

CONSTRUCTION OF RESEARCH FACILITIES

The Committee recommends \$85,000,000 for NIST construction. NIST shall continue to provide updates on the projects funded within this account, to include milestones and total amount of funding necessary for completion.

Safety, Capacity, Maintenance, and Major Repairs (SCMMR).—Within the amount provided for Construction of Research Facilities, the agreement includes no less than \$75,000,000 for NIST to address its most pressing SCMMR projects.

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

The Committee recommends a total of \$5,454,068,000 in discretionary funds for the National Oceanic and Atmospheric Administration (NOAA), which is \$101,890,000 above fiscal year 2020 and \$827,661,000 above the President's request. In addition, the Coronavirus Aid, Relief, and Economic Security Act (CARES Act) (Public Law 116–136) included \$20,000,000 for NOAA to prevent, prepare for, and respond to coronavirus as well as \$300,000,000 for Assistance to Fishery Participants to offset economic injury precipitated by the coronavirus.

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 table below are subject to section 505 requirements of this Act. When executing its budget for fiscal year 2021, NOAA shall incorporate the funding levels established in both the table and the narrative direction. NOAA is reminded that comity has existed between the Congress and the Executive Branch with respect to abiding by language included in this report and in the accompanying bill. The Committee expects NOAA to respect this long-standing practice.

Tribal Allocation of CARES Act Funds.—The Committee is aware of concerns raised by Native American tribes regarding the lack of formal government-to-government consultation and the methodology used by NOAA to allocate funds provided in Sec. 12005 of the CARES Act (Public Law 116–136) which relied on annual revenues by sector rather than recorded losses to determine proportional allocations. The Committee reminds NOAA of its responsibility to uphold Federal treaty and trust obligations during all engagements with tribal interests, regardless of any exigent circumstances.

Sexual Assault and Sexual Harassment.—The Committee remains highly concerned by the threat of sexual assault and sexual harassment faced by individuals in the workplace, especially those in nontraditional work settings such as NOAA research vessels or private fishing vessels. The Committee appreciates the initial steps NOAA has taken in addressing these threats. To further this work, the Committee provides no less than \$1,700,000 above the fiscal year 2020 level and directs NOAA to prioritize and expedite the hiring of staff to reduce these risks and to provide assistance and counseling to victims.

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.

Shellfish genetics.—The recommendation includes up to \$10,000,000 to improve shellfish survival and growth rates and to classify and preserve the natural genetic variation of shellfish. NOAA is encouraged to support regional partnerships to classify and preserve natural genetic variation in shellfish. Further, the Committee encourages NOAA to examine the feasibility of tracking its efforts at the species level.

Mississippi River Restoration and Resiliency Strategy.—The Committee recognizes that the Mississippi River basin from Minnesota to Louisiana is a vital American waterway. Therefore, the Committee urges NOAA to participate and coordinate as an essential Federal stakeholder with the Environmental Protection Agency on developing a Mississippi River restoration and resiliency strategy focused on improving water quality, restoring habitat and natural systems, improving navigation, eliminating aquatic invasive species, and building local resilience to natural disasters.

OPERATIONS, RESEARCH, AND FACILITIES

(INCLUDING TRANSFER OF FUNDS)

The Committee recommends a total program level of \$4,142,330,000 under Operations, Research, and Facilities (ORF) for the coastal, fisheries, marine, weather, satellite, and other programs of NOAA. This total funding consists of \$3,871,659,000 in direct appropriations, a transfer of \$253,171,000 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 \$3,871,659,000 is \$107,720,000 above fiscal year 2020 and \$706,535,000 above the President’s request.

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

National Ocean Service.—The recommendation provides \$625,406,000 for National Ocean Service (NOS) Operations, Research, and Facilities, an increase of \$26,450,000 above the fiscal year 2020 level and \$244,370,000 above the President’s request. Given the increasingly troubled state of the oceans, the Committee finds the request to reduce NOS funding by 36 percent as compared to fiscal year 2020 to be dramatically inappropriate. The Committee instead invests in programs within NOS that aim to enhance the resiliency of coastal assets and to understand and mitigate the changing ecological threats to our oceans and the Great Lakes to meet the increased need.

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

Program	Amount
Navigation, Observations and Positioning:	
Navigation, Observations and Positioning	\$160,456
Hydrographic Survey Priorities/Contracts	32,000

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

Program	Amount
Integrated Ocean Observing System Regional Observations	40,500
Navigation, Observations and Positioning	232,956
Coastal Science and Assessment:	
Coastal Science, Assessment, Response and Restoration	88,500
Competitive External Research	22,000
Coastal Science and Assessment	110,500
Ocean and Coastal Management Services:	
Coastal Zone Management and Services	47,700
Coastal Management Grants	78,000
National Coastal Resilience Fund (Title IX)	36,000
Coral Reef Program	34,000
National Estuarine Research Reserve System	28,250
Sanctuaries and Marine Protected Areas	58,000
Ocean and Coastal Management and Services	281,950
Total, National Ocean Service, Operations, Research, and Facilities	\$625,406

Navigation, Observations, and Positioning.—The Committee provides \$160,456,000 for Navigation, Observations, and Positioning, \$1,000,000 above the level provided in fiscal year 2020. The recommendation rejects the proposed elimination of the competitive Regional Geospatial Modeling Grants program and the Joint Ocean and Coastal Mapping Centers. The Committee additionally continues funding for the Physical Oceanographic Real-Time System (PORTS), at no less than the fiscal year 2020 level.

Hydrographic Survey Priorities/Contracts.—The Committee rejects the proposed reduction to Hydrographic Survey Priorities/Contracts and directs NOAA to maintain its prior year level of effort.

Integrated Ocean Observing System.—The recommendation includes \$40,500,000 for Integrated Ocean Observing System (IOOS) Regional Observations and rejects the elimination of IOOS grants. The Committee supports IOOS's efforts to expand its use of underwater gliders and encourages NOAA to fill critical gaps in the current surface mapping system and to ensure streamlined access to data for weather forecasting, detection of ecological phenomena, and safe maritime operations.

The Committee provides \$2,000,000, from within the funds allocated for IOOS, to continue and expand the pilot program launched in fiscal year 2020 for IOOS 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.

