

*Facilities Report.*—NIST is directed to contract with an independent entity to develop a report that assesses the comprehensive capital needs of NIST’s campuses. The report, at a minimum, should identify facilities in greatest need of repair, describe the work needed to bring them up to current standards, and include cost estimates for each project. NIST shall provide the report with its recommendations to the Committees no later than 1 year after the date of the contract agreement between NIST and the contracted entity.

#### NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

*Coastal Inundation Forecasting and Resilience.*—House direction regarding Coastal Inundation Forecasting and Resilience is modified to direct the National Oceanic and Atmospheric Administration (NOAA), rather than the Office of Oceanic and Atmospheric Research, to develop and initiate a cross-line office research agenda as described in the House report. As part of this effort, NOAA shall consider the establishment of a Cooperative Institute for Coastal Resilience and Adaptation that could benefit existing coastal resilience programs by providing additional research, data collection, experience, and strengthened relationships with institutions conducting coastal resilience and adaptation research and applied science activities.

#### OPERATIONS, RESEARCH, AND FACILITIES

##### (INCLUDING TRANSFER OF FUNDS)

The agreement includes a total program level of \$4,103,971,000 under this account for NOAA’s coastal, fisheries, marine, weather, satellite, and other programs. This total funding level includes \$3,840,300,000 in direct appropriations, a transfer of \$246,171,000 from balances in the “Promote and Develop Fishery Products and Research Pertaining to American Fisheries” fund, and \$17,500,000 derived from recoveries of prior year obligations.

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

*National Ocean Service (NOS).*—\$619,700,000 is for NOS Operations, Research, and Facilities.

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

Program	Amount
<b>Navigation, Observations and Positioning</b>	
Navigation, Observations and Positioning.....	\$162,500
Hydrographic Survey Priorities / Contracts.....	32,000
IOOS Regional Observations.....	40,500
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Navigation, Observations and Positioning.....	235,000
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<b>Coastal Science and Assessment</b>	
Coastal Science, Assessment, Response and Restoration.....	86,500
Competitive Research.....	21,000
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Coastal Science and Assessment.....	107,500
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<b>Ocean and Coastal Management and Services</b>	
Coastal Zone Management and Services.....	46,700
Coastal Zone Management Grants.....	78,500
National Oceans and Coastal Security Fund.....	34,000
Coral Reef Program.....	33,000
National Estuarine Research Reserve System.....	28,500
Sanctuaries and Marine Protected Areas.....	56,500
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Ocean and Coastal Management and Services.....	277,200
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Total, National Ocean Service, Operations, Research, and Facilities.....	\$619,700

*Navigation, Observations and Positioning.*—The agreement rejects all of the proposed decreases within Navigation, Observations and Positioning and directs NOS to follow prior year direction adopted in Public Law 116–93, on the distribution of Geospatial Modeling Grants.

*Hydrographic Research and Technology Development.*—The agreement supports the intended use of funds requested for Hydrographic Research and Technology Development and provides an additional \$1,000,000 above the fiscal year 2020 level for these purposes. In addition, the agreement provides \$2,000,000 above the request for NOAA to continue supporting joint ocean and coastal mapping centers in other areas of the country as authorized by the

Omnibus Public Land Management Act of 2009 (Public Law 111–11). Additional funding is provided for the designation of additional joint ocean and coastal mapping centers in order to provide steady funding for existing centers. NOAA shall not decrease funding levels for any existing centers.

*Ocean Mapping and Coastal Charting.*—Within Navigation, Observations and Positioning, the agreement provides \$2,000,000 for NOS to coordinate and implement an interagency mapping, exploration, and characterization strategy for the U.S. Exclusive Economic Zone, as well as the Arctic and sub-Arctic shoreline and nearshore of Alaska. For the latter activity, NOAA shall work closely with the Alaska Mapping Executive Committee and the State of Alaska to ensure that mapping efforts are coordinated and adhere to the priorities identified in the Alaska Coastal Mapping Strategy.

*Precision Navigation.*—As NOS concludes its two ongoing precision navigation pilots in fiscal year 2021, NOAA is directed to begin making preparations to commence additional precision navigation projects. The agreement supports the consideration of all U.S. seaports identified in the February 2020 Precision Navigation Socioeconomic Study for inclusion in the next precision navigation project and directs that preference shall be given to U.S. seaports that have immediate access to multiple interstate and railroad systems and at least 10,000 miles of inland waterway connections, are ranked within the top 15 by total tonnage of goods shipped and received, and which are currently performing or scheduled to perform channel expansion to accommodate larger draft vessels or already have such capacity.

*Coastal Survey Data.*—NOS is directed to submit a report to the Committees, within one year of enactment of this Act, on progress it has made toward conducting comprehensive coastal survey work in Alaska. The report shall detail steps taken to implement NOAA’s strategy, developed pursuant to section 3 of the 2019 Presidential Memorandum on Ocean Mapping of the United States, for mapping the Arctic and sub-Arctic shoreline and nearshore of Alaska.

*Modernization of the Vertical Datum.*—The agreement provides no less than the fiscal year 2020 enacted level for the Gravity for the Re-Definition of the American Vertical Datum initiative within the Geodesy program.

*Hydrographic Surveys and Contracts.*—For fiscal year 2021, NOS shall follow prior year direction adopted in Public Law 116–93, on the following topics: Hydrographic Surveys and Contracts and Hydrographic Charting in the Arctic.

*Integrated Ocean Observing System (IOOS).*—The agreement includes \$40,500,000 for IOOS Regional Observations and directs NOS to expand the regional underwater profiling gliders program consistent with House direction as well as for disaster response and the forecasting of freshwater and marine water quality.

*Coastal Science, Assessment, Response and Restoration.*—The agreement provides no less than the fiscal year 2020 enacted level for the Gulf of Mexico Disaster Response Center (DRC), and directs NOS to continue to prioritize full staffing of the DRC in fiscal year 2021. Additionally, the recommendation includes \$1,000,000 above the fiscal year 2020 enacted level for the Disaster Preparedness Program.

*Marine Debris Program.*—The agreement provides no less than \$9,000,000 for the Marine Debris program and adopts House language on the topic. NOS is encouraged to prioritize funding for projects in urban communities that support waterway cleanup efforts to remove any and all forms of marine debris, projects in rural and remote communities that lack infrastructure to address their marine debris problems, and projects that address the impact of marine debris in fresh water systems that are a source of drinking water.

*National Centers for Coastal Ocean Science (NCCOS).*—The agreement provides \$47,000,000 for NCCOS. NOS is directed to consider expanding NCCOS’s efforts related to coastal sustainability and resilience, including assessing the effects of land-use on coastal and marine resources, measuring societal benefits of coastal restoration and green infrastructure, encouraging citizen science monitoring of coastal and marine resources, and assessing the adaptive capacity of human communities to coastal hazards.

*Harmful Algal Blooms (HABs).*—Across NOS, the recommendation includes an additional \$5,500,000 for HABs work as compared to fiscal year 2020. House direction and an increase of \$1,000,000 above the fiscal year 2020 enacted level is adopted for NCCOS’s HABs work. The agreement also adopts House direction and provides \$2,500,000 to continue and expand the IOOS-sponsored pilot programs launched in fiscal year 2020 to enhance the monitoring and detection of HABs. In addition, the agreement provides up to \$1,000,000, from

within funds allocated to the IOOS-sponsored pilot programs, for IOOS to establish an initial HABs monitoring and detection test bed in the Gulf of Mexico. The agreement expects that the test bed will deploy, operate, and test a range of technologies and also determine the data management and dissemination needs for operating and maintaining a complete end-to-end HABs detection and monitoring system. The agreement encourages the testbed to be established in an area that has experienced HABs in recent years and which has existing expertise, infrastructure, and collaboration between IOOS, an IOOS regional association, and academic and State partners that can be readily leveraged.

The agreement provides \$21,000,000 for Competitive Research, including not less than \$13,000,000 for HABs research, and adopts House direction for these funds. From within these funds, the agreement also provides up to \$2,000,000 to explore innovative methods to increase monitoring and detection of HABs in freshwater systems by partnering with a consortium of academic institutions with expertise in unmanned aircraft systems.

*Sea Level Rise and Coastal Resilience.*—The agreement provides an increase of \$2,000,000 above the fiscal year 2020 enacted level within Coastal Science, Assessment, Response and Restoration to address the increasing risk of coastal inundation due to sea level rise consistent with House direction. From within these increased funds, up to \$1,000,000 shall be applied to the new Hydrology and Water Resources Cooperative Institute described in the National Weather Service section of this explanatory statement to accelerate the Integrated Water Prediction (IWP) program and inform NOAA’s broader efforts on coastal inundation and resilience.

*Regional Data Portals.*—Within funding provided for Coastal Zone Management and Services, \$2,500,000 is for the regional ocean partnerships, or their equivalent, to enhance their capacity for sharing and integration of Federal and non-Federal data to support regional coastal, ocean, and Great Lakes management priorities.

