions of dollars into coastal communities and the Nation. Many HMS are threatened by overfishing or environmental challenges and are urgently in need of improved, science-based management and conservation, either regionally or throughout their distribution. The additional funding will enable NOAA to implement a set of management-based HMS research needs and priorities established in fiscal year 2020.

American Lobster Research.—Within funding for the Sea Grant program, the Committee encourages the continued funding of partnerships between State agencies, academia, and industry to address American lobster research priorities. Research should focus on stock resilience in the face of environmental changes, including life history parameters, distribution and abundance, and species interactions, with the purpose of informing future management actions.

Sea Grant Aquaculture Research Program.—The Committee recognizes the importance of NOAA’s aquaculture research and development activities that help coastal communities maintain a safe and sustainable local seafood supply through research and technology transfer to support and expand America’s aquaculture industry. As such, the Committee provides \$14,500,000 for the Sea Grant Aquaculture Research Program.

Sea Grant Knauss Fellowship Program.—Within 60 days of enactment of this Act, NOAA is directed to brief the Committee on steps the agency is taking to implement section 3 of the National

Sea Grant College Program Amendments Act of 2020 (Public Law 116–221).

Ocean Exploration and Research.—The Committee rejects the requested decrease in funding for Ocean Exploration and Research and instead provides \$44,500,000 and encourages NOAA to map and characterize the Nation’s Exclusive Economic Zone and Extended Continental Shelf. NOAA is encouraged to work with the Department of Education and other relevant agencies to continue fundamental ocean exploration in which open source data are collected for the oceanographic community and private industries in real-time through telepresence technology that would be applied to educational research.

Deep Seabed Mining.—The Committee provides \$1,000,000 from Ocean Exploration and Research, for NOAA, not later than 90 days after the enactment of this Act, to seek to enter into an agreement with the National Academies to conduct a comprehensive assessment of the environmental impacts of deep seabed mining, including assessment of potential impacts to deep seabed habitat and species from exploratory or extractive activities; assessment of the potential impacts of sediment plumes from disturbance of the deep seabed on the marine ecosystems and biota; and approximate quantification of the greenhouse gas emissions associated with deep seabed mining, including possible emissions from the release of greenhouse gases sequestered in the seabed.

Integrated Ocean Acidification Program.—The Committee is increasingly concerned about the growing impacts of ocean acidification on coastal communities and industries and therefore provides \$17,000,000 for the Integrated Ocean Acidification program. Within the increase, NOAA shall, in partnership with academia and the private sector, prioritize efforts at understanding, monitoring, and mitigating coastal ocean acidification, especially where it impacts fisheries and aquaculture. To allow NOAA’s partners around the nation to scale up their regional-level monitoring programs, develop modeling tools, and improve coordination with regional stakeholders, the Committee encourages the Integrated Ocean Acidification program, in partnership with IOOS and Sea Grant, to make multi-year, competitive grant awards to university partners to operate regional-scale research and education centers to address the impacts of ocean acidification.

The Committee encourages NOAA, in coordination with the Office of Science and Technology Policy, to implement a program to competitively award prizes under the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3719) to stimulate innovation to advance the understanding, research, or monitoring of ocean acidification or its impacts, or to develop management or adaptation options for responding to ocean acidification. In prize competitions, the Committee encourages NOAA to prioritize communities, environments, or industries that are currently in distress due to the impacts of ocean acidification.

Sustained Ocean Observations and Monitoring.—The recommendation provides \$59,750,000 for Sustained Ocean Observations and Monitoring. Within the increase, NOAA shall expand coverage of biogeochemical and Deep Argo floats to improve ecological and sub-seasonal-to-seasonal weather forecasting as well as to provide observational data on the health and state of the ocean, par-

ticularly in the deep sea, the tropics, and the Arctic. Further, NOAA is directed to encourage international partners to meet their obligations for shared ocean science and observations.

Uncrewed Systems.—Within Innovative Research and Technology, \$2,000,000 is provided in support of the proposal for Uncrewed Systems. The Committee further encourages NOAA to address potential new challenges in the areas of data organization, automation, scale, processing, and presentation.