Coastal Science, Assessment, Response, and Restoration.—The Committee provides \$88,500,000 for Coastal Science Assessment, Response, and Restoration, and rejects the proposed reductions to Response and Restoration activities. The recommendation includes

no less than \$9,000,000 for the Marine Debris program to address the pervasive problem of marine pollution in coastal waters around the country. The Committee encourages NOS to coordinate with States, territories, and local communities on efforts to remove debris from the marine environment and the Great Lakes, with a goal of developing a cost-effective programmatic solution to land-generated marine debris.

Further, the Committee rejects the proposed elimination of the National Centers for Coastal Ocean Science (NCCOS). The Committee instead provides NCCOS no less than \$2,000,000 above the fiscal year 2020 level to expand the regular monitoring of coastal and nearshore areas to increase understanding of the movement and severity of natural phenomena such as HABs and hypoxia—especially where insufficient data is currently available to provide high resolution and high frequency ecological forecasts. As part of this work, the Committee encourages NOAA to expand partnerships with academic institutions, the private sector, State governments, and other Federal agencies. The Committee also encourages NOAA to work with stakeholders to improve the transition of observational data to operational use in order to advance public education, understanding, and preparedness for HAB and hypoxia events. For all HABs-related work, NOAA shall coordinate with the Interagency Working Group of the Harmful Algal Bloom and Hypoxia Research and Control Act.

Sea Level Rise.—The Committee is concerned by the increasing threat posed to coastal communities and assets of the Nation by sea level rise and the resultant increase in coastal flood risk. The recommendation includes no less than an increase of \$600,000 above fiscal year 2020, within Coastal Science, Assessment, Response, Restoration, to initiate and accelerate efforts to create a National Coastal Data Information System which includes (1) combining existing observations, modeling, predictions, products and services into an integrated framework for producing and maintaining authoritative and timely data, maps and information services which quantify and communicate coastal flood risk to the US States and territories; (2) developing and strengthening partnerships with organizations that represent end users within coastal communities, including other Federal agencies, to better assess information gaps and needs; and (3) producing new information products and services, targeted to end-user needs, that allow coastal communities across the U.S. to plan for coastal flood risk today, next year, and for decades to come. NOAA shall, not less than 180 days after the enactment of this Act, provide the Committee with a holistic analysis of the need to expand observations, modeling, predictions, products and services to (1) improve the understanding of changing coastal flood risk, including impacts of sea level rise, (2) maintain and update this information on a regular cadence and (3) track and report how observed rates of sea level rise compare to the sea level rise predictions published within the National Climate Assessments.

Harmful Algal Blooms.—The Committee remains highly concerned about the increasing prevalence of harmful algal blooms (HABs) in every U.S. State and territory and the corresponding impacts on human health, drinking water, fisheries, and the broader economy. The Committee therefore directs NMFS to continue its

research into HABs at the fiscal year 2020 enacted level. Further, the Committee provides \$22,000,000 for Competitive Research, including not less than \$14,000,000 for HABs research. This research should prioritize further 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. The Committee encourages NOAA to work to ensure that new technology and mitigation efforts have minimal environmental impacts.

NOAA shall also explore research into the impacts on HAB timing, duration, and toxicity of nutrient pollution such as nitrogen and phosphorus as they enter coastal areas from tributaries that could lead to more accurate forecasts to the benefit of recreational and commercial fishing, recreation, and coastal drinking water plants. NOAA shall provide a report to the Committee within 180 days of the enactment of this Act that assesses its existing deployed capabilities and prior scope of work regarding the monitoring and management of nutrient runoff and its associated effect on HABs, including a delineation of how modeling is aided by data from other Federal partners. In addition, the report shall identify how NOAA is coordinating with other agencies that are part of the Harmful Algal Bloom and Hypoxia Research and Control Act Task Force in monitoring and mitigating the HAB crisis in various water systems.

Seafloor Mapping.—The Committee encourages NOS to perform high-priority, cooperative habitat mapping in currently unmapped and disaster-prone areas, with priority given to areas where oil exploration is under consideration to better understand long-term implications.

Blue Carbon.—The Committee notes the importance of the coastal zone as a potential carbon sink and the increased public interest in blue carbon. NOAA shall expand their efforts to understand the relative emissions and absorption of carbon pollution associated with various human activities in the coastal zone so as to inform future planning decisions regarding their carbon impacts.

Coastal Zone Management.—The Committee provides \$47,700,000 for Coastal Zone Management and Services. The recommendation rejects the reduction to Integrated Water Prediction, and instead provides no less than the fiscal year 2020 level. Within these funds, the recommendation also includes \$2,000,000 for Regional Ocean Data Portals.

Ocean Economy of the Territories.—The Committee supports NOAA's efforts to calculate and characterize the U.S. ocean and Great Lakes economy. However, the Committee is concerned that these estimates do not capture the ocean economies of the five U.S. territories. The Committee therefore provides an additional \$700,000 within Coastal Zone Management and Services and directs NOAA to take all reasonable steps to expand the scope of the Economics: National Ocean Watch (ENOW) dataset so that it includes the island territories, and to submit a report detailing these efforts within 180 days of the enactment of this Act.

Coastal Zone Management Grants and the National Coastal Resilience Fund.—The Committee does not approve the Administration's proposed elimination of the Coastal Zone Management (CZM)

Grants and the National Coastal Resilience Fund (NCRF), which are critical programs for preparing coastal areas for measurably rising sea levels. The recommendation instead includes \$78,000,000 for CZM Grants and \$36,000,000 for the NCRF, 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 is 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 \$34,000,000, which is \$7,893,000 above the President's request for the Coral Reef Program. The Committee also rejects the proposed reduction for Innovative Coral Reef Restoration Initiatives.

Within the increase provided for the Coral Reef Program, NOAA shall prioritize active restoration of bank barrier coral reef ecosystems in U.S. waters. NOAA is directed to 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. 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. 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.

NOAA shall provide to the Committee, no later than 180 days after the enactment of this Act, a report on the latest scientific tools and technologies available to conserve coral germplasm and genetic material of coral reef species. The report shall address the feasibility of a national strategy of establishing physical biorepositories that can preserve genetic material for coral reef propagation and restoration practices.

