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(Original Signature of Member)

116TH CONGRESS
2D SESSION

H. R. _____

To direct the Secretary of Commerce, acting through the Administrator of the National Oceanic and Atmospheric Administration, to provide for ocean-based climate solutions to reduce carbon emissions and global warming; to make coastal communities more resilient; and to provide for the conservation and restoration of ocean and coastal habitats, biodiversity, and marine mammal and fish populations; and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

Mr. GRIJALVA (for himself and [see ATTACHED LIST of cosponsors]) introduced the following bill; which was referred to the Committee on

A BILL

To direct the Secretary of Commerce, acting through the Administrator of the National Oceanic and Atmospheric Administration, to provide for ocean-based climate solutions to reduce carbon emissions and global warming; to make coastal communities more resilient; and to provide for the conservation and restoration of ocean and coastal habitats, biodiversity, and marine mammal and fish populations; and for other purposes.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*

3 **SECTION 1. SHORT TITLE; TABLE OF CONTENTS.**

4 (a) SHORT TITLE.—This Act may be cited as the
5 “Ocean-Based Climate Solutions Act of 2020”.

6 (b) TABLE OF CONTENTS.—The table of contents for
7 this Act is the following:

Sec. 1. Short title; table of contents.

Sec. 2. Definitions.

TITLE I—MARINE AND COASTAL BLUE CARBON

Sec. 101. Blue carbon program.

Sec. 102. National map of coastal and marine blue carbon ecosystems.

Sec. 103. Report on blue carbon in the United States.

Sec. 104. Blue Carbon Partnership Grant Program.

Sec. 105. Integrated pilot programs to protect and restore degraded coastal
blue carbon ecosystems.

Sec. 106. Interagency working group.

Sec. 107. Coastal carbon areas of significance.

Sec. 108. Authorization of Smithsonian Institution blue carbon activities.

Sec. 109. Authorization of appropriations.

Sec. 110. Definitions.

TITLE II—MARINE PROTECTED AREAS

Sec. 201. Policy.

Sec. 202. Interagency task force.

Sec. 203. Initiate designation process for successful sanctuary nominations and
technical corrections to the National Marine Sanctuaries Act.

Sec. 204. Increased protection for deep sea corals.

Sec. 205. Marine biodiversity gap analysis.

TITLE III—OFFSHORE ENERGY

Subtitle A—Oil and Gas Leasing in the Outer Continental Shelf

Sec. 301. Prohibition of oil and gas leasing in all areas of the Outer Conti-
nental Shelf.

Subtitle B—Offshore Renewable Energy

Sec. 311. Sense of Congress on the importance of offshore wind energy.

Sec. 312. National offshore wind goals.

Sec. 313. Removing roadblocks for data sharing.

Sec. 314. Increasing funding for scientific research.

Sec. 315. Extending collaboration with industry.

Sec. 316. Developing strategies to protect wildlife.

Sec. 317. Offshore wind for the Territories.

- Sec. 318. Marine energy research.
Sec. 319. Increasing funding for coastal conservation and resilience.

TITLE IV—CLIMATE-READY FISHERIES, EFFICIENT FISHERY
VESSELS, AND BUY AMERICAN SEAFOOD

- Sec. 401. Sense of Congress.
Sec. 402. Caught in the USA.
Sec. 403. Eliminate fish subsidies in trade agreements.
Sec. 404. Fuel efficient fishing vessels.
Sec. 405. Climate and fisheries research and management program.
Sec. 406. Climate-ready fisheries innovation program.
Sec. 407. Shifting Stocks Task Force.
Sec. 408. Essential fish habitat consultation.
Sec. 409. Ocean Aquaculture Research and Policy Program.