*Ocean Economy of the Territories.*—The agreement adopts House direction and funding for NOAA to include the five U.S. territories in the estimate of the ocean economy.

*Aquatic Invasive Species.*—NOAA is directed to establish the Coastal Aquatic Invasive Species Mitigation Grant Program and Mitigation Fund, as authorized by the Vessel Incident Discharge Act of 2018 (Public Law 115–282).

*National Oceans and Coastal Security Fund.*—The agreement provides \$34,000,000 for the National Oceans and Coastal Security Fund, also known as the Title IX Fund or the National Coastal Resilience Fund. Of the amount provided, not less than \$3,000,000 shall be for project planning and design.

*Coral Reefs.*—The recommendation provides \$33,000,000 for the Coral Reef Program and adopts the House language. Within these funds, the agreement provides up to \$8,500,000 for NOS to work with academic institutions and non-governmental research organizations to establish innovative active restoration projects to restore degraded coral reefs, such as projects like “Mission: Iconic Reef.”

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

*Papahānaumokuākea Sanctuary Designation.*—NOAA is directed to initiate the process under the National Marine Sanctuaries Act (16 U.S.C. 1431 et seq.) to designate the Papahānaumokuākea Marine National Monument as a National Marine Sanctuary to supplement and complement, rather than supplant, existing authorities. NOAA shall provide the Committees an update on this designation before the end of fiscal year 2021.

*National Marine Fisheries Service (NMFS).*—\$964,862,000 is for NMFS Operations, Research, and Facilities.

## NATIONAL MARINE FISHERIES SERVICE

### OPERATIONS, RESEARCH, AND FACILITIES

(in thousands of dollars)

Program	Amount
<b>Protected Resources Science and Management</b>	
Marine Mammals, Sea Turtles, and Other Species.....	\$125,164
Species Recovery Grants.....	7,000
Atlantic Salmon.....	6,500
Pacific Salmon.....	67,000
Protected Resources Science and Management.....	205,664
<b>Fisheries Science and Management</b>	
Fisheries and Ecosystem Science Programs and Services.....	146,927
Fisheries Data Collections, Surveys, and Assessments.....	175,927
Observers and Training.....	55,468
Fisheries Management Programs and Services.....	123,836
Aquaculture.....	17,500
Salmon Management Activities.....	62,050
Regional Councils and Fisheries Commissions.....	41,500
Interjurisdictional Fisheries Grants.....	3,365
Fisheries Science and Management.....	626,573
Enforcement.....	75,000
Habitat Conservation and Restoration.....	57,625
Total, National Marine Fisheries Service, Operations, Research, and Facilities..	\$964,862

For fiscal year 2021, NMFS shall follow prior year Senate direction and, if applicable, funding levels adopted by Public Law 116-93 on the following topics: Promote and Develop Fisheries Products and Research Funding Transfer, Saltonstall-Kennedy Grant Program, NMFS Staffing, Hawaiian Monk Seal and Sea Turtles, Species Recovery Grants, Atlantic Salmon, Pacific Salmon, American Lobster and Jonah Crab Research, Electronic Monitoring and Reporting, International Fisheries Management Coordination, Bycatch Reduction, Atlantic Herring Stock Assessment, and Seafood Reporting. The agreement also adopts House language

disbursed

on Foreign Fisheries and provides \$750,000 for this work, but does not adopt House language on Video Review of Electronic Monitoring Data. The agreement maintains the existing budget structure for Regional Councils and Fisheries Commissions.

*False Killer Whales.*—Within the funding provided for Marine Mammals, Sea Turtles, and Other Species, the agreement includes \$1,000,000 for NMFS to study interactions between the U.S. fishing fleet and false killer whales in the Western Pacific.

*Unusual Mortality Events (UMEs).*—NMFS is directed to submit a report, within 90 days of enactment of this Act, showing how funds from the Unusual Mortality Event Fund have been ~~dispersed~~ during UMEs active within the past 10 years. The report shall include what specific services and incurred costs have been financed or reimbursed by NOAA as well as an overview of services provided by Tribal partners, including, but not limited to, carcass retrieval and shipment, regardless of whether or not compensation was provided for these services or related expenses were reimbursed.

*North Atlantic Right Whale.*—The agreement rejects the proposed reduction and provides an additional \$2,000,000 above the fiscal year 2020 enacted level within Marine Mammals, Sea Turtles, and Other Species for North Atlantic right whale-related research, development, and conservation efforts. These additional funds shall be spent as outlined in the House language. Within funding provided, not less than \$1,000,000 shall be to support the existing pilot program to develop, refine, and field test innovative lobster fishing gear technologies as directed in Public Law 116-93.

NOAA shall continue to support disentanglement, stranding response, necropsy activities, aerial surveys, and passive acoustic monitoring in the waters of the Atlantic Ocean, and is encouraged to develop a habitat suitability index and long-term tagging methods. Further, NMFS is directed to continue to work in coordination with counterparts in the Canadian government to reduce risks throughout the range of the North Atlantic right whale.

In any rulemaking regarding the North Atlantic right whale, NMFS shall incorporate recent research on the species' primary food source, *Calanus finmarchicus*, which indicates these zooplankton have decreased in abundance in the Gulf of Maine since 2010. NOAA is also directed to fully evaluate the feasibility, as well as the safety and economic implications, of any



management actions relating to the North Atlantic right whale. Further, the North Atlantic right whale risk reduction target proposed by NMFS depends heavily on how unknown entanglements are assigned to individual fisheries and countries. Any misattributions of whale entanglements that NMFS has acknowledged must be considered by NMFS and incorporated in relevant rulemaking.

*Risk Reduction Credit.*—Should NOAA award risk reduction credit to any State as part of the current North Atlantic right whale take reduction management process, the agency shall also ensure that other States have the opportunity to receive credit for past management actions.

*Assessment of Fishing Interference.*—The agreement directs NMFS to undertake a review, no later than 90 days after enactment of this Act, to assess and better understand the occurrence of conflicts between dolphins and sharks and commercial, for-hire, and recreational fishing vessels in the Gulf of Mexico and South Atlantic. The review should provide: (1) a quantification, to the extent practicable within existing resources, of the degree to which dolphins and sharks interfere with commercial, charter, and recreational fishing; and (2) recommendations for non-lethal methods to deter dolphins and sharks from interfering with commercial, for-hire, and recreational fishing, in accordance with existing laws. NMFS shall report to the Committees on the results of the review no later than one year after the review is commenced. In conducting the review, NMFS shall consult with the Marine Mammal Commission, the Gulf of Mexico Fishery Management Council, the South Atlantic Fishery Management Council, the Atlantic Highly Migratory Species Advisory Panel, and conduct outreach to commercial, for-hire, and recreational fishermen.

*Northeast Groundfish Research.*—Within funding provided for Fisheries and Ecosystem Science Programs and Services, the agreement provides \$2,500,000 for Northeast groundfish research, with a focus on the effects of changing climatic conditions and warming waters on the fishery, including stock health and natural mortality. NOAA is further encouraged to prioritize research regarding relative gear efficiency, stock boundaries, and other topics that can improve groundfish stock assessments in the next five years. Within funding provided, \$500,000 shall be obligated to develop methods for improving and increasing utilization of the full range of available fishery-dependent data to better inform groundfish stock abundance estimates. This should include a review of statistical strengths and weaknesses of existing bottom trawl surveys

for different species and the development of alternative data sources and sampling methods that will augment and improve groundfish stock assessments as recommended in the 2020 report of the Groundfish Trawl Task Force. This funding is intended to support new and innovative research, including by the Northeast Fisheries Science Center (NEFSC), separately by, or in collaboration with, outside partners such as higher education institutions or State agencies, and in cooperation with the fishing industry.

*Fisheries Information Systems Grants.*—The agreement includes no less than the fiscal year 2020 enacted amount for Fisheries Information Systems grants.

*Cooperative Research.*—The agreement provides no less than \$13,000,000 for the Cooperative Research program. NMFS is directed to prioritize trawl surveys that are designed and conducted cooperatively with industry and States to provide empirical measures of fish stock abundance, such as swept area biomass surveys. NMFS is encouraged to prioritize studies conducted cooperatively with States, industry, and nonprofit institutions using video systems deployed in commercial trawl nets for surveys. NMFS is also encouraged to focus on improving understanding of natural mortality and relative gear efficiency to ensure accurate measures of catchability.

The NEFSC is directed to consider prioritizing cooperative research efforts for species that are experiencing shifts in range and population density due to warming waters and other global environmental changes. Further, NMFS is encouraged to prioritize data collection that may be affected by offshore wind energy development.