National Estuarine Research Reserve System (NERRS).—The Committee rejects the proposed elimination of the National Estuarine Research Reserve System and instead provides \$28,250,000 for this important partnership between NOAA and the coastal States and territories that protects and studies estuarine systems.

Sanctuaries and Marine Protected Areas.—The Committee provides \$58,000,000 for Sanctuaries and Marine Protected Areas, which is \$3,078,000 above the President's request. The Committee urges the Office of National Marine Sanctuaries to initiate the multi-year marine sanctuary designation process for marine sites currently under inventory and ensure all stakeholders and the public are fully engaged in developing the parameters of a future designation. Within 180 days of enactment of this Act, the Committee directs NOAA to submit a report on the steps taken to initiate the multi-year marine sanctuary designation process for successfully

nominated marine sites currently in inventory, and the estimated timeline for the designation process.

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. The Committee further directs NOAA to submit a report to the Committee no later than 180 days after the enactment of this Act on the research that is ongoing, has been completed, and is planned for Marine National Monuments administered by NMFS. NOAA shall engage with relevant science community stakeholders including, but not limited to, governmental, academic and non-governmental organization scientists, to determine the gaps in the research of these Monuments and make recommendations for research priorities, to be included in such report.

Derelict Fishing Gear.—The Committee recognizes that derelict fishing gear (DFG) harms marine life through ghost fishing and poses a significant threat, especially to protected and native species. NOAA is therefore encouraged to study the impacts of DFG on marine life and natural habitats in the waters of the United States, including those surrounding U.S. territories, especially Marine National Monuments and the National Estuarine Research Reserves.

National Marine Fisheries Service.—The Committee recommends \$967,586,000 for National Marine Fisheries Service (NMFS) Operations, Research, and Facilities, which is \$125,911,000 above the President's request. NMFS shall continue to provide quarterly updates to the Committee consistent with direction in fiscal year 2020.

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	\$127,905
Species Recovery Grants	7,000
Atlantic Salmon	6,500
Pacific Salmon	67,250
Protected Resources Science and Management	208,655
Fisheries Science and Management:	
Fisheries and Ecosystem Science Programs and Services	150,018
Fisheries Data Collections, Surveys and Assessments	173,709
Observers and Training	50,000
Fisheries Management Programs and Services	124,500
Aquaculture	15,250
Salmon Management Activities	59,643
Regional Councils and Fisheries Commissions	46,446
Interjurisdictional Fisheries Grants	3,365
Fisheries Science and Management	622,931
Enforcement	77,000
Habitat Conservation and Restoration	59,000

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

Program	Amount
Total, National Marine Fisheries Service, Operations, Research, and Facilities	\$967,586

Climate-Ready Fisheries.—The Committee directs the Government Accountability Office (GAO) to issue a report to Congress not later than one year after the enactment of this Act examining efforts by NMFS, the Regional Fishery Management Councils (RFMC), and the Atlantic States Marine Fisheries Commission (ASMFC) to prepare and adapt Federal or jointly-managed fisheries to the impacts of climate change. The report shall examine whether these entities have taken steps to prepare and respond to the impacts of climate change and if any guidance issued to the RFMCs by NMFS on climate impacts has been utilized by fishery managers. The report shall also make recommendations for addressing (1) the most significant funding shortfalls; (2) the most important social, ecological, and other knowledge gaps preventing action; (3) how these entities can better prepare associated fishing industries and dependent communities for the impacts of climate change; and (4) how to enhance the capacity of NMFS to monitor and incorporate climate-related changes to fishery management.

Consistent Application of Regulations.—The Committee looks forward to receiving the report requested in fiscal year 2020 regarding the consistent application of regulations across NMFS regions and directs NMFS to expedite the report's completion.

Marine Mammals, Sea Turtles, and Other Species.—The recommendation includes \$127,000,000 for Marine Mammals, Sea Turtles, and Other Species. Within this amount, the Committee provides no less than the fiscal year 2020 level for Endangered Species Act and Marine Mammal Protection Act Permitting Capacity and no less than \$4,000,000 for the John H. Prescott Marine Mammal Rescue Assistance grant program.

Sea Turtles.—The Committee provides no less than the fiscal year 2020 amount for NMFS to continue scientifically advisable operations of, and full funding for, ongoing work on endangered and threatened sea turtle conservation, including captive sea turtle rearing and Turtle Excluder Device research and certification to reduce sea turtle bycatch. NOAA committed to Congress that it would continue its sea turtle stranding and rehabilitation programs until it found suitable non-governmental partners to take over this program in full. Therefore, NMFS is directed to maintain adequate capacity of the sea turtle stranding and rehabilitation program until it can assure Congress that those critical activities have been fully transferred to partner organizations.

Southern Resident Killer Whales.—The Committee provides not less than the fiscal year 2020 amount for the Southern Resident Killer Whales program for research and monitoring to improve the recovery of the 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.

North Atlantic Right Whale.—The Committee remains concerned that North Atlantic right whale populations continue to be critically low. Therefore, the Committee rejects the President’s proposal to reduce funds and instead provides not less than \$2,000,000 above the amount provided in fiscal year 2020 for research and monitoring of North Atlantic right whales. These additional funds shall be dedicated to (1) increasing aerial surveys and fixed and mobile acoustic monitoring to improve understanding of the species’ full range and the timing of migration within that range; (2) augmenting data collection regarding relevant fishing effort, distribution, and gear use; and (3) expanding the pilot to develop, refine, and field test innovative fishing gear technologies designed to reduce North Atlantic right whale entanglements in partnership with relevant stakeholders. Further, the Committee encourages NOAA to develop a habitat suitability index and long-term tagging methods. The recommendation also includes \$300,000 from the amount provided for Fisheries Data Collections, Surveys, and Assessments to continue to support a continuous plankton recorder survey consistent with direction provided in fiscal year 2020.

Species Recovery Grants.—The Committee rejects the proposed reduction for Species Recovery Grants and recommends \$1,010,000 above the President’s request.