TITLE V—COASTAL BARRIER RESOURCE ACT AMENDMENTS

- Sec. 501. Undeveloped coastal barrier.
Sec. 502. Coastal hazard pilot project.
Sec. 503. Report on expanding Coastal Barrier Resources Act to the Pacific Coast, including Pacific Territories and Freely Associated States.
Sec. 504. Require disclosure to prospective buyers that property is in the Coastal Barrier Resources System.
Sec. 505. Improve Federal agency compliance with Coastal Barrier Resources Act.
Sec. 506. Excess Federal property.
Sec. 507. Authorization of appropriations.

TITLE VI—COASTAL ZONE MANAGEMENT ACT AMENDMENTS

- Sec. 601. Grants to further achievement of Tribal coastal zone objectives.
Sec. 602. Eligibility of District of Columbia for Federal funding under the Coastal Zone Management Act of 1972.
Sec. 603. Coastal and Estuarine Land Conservation Program.
Sec. 604. Coastal Zone Management Fund.
Sec. 605. Authorization of appropriations.
Sec. 606. Amendments to National Estuarine Research Reserve System program.

TITLE VII—INSULAR AFFAIRS

- Sec. 701. Definitions.
Sec. 702. Coastal management technical assistance and report.
Sec. 703. Climate Change Insular Research Grant Program.
Sec. 704. Extreme weather and climate outreach to insular areas.
Sec. 705. Coral reefs.
Sec. 706. Ocean and Coastal Mapping Integration Act.
Sec. 707. Office of Insular Affairs Technical Assistance Program.
Sec. 708. Disaster relief Federal cost-share waiver.

TITLE VIII—STRENGTHENING MARINE MAMMAL CONSERVATION

- Sec. 801. Conservation of marine mammals adversely affected by climate change.
Sec. 802. Vessel speed restrictions in marine mammal habitat.

Sec. 803. Monitoring ocean noise for marine mammal health.

Sec. 804. Grants for seaports to establish programs to reduce the impacts of vessel traffic and port operations on marine mammals.

TITLE IX—INTERNATIONAL AGREEMENTS, EFFORTS IN THE
ARCTIC, AND BUREAU OF INDIAN AFFAIRS TRIBAL RESIL-
IENCE PROGRAM

Subtitle A—International Agreements

Sec. 901. United Nations Convention on the Law of the Sea.

Subtitle B—Efforts in the Arctic

Sec. 911. Reinstatement of executive order 13754; Northern Bering Sea Climate Resilience Area.

Sec. 912. Plan for the United States to cut black carbon emissions to 33 percent below 2013 levels by 2025.

Subtitle C—Bureau of Indian Affairs Tribal Resilience Program

Sec. 921. Bureau of Indian Affairs Tribal Resilience Program.

TITLE X—COASTAL RESILIENCY AND ADAPTATION

Sec. 1001. Living Shoreline Grant Program.

Sec. 1002. National Oceanic and Atmospheric Administration Research Programs.

Sec. 1003. Grants for recovering oysters.

Sec. 1004. Improvements to the National Oceans and Coastal Security Act.

Sec. 1005. Shovel-ready restoration grants for coastlines and fisheries.

Sec. 1006. Strategic Climate Change Relocation Initiative and Program.

TITLE XI—OCEAN HEALTH: OCEAN ACIDIFICATION AND
HARMFUL ALGAL BLOOMS

Subtitle A—Coastal Communities Ocean Acidification Act

Sec. 1101. State and United States defined.

Sec. 1102. Coastal community vulnerability assessment.

Subtitle B—Ocean Acidification Act

Sec. 1111. Prize competitions.

Subtitle C—COAST Research Act

Sec. 1121. Purposes.

Sec. 1122. Definitions.

Sec. 1123. Interagency working group.

Sec. 1124. Strategic research plan.

Sec. 1125. National Oceanic and Atmospheric Administration ocean acidification activities.

Sec. 1126. National Science Foundation ocean acidification activities.

Sec. 1127. National Aeronautics and Space Administration ocean acidification activities.

Sec. 1128. Authorization of appropriations.

Subtitle D—South Florida Clean Coastal Waters

Sec. 1131. South Florida harmful algal blooms and hypoxia assessment and action plan.