National Weather Service.—The Committee recommends \$1,218,113,000 for National Weather Service (NWS) Operations, Research, and Facilities, which is \$117,337,000 above the fiscal year 2021 enacted level. The Committee reaffirms its commitment to the weather enterprise and the necessity of maintaining within the Federal Government the mission of protecting life and property.

NATIONAL WEATHER SERVICE
OPERATIONS, RESEARCH, AND FACILITIES
(In thousands of dollars)

Program	Amount
Observations	\$245,750
Central Processing	108,472
Analyze, Forecast and Support	565,097
Dissemination	117,646
Science and Technology Integration	181,148
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Total, National Weather Service, Operations, Research, and Facilities	\$1,218,113

NWS Staffing.—The Committee remains concerned about continuing reports of staffing and management challenges within NWS. NOAA and the Department of Commerce are directed to ensure that NWS fulfills its critical mission to protect the lives and property of our Nation's citizens, including by filling all vacancies as expeditiously as possible. In its fiscal year 2022 spend plan, NWS shall follow direction as provided in fiscal year 2021 regarding details of all NWS funded positions. The Committee further directs NWS to continue the quarterly briefings to the Committee consistent with prior year direction.

National Mesonet Program.—The recommendation includes not less than \$24,000,000 for the National Mesonet Program to allow the program to leverage large investments by other sponsors, enable the program to increase the number of observations, include new types of data, and introduce innovative capabilities to address capacity and coverage gaps.

Sub-seasonal to Seasonal Decision Support Services.—The recommendation includes no less than \$5,000,000 for the proposals across NWS for Sub-Seasonal to Seasonal Decision Support Services.

Low Altitude Rainfall.—The Committee is concerned about the limitations of NEXRAD due to its ineffectiveness in calculating low altitude rainfall, below 7,000 feet, in low lying areas on the edges of the radars' scannable range, lack of river gauges and lack of ground truth stations. The Committee therefore encourages NWS to install additional small data collection devices to better assess rainfall, water levels, and related climate data. NWS is urged to

focus on watersheds where underestimates of local rainfall has led to damage of water infrastructure.

Tsunami Warning Program.—The Committee continues to support the Tsunami Warning Program and provides no less than the fiscal year 2021 level for this critical program.

Dissemination.—The Committee is very troubled by the ongoing issues with NWS' forecast dissemination systems. The recommendation therefore includes an increase of \$39,284,000 above the fiscal year 2021 enacted level. NWS shall provide monthly updates to the Committee on the status of the ongoing problems with its dissemination systems and its progress in carrying out the Integrated Dissemination Program plan.

Atlas-14.—The Committee provides up to \$1,450,000 within Science and Technology Integration for NWS to partner with interested states or regions to update their respective Atlas-14 precipitation frequency estimates.

National Environmental Satellite, Data and Information Service.—The Committee recommends \$348,086,000 for National Environmental Satellite, Data and Information Service (NESDIS) Operations, Research, and Facilities.

NATIONAL ENVIRONMENTAL SATELLITE, DATA AND INFORMATION SERVICE
OPERATIONS, RESEARCH, AND FACILITIES
(In thousands of dollars)

Program	Amount
Environmental Satellite Observing Systems:	
Office of Satellite and Product Operations	\$202,000
Product Development, Readiness and Application	47,000
Office of Space Commerce	10,000
U.S. Group on Earth Observations	1,000
Environmental Satellite Observing Systems	260,000
National Centers for Environmental Information	88,086
Total, National Environmental Satellite, Data and Information Service, Operations, Research, and Facilities	\$348,086

Wildfire Demonstration Products.—The Committee supports NOAA's ongoing efforts to develop and provide new wildfire products which are critically important to informing the public about wildfire dangers and to supporting firefighters and other first responders. The Committee is aware and supports the fact that as part of the product development process, NOAA makes demonstration versions available online and that these products are rapidly adopted by external stakeholders. The Committee further understands that the rapid adoption of these demonstration products by external stakeholders has caused both hardware and software failures. The Committee directs NOAA to prioritize the availability of demonstration products that have been adopted by external stakeholders, particularly first responders, and provides no less than \$500,000 within the Office of Satellite and Product Operations for this purpose.

Office of Space Commerce.—The Committee provides \$10,000,000 for the Office of Space Commerce and directs NOAA to continue the pilot program established by Public Law 116–260, for which no less than the fiscal year 2021 enacted amount is provided.