Hatchery and Genetic Management Plans.—The Committee provides \$67,250,000 for Pacific Salmon, \$3,014,000 above the requested level, and rejects the reduction to Hatchery and Genetic Management Plans (HGMPs). Instead, the recommendation provides no less than \$5,000,000 within Pacific Salmon to implement NMFS’ comprehensive plan to address the backlog of HGMPs as specified in House Report 116–101. NMFS shall provide the Committee with an update, not later than 90 days after the enactment of this Act, on progress in reducing the backlog.

Fisheries and Ecosystem Science Programs and Services.—The Committee provides \$150,018,000 for Fisheries and Ecosystem Science Programs and Services and rejects the proposed elimination of Antarctic Research, Fisheries Science Activities, and Northeast Groundfish Research and provides funding at no less than the fiscal year 2020 level for each of these programs.

Fisheries Data Collections, Surveys, and Assessments.—The Committee provides \$173,709,000 for Fisheries Data Collections, Surveys, and Assessments, \$9,657,000 above the request. 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 recommendation does not adopt the proposed reduction for Cooperative Research and continues funding for this activity at no less than the fiscal year 2020 level. The Committee encourages NMFS to support collaborative programs focused on improving recreational fishery data collection. The recommenda-

tion 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.

Fisheries Management Programs and Services.—The Committee rejects the harmful proposals to reduce base funds to the Fisheries Management Programs and Services, the Seafood Import Monitoring Program, and provides no less than the fiscal year 2020 level for these activities. The recommendation does not adopt the proposed reduction to Electronic Monitoring and Reporting and instead provides no less than the fiscal year 2020 level for these efforts to continue nationwide. The Committee reminds NOAA that catch share programs reduce harmful competition between fishing vessels, thereby helping to reduce occupational hazards, avoid market gluts, maximize profits, and reduce ecological damage. The Committee therefore rejects the proposed reduction of funding and provides no less than the fiscal year 2020 level for the National Catch Share Program.

Additionally, within the funds provided for Fisheries Science and Management, NOAA shall develop a priority list of other species that should be considered for inclusion in the Seafood Import Monitoring Program in order to: (1) reduce human trafficking in the international seafood supply chain, (2) reduce economic harm to the American fishing industry, (3) preserve stocks of at-risk species around the world, and (4) protect American consumers from seafood fraud. NOAA shall provide this list to the Committee within 180 days of enactment of this Act.

To strengthen implementation of the Seafood Import Monitoring Program, the Committee directs NMFS to increase coordination with the Commercial Targeting and Analysis Center (CTAC) in the Department of Homeland Security to develop additional analytical tools to help identify imports that are of high risk of illegal fishing and seafood fraud to inform targeted inspections and enforcement.

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 Pacific bluefin tuna and therefore urges NMFS to support the Management Strategy Evaluations (MSE) for Pacific bluefin tuna and other priority highly migratory species. Further, the Committee encourages NMFS to ensure a strong U.S. negotiating position on Pacific bluefin tuna recovery by providing additional resources to support engagement of the Pacific Fishery

Management Council and U.S. stakeholders to ensure continued progress on the international recovery plan.

Oyster Restoration and Research.—The Committee encourages NOAA to competitively select external partners to research alternative substrates for oyster restoration. NOAA shall consider survivability as part of the oyster restoration program in the Chesapeake Bay. Within Habitat Conservation and Restoration, the Committee encourages NOAA to support oyster restoration in the Chesapeake Bay.

Salmon Management Activities.—The Committee recommends \$1,600,000 above the fiscal year 2020 amount provided for Salmon Management Activities. The Committee rejects the proposed reductions to these activities and instead includes no less than \$36,100,000 for Pacific Salmon Treaty activities and \$23,000,000 for Mitchell Act Hatcheries that shall be executed consistent with prior year direction. NMFS shall continue to brief the Committee biannually on the implementation of the new obligations of the 2018 recertification of the Pacific Salmon Treaty as directed in fiscal year 2020.

Regional Councils and Fisheries Commissions.—The recommendation accepts the proposed technical transfers into Regional Councils and Fisheries Commissions, but rejects the proposed reduction in funding for this program. Further, within the funds provided for Regional Councils and Fisheries Commissions, \$250,000 is included to implement the Pacific Fishery Management Council's Fishery Ecosystem Plan (FEP) Climate and Communities Initiative and to update the FEP to support climate-ready fisheries and ecosystem-based fisheries management.

Interjurisdictional Fisheries Grants.—The recommendation rejects the proposed elimination of Interjurisdictional Fisheries Grants and instead provides \$3,365,000.

Enforcement.—The Committee provides \$77,000,000 for Enforcement, which is \$21,070,000 above the request. The Committee again rejects the proposed elimination of the Cooperative Enforcement Program that includes the execution of Joint Enforcement Agreements as well as the proposal to reduce enforcement capacity, and instead provides no less than the fiscal year 2020 level for these activities.

Illegal Unregulated and Unreported (IUU) Fishing.—IUU fishing 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. Within the increase to Enforcement, the Committee directs NMFS to allocate a full-time employee, or its equivalent, to staff the Interagency Working Group on IUU Fishing, which was established in the FY 2020 National Defense Authorization Act (Public Law 116–92). Dedicated staffing shall ensure that the Interagency Working Group can fulfill the requirements in the Maritime SAFE Act, including the preparation of a strategic plan by December 2021. The Committee directs NOAA to provide a report to the Committee detailing costs and progress on improvements to IUU enforcement and seafood traceability since 2018 within 180 days of the enactment of this Act.

Habitat Conservation and Restoration.—The Committee provides \$59,000,000 for Habitat Conservation and Restoration, which is

\$19,952,000 above the request. Further, the recommendation rejects the reductions to Sustainable Habitat Management and Fisheries Habitat Grants and provides no less than the fiscal year 2020 level for each program. The Committee appreciates the progress made in reducing the backlog of essential fish habitat consultations and encourages NMFS to continue to prioritize this effort. The Committee also directs the Office of Habitat Conservation to continue to collaborate with NOS' Coral Reef Conservation program to restore coral barrier reef ecosystems.

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.