Subtitle E—Protecting Local Communities From Harmful Algal Blooms

Sec. 1141. Algal blooms.

Subtitle F—Harmful Algal Bloom Essential Forecasting

Sec. 1151. Designating certain harmful algal bloom services as excepted services under the Anti-Deficiency Act.

Sec. 1152. Centers of Excellence in Harmful Algal Bloom Research, Prevention, Response, and Mitigation.

TITLE XII—NATIONAL OCEAN POLICY, DATA, AND COORDINATED WEBSITE FOR GRANT PROGRAMS

Subtitle A—Regional Ocean Partnerships

Sec. 1201. Findings; sense of Congress; purposes.

Sec. 1202. Regional Ocean Partnerships.

Subtitle B—Data and Scientific Coordination

Sec. 1211. Increased coordination among agencies with respect to data and monitoring.

Sec. 1212. Interagency Ocean Exploration Committee.

Sec. 1213. Committee on Ocean Policy.

Sec. 1214. Building data sources.

Sec. 1215. National sea level rise risk analysis.

Subtitle C—Digital Coast

Sec. 1221. Definitions.

Sec. 1222. Establishment of the Digital Coast.

Subtitle D—Integrated Coastal and Ocean Observation System

Sec. 1241. Staggered terms for National Integrated Coastal and Ocean Observation System Advisory Committee.

Sec. 1242. Integrated coastal and ocean observation system cooperative agreements.

Sec. 1243. Reauthorization of Integrated Coastal and Ocean Observation System Act of 2009.

Sec. 1244. Advanced Research Projects Agency—Oceans.

Subtitle E—Centralized Website for Resiliency Grants

Sec. 1251. Centralized website for resiliency grants.

TITLE XIII—WETLANDS

Subtitle A—Coastal Wetlands

Sec. 1301. Definitions.

Sec. 1302. Coastal and Estuary Resilience Grant Program.

Sec. 1303. Data collection.

Sec. 1304. Outreach and technical assistance.

Sec. 1305. Annual restoration and funding.

- Sec. 1306. Prevailing wage requirement.
Sec. 1307. Department of the Interior coastal wetland restoration; funding.

TITLE XIV—MEASURES TO ADDRESS GREENHOUSE GAS
POLLUTION FROM SHIPPING VESSELS

- Sec. 1401. Greenhouse gas emissions from shipping.
Sec. 1402. Quiet Seas and Clear Skies Vessel Speed Reduction Award Program.

TITLE XV—STUDIES AND REPORTS

- Sec. 1501. Deep sea mining.
Sec. 1502. National academies assessment of oceanic blue carbon.
Sec. 1503. Ocean climate impacts and action report.
Sec. 1504. Report on the ecological and economic effects of high seas fishing in the ocean areas beyond national jurisdiction (“ABNJ”).
Sec. 1505. National Academies assessment of public access to the coasts.
Sec. 1506. Study examining the impact of ocean acidification and other environmental stressors on estuarine environments.

1 SEC. 2. DEFINITIONS.

2 In this Act:

3 (1) ADMINISTRATOR.—The term “Adminis-
4 trator” means the Secretary of Commerce acting
5 through the Administrator of the National Oceanic
6 and Atmospheric Administration.

7 (2) EXCLUSIVE ECONOMIC ZONE.—The term
8 “exclusive economic zone” means the zone estab-
9 lished by Proclamation Numbered 5030, dated
10 March 10, 1983.

11 (3) INDIAN TRIBE.—The term “Indian Tribe”
12 has the meaning given such term in section 4 of the
13 Indian Self-Determination and Education Assistance
14 Act (25 U.S.C. 5304).

15 (4) INSTITUTION OF HIGHER EDUCATION.—The
16 term “institution of higher education” has the

1 meaning given such term in section 101(a) of the
2 Higher Education Act of 1965 (20 U.S.C. 1001(a)).

3 (5) NATIONAL ACADEMIES.—The term “Na-
4 tional Academies” means the National Academies of
5 Science, Engineering, and Medicine.