National Centers for Environmental Information.—The Committee continues to support the National Centers for Environmental Information (NCEI) and their efforts to provide more products and services for the Nation. Of the funds provided for NCEI, no less than \$13,500,000 shall be for the Regional Climate Services, including no less than \$10,000,000 for the Regional Climate Centers. NOAA shall continue to prioritize hiring to meet the demand for climate services, most notably by filling the vacant Regional Climate Services Director positions.

Mission Support.—The recommendation includes \$364,316,000 for Mission Support Operations, Research, and Facilities.

MISSION SUPPORT
OPERATIONS, RESEARCH, AND FACILITIES
(In thousands of dollars)

Program	Amount
Mission Support Services:	
Executive Leadership	\$30,000
Mission Services and Management	185,000
IT Security	35,365
Payment to the DOC Working Capital Fund	67,867
Facilities Maintenance and Capital Improvements	5,000
Mission Support Services	323,232
Office of Education:	
BWET Regional Programs	12,000
José E. Serrano Educational Partnership Program with Minority Serving Institutions	22,000
NOAA Education Program Base	7,084
Office of Education	41,084
Total, Mission Support, Operations, Research, and Facilities	\$364,316

Office of Education.—The Committee recognizes that the changing climate and increasing degradation of our environment will necessitate greater future investments in these scientific fields and their corresponding workforces. Consequently, the recommendation includes \$41,084,000 for NOAA's Office of Education, an increase of \$8,084,000 above the fiscal year 2021 enacted level. Further, as part of all of its educational programming, the Committee encourages NOAA to prioritize improving Americans' understanding of climate change, including providing formal and informal learning opportunities to individuals of all ages, including individuals of diverse cultural and linguistic backgrounds, emphasizing actionable information to help people understand and promote implementation of new technologies, programs, and incentives related to climate change, climate adaptation and mitigation, and climate resilience.

Office of Marine and Aviation Operations (OMAO).—The recommendation includes \$299,373,000 for the Office of Marine and Aviation Operations, Operations, Research, and Facilities. The Committee appreciates the clear and concise regular briefings provided by OMAO's leadership and encourages them to continue with the same frequency and detail as in fiscal year 2021.

OFFICE OF MARINE AND AVIATION OPERATIONS
OPERATIONS, RESEARCH, AND FACILITIES
(In thousands of dollars)

Program	Amount
Office of Marine and Aviation Operations:	
Marine Operations and Maintenance	\$194,000
Aviation Operations and Aircraft Services	37,500
Autonomous Uncrewed Technology Operations	14,500
NOAA Commissioned Officer Corps	53,373
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Total, Office of Marine and Aviation Operations, Operations, Research, and Facilities	\$299,373

Marine Operations and Maintenance.—The Committee appreciates and supports the proposal to increase the number of days at sea, and further directs OMAO to continue to implement the progressive maintenance program developed over the last few years to keep NOAA’s ships available and operational at the highest possible rate. The Committee notes that missions in the Pacific Islands and territories have been delayed due to a lack of ship availability and the pandemic. The increase in funding for Marine Operations and Maintenance is intended, in part, to alleviate these constraints. The Committee directs NOAA to submit a report on its plan to ensure adequate ship time for the critical missions in this region no later than 90 days after the enactment of this Act.

Monitoring of Atmospheric Rivers.—Improving understanding of atmospheric rivers is critical to preparing for concentrated rain storms and flooding along the U.S. West Coast. Therefore, the Committee provides no less than \$2,300,000 for use of airborne assets to conduct increased winter storm observations to better observe and predict these extreme weather events.

NOAA Community Project Funding.—The recommendation includes \$23,980,000 for Community Projects as detailed in the table below. The Committee directs NOAA to provide the amounts listed in the table consistent with NOAA’s existing authorities, jurisdictions, and procedures, as appropriate. NOAA shall further perform the same level of oversight and due diligence as with any other external partners.