*Gulf Reef Fish.*—Within funding for Fisheries and Ecosystem Science Programs and Services, the agreement includes no less than \$2,000,000 for NMFS to support Gulf reef fish surveys, research, and sampling. NMFS is also encouraged to continue to collaborate with NOAA's Office of Oceanic and Atmospheric Research on the agency-independent reef fish population assessments funded within Sea Grant.

*State Management for Recreational Red Snapper.*—Within the amount provided for Fisheries Data Collections, Surveys, and Assessments, the agreement includes \$5,000,000 for NMFS to continue to work with the Gulf States to ensure successful implementation of State management for recreational red snapper. The agreement reiterates past direction that these

efforts shall be a top priority for NOAA, and that such efforts shall be done in coordination with the Gulf States.

Many are concerned by the results of recent efforts by NMFS to calibrate each Gulf State's catch data program to catch data derived by the Marine Recreational Information Program (MRIP), which in some cases resulted in significant discrepancies between the Federal and State catch statistics for red snapper. The discrepancies are large enough that it calls into question whether MRIP is providing the best account of the fishery, especially when available data from the Gulf States suggest otherwise. Therefore, before making any related regulatory changes, NMFS is directed to address the question of which data collection system (i.e., MRIP or the catch data programs administered by the Gulf States) are providing the best estimates of recreational red snapper catch in the Gulf of Mexico. The agreement includes \$2,000,000, from within the funding provided to support State management of red snapper, for NMFS to contract with a non-governmental entity with expertise in statistics and fisheries-dependent data collection to provide the following: (1) an independent assessment of the accuracy and precision of both the Federal and State recreational catch data programs in the Gulf of Mexico; (2) recommended improvements to be made to the Federal and State recreational catch data programs in the Gulf of Mexico to improve accuracy and precision; and (3) an independent assessment, based on the results of the two prior items, of how best to calibrate the Federal and State recreational catch data programs in the Gulf of Mexico to a common currency.

*South Atlantic Reef Fish.*—The agreement provides no less than \$1,800,000 with the instructions contained in the House report.

*Data Collection for Recreational Fisheries.*—The agreement includes no less than \$3,500,000 within Fisheries Data Collections, Surveys, and Assessments, to support collaborative programs focused on improving recreational fishery data collection, as articulated in sections 102, 201, and 202 of Public Law 115–405. This funding should focus on assisting States to establish, test, and implement more reliable recreational fishery data collection tools, such as smartphone applications or text messaging supplements. In addition, NMFS is directed to support efforts by the Regional Fishery Management Councils to implement section 102 of Public Law 115–405, including the shared initiative between the Gulf of Mexico and South Atlantic Fishery Management Councils to establish a joint committee.

*Northeast Multispecies Fishery.*—NOAA is directed to fully fund the At-Sea Monitoring costs in the New England groundfish fishery, including sea and shore side infrastructure costs, and shall ensure the costs and benefits of At-Sea Monitoring are commensurate with the gross revenues of vessels in the fishery. The agreement provides no less than the fiscal year 2020 enacted amount within Observers and Training for this purpose. Before obligating any of these funds, NOAA shall provide the Committees with a detailed spending plan. The Committees also look forward to receiving the report requested by Public Law 116–93 outlining the current status of electronic monitoring and reporting technology for the Northeast multispecies fishery.

*North Pacific Observer Coverage.*—Within Observers and Training, the agreement includes no less than \$7,500,000 for the North Pacific Observers Program. This additional funding shall be used to offset observer costs normally paid for by harvesters in fisheries that are undertaking a transition to electronic monitoring and reporting. Additionally, NOAA is encouraged to identify and implement any efficiencies that would mitigate the cost burden shouldered by small vessel operators in the fixed-gear fleet.

*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 logbooks for the federally permitted charter-for-hire sector in the Gulf of Mexico.

*Fisheries Surveys and Offshore Wind.*—The agreement provides \$500,000 within Fisheries and Ecosystem Science Programs and Services to ensure the continuity of fisheries survey data that may be affected by offshore wind energy development and \$500,000 within Fisheries Management Programs and Services to support the permitting process.

*Fisheries Surveys.*— Within funds for Fisheries Data Collections, Surveys, and Assessments, the agreement provides \$1,000,000 above the fiscal year 2020 enacted amount for NMFS fishery and ecosystem research surveys and directs NMFS take the necessary steps to ensure that historical levels of survey coverage are achieved without disruption in fiscal year 2021. At this funding level NMFS is expected to contract no fewer than six surveys for Alaskan bottom trawl surveys and cooperative research, including a survey to capture movement of fish populations out of historic survey areas, and no fewer than four vessels for West Coast groundfish surveys.

*Northwest Fisheries Ecosystem Monitoring System.*—Within funds for Fisheries Data Collections, Surveys, and Assessments, the agreement provides \$500,000 to maintain a time-series monitoring system that includes no less than monthly data collection, analysis, and dissemination of hydrographic and ecological data to inform fishery management on the Northern California Current.

*Western Atlantic Bluefin Tuna (ABFT).*—Many are concerned by NOAA's April 2, 2020, rulemaking to reopen for commercial long-line fishing two gear-restricted areas (GRAs) in the Gulf of Mexico that were previously closed annually during April and May to protect spawning ABFT. The hypothetical basis for this rulemaking—that all of the management measures previously in place for ABFT in the Gulf of Mexico may not be necessary in tandem and that such measures are inhibiting the harvest of other target species—is questioned because of the following facts: (1) the Gulf of Mexico is the primary spawning ground for ABFT, and recovery of the still depleted stock requires that spawning fish be protected; and (2) the management measures implemented in 2015, the Individual Bluefin Quota and time-area closures, have in tandem, not individually, reduced ABFT discards and catch during peak spawning months. Therefore, NOAA is directed to reconsider the decision to open the two GRAs in the Gulf of Mexico. If the status quo is maintained, NOAA shall increase monitoring efforts within the GRAs through 100 percent human observer coverage and by making publicly available all Gulf of Mexico ABFT catch data, broken down both inside and outside the GRAs, on a weekly basis and within one week of catch, during the months of April and May in order to allow for increased oversight to ensure that this rule does not result in the longline fishery exceeding their ABFT catch limits.

*Harmful Drift Gillnets.*—NMFS is encouraged to establish a pilot program to assist fishermen in replacing large-mesh drift gillnets with more sustainable gear and to consider actions to ban the use of drift gillnets in Federal waters off the coast of California.

*Marine Aquaculture.*—The agreement includes no less than \$500,000 in the Aquaculture Program, Project, or Activity (PPA) for NMFS, in collaboration with NOS, to perform activities in support of the identification of at least two aquaculture opportunity areas, as called for in section 7 of the May 7, 2020, Presidential Executive Order on Promoting American Seafood and Competitiveness and Economic Growth. The agreement also provides up to \$500,000 above the

fiscal year 2020 enacted level in the Aquaculture PPA to increase the amount of staff focused on aquaculture at all NMFS fisheries science centers. Within the funding provided, NOAA is encouraged to return staffing levels to those in fiscal year 2010 at the Northeast and Northwest Fisheries Science Centers.

*Regional Pilots in Sustainable Aquaculture.*—The agreement includes \$2,000,000 in the Aquaculture PPA for the NMFS Aquaculture Office to continue the regional aquaculture pilot program, in partnership with the three interstate marine fisheries commissions, to establish partnerships between the seafood industry and community partners that can develop, validate, and deploy economically and environmentally sustainable aquatic farming techniques and regional business practices to grow domestic seafood production. To maximize the impact of these pilot grants, NMFS is encouraged to give priority consideration to promising but less commercially developed technologies, such as those targeting shellfish, seaweed, and other relative newcomers to the domestic aquaculture industry.

In addition, the agreement provides no less than \$2,000,000 for the NMFS Aquaculture Office, in partnership with the Gulf States Marine Fisheries Commission, to partner with a university or consortium of universities to establish a multi-year demonstration pilot of an Integrated Multi-Trophic Aquaculture (IMTA) system in State waters of the Gulf of Mexico, which shall culture native species of finfish, bivalve mollusks, and macroalgae. The pilot is to be for research, training, and educational purposes only and should involve students, fishermen, and farmers, and shall endeavor to inform how to adapt IMTA methods and systems, in an environmentally and ecologically balanced manner, for deployment in warm water environments.

*Salmon Management Activities.*—Within the amount included for Salmon Management Activities, the agreement provides \$39,500,000, an increase of \$4,000,000 above the fiscal year 2020 enacted level, to enable NOAA, the Pacific States, and Tribal communities to continue activities in support of the obligations set forth in the renegotiated annex of the Pacific Salmon Treaty (PST). No less than \$20,000,000 of the funds provided shall be made available to support ongoing and new implementation and mitigation activities for the PST. Before any of these funds may be obligated, NOAA is directed to provide the Committees with a detailed spending plan that is reflective of the funding recommendations produced by the U.S. section of the Pacific

Salmon Commission. In doing so, NOAA is directed to consult with the Pacific States, Tribal communities, and other stakeholders. Further, NOAA is encouraged to minimize, to the extent practicable, the amount of funds withheld for administrative expenses.