Adapting Fisheries Management to a Changing Climate.—The Committee notes that preparation efforts offer the potential to yield greater stability in Federal fishery management as the oceans change as a result of climate change, with benefits to fish stocks, fishermen, and fishing communities. Within the funds provided for Regional Councils and Fisheries Commissions, NOAA is encouraged to support climate-ready fishery management efforts underway by the Councils, including initiatives to conduct scenario planning and other preparation or adaptation efforts.

Bycatch Reduction and Incidental Take Permits.—The Committee is concerned by changing ocean conditions that are disrupting ecosystem stability, leading to increased conflicts between commercial shellfish fisheries and protected species. To resolve this conflict, the Committee encourages NMFS to ensure that it dedicates adequate resources (1) to expeditiously evaluate any application that it receives for an incidental take permit for shellfish fisheries, (2) to support the NOAA Bycatch Reduction Engineering Program for research and development of gear innovations to prevent entanglements while allowing for continued fishing in these fisheries, and (3) to continue robust participation in collaborative efforts to reduce fishing gear conflicts.

Oceanic and Atmospheric Research.—The Committee recommends \$584,426,000 for Oceanic and Atmospheric Research (OAR) Operations, Research, and Facilities, which represents an increase of \$36,042,000 over fiscal year 2020 and is \$257,681,000 above the request.

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

Program	Amount
Climate Research:	
Laboratories and Cooperative Institutes	\$78,000
Regional Climate Data and Information	43,000
Climate Competitive Research	69,000

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

Program	Amount
Climate Research	190,000
Weather and Air Chemistry Research:	
Laboratories and Cooperative Institutes	89,000
U.S. Weather Research Program	28,750
Tornado Severe Storm Research/Phased Array Radar	14,134
Joint Technology Transfer Initiative	14,000
Weather and Air Chemistry Research	145,884
Ocean, Coastal, and Great Lakes Research:	
Laboratories and Cooperative Institutes	37,000
National Sea Grant College Program	71,000
Marine Aquaculture Program	13,000
Ocean Exploration and Research	42,742
Integrated Ocean Acidification	16,000
Sustained Ocean Observations and Monitoring	46,000
National Oceanographic Partnership Program	5,000
Ocean, Coastal, and Great Lakes Research	230,742
High Performance Computing Initiatives	17,800
Total, Office of Oceanic and Atmospheric Research, Operations, Research, and Facilities	\$584,426

Forward-looking Climate Data.—The National Oceanic and Atmospheric Administration (NOAA) plays a vital role in providing accurate climate data and projections to other Federal agencies. Therefore, the Committee directs NOAA to identify and support the utilization by the National Institute of Standards and Technology (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. This effort shall serve 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.

Climate Research.—The Committee provides \$190,000,000 for Climate Research and rejects the reductions to Climate Laboratories and Cooperative Institutes and the termination of climate research at the Atlantic Oceanographic and Meteorological Laboratory and directs NOAA to continue this work at no less than the level of funding provided in fiscal year in 2020. The recommendation further rejects the proposal to eliminate funding for the National Climate Assessment (NCA) and instead provides no less than the fiscal year 2020 level to continue this work. The Committee emphasizes that the NCA is congressionally-mandated and shall not be impeded.

Coastal Inundation Forecasting and Resilience.—Within funds provided for Climate Laboratories and Cooperative Institutes, the Committee directs OAR, in collaboration with NOS and other partners in the U.S. Global Change Research Program as appropriate, to develop and initiate a research agenda to improve understanding of inundation risks to coastal areas as a result of the climate crisis and to meet the information needs of decision makers as they con-

sider how to appropriately adapt and increase resilience to such impacts. OAR shall provide to the Committee, within 180 days of the enactment of this Act, a report outlining a 5-year plan for such efforts and the associated funding requirements.

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 no less than \$1,250,000, within Climate Laboratories and Cooperative Institutes, to modernize these observatories' aging infrastructure to ensure measurement integrity and safety of the observatory facilities.

Earth's Radiation Budget.—The Committee provides no less than \$9,000,000 for modeling, assessments, observations, and monitoring of stratospheric conditions and the Earth's radiation budget, including the impact of the introduction of material into the stratosphere from changes in natural systems, increased air and space traffic, proposals to inject material to affect climate, and the assessment of solar climate interventions. Within these funds, the recommendation further directs OAR 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.

Arctic Research.—The Committee rejects the proposed elimination of Arctic Research and provides no less than the fiscal year 2020 level in both Regional Climate Data and Information and Climate Laboratories and Cooperative Institutes for this work.

Regional Integrated Sciences and Assessments Program.—The Committee rejects the termination of the Regional Integrated Sciences and Assessments Program and instead provides the program an increase of \$3,000,000, as compared to the fiscal year 2020 level, within Regional Climate Data and Information. The Committee directs NOAA to expand the geographic coverage of the program with a long-term goal of providing comprehensive decision-support services and tools to local and regional decision makers in all States and territories.

Climate Competitive Research.—The Committee rejects the elimination of Climate Competitive Research as well as any transfers or eliminations of activities, funds, or staff from this budget line proposed in the President's request. Instead, the recommendation includes \$69,000,000 for this critical research, which is \$6,000,000 above fiscal year 2020.

Weather and Air Chemistry Research.—The Committee provides \$145,884,000 for Weather and Air Chemistry Research, which is \$12,250,000 above fiscal year 2020. The recommendation rejects the proposals to close the Air Resources Lab and to decrease funding for Weather and Air Chemistry Research Laboratories and Cooperative Institutes, and instead provides no less than the fiscal year 2020 level for each of these activities. The recommendation also includes \$10,000,000 for Vortex-Southeast.

Earth Prediction Innovation Center.—The Committee provides \$28,750,000 for the U.S. Weather Research Program (USWRP), thereby rejecting the proposal to reduce base funding. The committee commends NOAA for efforts made to advance weather fore-

casting through the Earth Prediction Innovation Center (EPIC) program and provides \$3,500,000 above fiscal year 2020 for this program. The Committee further directs the agency to continue efforts to advance and accelerate forecasting improvements that are accessible to the public and community-based. The committee directs NOAA to include workforce, organizational, and culture change components as part of the EPIC scope and to include the adoption of more modern software engineering practices and the application of new practices in research and operations processes that infuse innovation.