Recipient	Project	Amount
Alabama State Port Authority	Physical Oceanographic Real-Time System (PORTS) Sensors, Port of Mobile.	\$233,000
Coastal Preservation Network	Restoration & Stabilization of Two On-Water Platforms on Flushing Bay.	\$263,000
Columbia River Inter Tribal Fish Commission	Upgrade and Expand the Coastal Margin Observation and Prediction Program.	\$760,000
Florida International University	Aquarius Coral Reef Observatory	\$1,135,000
Florida International University	Greater Biscayne Bay Harmful Algae Bloom Monitoring Program.	\$2,000,000
George Mason University	Virginia Climate Center	\$1,979,000
Greater Farallones Association	Greater Farallones National Marine Sanctuary Kelp Recovery.	\$500,000
Museum of Science, Inc.	National Center for Education and Conservation of Florida’s Coral Reef.	\$1,150,000
NOAA’s James J. Howard Marine Sciences Laboratory at Sandy Hook.	Social and Ecological Resilience Projects for New Jersey Coasts and Oceans.	\$480,000
NOAA’s Northeast Fisheries Science Center	Planning for the Future of Maine’s Lobster Fishery and Right Whale Protections.	\$200,000
Northern Illinois University	Understanding and Mitigating Future Weather and Climate Risks to Agriculture.	\$660,000

Recipient	Project	Amount
Oceans Initiative	Targeted Acoustic Startle Technology (TAST) at the Ballard Locks.	\$322,000
Oregon Department of Fish and Wildlife	Whale Entanglement Risk Reduction Research	\$100,000
San Diego Unified Port District	Habitat-Friendly Shoreline Structures	\$1,000,000
San Jose State University Research Foundation	Wildfire Interdisciplinary Research Center	\$1,150,000
Texas State University	Texas State University Meadows Center Climate Change Impact on Water Initiative.	\$2,000,000
The Hawai'i Department of Land and Natural Resources, Division of Aquatic Resources.	Waikiki Marine Life Conservation District Coral Restoration.	\$415,000
The Marine Mammal Center	Emergency Marine Mammal Field Response, Research, and Rehabilitation.	\$500,000
The Nature Conservancy Hawai'i	Putting People to Work Supporting Community-Based Co-Management of Coastal Resources in Hawai'i.	\$500,000
The Nurture Nature Center	CREATE Resilience Research and Community Learning Hub.	\$140,000
The Regents of the University of California, Scripps Institute of Oceanography.	Mobile LiDAR System	\$800,000
Town of Hempstead, New York	Marine Nature Study Area	\$130,000
University of Alaska Anchorage	Engaging Diverse Communities in Stewardship of Wild Salmon in Cook Inlet.	\$750,000
University of Hawai'i	Moku o Lo'e Marine Laboratory Refuge Eco-Friendly Sea Wall Research.	\$200,000
University of Maine	Maine Climate Coordination Center	\$990,000
University of Rhode Island	University of Rhode Island Integrated Plastics Research.	\$1,000,000
University of South Florida	Observing Infrastructure to Address Flooding Risks due to Climate Change at the Community Level.	\$2,000,000
University of Wisconsin-Madison, Space Science and Engineering Center.	Next Generation Scanning High-Resolution Interferometer Sounder (S-HIS) Aircraft Instrument.	\$1,200,000
Washington Department of Fish and Wildlife	Columbia River Pinniped Removal	\$892,000
Waterfront Alliance, Inc.	Flushing Meadows Corona Park: A Hub for Climate Resilience.	\$531,000

PROCUREMENT, ACQUISITION AND CONSTRUCTION

(INCLUDING TRANSFER OF FUNDS)

The Committee recommends a total program level of \$1,998,000,000 for Procurement, Acquisition, and Construction (PAC), of which \$1,985,000,000 is appropriated from the general fund and \$13,000,000 is derived from recoveries of prior year obligations.

The following narrative descriptions and tables identify the specific activities and funding levels included in this Act.