6 (6) RESTORATIVE OCEAN AQUACULTURE.—The
7 term “restorative ocean aquaculture” means ocean
8 and coastal propagation of seaweed or shellfish
9 farming that generates positive ecological and social
10 impact.

11 (7) STATE.—The term “State” means each of
12 the several States, the District of Columbia, and the
13 United States Territories of American Samoa, the
14 Commonwealth of the Northern Mariana Islands,
15 Guam, Puerto Rico, and the United States Virgin
16 Islands.

17 (8) UNITED STATES.—The term “United
18 States” means the several States, the District of Co-
19 lumbia, and the United States Territories of Amer-
20 ican Samoa, the Commonwealth of the Northern
21 Mariana Islands, Guam, Puerto Rico, and the
22 United States Virgin Islands.

1 **TITLE I—MARINE AND COASTAL**
2 **BLUE CARBON**

3 **SEC. 101. BLUE CARBON PROGRAM.**

4 (a) ESTABLISHMENT.—The Administrator shall es-
5 tablish and maintain a Blue Carbon Program within the
6 National Oceanic and Atmospheric Administration for the
7 purposes of furthering conservation objectives for fish and
8 wildlife habitat conservation and restoration and coastal
9 resilience including the development of ways to incorporate
10 ecosystem services from carbon storage into existing do-
11 mestic and international policies, programs, and activities.

12 (b) ADDITIONAL AUTHORITY.—In conducting the
13 Program, the Administrator may enter into and perform
14 such contracts, leases, grants, or cooperative agreements
15 as may be necessary to carry out the purposes of this sub-
16 title on such terms as Administrator considers appro-
17 priate.

18 (c) CONSULTATION.—The Administrator shall coordi-
19 nate activities carried out under this section with the As-
20 sistant Administrator of the National Marine Fisheries
21 Service and the Assistant Administrator of the National
22 Ocean Service.

23 (d) ACTIVITIES.—The Administrator shall lead the
24 development and coordination of the strategic plan de-

1 scribed in section 106(e) and conduct the following activi-
2 ties:

3 (1) Collaborate with Federal agencies, the inter-
4 agency working group, State agencies, Tribes, and
5 non-governmental organizations on research, restora-
6 tion, and protection efforts relating to blue carbon
7 ecosystems.

8 (2) Develop a database of blue carbon stocks
9 and fluxes in the United States.

10 (3) Assist in exploration of the potential for a
11 market for carbon credits for restoration initiatives,
12 including research and development of protocols.

13 (4) Raise awareness of blue carbon ecosystems
14 as a tool to further conservation objectives through
15 education and extension activities.

16 (5) Use existing models or develop new models
17 to assess blue carbon storage potential that include
18 quantification, verifiability, additionality as com-
19 pared to a historical baseline, and permanence of
20 those benefits.

21 (6) Quantify current total and net ecosystem
22 carbon storage in coastal and marine areas.

23 (7) Project future total and net ecosystem car-
24 bon storage under different scenarios influenced by

1 human population growth, sea level rise, and other
2 system-wide changes.

3 (8) Develop and use protocols for inclusion of
4 blue carbon projects in carbon markets.

5 (9) Protect and restore habitats, waters, and
6 organisms that are long-term carbon sinks or will be
7 subject to habitat change as a result of climate
8 change and development.

9 (10) Provide staff and technical expertise to the
10 interagency working group.

11 (11) Quantify co-benefits, including flood risk
12 reduction, habitat restoration for endangered and
13 threatened species, maintenance of biodiversity,
14 water quality improvements, habitat maintenance
15 and creation, cycling of nutrients other than carbon,
16 commercial and recreational fishing and boating
17 benefits.

18 (12) Assess regional and national ecosystem
19 and socioeconomic impacts of carbon sequestration
20 and storage.

21 (13) Research variability, long-term storage,
22 and innovative techniques for effective, long-term,
23 natural ocean or coastal ecosystem-based carbon se-
24 questration.