Tornado Warning Improvement and Extension Program.—The Committee provides \$3,200,000 to create the Tornado Warning Improvement and Extension Program as authorized in the Weather Research and Forecasting Innovation Act of 2017 (Public Law 115–25).

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.

Severe Weather Extramural Testbeds.—The Committee continues to support efforts at NOAA to leverage the capabilities of extramural partners as they continue to implement the Weather Research and Forecasting Innovation Act. Within the funding for Tornado Severe Storm Research/Phased Array Radar, the Committee encourages NOAA to establish a severe weather extramural testbed to focus on severe weather and to improve weather modeling and prediction, including improved convection models and use of new techniques for data assimilation and ensemble prediction. Such efforts are an important step in helping improve the path from research to operations for the NWS.

Next Generation Phased Array Weather Radars.—The Committee affirms NOAA’s investment in the development of advanced radar systems and technology to satisfy its weather and related requirements. Within the amount provided for Tornado Severe Storm Research/Phased Array Radar above the request, NOAA shall expand the Agency’s work on digital phased array radar systems with the goal of evolving into broader advanced radar research and applications in collaboration with current university cooperative institute partners with expertise in this area. This refined investment should also work in parallel to provide complementary but not redundant research and development to meet National Weather Service requirements and to reduce long-term operations and maintenance costs of the future national radar network.

Ocean, Coastal, and Great Lakes Research Laboratories and Cooperative Institutes.—The Committee provides \$37,000,000 for Ocean, Coastal, and Great Lakes Research Laboratories and Cooperative Institutes. The Committee does not approve the proposed termination of the Genomics program and instead directs NOAA to expand this work within the increased available base 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.

National Sea Grant College Program.—The Committee once again rejects the President’s proposal to eliminate the National Sea Grant College Program. Instead, the Committee provides \$71,000,000, including an increase of \$4,000,000 as compared to the fiscal year 2020 level for the base program that funds universities in coastal States around the country.

Tribal Coastal Resiliency Planning.—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.

Marine Aquaculture Program.—The Committee recognizes the importance of NOAA’s Marine 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 \$13,000,000 for Marine Aquaculture.

Ocean Exploration and Research.—The Committee rejects the requested decrease in funding for Ocean Exploration and Research and instead provides \$42,742,000 and encourages NOAA to map and characterize the Nation’s Exclusive Economic Zone and Extended Continental Shelf.

Integrated Ocean Acidification.—The Committee is increasingly concerned about the impacts of ocean acidification on coastal communities and industries and therefore rejects the proposed reduction to the Integrated Ocean Acidification program. The recommendation instead includes \$16,000,000 for this important work. 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.

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 does not adopt the requested reduction in funds for Sustained Ocean Observations and Monitoring and instead provides \$46,000,000. 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, particularly in the deep sea, the tropics, and the Arctic.

Cloud Computing for Research.—The Committee rejects the proposed reduction to Research and Development Cloud Computing Services and instead provides no less than \$6,000,000 for cloud computing for research consistent with prior year direction. The Committee further looks forward to receiving the report requested in fiscal year 2020 regarding high performance and cloud computing.

National Weather Service.—The Committee recommends \$1,112,073,000 for National Weather Service (NWS) Operations, Research, and Facilities, which is \$46,372,000 above the President’s Budget request. The Committee reaffirms its commitment to the weather enterprise and the necessity of maintaining the mission of protecting life and property within the Federal Government. While the Committee does not oppose the continued growth of the private weather industry, the increasing frequency and intensity of natural disasters epitomize the need for the public provision of this critical information.

NATIONAL WEATHER SERVICE
Operations, Research, and Facilities
(In thousands of dollars)

Program	Amount
Observations	\$241,000
Central Processing	102,538
Analyze, Forecast, and Support	538,000
Dissemination	79,112
Science and Technology Integration	151,423
Total, National Weather Service, Operations, Research, and Facilities	1,112,073

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 2021 spend plan, NWS shall follow direction as provided in fiscal year 2020. The Committee further directs NWS to continue the quarterly briefings to the Committee first required in fiscal year 2018, and NWS shall also include information about weather forecast accuracy and efforts to improve such accuracy. Further, future NWS spend plans provided to the Committee shall include a detailed comparison, in tables and narrative descriptions, showing the prior fiscal year’s spend plan, compared with that year’s actual expenditures, with justifications for all deviations.

Observations.—The recommendation provides \$241,000,000 for observation activities, including not less than \$1,000,000 for Data Sharing for Integrated Global Observing System and Global Basic Observing Network. The recommendation does not adopt the proposed reductions to Marine Observations, Upper Air Observations, the Ship Observation Data Buy, NEXRAD Radome and Tower Maintenance Services, or the Weather and Ocean Platform Buoys and provides not less than the fiscal year 2020 level for each of these activities. The Committee reaffirms its support for the tsunami detection mission and provides not less than the fiscal year

2020 enacted level for the Tropical Atmosphere Ocean (TAO) Platform observations.

National Mesonet Program.—The recommendation includes not less than \$22,500,000 for the National Mesonet Program, \$2,300,000 above the fiscal year 2020 level, to enable the program to increase the number of observations, include new types of data, and introduce innovative capabilities to address capacity and coverage gaps.

Central Processing.—The recommendation includes \$102,538,000 for Central Processing while rejecting the proposed reduction to the Advanced Hydrologic Prediction Services System and the proposal to terminate 84 Information Technology Officers who are critical to the delivery of timely and actionable forecasts. No less than the fiscal year 2020 level is provided to continue these activities.

Analyze, Forecast, and Support.—The recommendation includes \$538,000,000 for Analyze, Forecast, and Support activities, but does not adopt the proposed NWS workforce savings that would only serve to exacerbate the staffing problems noted above. The Committee further rejects the proposed consolidation of the functions of the Climate Prediction Center and the Weather Prediction Center at the National Centers for Environmental Prediction, as well as the termination of Aviation Science Research to Operations, and provides no less than the fiscal year 2020 amount for each of these activities.

Tsunami Warning Program.—The Committee rejects the proposed reduction to the Tsunami Warning Program and instead provides no less than the fiscal year 2020 level for this critical program.