PROCUREMENT, ACQUISITION AND CONSTRUCTION

(In thousands of dollars)

Program	Amount
National Ocean Service:	
National Estuarine Research Reserve Construction	\$4,000
Marine Sanctuaries Construction	4,000
Total, NOS-PAC	8,000
Office of Oceanic and Atmospheric Research:	
Research Supercomputing/CCRI	53,500
National Weather Service:	
Observations	24,000
Central Processing	68,000
Dissemination	9,934

PROCUREMENT, ACQUISITION AND CONSTRUCTION—Continued

(In thousands of dollars)

Program	Amount
Facilities Construction and Major Repairs	17,000
Total, NWS–PAC	118,934
National Environmental Satellite, Data and Information Service:	
Common Ground Services	73,633
Geostationary Earth Orbit	623,247
Low Earth Orbit	512,730
Space Weather	203,506
Systems/Services Architecture and Engineering	68,500
Satellite CDA Facility	2,450
Total, NESDIS–PAC	1,482,066
Mission Support:	
NOAA Construction	43,000
Office of Marine and Aviation Operations:	
Fleet Capital Improvements and Technology Infusion	95,500
Vessel Recapitalization and Construction	75,000
Aircraft Recapitalization and Construction	120,000
Total, OMAO–PAC	290,500
Total, Procurement, Acquisition and Construction	\$1,998,000

Research Supercomputing.—The Committee recognizes the importance of supercomputing capacity to further research efforts regarding weather and climate modeling and therefore recommends \$53,500,000 for OAR Research Supercomputing.

Quarterly Satellite Reports.—The Committee directs the Department of Commerce to continue to provide oversight of NOAA's satellite programs as directed in fiscal year 2021. NOAA shall also continue to provide quarterly briefings to the Committee on all NOAA satellite programs not later than 30 days after the end of each quarter, consistent with prior years.

America's Next Generation Weather Satellite System.—The Committee supports NOAA's next generation weather architecture plan, as developed through the NOAA Satellite Observing System Architecture (NSOSA) study and recognizes that many of that study's recommendations are included in the request. The recommendation directs NOAA to provide the Committee with a five-year budget plan that outlines how it intends to fully develop NSOSA. This plan shall be submitted to the Committee not later than 270 days after the enactment of this Act.

Commercial Data.—The Committee provides \$17,000,000 for the purchase and piloting of commercial weather data. Within these funds and consistent with direction from the Promoting Research and Observations of Space Weather to Improve the Forecasting of Tomorrow (PROSWIFT) Act, the Committee provides up to \$5,000,000 for a Commercial Space Weather Data Pilot for NOAA to collaborate with commercial companies for the testing and analysis of space weather data.

NOAA Construction.—There is significant concern that several NMFS laboratories will soon be unable to perform basic scientific

functions, given the age of the infrastructure, state of disrepair, and changing physical environments in which they are located. The Committee therefore directs NOAA, not later than 180 days after the enactment of this Act, to provide the Committee with a five-year budget framework to address regional facility modernization planning and redevelopment of priority labs in the Northwest, Northeast, and Southeast regions. NOAA is further encouraged to initiate the planning process, given the distressed state of these facilities, to help facilitate a competitive solicitation process for proposals from academic and nonprofit partners to co-locate NMFS laboratories, as a means of leveraging research efforts and enhancing scientific capabilities.

Vessel Recapitalization and Capital Improvements.—The Committee reaffirms its support for NOAA’s Fleet Recapitalization Plan by, as in prior fiscal years, providing the requested amount for Vessel Recapitalization. The Committee expects that NOAA will ensure that these new vessels facilitate the reduction of gaps in mission coverage as current ships fall into disrepair or are decommissioned. During the recapitalization process, NOAA is encouraged to evaluate its fleet plan regularly and consider cost-effective alternatives such as vessel leasing or chartering for meeting NOAA’s mission requirements. The recommendation also includes \$63,000,000 for the midlife maintenance of the NOAA Ship *Ronald H. Brown*. The Committee directs NOAA, in all future budget submissions to Congress, to detail all operational and maintenance requirements in addition to capital requirements of vessels and aircraft to maintain the optimal operational tempo necessary to meet NOAA’s missions.

Hurricane Hunters.—The recommendation includes an increase of \$100,000,000 above the fiscal year 2021 enacted level for hurricane hunter aircraft. These funds shall be used to: (1) complete the outfitting with scientific equipment of the recently acquired Gulfstream 550; (2) perform the service depot level maintenance for the P-3 Orion hurricane hunter aircraft; and (3) exercise the contract option to acquire a second Gulfstream 550 to support hurricane surveillance and other missions.