*Salmon and Steelhead Monitoring.*—The agreement recognizes that NOAA intends to continue funding research in fiscal year 2021 to monitor mortality of spring Chinook salmon in the Columbia River in order to understand the impacts of marine mammal predation. Not later than 60 days after submission of the President's budget for fiscal year 2022, NOAA is directed to brief the Committees on the research priorities of the Northwest Fisheries Science Center and the prospect of expanding research to include monitoring fall Chinook salmon and steelhead mortality from marine mammals.

*Mitchell Act.*—The agreement rejects the proposed reduction and provides not less than \$22,000,000 for Mitchell Act mitigation hatchery programs, in recognition of the important cultural, ecological, and economic benefits that these programs provide for the people of the Columbia River Basin. NOAA is directed to continue genetic stock identification for salmon recovery and management.

*Interstate Marine Fisheries Commissions.*—Within the amount provided for Regional Councils and Fisheries Commissions, no less than \$1,850,000 shall be for the three Interstate Marine Fisheries Commissions.

*Northeast Lobster Enforcement.*—Within Enforcement, the agreement includes no less than \$750,000 for NMFS, in partnership with the relevant States, Joint Enforcement Agreement partner agencies, and the Atlantic States Marine Fisheries Commission, to establish a pilot cooperative offshore lobster enforcement program. The program shall endeavor to establish multi-year contracts with commercial vessels, which are not participating in the lobster fishery but are capable of hauling deep-set gear, to carry law enforcement officials to oversee inspection of offshore lobster gear. As part of the establishment of the program, NMFS shall consider (1) implementing measures to increase the tracking of vessels participating in the offshore lobster fishery and (2) how the resulting increase in enforcement and/or any enforcement actions (e.g., seizure of illegal gear) could count towards risk-reduction under the North Atlantic right whale take reduction program. NMFS shall report to the Committees in writing on the status of the

program, beginning not later than 180 days after enactment of this Act, and every 90 days thereafter until the program is established.

*Report on Illegal, Unreported, and Unregulated (IUU) Fishing.*—In lieu of House language requesting a report on IUU enforcement and seafood traceability, NMFS is directed to provide a report, within 90 days of enactment of this Act, that summarizes ongoing efforts to prevent the importation of seafood harvested through IUU fishing and address imported seafood fraud. The report should include the following: (1) the volume and value of seafood species subject to the Seafood Import Monitoring Program (SIMP) imported during fiscal year 2020; (2) the enforcement activities carried out under SIMP; (3) the percentage of import shipments subject to SIMP selected for inspection or audit; (4) the number of instances of noncompliance with the SIMP requirements; (5) the seafood species in which such noncompliance were found to be the most prevalent; and (6) such other information that NMFS considers appropriate with respect to SIMP monitoring and enforcing compliance.

*Definition of Illegal, Unreported, and Unregulated Fishing.*—Not later than 90 days after enactment of this Act, NOAA shall revise existing regulations defining IUU fishing, provided in 50 C.F.R 300.201, to be consistent with the definition codified in section 3532(6) of Public Law 116–92.

*Habitat Conservation and Restoration.*—Within Habitat Conservation and Restoration, NOAA is encouraged to include a broader ecosystem-based management philosophy; expand criteria to include recreational species, managed commercial species, and forage species; and prioritize proposals that engage local communities. NOAA should also continue to emphasize the value of partnerships when evaluating grant applications.

*Oyster Restoration.*—The agreement provides \$250,000 above the fiscal year 2020 enacted level within Habitat Conservation and Restoration to support oyster restoration in the Chesapeake Bay.

*Marine National Monuments.*—The Offices of Habitat Conservation and Protected Resources are encouraged to support competitive research and management grants for existing marine national monuments off of the continental United States administered by NMFS, provided such grants are subject to a 100 percent non-Federal match.



Office of Oceanic and Atmospheric Research (OAR).—\$570,590,000 is for OAR Operations, Research, and Facilities.

**OFFICE OF OCEANIC AND ATMOSPHERIC RESEARCH**

**OPERATIONS, RESEARCH, AND FACILITIES**

(in thousands of dollars)

Program	Amount
<b>Climate Research</b>	
Climate Laboratories and Cooperative Institutes.....	\$75,500
Regional Climate Data and Information.....	42,500
Climate Competitive Research.....	64,000
<b>Climate Research.....</b>	<b>182,000</b>
<b>Weather and Air Chemistry Research</b>	
Weather Laboratories and Cooperative Institutes.....	85,500
U.S. Weather Research Program.....	26,500
Tornado Severe Storm Research / Phased Array Radar.....	14,382
Joint Technology Transfer Initiative.....	13,000
<b>Weather and Air Chemistry Research.....</b>	<b>139,382</b>
<b>Ocean, Coastal, and Great Lakes Research</b>	
Ocean Laboratories and Cooperative Institutes.....	36,500
National Sea Grant College Program.....	75,000
Sea Grant Aquaculture Research.....	13,000
Ocean Exploration and Research.....	43,000
Integrated Ocean Acidification.....	15,500
Sustained Ocean Observations and Monitoring.....	45,408
National Oceanographic Partnership Program.....	3,000
<b>Ocean, Coastal, and Great Lakes Research.....</b>	<b>231,408</b>
<b>High Performance Computing Initiatives.....</b>	<b>17,800</b>
<b>Total, Office of Oceanic and Atmospheric Research, Operations, Research, and Facilities.....</b>	<b>\$570,590</b>

The agreement adopts House direction and funding for Atmospheric Baseline Observatories as well as House language and an increase of \$2,500,000 above the fiscal year

2020 enacted level for the Regional Integrated Sciences and Assessments program. Further, the agreement encourages NOAA to increase collaboration with the Department of Energy in its climate research and modeling efforts, including, as appropriate, the sharing of resources and the exchange of detailees, in order to minimize the duplication of efforts and to increase the cross pollination of ideas and research.

*Earth's Radiation Budget.*—The agreement adopts House language and provides \$9,000,000 for Earth's Radiation Budget, and directs OAR to coordinate this work with the National Aeronautics and Space Administration (NASA), as appropriate.

*VORTEX-USA.*—The agreement provides \$7,500,000 to initiate the implementation of a tornado warning improvement and extension program as authorized in the Weather Research and Forecasting Innovation Act of 2017 (Public Law 115–25), and to be known as VORTEX-USA. In developing the program plan and annual budget, as authorized by Public Law 115–25, OAR shall consider all options across the technology readiness scale to reduce the loss of life and economic damage caused by tornadoes, including expanding atmospheric observations, advancing radar technology, and improving the delivery of actionable weather information, and shall include as part of the program plan quantitative goals for improving the prediction of tornadoes by which the Committees can measure the success of any investments. The VORTEX-SE program shall continue and be closely coordinated with this broader initiative, and, within these funds, the agreement provides an increase of no less than \$2,000,000 above the fiscal year 2020 level to expand the VORTEX-SE efforts.

*U.S. Weather Research Program (USWRP).*—The agreement rejects the proposal to cut base funding for USWRP. Within the funding provided for USWRP, no less than \$13,000,000, an increase of \$5,000,000 above the fiscal year 2020 enacted amount, is included for the Earth Prediction Innovation Center (EPIC) and House language on EPIC is adopted. Further, NOAA is expected to finalize and award the EPIC contract in fiscal year 2021, and continue building the community-based infrastructure so that participants can utilize external compute resources, including cloud technologies, to interface with the agency. It is also expected that NOAA will continue to centralize available observations used in operational models in a publicly accessible manner by leveraging cloud technology within the EPIC infrastructure.

Within funding for USWRP, the agreement provides \$1,000,000 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 monitoring methods of violent weather.

*National Sea Grant College Program.*—The agreement provides \$75,000,000 for the National Sea Grant College Program, including an increase of \$2,500,000 as compared to the fiscal year 2020 enacted level for the base program that funds universities in States around the country.

*Fisheries-Related Research.*—The agreement includes \$2,500,000 within Sea Grant to fully fund the project initiated in fiscal year 2020 to develop agency-independent estimates of the abundance of greater amberjack in the Gulf of Mexico. Within the funding provided, the Committee also encourages Sea Grant to establish a regional extension initiative for Gulf of Mexico reef fish.

*American Lobster Research.*—Within funding for the Sea Grant program, the agreement provides \$2,000,000 for American lobster research as directed in Public Law 116–93.

*Green Infrastructure.*—The agreement provides \$500,000 for the Sea Grant program to partner with local, regional, and State governments, as well as with non-governmental organizations, to research innovative techniques and use of low-impact development and green infrastructure practices to mitigate runoff from developed lands that contribute to nutrient-driven cyanobacteria blooms, and otherwise pollute freshwater aquatic systems, especially large lakes.