Weather decadal.—The recommendation includes no less than \$1,500,000 from within Analyze, Forecast, and Support to commission the National Academies of Sciences, Engineering and Medicine to undertake the inaugural decadal survey of the U.S. weather enterprise, to be completed not later than one year after the enactment of this Act, that shall: (1) ensure the participation of all relevant Federal agencies; (2) provide policymakers with the relevant information to prioritize investments in weather forecasting, modeling, data assimilation, and supercomputing over the next ten years; (3) assess the current US weather enterprise and how it has performed over the previous five years, including implementation of the Weather Research and Forecasting Innovation Act of 2017 (15 U.S.C. 8501–8549); and (4) evaluate 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.

Dissemination.—The Committee provides \$79,112,000 for Dissemination Operations, Research, and Facilities, and rejects the proposal to reduce funding for NOAA Weather Radio.

Science and Technology Integration.—The recommendation includes \$151,423,000 for Science and Technology Integration but approves neither the termination of COASTAL Act or Aviation Science Research to Operations, nor the reduction to Numerical Weather Prediction Modeling. No less than the fiscal year 2020 level is provided for each of these activities.

National Water Center (NWC).—The Committee does not adopt the termination of funding for Hydrology and Water Resources within Science and Technology Integration. Instead, the recommendation includes no less than the fiscal year 2020 level to continue research activities to improve fine and large-scale measurements of snow depth and soil moisture data that can be used to expand and improve the National Water Model and contribute directly to the mission of NOAA’s National Water Center.

Improving River and Flood Forecasts.—The Committee was troubled by the widespread flooding throughout the Nation in calendar year 2019. Future effective mitigation of this costly and dangerous hazard requires improved monitoring and forecasting of hydrologic conditions, including stream and river flow. Recognizing this need, the Committee encourages NOAA, in collaboration with the United States Geological Survey, to work with the extramural research community to update and improve upon its existing flooding models and forecasts, to utilize new technologies for enhanced data collection, and to enhance flood data services for local government officials, communities, producers, and other stakeholders who depend on accurate flooding forecasts. NOAA should consider how this priority can be addressed by future partnerships with academic and State centers, particularly in those States impacted by the 2019 Missouri River and North Central Flooding.

Storm Surge Modeling Technology.—The Committee encourages NOAA to continue to pursue collaborations that will improve upon NOAA’s current Sea, Lake, and Overland Surge from Hurricanes model; and encourages NOAA to consider integrating improved technologies into standard modeling operations for storm surge, inland flooding, and the combination of both.

National Environmental Satellite, Data and Information Service.—The Committee recommends \$285,606,000 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	\$189,099
Product Development, Readiness, and Application	28,907
Commercial Remote Sensing Regulatory Affairs	1,800
Office of Space Commerce	1,800
Group on Earth Observations	500
Environmental Satellite Observing Systems	222,106
National Centers for Environmental Information	63,500
Total, National Environmental Satellite, Data and Information Service, Operations, Research, and Facilities	\$285,606

Product Development, Readiness, and Application.—The recommendation does not accept the proposal regarding Data Products Developed and provides no less than the fiscal year 2020 level for this work.

Office of Space Commerce.—The Committee does not accept the proposal to transfer the functions of the Office of Space Commerce

and Commercial Remote Sensing Regulatory Affairs out of NOAA NESDIS. The Committee looks forward to the delivery of the study on this topic by the National Academy of Public Administration.

National Centers for Environmental Information.—The Committee does not adopt the proposals to reduce National Centers for Environmental Information (NCEI) grants or to terminate Regional Climate Services. The Committee recommends \$63,500,000 for NCEI, which includes no less than \$5,500,000 for Coastal Data Development, \$2,400,000 for Regional Climate Services, and \$4,600,000 for Regional Climate Centers. NESDIS shall further prioritize filling the vacant Regional Climate Services Director positions.

Mission Support.—The recommendation includes \$311,454,000 for Mission Support Operations, Research, and Facilities.

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

Program	Amount
Mission Support:	
Executive Leadership	\$28,024
Mission Services and Management	161,163
IT Security	15,378
Payment to DOC Working Capital Fund	66,389
	270,954
Mission Support Services	270,954
Office of Education:	
B–WET Regional Programs	8,000
José E. Serrano Educational Partnership Program with Minority Serving Institutions	20,000
NOAA Education Program Base	5,500
	33,500
Office of Education	33,500
Facilities Maintenance	7,000
	7,000
Total, Mission Support, Operations, Research, and Facilities	\$311,454

Office of Education.—The Committee rejects all of the proposed cuts to the Office of Education and believes the enactment of these proposals would do great harm to the future of oceanic and atmospheric sciences. 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 \$33,500,000 for NOAA’s Office of Education, an increase of \$3,300,000 above the fiscal year 2020 level, which includes continued support for Environmental Literacy Grants and for improving geographic literacy. Of this amount, \$20,000,000 is provided for the José E. Serrano Educational Partnership Program with Minority Serving Institutions and \$8,000,000 is provided to continue the Bay-Watershed Education and Training (B–WET) regional programs.

Facilities Maintenance.—The Committee accepts the consolidation of Facilities Maintenance into one budget line under Mission Support, including the proposed transfer of funds for this purpose from NMFS.

Office of Marine and Aviation Operations (OMAO).—The recommendation includes \$255,779,000 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 2020.

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	\$174,000
Aviation Operations and Aircraft Services	29,466
Unmanned Systems Operations	10,665
NOAA Corps	41,648
<hr/>	
Total, Office of Marine and Aviation Operations, Operations, Research, and Facilities	\$255,779

Marine and Aviation Operations.—The Committee notes the importance of NOAA’s vessels’ Days At Sea (DAS) and aircraft flight hours in fulfilling NOAA’s mission requirements, and therefore rejects the proposals to reduce DAS and Aircraft Operations. Instead, the Committee directs OMAO to maximize DAS and flight hours, to the extent practicable, while executing the comprehensive vessel and aircraft maintenance program recently developed by OMAO.

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 rejects the proposal to eliminate these flights and instead provides no less than \$2,000,000, including up to \$1,500,000 from unexpended funds in fiscal year 2020, for use of airborne assets to conduct increased winter storm observations to better observe and predict these extreme weather events.