PACIFIC COASTAL SALMON RECOVERY

The Committee provides \$65,000,000 for Pacific Coastal Salmon Recovery.

FISHERMEN’S CONTINGENCY FUND

The Committee recommends \$349,000 for the Fishermen’s Contingency Fund, which is the same as fiscal year 2020. This Fund is available to compensate U.S. commercial fishermen for damage or loss caused by obstructions related to oil and gas exploration, and is derived from fees collected by the Secretary of the Interior.

FISHERIES FINANCE PROGRAM ACCOUNT

The Committee recommends language under this heading limiting obligations of direct loans to \$24,000,000 for Individual Fishing Quota loans and \$100,000,000 for traditional direct loans.

DEPARTMENTAL MANAGEMENT

The Committee recommends \$252,587,000 for Departmental Management (DM), \$124,464,000 above fiscal year 2021 and \$41,092,000 below the request. This amount includes funding for DM Salaries and Expenses, the Renovation and Modernization of the Herbert C. Hoover Building, the Department of Commerce Nonrecurring Expenses Fund, and the Office of Inspector General.

PPE Filter Industrial Base Expansion Initiative.—The Committee recognizes that during the COVID–19 global pandemic, the Nation has experienced a severe gap in manufacturing and supply chain industrial base to produce and deliver Personal Protective Equipment (PPE) to our military, first responders, medical and industrial workers. The Committee supports efforts to bolster the domestic production, including the supply chain, of PPE. The Committee further notes the proposal to establish a new office within the Department to support and monitor domestic manufacturing capacity and supply chains of products that are necessary for the health, safety, and security of our Nation. As part of any efforts to support domestic manufacturing and supply chains, the Committee directs the Department to prioritize the production of PPE as among the most critical of such products as evidenced by the COVID–19 pandemic.

EOP Office of Manufacturing and Industrial Innovation.—The Committee appreciates the engagement between the Administration and Congress to elevate manufacturing to the highest levels within the Executive Office of the President through the creation of an Office of Manufacturing and Industrial Innovation. Given the Department of Commerce’s jurisdiction over existing manufacturing programs and initiatives, the Committee highlights the importance of robust participation and engagement with the Administration’s efforts to reassert America’s manufacturing legacy, especially in strategies to re-shore critical manufacturing and further advanced manufacturing.

Human Rights Violations.—The Committee is concerned with violence and threats shown towards human rights activists around the world, and notes some of this has occurred in nations with which the United States has trade agreements with enforceable protections. The Committee encourages the Department to more actively engage with trade partner nations, alongside the U.S. Trade Representative, to end these human rights violations and report to the Committee no later than 90 days after enactment of this Act on enforcement actions it has taken to promote compliance with labor and environmental obligations.

Data Collection in U.S. Territories.—Executive Order 13985, “Advancing Racial Equity and Support for Underserved Communities Through the Federal Government”, directed Federal agencies to address existing gaps in access to Federal programs among historically underserved communities. The Committee directs the Department provide the Committee, no later than 180 days after the date of enactment of this Act, an action plan for bringing all of the U.S. territories fully into the programs and surveys of data collection managed by agencies such as BEA and the Census Bureau on the same terms as States. The plan should include a specific timeline for each territory and cost estimates for implementation. The Committee recognizes the prior work done by the Department related

to Puerto Rico in this area in compliance with recommendations from the 2016 Bipartisan Congressional Task Force on Economic Growth in Puerto Rico and expects the plan to include updates on any progress related to survey and data expansion for Puerto Rico as well as any revisions to cost assumptions previously reported to the Committee.

Regional Biosecurity Plan.—The Department shall continue to submit a report alongside its annual budget justifications describing the activities of the Department during the prior fiscal year to implement the *Regional Biosecurity Plan for Micronesia and Hawaii*—a strategic plan developed jointly by the Department and other Federal and non-Federal entities to prevent and control the introduction of invasive species in the U.S. Pacific region. The report shall include an update of the Departmental activities accomplished in implementation of the plan and next steps and planned activities for further execution of the plan, including estimates of funding that will be obligated toward the implementation and future year requirements.