*Contaminants of Emerging Concern.*—The agreement provides \$500,000 within the Sea Grant program to partner with State agencies and academic institutions to research and monitor contaminants of emerging concern that may cause ecological or human health impacts, including PFAS, in coastal and estuarine waters.

*Microfiber Research.*—The Sea Grant program is encouraged to support interdisciplinary research on the impact of microfiber pollution on aquatic environments that leverages public-private partnerships and focuses on identifying and characterizing microfibers in textile products, as well as determining their impact on aquatic environments and species.

agreement

*Sea Grant Aquaculture Research.*—The agreement provides \$13,000,000 for Sea Grant Aquaculture Research. NOAA is directed to support marine aquaculture research and development in partnership with universities, including with Historically Black Colleges and Universities and Tribal Colleges and Universities. Similar research efforts have led to beneficial outcomes such as the development and commercialization of new technologies to meet the domestic demand for seafood, including finfish, shrimp, and oysters.

*Ocean Exploration and Research.*—The Committee provides \$43,000,000 for Ocean Exploration and Research. Within the funding provided, OAR is directed to accelerate efforts to map and characterize America’s Exclusive Economic Zone and Extended Outer Continental Shelf, including by maximizing the amount of funding provided for the Ocean Exploration Cooperative Institute and supporting competitive awards for deep ocean acoustic research. NOAA is also encouraged to work with the Department of Defense 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.

*National Weather Service (NWS).*—\$1,100,776,000 is for NWS Operations, Research, and Facilities.

NATIONAL WEATHER SERVICE

Operations, Research, and Facilities

(in thousands of dollars)

Program	Amount
Observations.....	\$231,910
Central Processing.....	97,980
Analyze, Forecast and Support.....	537,000
Dissemination.....	78,362
Science and Technology Integration.....	155,524
Total, National Weather Service, Operations, Research, and Facilities.....	\$1,100,776

The agreement does not adopt House language on Data Sharing for Integrated Global Observing System and Global Basic Observing Network and includes up to \$1,000,000 for Ship

Observation Data Buys. For fiscal year 2021, NWS shall follow prior year direction regarding NWS Staffing in Alaska adopted in Public Law 116–93.

*NEXRAD Coverage.*—NOAA is directed to provide the Committees with a follow-up briefing with personnel from NWS and OAR to discuss best options and cost requirements of further supplementing the NEXRAD system with additional sources of observations regularly used by forecasters to predict severe weather in absence of complete radar coverage.

*National Data Buoy Center (NDBC).*—The agreement provides sufficient funding to maintain, at a minimum, NDBC operations at 80 percent data availability. NOAA is directed to provide adequate funding to support maintenance and service of the Tropical Atmosphere/Ocean Array and Deep Ocean Assessment and Reporting of Tsunamis Array across the equatorial Pacific, recognizing the importance of ensuring full tsunami prediction capacity. As part of the fiscal year 2021 spending plan, NOAA shall include a schedule to restore existing data buoy operability, including buoys damaged by hurricanes in calendar year 2020, and its strategy to minimize outages in the future.

*National Mesonet Program.*—The agreement provides no less than \$22,200,000, an increase of \$2,000,000 above the fiscal year 2020 enacted level, for the continuation and expansion of the National Mesonet Program. Of the funds provided, up to \$750,000 may be used for Meteorological Assimilation Data Ingest System activities, and up to \$500,000 may be used for costs associated with the National Mesonet Program Office.

The National Mesonet Program is encouraged to proactively work with other Federal agencies, including the National Science Foundation and the U.S. Geological Survey, to identify observations and platforms of opportunity in areas with sparse instrumentation that may be transferred to the National Mesonet Program. Further, the National Mesonet Program is encouraged to establish a profiler research testbed, using existing profiler networks that provide statewide observational capability, to use advanced technologies to sample the weather in the atmospheric boundary layer. NWS is directed to provide a briefing to the Committees about how such a profiler research testbed could be established.

*Automated Surface Observing System (ASOS).*—NWS is directed to ensure that rural and remote communities who disproportionately rely on ASOS operability for continued reliable air

service are provided with additional resources, such as trained human observers, to continue observing capabilities in the event of an ASOS outage.

*Climate Prediction Center.*—NWS is directed, through the Climate Prediction Center, to engage with State agencies, non-profit organizations, academic institutions, and the general public in rural areas in the Mid-Atlantic United States that due to changes in climate have seen unseasonable and unexpected drought in order to improve drought monitoring and reporting.

*Analyze, Forecast, and Support (AFS).*—The agreement provides an increase of \$22,500,000 above the fiscal year 2020 enacted level for AFS and directs NWS to use the increased funding to reconcile previous year funding gaps and prioritize filling vacancies in currently understaffed weather forecast offices.

*Environmental Processes in the Arctic.*—Within the funding provided for AFS, the National Centers for Environmental Prediction is encouraged to develop capacity for seasonal to multiannual timescale predictions of environmental processes in the Arctic.

*Tsunami Warning Program.*—The agreement rejects NWS's proposed cut to the Tsunami Warning Program, including for the National Tsunami Hazard Mitigation program grants. Funding is provided at no less than \$500,000 above the fiscal year 2020 enacted level to ensure that high-quality tsunami watches, warnings, and advisories are issued to safeguard lives and property. NWS is directed to expeditiously fill the current vacancies.

*Tsunami Preparedness in Alaska.*—NOAA is directed to work with other relevant Federal agencies, the State of Alaska, local governments, and area stakeholders to actively monitor Barry Glacier in Prince William Sound, Alaska, and tailor, as needed, its early warning tsunami systems to be prepared for a possible landslide-induced tsunami in the area. This effort should include, if appropriate, the deployment of sensors in strategic locations and the development of inundation models to inform emergency planning efforts.

*Report on Weather Research Priorities.*—In lieu of House language on a Weather Decadal, the agreement directs NOAA's Science Advisory Board to publish a report, not later than one year after enactment of this Act, that provides policymakers with the relevant information necessary to prioritize investments in weather forecasting, modeling, data assimilation, and supercomputing over the next ten years; and that evaluates future potential

Federal investments in science, satellites, radars, and other observation technologies, to include surface and boundary layer observations, so that all domestic users of weather information can receive data in the most efficient and effective manner possible.

*Office of Water Prediction (OWP).*—The agreement provides no less than \$34,500,000 for OWP, which receives funding across multiple NWS budget lines, and rejects the proposed decrease for OWP within AFS. The agreement maintains the direction adopted in previous fiscal years for NWS to continue to expedite hiring within the National Water Center (NWC) Water Prediction Operations Division and reach full operating capability no later than the end of fiscal year 2022. NOAA shall also continue to transition OWP personnel from other offices to the NWC, as deemed necessary to improve effectiveness and efficiency. Within 45 days of enactment of this Act, NOAA is directed to provide the Committees with an updated staffing plan for the NWC.

The agreement also provides no less than the fiscal year 2020 enacted level to continue to expedite development of the National Water Model and other next-generation water modeling capabilities, and directs NWS to continue to expeditiously transition the water resources prediction capabilities developed by OWP, including flood inundation mapping products, into operations.

*Hydrology and Water Resource Programs.*—The agreement recognizes that the clear, present, and increasing threat of water-related hazards demands an increased commitment to and investment in water-related research and development to better support NOAA's existing and growing water-related operational services. Therefore, the agreement includes no less than \$15,000,000 (\$14,000,000 within NWS, Science Technology and Integration; and \$1,000,000 within NOS, Coastal Science and Assessment) for NWS, in collaboration with NOS, to establish a new NOAA Cooperative Institute (CI), by no later than the end of fiscal year 2021, which is to focus solely on helping NOAA address the Nation's growing water-related challenges. The proposed CI should leverage talent and diversity from multiple universities to lead an interdisciplinary, systems-based research approach from mountains to tributaries, lakes and rivers, and ultimately to the coasts that will seed new and improved operational services for NOAA by improving our current understanding of the water cycle and our ability to observe and predict it. The CI shall deliver expertise and resources in the following areas of emphasis:

hydroinformatics and community water resources modeling; geographic information systems and remote sensing, including snow depth and soil moisture; coastal inundation modeling and forecasting in collaboration with NOS; data assimilation; computational science and high performance computing; artificial intelligence; and machine learning. The proposed CI shall also prioritize the cultivation of the next-generation of water resources scientists and engineers who will be needed to tackle the grand challenges of 21st century water resources. NOAA should encourage and prioritize submissions from applicants that can demonstrate established collaboration with NOAA's water research programs, led by the National Water Center, as well as those of other pertinent Federal partners, principally the U.S. Geological Survey and Federal Emergency Management Agency.