25 (14) Identify blue carbon hot spots.

1 (15) Assess legal issues of landownership in
2 blue carbon markets, and develop guidelines to help
3 landowners navigate the requirements of such mar-
4 kets.

5 **SEC. 102. NATIONAL MAP OF COASTAL AND MARINE BLUE**
6 **CARBON ECOSYSTEMS.**

7 (a) NATIONAL MAP.—The Administrator, in con-
8 sultation with the interagency working group established
9 under section 106, shall—

10 (1) produce, update every 3 years, and main-
11 tain a national map and inventory of coastal blue
12 carbon ecosystems including—

13 (A) with respect to each such ecosystem—

14 (i) the species and types of habitat in
15 the ecosystem;

16 (ii) the condition of such habitats in-
17 cluding whether a habitat is degraded,
18 drained, eutrophic, or tidally restricted;

19 (iii) type of public or private owner-
20 ship and any protected status;

21 (iv) the size of the ecosystem;

22 (v) the salinity boundaries of the eco-
23 system;

24 (vi) the tidal boundaries of the eco-
25 system;

1 (vii) an assessment of carbon seques-
2 tration potential, methane production, and
3 net greenhouse gas effects of the eco-
4 system, including consideration of—

5 (I) quantification;

6 (II) verifiability;

7 (III) additionality, as compared
8 to a historical baseline; and

9 (IV) permanence of those bene-
10 fits;

11 (viii) an assessment of the ecosystem
12 co-benefits, such as fish habitat for com-
13 mercial, recreational, and Tribal fisheries,
14 flood risk reduction, wave stress, storm
15 protection, shoreline stabilization, public
16 access, water and air pollution filtration,
17 contributions to traditional and cultural
18 practices, and recreational use and benefits
19 of the ecosystem;

20 (ix) the potential for landward migra-
21 tion of each ecosystem as a result of sea
22 level rise;

23 (x) any upstream restrictions detri-
24 mental to the watershed process and condi-
25 tions, including dams, dikes, and levees;

- 1 (xi) any upstream pollution sources
2 that threaten the health of each ecosystem;
3 (xii) proximity to aquaculture uses or
4 lease areas; and
5 (xiii) a depiction of the effects of
6 human stressors, including the conversion
7 of coastal blue carbon ecosystems to other
8 land uses and the cause of such conver-
9 sion; and

10 (B) a depiction of the effects of climate
11 change, including sea level rise, ocean acidifica-
12 tion, ocean warming, and other environmental
13 stressors on the sequestration rate, carbon stor-
14 age, and potential of coastal blue carbon eco-
15 systems; and

16 (2) in carrying out paragraph (1)—

17 (A) incorporate, to the extent possible, ex-
18 isting and future data collected through feder-
19 ally and State funded research, including data
20 collected from the National Oceanic and Atmos-
21 pheric Administration Coastal Change Analysis
22 Program, United States Fish and Wildlife Serv-
23 ice National Wetlands Inventory, United States
24 Geological Survey Land Carbon program,
25 United States Geological Survey and Federal

1 Emergency Management Agency LiDAR infor-
2 mation coordination and knowledge program,
3 Department of Energy Biological and Environ-
4 mental Research program, and Department of
5 Agriculture National Coastal Blue Carbon As-
6 sessment; and

7 (B) engage regional experts for additional
8 peer-reviewed data to ensure best available sci-
9 entific information is incorporated.