Remanufactured Products and Reclaimed Materials.—The Committee notes that House Report 116–455 directed the Department to study strategies to strengthen regional and local remanufacturing markets, and urges the Department to provide the results of this study to the Committee no later than 60 days after the enactment of this Act. The Committee further directs the Department, in conjunction with the National Advisory Council on Innovation and Entrepreneurship, to build on the information gathered within this report to study strategies to safely extract cobalt, copper, nickel, and other critical minerals from industrial and electronic waste streams, and make recommendations for developing regional or local markets to encourage domestic, responsible, and sustainable sources of reclaimed critical minerals.

Solid Sodium Cyanide Briquettes.—The Committee is aware that the Department of Homeland Security (DHS) has an ongoing investigation, in coordination with the Environmental Protection Agency and the Department of Transportation, regarding the national security, health, and safety implications of imports of solid sodium cyanide briquettes as described in the explanatory statement accompanying Public Law 116–260. The Committee encourages the Secretary of Commerce to make Department resources available, upon request, to support this ongoing investigation.

Economic Assessment of Reducing Carbon Emissions from Public Schools.—The Committee recognizes the importance of reducing carbon dioxide and other greenhouse gas emissions and the new target for the United States to achieve a 50 percent reduction from 2005 levels in economy-wide net greenhouse gas pollution by 2030. The Committee recognizes the Secretary of Commerce is one of many Departmental leaders on the National Climate Task Force established through Executive Order 14008, “Tackling the Climate Crisis at Home and Abroad”, and in this role will coordinate, alongside the Secretaries of Labor and Energy, the development of a comprehensive plan to create jobs and stimulate clean energy industries. As part of these ongoing efforts, the Committee strongly encourages the Department of Commerce, in consultation with the Departments of Energy, Education, and Labor, to conduct a study assessing the economic impact on the domestic clean energy and

energy efficiency sectors of making all public school facilities net zero-carbon emitting by 2030, including projected job growth, benefits to students, teachers, and schools, and recommendations for implementation. The Committee recommends the Department publish a report on its findings from this study on its publicly available website within 30 days following the conclusion of the study.

Interstate Commerce.—The Committee remains concerned about the Electronic Export Information (EEI) requirements located in 15 CFR Part 30, which mandate reporting for certain goods between the States and Puerto Rico. The Committee understands that the Department, in coordination with the Government of Puerto Rico, established a working group to explore alternative options, and that the Census Bureau is evaluating public comments received through a Federal Register Notice concerning the overall impact of the removal of EEI filing requirements for shipments between the United States and Puerto Rico and the U.S. Virgin Islands. The Committee reminds the Department that the 2016 Bipartisan Congressional Task Force on Economic Growth in Puerto Rico recommended the Department conduct a thorough evaluation of its regulations requiring EEI filings and assess alternative data sets that could be used without modification. The Committee looks forward to receiving the report directed in House Report 116–455 on the analysis of alternatives and timeline for implementation.

Congressional Budget Justification Materials.—The Committee remains frustrated with the piecemeal rollout of congressional budget justification materials by the Department. These delays hamper the Committee’s ability to review the Department’s budget request holistically. The Committee directs the Department, in coordination with OMB, to ensure that all materials are provided in a timely manner following the release of the budget, and that the justification materials are submitted cohesively.

Investigations and Threat Management Service Division.—The Committee remains concerned by a recent Washington Post investigation published in May 2021 that unearthed troubling evidence that the Investigations and Threat Management Service (ITMS) Division within the Office of Intelligence and Security had been engaging in poorly managed law enforcement functions that far exceeded the scope of the unit’s legal authority, with little internal oversight. The Committee understands that the Department suspended ITMS investigative operations, and that any new investigations must be approved by the Office of General Counsel on a case-by-case basis. The Committee appreciates the Department’s efforts to treat this matter seriously and directs the Department to brief the Committee on its findings when internal reviews have been completed.

SALARIES AND EXPENSES

The Committee recommends \$87,500,000 for DM Salaries and Expenses, \$14,500,000 above fiscal year 2021 and \$4,246,000 below the request. The recommendation does not assume the adjustment to base for certain positions that are not currently funded. The recommendation includes the requested \$5,783,000 increase to support the Department’s implementation of Executive Order 13873, “Securing the Information and Communications Technology and Services Supply Chain”, alongside the investments provided to BIS and

NTIA. The Committee understands the important role the Department will play in protecting Americans' sensitive personal data from collection and utilization by foreign adversaries through connected software applications. However, the Committee does not support providing this funding to the Office of Intelligence and Security, as requested, and instead recommends the funds be managed through the Office of the Secretary.