*Dissemination.*—The agreement provides \$78,362,000 for Dissemination which shall be used to cover adjustments to base and other mission-critical costs, including those needed to further strengthen and advance the NWS integrated dissemination platform.

*National Environmental Satellite, Data and Information Service (NESDIS).*—\$291,533,000 is for NESDIS Operations, Research, and Facilities.



**NATIONAL ENVIRONMENTAL SATELLITE, DATA AND INFORMATION  
SERVICE**

**OPERATIONS, RESEARCH, AND FACILITIES**

(in thousands of dollars)

Program	Amount
<b>Environmental Satellite Observing Systems</b>	
Office of Satellite and Product Operations.....	\$189,099
Product Development, Readiness and Application.....	28,434
Office of Space Commerce.....	10,000
U.S. Group on Earth Observations .....	500
<b>Environmental Satellite Observing Systems.....</b>	<b>228,033</b>
<b>National Centers for Environmental Information.....</b>	<b>63,500</b>
<b>Total, National Environmental Satellite, Data and Information Service, Operations, Research, and Facilities.....</b>	<b>\$291,533</b>

The agreement adopts the proposed technical transfers to the Office of Satellite and Product Operations, moving operations funded within Cooperative Data and Rescue Services, Satellite Ground Services, and the Office of Projects, Planning and Analysis from Procurement, Acquisition and Construction to Operations, Research, and Facilities. The agreement clarifies House language that Regional Climate Services is provided no less than \$7,000,000, which includes no less than \$4,600,000 for Regional Climate Centers.

*Space Commerce.*—The agreement approves the request to merge the Office of Commercial Remote Sensing Regulatory Affairs and the Office of Space Commerce (OSC) and provides \$10,000,000 for OSC, which on balance is \$5,900,000 above the fiscal year 2020 enacted level. Within the funding provided, the agreement directs NESDIS and OSC to initiate a space traffic management (STM) pilot program, in collaboration with industry, the Department of Defense, the Federal Aviation Administration, NASA, and other Federal partners, as appropriate, to develop STM technical prototypes, initiate an open architecture data repository, and perform STM demonstrations and experiments. Within 45 days of enactment of this Act,

NESDIS shall provide the Committees with a detailed spending plan for the funding provided to OSC.

*Mission Support.*—\$302,845,000 is for Mission Support Operations, Research, and Facilities.

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

Program	Amount
Mission Support Services	
Executive Leadership.....	27,078
Mission Services and Management.....	156,000
IT Security.....	15,378
Payment to the DOC Working Capital Fund.....	66,389
Facilities Maintenance and Capital Improvements.....	5,000
	269,845
Office of Education	
BWET Regional Programs.....	7,750
José E. Serrano Educational Partnership Program with Minority Serving Institutions.....	20,000
NOAA Education Program Base.....	5,250
	33,000
Office of Education.....	33,000
	\$302,845

*Sexual Assault and Sexual Harassment (SASH).*—The agreement directs NOAA to continue implementing NOAA Administrative Order (NAO) 202–1106 on sexual assault and sexual harassment prevention and provides \$2,000,000 within Mission Services and Management for this purpose. The agreement further encourages the use of carryover funds to expedite the hiring of staff to carry out this work. NOAA shall continue to provide the Committees with a copy of the report required under Section 12.02 of NOAA Administrative Order 202–1106.

*NOAA Diversity and Inclusion.*—NOAA is directed to take discrete steps to promote racial and cultural acceptance and diversity within its workforce. No later than 180 days after enactment of this Act, NOAA is directed to submit a report analyzing the current racial and cultural makeup of the agency; planned efforts to recruit, retain, and advance applicants and employees critical to promoting greater racial and cultural diversity, and the outcomes of these efforts; and any additional steps and recommendations planned to promote greater racial and cultural acceptance and diversity throughout the NOAA workforce, including the development and analysis of metrics to evaluate success.

*Workforce Succession Planning.*—NOAA is directed to provide the Committees, no later than 270 days after enactment of this Act, a report that details: (1) the age composition of NOAA's workforce, to include an assessment of the percentage of staff by line office that are currently retirement eligible or will be within the next five fiscal years; (2) a summary of the agency's current workforce succession plans, including any relevant documentation; and (3) any challenges to succession planning that could be remedied through legislation.

*Facilities Maintenance and Capital Improvements.*—Within Mission Support, the agreement includes \$5,000,000 in a new PPA, Facilities Maintenance and Capital Improvements, which is to be administered by the Office of the Chief Administrative Officer to address the growing backlog of deferred maintenance and capital improvement needs at NOAA facilities. Before any of these funds may be obligated, NOAA is directed to provide the Committees with a detailed spending plan that explains what projects will be supported with the provided funding, as well as a prioritized list of the backlog of needed facilities repair, improvement, and maintenance projects. NOAA is encouraged to minimize, to the extent practicable, the amount of funds withheld for administrative expenses.

*NOAA Environmental Security Computing Center (NESCC).*—Within funding provided for Facilities Maintenance and Capital Improvements, NOAA shall consider making necessary upgrades to the NESCC to support future compute needs. Additionally, NOAA, in coordination with the General Services Administration, is encouraged to execute a cost benefit analysis to determine the merit of potentially acquiring the facility.

*Office of Marine and Aviation Operations (OMAO).*—\$253,665,000 is for OMAO Operations, Research, and Facilities.

## 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.....	\$166,000
Aviation Operations and Aircraft Services.....	32,000
Autonomous Uncrewed Technology Operations.....	13,665
NOAA Commissioned Officer Corps.....	42,000
Total, Office of Marine and Aviation Operations, Operations, Research, and Facilities.....	\$253,665

For fiscal year 2021, OMAO is directed to follow prior year language on Charter Vessels adopted by Public Law 116–93.

*Funding for the NOAA Commissioned Officer Corps.*—The agreement accepts the administration’s budget proposal to consolidate OMAO funding for the NOAA Commissioned Officer Corps and its supporting functions into a single PPA, as is reflected in the preceding table. In so doing, funding has been transferred from Marine Operations and Maintenance, Aviation Operations and Aircraft Services, and Autonomous Uncrewed Technology Operations to the new PPA. However, on balance, the amount provided for OMAO represents a \$9,250,000 increase above the fiscal year 2020 enacted level.

*Mitigating Hi‘ialakai Operations.*—It is noted that even before OMAO operations were disrupted in 2020, no coverage was to be provided in fiscal year 2020 to assess emerging threats to marine national monuments in the Pacific administered by NOS. OMAO is directed to submit a report on its plan to ensure adequate ship time for this mission no later than 90 days after enactment of this Act.

*Monitoring of Atmospheric Rivers.*—The agreement provides no less than \$1,500,000 within Aviation Operations and Aircraft Services to better observe and predict atmospheric rivers and encourages the use of unexpended funds for this purpose from fiscal year 2020 to increase atmospheric rivers observations.

*Pilot Recruitment and Training*.—The agreement directs OMAO to continue programs to recruit and train pilots for service in the NOAA Commissioned Officer Corps, and provides up to the fiscal year 2020 enacted amount for this purpose.

*High Altitude Hurricane Hunter Aircraft Back-up*.—The agreement supports efforts by NOAA and NASA to establish a memorandum of agreement (MOA) for the NASA Gulfstream-V to serve as a back-up to the NOAA Gulfstream IV–SP Hurricane Hunter aircraft. The Committee expects NOAA and NASA to formalize an MOA as soon as possible, but not later than 90 days after enactment of this Act.

*Autonomous and Uncrewed Technology Operations (AUTO)*.—The agreement provides \$13,665,000 for AUTO, as authorized by the Commercial Engagement through Ocean Technology Act (Public Law 115–394). Within the funds provided, up to \$5,000,000, an increase of \$1,000,000 above the fiscal year 2020 enacted level, may be used to establish and support extramural partnerships for unmanned maritime systems research, development, testing, and training, including any legacy projects previously supported by the Unmanned Aircraft Systems Program Office or the Autonomous Underwater Vehicle Demonstration Testbed. Further, the agreement also provides up to \$3,000,000 to continue data acquisition from unmanned maritime systems (UMS), as defined within Public Law 115–394, as well as for cooperative, competitive research and development of UMSs that can serve as a cost-effective augmentation for relevant research missions and fisheries data collection.

In executing the AUTO program, OMAO is encouraged to continue to coordinate with IOOS regarding use of underwater gliders and leverage partnerships with universities, oceanographic institutions, and other Federal agencies, especially the Naval Meteorology and Oceanography Command and the Naval Undersea Warfare Center.

*2021 Hurricane Hunter Flight Hours*.—The agreement includes an additional \$2,000,000 within Aviation Operations and Aircraft Services to fund additional hurricane flight hours in fiscal year 2021. There is concern that OMAO’s annual aircraft budgeting and scheduling processes are not accounting for the actual annual requirements of the hurricane reconnaissance mission, evidenced by the fact that in each of the three previous fiscal years OMAO has vastly exceeded the number of hours allocated for hurricane reconnaissance on its WP-3D Orion aircraft. Therefore, OMAO is directed to brief the Committees, not later than 90 days after

enactment of this Act, on its annual aircraft budgeting and scheduling processes and shall include as part of its fiscal year 2022 budget the number of flight hours supported on each aircraft type within the fleet.