10 (b) USE.—The interagency working group shall use
11 the national map and inventory created pursuant to sub-
12 section (a)—

13 (1) to assess the existing and potential carbon
14 sequestration of different coastal blue carbon eco-
15 systems, and account for any regional differences;

16 (2) to assess and quantify emissions from de-
17 graded and destroyed coastal blue carbon eco-
18 systems;

19 (3) to develop regional assessments and to pro-
20 vide technical assistance to regional, State, Tribal,
21 and local government agencies, regional information
22 coordination entities (as such term is defined in sec-
23 tion 12303(6) of the Integrated Coastal and Ocean
24 Observation System Act (33 U.S.C. 3602)), and
25 agencies, organizations, and other entities that sup-

1 port communities that may not have adequate re-
2 sources, including low-income communities, commu-
3 nities of color, Tribal communities, and rural com-
4 munities;

5 (4) to assess degraded coastal blue carbon eco-
6 systems and their potential for restoration, including
7 developing scenario modeling to identify vulnerable
8 land areas where management, protection, and res-
9 toration efforts should be focused, including the po-
10 tential for an ecosystem to migrate inland to adapt
11 to sea level rise; and

12 (5) produce predictions of coastal blue carbon
13 ecosystems and carbon sequestration rates in the
14 context of climate change, environmental stressors,
15 and human stressors.

16 **SEC. 103. REPORT ON BLUE CARBON IN THE UNITED**
17 **STATES.**

18 Not later than 1 year after the date of the enactment
19 of this Act and every 2 years thereafter, the Adminis-
20 trator, in consultation with the interagency working
21 group, shall submit to the Committee on Natural Re-
22 sources of the House of Representatives and the Com-
23 mittee on Commerce, Science, and Transportation of the
24 Senate a report containing the following:

1 (1) A summary of federally funded coastal and
2 marine blue carbon ecosystem research, monitoring,
3 preservation, and restoration activities, including the
4 budget for each of these activities and describe the
5 progress in advancing the national priorities estab-
6 lished by the interagency working group.

7 (2) With respect to each blue carbon eco-
8 system—

9 (A) the type;

10 (B) location; and

11 (C) type of ownership, delineated by pri-
12 vate lands, State lands, Tribal lands, or Fed-
13 eral.

14 (3) An assessment of the vulnerability of coast-
15 al and marine blue carbon ecosystems to climate im-
16 pacts such as sea-level rise, acidification, and salt-
17 water intrusion, and other environmental and human
18 stressors, such as development, water pollution, and
19 aquaculture.

20 (4) An assessment of the greatest anthropo-
21 genic threats to blue carbon ecosystems, including
22 the Federal agency actions that have historically
23 caused and presently cause great adverse effects on
24 such ecosystems.

1 (5) An assessment of the carbon sequestration
2 potential of blue carbon ecosystems and the probable
3 changes to sequestration under climate change sce-
4 narios.

5 (6) An assessment of biophysical, social, and
6 economic impediments including water storage and
7 flood control structures to coastal blue carbon eco-
8 system protection and restoration and opportunities
9 to restore and enhance the resilience of and seques-
10 tration potential of blue carbon ecosystems.

11 (7) An assessment of aging or outdated artifi-
12 cial structures, including dykes, levees, dams, cul-
13 verts, water storage structures, shoreline hardening
14 projects, impediments to fish passage, and other in-
15 frastructure that impede the ecological or sequestra-
16 tion functions of blue carbon areas and the feasi-
17 bility of repairing, retrofitting, or removing such
18 structures.

19 (8) The economic, social, and environmental co-
20 benefits that these blue carbon ecosystems provide
21 including—

22 (A) coastal protection from storms and
23 flooding;

24 (B) tourism and recreational use;

25 (C) benefits to fisheries;

- 1 (D) nutrient removal;
- 2 (E) number of jobs that are directly or in-
- 3 directly attributable to blue carbon ecosystems;
- 4 and
- 5 (F) total economic activity that is attrib-
- 6 utable to such blue carbon ecosystems.
- 7 (8) An assessment of the social and economic
- 8 makeup of the communities served by blue carbon
- 9 ecosystems.

10 **SEC. 104. BLUE CARBON PARTNERSHIP GRANT PROGRAM.**

11 (a) ESTABLISHMENT.—The Administrator shall es-

12 tablish a competitive grant program entitled the “Blue

13 Carbon Partnership Grant Program” to, beginning not

14 later than 2 years after the date of enactment of this Act,

15 provide funds to eligible entities for projects that—

16 (1) protect and restore blue carbon stocks, oce-

17 anic blue carbon, and coastal blue carbon ecosystems

18 and increase the long-term carbon storage; and

19 (2) contribute to priorities identified in the

20 most recent strategic plan developed by the inter-

21 agency working group.