Unmanned Systems Operations.—The Committee provides \$10,665,000 for Unmanned Systems Operations (UxS) and directs OMAO to continue to prioritize operationalizing unmanned technologies. OMAO shall also partner with OAR to develop new technologies and applications of unmanned systems to cost effectively meet NOAA’s missions.

Further, the Committee directs NOAA, in partnership with the UxS Executive Oversight Board, as well as in consultation with the leadership of each of the NOAA line offices, to develop a 5-year strategic plan for expanding the use of unmanned systems, including from third party vendors, as appropriate, to meet NOAA’s broad suite of missions. The plan shall detail how the use of these platforms will supplement the in-situ data collection capabilities and change the demands on NOAA’s ships and aircraft, both in terms of deploying unmanned assets as well as the potential for reduced demand on those assets as unmanned systems multiply the capacity for environmental observations. This plan shall take into consideration the rapidly advancing technology of these platforms as well as the sensors that can be placed upon them and allow the flexibility to adopt technologies as they become available. NOAA shall deliver this plan to the Committee no later than 12 months after the enactment of this Act.

PROCUREMENT, ACQUISITION AND CONSTRUCTION
(INCLUDING TRANSFER OF FUNDS)

The Committee recommends a total program level of \$1,537,360,000 for Procurement, Acquisition, and Construction (PAC), of which \$1,524,360,000 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	\$2,000
Marine Sanctuaries Construction	4,000
Total, NOS—PAC	6,000
Office of Oceanic and Atmospheric Research:	
Research Supercomputing/CCRI	42,000
National Weather Service:	
Observations	15,745
Central Processing	66,761
Dissemination	9,934
Total, NWS—PAC	92,440
National Environmental Satellite, Data and Information Service:	
GOES R	334,500
Space Weather Follow-on	108,115
Polar Weather Satellites	657,835
CDARS	14,400
COSMIC 2/GNSS RO	5,892
Geostationary Earth Orbit (GEO)	10,000
Systems/Services Architecture and Engineering (SAE)	37,000
Satellite Ground Services (SGS)	39,287
Projects, Planning, and Analysis	15,941
Satellite CDA Facility	2,450
Total, NESDIS—PAC	1,224,118
Mission Support:	
NOAA Construction	50,000
Office of Marine and Aviation Operations:	
Fleet Capital Improvements and Technology Infusion	27,500
Vessel Recapitalization	92,000
Unmanned Systems Acquisitions	2,000
Total, OMAO—PAC	121,500
Total, Procurement, Acquisition and Construction	\$1,537,360

Research Supercomputing.—The Committee recognizes the importance of supercomputing capacity to further research efforts regarding weather and climate modeling and therefore recommends \$42,000,000 for OAR Research Supercomputing, which is \$16,000,000 above the request.

Integrated Water Prediction.—The Committee provides \$66,761,000 for Central Processing under National Weather Service PAC, which includes not less than the fiscal year 2020 level for In-

tegrated Water Prediction High Performance Computing as well as Research and Development High Performance Computing.

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 2020. 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. These briefings shall include the status of obligations for each program, including spacecraft, launch vehicle, sensor, integration, and ground components, and proposed changes to the fly-out charts. NOAA shall also include in these briefings updates on all of its operational satellite systems.

Commercial Data.—The Committee provides \$2,678,000 above the fiscal year 2020 level for purchase and piloting of commercial weather data.

NOAA Construction.—The Committee notes the poor condition of NOAA's aging physical research infrastructure, including a number of highly utilized NOAA Fisheries regional facilities that perform critical, world class research and surveys in support of the agency's multiple missions. The Committee is particularly concerned that several key NOAA Fisheries regional labs across the country will soon be unable to perform basic functions, even with major reconstruction, given the significant age of infrastructure, state of disrepair, and changing physical environment in which they are located. The Committee therefore urges NOAA Fisheries to accelerate existing regional facility modernization planning and analysis efforts. Such efforts shall prioritize the benefits of colocation with existing Federal academic, university, and nonprofit partners, including cooperative institutes, as appropriate, as a means of leveraging existing relationships and research efforts in an effort to maintain, if not elevate, the facilities capabilities and enhance scientific excellence.

Vessel Recapitalization.—Following the unexpected decommissioning of the Research Vessel *Hi'ialakai*, the Committee expects NOAA to place a higher priority on full, proper, and timely maintenance of all ships and vessels. The Committee therefore notes with disdain the omission of a request for funding of the midlife maintenance of NOAA's global class vessel despite the direction provided in fiscal year 2020. Funding for such maintenance is included in this recommendation. 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. 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.

PACIFIC COASTAL SALMON RECOVERY

The Committee rejects the proposed termination of Pacific Coastal Salmon Recovery and recommends \$65,000,000 for this program.

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.

FISHERY DISASTER ASSISTANCE

The Committee accepts the proposal for Fishery Disaster Assistance. The Committee recognizes the distress caused by fishery disasters and understands that poor communication and funding disbursement delays only exacerbate an already difficult problem. NOAA is urged to consider policy changes to improve and expedite the review and obligation process, and to provide Congress with budgetary and legislative proposals as needed.

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 \$129,723,000 for Departmental Management (DM), \$14,723,000 above fiscal year 2020 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.

Modernizing economic statistics in Puerto Rico.—In October 2019, the Bureau of Economic Analysis (BEA) released prototype statistics for consumer spending, business investment, and net exports of goods for Puerto Rico for 2012–2017. This information is an important step towards producing gross domestic product (GDP) statistics for Puerto Rico and in line with recommendations from the 2016 Bipartisan Congressional Task Force on Economic Growth in Puerto Rico report to the House and Senate. The Committee understands that BEA will release these estimates by the end of 2020. The Committee directs the Department to continue its efforts to help the government of Puerto Rico to modernize its economic statistics programs and looks forward to receiving the report outlining its efforts to produce quarterly economic surveys for the territories and personal income statistics as directed in House Report 116–101.

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 and the U.S. Virgin Islands, and understands that the Commerce Department, in coordination with the Government of Puerto Rico, will stand up a working group to ex-