PROCUREMENT, ACQUISITION AND CONSTRUCTION

(INCLUDING TRANSFER OF FUNDS)

The agreement includes a total program level of \$1,545,558,000 in direct obligations for NOAA Procurement, Acquisition and Construction (PAC), of which \$1,532,558,000 is appropriated from the general fund and \$13,000,000 is derived from recoveries of prior year obligations. The following narrative and table identify the specific activities and funding levels included in this Act:

## PROCUREMENT, ACQUISITION AND CONSTRUCTION

(in thousands of dollars)

Program	Amount
<b>National Ocean Service</b>	
National Estuarine Research Reserve Construction.....	\$4,500
Marine Sanctuaries Construction.....	4,000
Total, NOS – PAC.....	8,500
<b>Office of Oceanic and Atmospheric Research</b>	
Research Supercomputing / CCRI.....	43,500
<b>National Weather Service</b>	
Observations.....	15,700
Central Processing.....	68,000
Dissemination.....	9,934
Facilities Construction and Major Repairs.....	10,000
Total, NWS – PAC.....	103,634
<b>National Environmental Satellite, Data and Information Service</b>	
Geostationary Systems – R.....	334,500
Polar Weather Satellites.....	657,835
Cooperative Data and Rescue Services.....	14,400
Space Weather Follow On.....	108,115
COSMIC 2 / GNSS RO.....	5,892
Satellite Ground Services.....	39,287
Projects, Planning, and Analysis.....	15,945
Geostationary Earth Orbit.....	10,000
Systems / Services Architecture and Engineering.....	38,500
Satellite CDA Facility.....	2,450
Total, NESDIS – PAC.....	1,226,924
<b>Mission Support</b>	
NOAA Construction.....	43,000
<b>Office of Marine and Aviation Operations</b>	
Fleet Capital Improvements and Technology Infusion.....	25,000
Vessel Recapitalization and Construction.....	75,000
Aircraft Recapitalization and Construction.....	20,000
Total, OMAO – PAC.....	120,000
Total, Procurement, Acquisition and Construction.....	\$1,545,558

*Judgment Fund Repayment.*—The agreement does not provide funding for NOAA to make payments to the Department of Treasury Judgment Fund.

*Research Supercomputing.*—Within funding provided for Research Supercomputing / CCRI, \$15,000,000 shall be used to continue to develop a dedicated high performance computing facility in collaboration with partners that have existing high performance computing expertise and scientific synergies.

*National Weather Service.*—The agreement includes the requested amount for NWS Observations to continue the Next Generation Weather Radar and the ASOS Service Life Extension Programs as planned.

*Integrated Water Prediction.*—The agreement provides an increase of \$1,239,000 above the fiscal year 2020 enacted level for Central Processing under NWS PAC, which includes not less than \$5,739,000 to procure operational high performance computing resources to enable modeling improvements associated with the IWP initiative. With the increased computing resources, the agreement encourages the prioritization of work by NOS, in collaboration with NWS, on IWP and coastal inundation.

*Systems / Services Architecture and Engineering (SAE).*—The agreement accepts the proposed transfer from the Office of Projects, Planning, and Analysis into SAE. No less than \$2,700,000 is provided for Joint Venture Partnerships with NASA and the commercial sector to leverage emerging capabilities for NOAA's operational use.

The agreement also provides not less than \$4,000,000 above the fiscal year 2020 enacted level for the commercial data purchase and commercial weather data pilot programs, which is to be divided between the two programs as deemed appropriate.

*Geostationary Earth Orbit (GEO).*—The agreement approves the administration's proposal to create a GEO PPA and has transferred \$10,000,000 from SAE to fund this activity. This funding shall be used to support the start of the GEO Phase A mission concept and technology development activities, including the continuity missions to follow the Geostationary Systems-R series and Space Weather Follow On programs. These activities may include low-cost sensors and CubeSats to advance existing space weather measurement capabilities. Further,



NOAA is encouraged to coordinate with NASA to ensure its space weather research is applicable and can be transitioned to NOAA's space weather operations.

*Satellite Ground Services.*—The agreement provides the requested amount for Satellite Ground Services, including no less than \$5,000,000 for Data-source Agnostic Common Services to utilize data and observations from an increasingly diverse array of partner and commercial systems.

*NOAA Construction.*—The agreement provides \$43,000,000 for NOAA's highest priority facilities construction, repair, and deferred maintenance requirements. Thirty days before obligating any funds, NOAA shall submit a report detailing how the funds will be expended and an explanation of why these projects were prioritized. NOAA is directed to prioritize funding for infrastructure projects related to marine operations, including facilities to accommodate NOAA research vessels.

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. NOAA is therefore encouraged to commence 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 Deferred Maintenance and Technology Infusion.*—The funding provided above the request for Fleet Capital Improvements and Technology Infusion shall be for deferred maintenance and technology infusion to transition to a progressive maintenance model.

*NOAA Ship Ronald H. Brown.*—The agreement reiterates House language expressing frustration over the omission of a request for funding in the fiscal year 2021 President's budget request for the midlife maintenance period for NOAA Ship *Ronald H. Brown*. Maintaining a safe and capable fleet of vessels is a NOAA mission requirement and it is expected that DOC and NOAA will make this ~~is~~ a top priority in future budget requests. Not later than 90 days after enactment of this Act, OMAO shall develop and brief the Committees on a plan to allocate funds from within Vessel Recapitalization and Construction to commence the midlife maintenance period for NOAA Ship *Ronald H. Brown*.

*Mission Requirement Costs.*—NOAA is directed to document within all of its future budget requests any unfunded mission requirement costs, and particularly those that are necessary to maintain the optimal operational tempo of NOAA assets and posture of NOAA facilities.

*Buy American Provisions.*—NOAA shall follow prior year direction adopted in Public Law 116–93 regarding Buy American provisions related to marine vessels and marine vessel components. NOAA shall report to the Committees about how this direction has been reflected in current acquisition documents and how it will be incorporated in the Fleet Recapitalization Plan no less than 90 days after enactment of this Act.

*Aircraft Recapitalization.*—The agreement provides \$20,000,000 to finalize the procurement and modifications of a suitable replacement for the Gulfstream IV–SP Hurricane Hunter aircraft.

*Acquisition and Construction Cost Estimation.*—The agreement notes with exasperation the continuing trend of NOAA underestimating the costs of major acquisition and construction projects. As such, the agreement directs GAO to conduct an audit, as soon as possible, of NOAA’s internal cost estimation procedures to include (1) a review of the extent to which NOAA’s cost estimation procedures align with best practices in GAO’s Cost Estimating and Assessment Guide, (2) ways in which NOAA can increase the reliability of cost estimates, and (3) specific NOAA projects or components of the NOAA cost estimation process that should be subject to regular oversight by the DOC Office of Inspector General.

#### PACIFIC COASTAL SALMON RECOVERY

The agreement includes \$65,000,000 for the Pacific Coastal Salmon Recovery Fund (PCSRF) and directs that funds will be available to Tribes without a matching requirement. NOAA is directed to report on how its current priorities meet the intent of the PCSRF to support the recovery and protection of all declining salmon stocks.

#### FISHERMEN’S CONTINGENCY FUND

The agreement includes \$349,000 for the Fishermen’s Contingency Fund.

## FISHERIES FINANCE PROGRAM ACCOUNT

The agreement includes 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

#### SALARIES AND EXPENSES

The agreement includes \$73,000,000 for Departmental Management (DM) salaries and expenses. The Department is expected to spend within its appropriated amounts.

For fiscal year 2021, the Department is directed to follow prior year report language, included in Senate Report 116–127 and adopted by Public Law 116–93, on Small Business Innovation Research, Rare Earth Elements Manufacturing Cooperative, and Working Capital Funds. House report language regarding Artificial Intelligence (AI) Talent is modified to clarify that these efforts shall be led by NIST, in accordance with House language for NIST on U.S. Leadership in AI.

*Staffing Report.*—The Chief Financial Officer and the Chief Human Capital Officer of the Department shall continue to provide quarterly briefings to the Committees on all Department-wide human capital issues, to include: a list of funded vacancies, by bureau, type, and location, including the length of time the positions have been vacant; a plan and explanation for addressing each vacancy, including a target for when the vacancy will be filled; and other relevant topics as appropriate.