22 (b) ELIGIBLE RECIPIENTS.—A person or entity is eli-

23 gible to receive a grant under the grant program if such

24 person is—

1 (1) a voluntary private landowner or group of
2 landowners;

3 (2) a State agency responsible for managing
4 natural resources or wildlife;

5 (3) an Indian Tribe;

6 (4) a unit of local government;

7 (5) a nonprofit organization or land trust;

8 (6) an institution of higher education and re-
9 search; or

10 (7) any group of entities described in para-
11 graphs (1) through (6).

12 (c) REQUIREMENTS.—In administering the grant
13 program under this section, the Secretary shall use the
14 criteria, guidelines, contracts, reporting requirements, and
15 evaluation metrics developed by the interagency working
16 group.

17 (d) SELECTION CRITERIA.—In evaluating applica-
18 tions for the program from eligible entities, the Adminis-
19 trator shall give priority to proposed eligible restoration
20 activities that—

21 (1) would result in long-term protection and se-
22 questration of carbon stored in coastal and marine
23 environments; and

24 (2)(A) would protect key habitats for fish, wild-
25 life, and the maintenance of biodiversity;

1 (B) would provide coastal protection from devel-
2 opment, storms, flooding, and land-based pollution;

3 (C) would protect coastal resources of national,
4 historical, and cultural significance;

5 (D) would benefit communities of color, low-in-
6 come communities, Tribal or Indigenous commu-
7 nities, or rural communities; or

8 (E) would capitalize on existing established
9 public/private partnerships.

10 (e) REPORT TO CONGRESS.—

11 (1) REPORT REQUIRED.—The Administrator
12 shall submit annually to Congress a report con-
13 taining a State-by-State analysis of—

14 (A) the total number of acres of land or
15 water protected or restored through fee title ac-
16 quisition, easement, restoration or other activi-
17 ties under the program;

18 (B) the status of restoration projects
19 under this program; and

20 (C) the amount of blue carbon captured or
21 protected over a 100-year time period as a re-
22 sult of this program;

23 (2) PUBLICATION OF REPORT.—The Adminis-
24 trator shall make available to the public each report
25 required by paragraph (1).

1 (f) AUTHORIZATION OF APPROPRIATIONS.—There is
2 authorized to be appropriated to the Administrator
3 \$200,000,000 for each of the fiscal years 2021 to 2025
4 to carry out this section.

5 **SEC. 105. INTEGRATED PILOT PROGRAMS TO PROTECT AND**
6 **RESTORE DEGRADED COASTAL BLUE CAR-**
7 **BON ECOSYSTEMS.**

8 The Administrator shall—

9 (1) establish integrated pilot programs that de-
10 velop best management practices, including design
11 criteria and performance functions, for coastal and
12 marine blue carbon ecosystem restoration, nature-
13 based adaptation strategies, living shoreline projects,
14 landward progression or migration of coastal blue
15 carbon ecosystems, and identify potential barriers to
16 restoration efforts;

17 (2) ensure that the pilot programs cover geo-
18 graphically, ecologically, culturally, and economically
19 representative locations with significant ecological,
20 economic, and social benefits and maximize potential
21 for long-term carbon storage;

22 (3) establish a procedure for reviewing applica-
23 tions for the pilot program, taking into account—

24 (A) quantification;

25 (B) verifiability;

1 (C) additionality, as compared to a histor-
2 ical baseline; and

3 (D) permanence of those benefits;

4 (4) ensure, through consultation with the inter-
5 agency working group, that the goals, metrics, moni-
6 toring, and outcomes of the pilot programs are com-
7 municated to the appropriate State, Tribal, and local
8 governments, and to the general public; and

9 (5) coordinate with relevant Federal agencies
10 on the interagency working group to prevent unnec-
11 essary duplication of effort among Federal agencies
12 and departments with respect to protection and res-
13 toration programs.