The recommendation assumes the Department will assume funding for the Office of Native American Business Development in compliance with the Indian Community Economic Enhancement Act (Public Law 116–261).

RENOVATION AND MODERNIZATION

The Committee recommends \$1,100,000 for the salaries and expenses needed to continue the operation of the renovation project of the Herbert C. Hoover Building.

NONRECURRING EXPENSES FUND

(INCLUDING TRANSFER OF FUNDS)

The Committee recommends \$126,900,000 for the Nonrecurring Expenses Fund that was established in the fiscal year 2020 Consolidated Appropriations Act. The recommendation includes the requested new authorities for the Department to address upgrades to cybersecurity and provides \$106,900,000 for these purposes. The Committee understands that this funding will enable the Department to employ a “whole of Commerce” approach to mature cybersecurity practices for protecting high value data and network infrastructures, acquiring tools to increase the identification of cybersecurity risks on an ongoing basis, prioritizing those risks based on potential impacts, and enabling cybersecurity personnel to mitigate the most significant problems first. The Department is directed to review whether these expenses are better positioned in the components and to ensure future budget justifications clearly highlight these investments. The Department is encouraged both to develop a clear process for the bureaus to advocate for their cybersecurity requirements and to brief the Committee on its implementation plans no later than 30 days after enactment of this Act. Should transfers be necessary, the Committee directs the Department to provide these notifications in one package so the Committee may evaluate the Department's requirements as a whole.

The recommendation includes the \$20,000,000 requested for the Department's efforts to modernize its financial systems through Business Application Solutions. The Committee understands that the Department is evaluating how it can standardize appropriations and periods of availability across the Department for more consistent planning, programming, budgeting, and execution. The Committee looks forward to receiving the Department's analysis as directed in House Report 116–101.

OFFICE OF INSPECTOR GENERAL

The Committee recommends a total of \$46,463,000 for the Office of Inspector General (OIG), which includes the requested transfers for oversight activities from USPTO, the Census Bureau, and NOAA PAC, and recommends a direct appropriation of

\$37,087,000. Additionally, \$2,000,000 is derived from the Public Safety Trust Fund for oversight of FirstNet. The Committee expects the OIG to continue its oversight work on cybersecurity, satellite procurements, telework, patent quality, and the work of the Census Bureau.

GENERAL PROVISIONS—DEPARTMENT OF COMMERCE

(INCLUDING TRANSFER OF FUNDS)

The Committee recommends the following general provisions for the Department of Commerce:

Section 101 makes funds available for advanced payments only upon certification of officials designated by the Secretary that such payments are considered to be in the public interest.

Section 102 makes appropriations for the Department available for hire of passenger motor vehicles, for services, and for uniforms and allowances as authorized by law.

Section 103 provides the authority to transfer funds between Department of Commerce appropriations accounts and require 15 days advance notification to the Committees on Appropriations for certain actions.

Section 104 extends congressional notification requirements for NOAA satellite programs.

Section 105 provides for reimbursement for services within Department of Commerce buildings.

Section 106 clarifies that grant recipients under the Department of Commerce may continue to deter child pornography, copyright infringement, or any other unlawful activity over their networks.

Section 107 provides the NOAA Administrator with the authority to avail NOAA of needed resources, with the consent of those supplying the resources, to carry out responsibilities of any statute administered by NOAA.

Section 108 prohibits the National Technical Information Service from charging for certain activities.

Section 109 authorizes NOAA to receive payments from other entities to defray some costs of permitting and regulatory activities.

Section 110 provides authority for the programs of the Bureau of Economic Analysis and the Bureau of the Census to enter into cooperative agreements in order to assist in improving statistical methodology and research.

Section 111 removes the requirement for matching funds for amounts provided in this Act through the Manufacturing Extension Partnership.

Section 112 allows the Secretary of Commerce to waive the cost sharing requirements for funds provided in this Act under sections 306, 306A, and 315 of the Coastal Zone Management Act of 1972.