*Salary Lapse.*—The Department is directed to provide a detailed accounting of the amounts projected in salary lapse in its fiscal year 2021 spend plan with an explanation of how all anticipated balances will be spent for each component. The Department is directed to provide this information by line offices within NOAA that have a greater than 10 percent vacancy rate as of September 30, 2020. The Department is advised that any amounts insufficiently justified to either augment staff vacancies or support mission critical functions will be considered for rescission in fiscal year 2022.

*Department of Commerce Working Capital Fund.*—As part of the fiscal year 2022 budget request, the Department is directed to provide justification that clearly articulates why each Advancements and Reimbursements account and Working Capital Fund project administered by the Office of Acquisition Management, Office of Budget, Office of the Chief

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Financial Officer and Assistant Secretary for Administration, and Chief of Staff should continue to be funded through the Department of Commerce Working Capital Fund.

*Scientific Integrity Policy.*—~~The Committees~~ are alarmed by the findings of the National Academy of Public Administration (NAPA) investigation titled “An Independent Assessment of Allegations of Scientific Misconduct.” The NAPA investigation found that NOAA officials violated the NOAA Scientific Integrity Policy (NOAA Administrative Order 202–735d), specifically the Code of Ethics for Science Supervision and Management, in its issuance of a statement rebuking NWS meteorologists regarding Hurricane Dorian forecasts on September 6, 2019. The NAPA investigation and a similar Inspector General investigation, “Evaluation of NOAA’s September 6, 2019, Statement About Hurricane Dorian Forecasts” (OIG–20–032–1), both note the role that Department officials played in the development and release of the statement. However, Department officials are not bound by NOAA’s Scientific Integrity Policy. Therefore, the Department is directed to develop a Department-wide Scientific Integrity Policy. The Department Policy should draw upon, but not interfere with, the NOAA Scientific Integrity Policy and ensure that bona fide scientific evidence and results can be presented absent political interference or censorship.

*Section 232 Exclusion Process.*—The agreement continues to provide funding for the ongoing exclusion process for steel and aluminum tariffs applied under section 232 of the Trade Expansion Act of 1962 (19 U.S.C. 1862), including no less than \$7,000,000 within BIS and \$1,500,000 within DM, and up to \$8,000,000 within ITA. If additional funding for the exclusion process becomes necessary, the Department shall report to the Committees at least 15 days prior to the obligation of funds above the totals specified herein. The Department is directed to exhaust all available options to ensure section 232 activities are funded without causing disruption to component operational needs or trade enforcement priorities previously highlighted in the agreement. Additionally, the Department should ensure section 232 activities are appropriately funded in future year budget requests and clearly show both current services and program increases anticipated to support the program.

*Improving Trade Data Reporting.*—The Department is directed, in coordination with U.S. Customs and Border Protection, U.S. International Trade Commission, and other relevant agencies, to review and compare methodologies for collecting and publishing gross trade flows

data and detailed supply chain data to better document the country of origin for components of each imported good before it reaches U.S. consumers.

#### RENOVATION AND MODERNIZATION

The agreement includes a total of \$1,123,000 for the Renovation and Modernization account. For fiscal year 2021, the Department is directed to follow prior year report language included in Senate Report 116–127 and adopted by Public Law 116–93 under this heading.

#### NONRECURRING EXPENSES FUND

The agreement includes \$20,000,000 for the Department of Commerce Nonrecurring Expenses Fund to continue phase one of the financial management and business information technology modernization. The Department is directed to provide an updated 5-year budget profile for this project as part of the fiscal year 2022 budget request.

#### OFFICE OF INSPECTOR GENERAL

The agreement includes a total of \$43,556,000 for the Office of Inspector General (OIG). This amount includes \$34,000,000 in direct appropriations, a \$2,000,000 transfer from USPTO, a transfer of \$3,556,000 from the Bureau of the Census, Periodic Censuses and Programs, and \$2,000,000 from NOAA PAC for audits and reviews of those programs. In addition, \$2,000,000 is derived from the Public Safety Trust Fund for oversight of FirstNet.

The agreement directs the OIG to continue its oversight work on cybersecurity, NOAA satellite and vessel procurements, telework, patent quality, the 2020 Decennial Census, the business application system modernization. Further, the OIG is directed to continue assessing all of the working capital funds within the Department to evaluate the budgetary controls in place to develop reimbursement formulas, the relationship of reimbursements to client services; the appropriateness of the level of fund balances, and compliance with appropriations law and direction. As part of this assessment, the Inspector General shall pay particular attention to the increasing amounts of funding needed to support the Department's Office of General Counsel (OGC), including the justification and metrics for how such funding is being levied against each agency and, reciprocally, how the agencies account for the services they receive from the OGC. The agreement also recommends the OIG investigate the growth and utilization of the

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Department's cash balances in its Working Capital Fund and the quality of services provided to the customers.

## GENERAL PROVISIONS—DEPARTMENT OF COMMERCE

### (INCLUDING TRANSFER OF FUNDS)

The agreement includes 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 Department of Commerce salaries and expenses 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 appropriation accounts and requires 15 days advance notification to the Committees on Appropriations for certain actions.

Section 104 provides congressional notification requirements for NOAA satellite programs and includes life cycle cost estimates for certain weather 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 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 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 services.

COMMERCE, JUSTICE, SCIENCE, AND RELATED AGENCIES APPROPRIATIONS ACT, 2021

(Amounts in thousands)

	FY 2020 Enacted	FY 2021 Request	Final Bill	Final Bill vs Enacted	Final Bill vs Request
<b>National Institute of Standards and Technology</b>					
Scientific and Technical Research and Services.....	754,000	652,027	788,000	+34,000	+135,973
(transfer out).....	(-9,000)	(-9,000)	(-9,000)	---	---
Industrial Technology Services.....	162,000	25,252	166,500	+4,500	+141,248
Manufacturing extension partnerships.....	(146,000)	---	(150,000)	(+4,000)	(+150,000)
Manufacturing USA.....	(16,000)	(25,252)	(16,500)	(+500)	(-8,752)
Construction of research facilities.....	118,000	40,644	80,000	-38,000	+39,356
(Legislative Proposal).....	---	294,000	---	---	-294,000
Working Capital Fund (by transfer).....	(9,000)	(9,000)	(9,000)	---	---
<b>Total, National Institute of Standards and Technology.....</b>	<b>1,034,000</b>	<b>1,011,923</b>	<b>1,034,500</b>	<b>+500</b>	<b>+22,577</b>
<b>National Oceanic and Atmospheric Administration</b>					
Operations, Research, and Facilities.....	3,763,939	3,165,124	3,840,300	+76,361	+675,176
(by transfer).....	(174,774)	(183,834)	(246,171)	(+71,397)	(+62,337)
Promote and Develop Fund (transfer out).....	(-174,774)	(-183,834)	(-246,171)	(-71,397)	(-62,337)
<b>Subtotal.....</b>	<b>3,763,939</b>	<b>3,165,124</b>	<b>3,840,300</b>	<b>+76,361</b>	<b>+675,176</b>

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COMMERCE, JUSTICE, SCIENCE, AND RELATED AGENCIES APPROPRIATIONS ACT, 2021

(Amounts in thousands)

	FY 2020 Enacted	FY 2021 Request	Final Bill	Final Bill vs Enacted	Final Bill vs Request
Procurement, Acquisition and Construction.....	1,530,690	1,486,669	1,532,558	+1,668	+65,889
Pacific Coastal Salmon Recovery.....	65,000	---	65,000	---	+65,000
Fishermen's Contingency Fund.....	349	349	349	---	---
Fishery Disaster Assistance.....	---	300	---	---	-300
Fisheries Finance Program Account.....	-8,000	-7,600	-7,600	+400	---
<b>Total, National Oceanic and Atmospheric Administration.....</b>	<b>5,352,178</b>	<b>4,624,842</b>	<b>5,430,607</b>	<b>+78,429</b>	<b>+805,765</b>
<b>Departmental Management</b>					
Salaries and expenses.....	61,000	96,134	73,000	+12,000	-23,134
Renovation and Modernization.....	1,000	1,123	1,123	+123	---
DOC Nonrecurring Expense Fund.....	20,000	38,036	20,000	---	-18,036
Office of Inspector General.....	33,000	35,520	34,000	+1,000	-1,520
Collection from the Public Safety Trust Fund.....	(-2,000)	(-2,000)	(-2,000)	---	---
Public Safety Trust Fund transfer.....	(2,000)	(2,000)	(2,000)	---	---
<b>Total, Departmental Management.....</b>	<b>115,000</b>	<b>170,815</b>	<b>128,123</b>	<b>+13,123</b>	<b>-42,692</b>
<b>Total, title I, Department of Commerce.....</b>	<b>15,220,830</b>	<b>8,317,560</b>	<b>8,914,229</b>	<b>-6,306,601</b>	<b>+596,669</b>
(by transfer).....	185,774	194,834	257,171	+71,397	+62,337
(transfer out).....	-185,774	-194,834	-257,171	-71,397	-62,337

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