14 **SEC. 106. INTERAGENCY WORKING GROUP.**

15 (a) ESTABLISHMENT.—The National Science and
16 Technology Council Subcommittee on Ocean Science and
17 Technology shall establish the Interagency Working Group
18 on Coastal and Marine Blue Carbon.

19 (b) PURPOSES.—The interagency working group
20 shall—

21 (1) oversee the development of and updates to
22 a national map, including United States Territories,
23 of coastal and marine blue carbon ecosystems, in-
24 cluding habitat types with a regional focus in anal-

1 ysis that is usable for local level protection planning
2 and restoration;

3 (2) use such map to inform the Administrator
4 of the Environmental Protection Agency's creation
5 of the annual Inventory of U.S. Greenhouse Gas
6 Emissions and Sinks;

7 (3) establish national coastal and marine blue
8 carbon ecosystem restoration priorities, including an
9 assessment of current Federal funding being used
10 for restoration and conservation efforts;

11 (4) assess the biophysical, social, statutory, reg-
12 ulatory, and economic impediments to coastal and
13 marine blue carbon ecosystem protection and res-
14 toration;

15 (5) study the effects of climate change and en-
16 vironmental and human stressors on carbon seques-
17 tration rates;

18 (6) identify priority blue carbon ecosystems for
19 protection;

20 (7) develop a national strategy for foundational
21 science necessary to study, synthesize, and evaluate
22 the effects of climate change, environmental, and
23 human stressors on sequestration rates and capabili-
24 ties of marine blue carbon and coastal blue carbon
25 ecosystems protection;

1 (8) develop an assessment of current legal au-
2 thorities to protect and restore blue carbon eco-
3 systems and make recommendations for additional
4 authorities if current authorities are determined to
5 be insufficient; and

6 (9) ensure the continuity, use, and interoper-
7 ability of data assets through Coastal Carbon Data
8 Clearinghouse of the Smithsonian Institution.

9 (c) MEMBERSHIP.—The interagency working group
10 shall be comprised of representatives of the following:

11 (1) The Administrator.

12 (2) The Administrator of the Environmental
13 Protection Agency.

14 (3) The Director of the National Science Foun-
15 dation.

16 (4) The Administrator of the National Aero-
17 nautics and Space Administration.

18 (5) The Director of the United States Geologi-
19 cal Survey.

20 (6) The Director of the United States Fish and
21 Wildlife Service.

22 (7) The Director of the National Park Service.

23 (8) The Director of the Bureau of Indian Af-
24 fairs.

1 (9) The Secretary of the Smithsonian Institu-
2 tion.

3 (10) The Chief of Engineers of the Army Corps
4 of Engineers.

5 (11) The Secretary of Agriculture.

6 (12) The Secretary of Defense.

7 (13) The Secretary of Transportation.

8 (14) The Secretary of State.

9 (15) The Secretary of Energy.

10 (16) The Administrator of the United States
11 Agency for International Development.

12 (17) The Administrator of the Federal Emer-
13 gency Management Agency.

14 (18) The Chair of the Council on Environ-
15 mental Quality.

16 (d) CHAIR.—The interagency working group shall be
17 chaired by the Administrator.

18 (e) STRATEGIC PLAN.—

19 (1) IN GENERAL.—The Interagency Working
20 group shall create a strategic plan for Federal in-
21 vestments in basic research, development, dem-
22 onstration, long-term monitoring and stewardship,
23 and deployment of coastal blue carbon ecosystem
24 and marine blue carbon projects for the 5-year pe-
25 riod beginning on the date that is 1 year after the

1 date of enactment of this Act. The plan shall in-
2 clude—

3 (A) an assessment of the use of existing
4 Federal programs to protect, restore, enhance,
5 and preserve coastal blue carbon ecosystems;

6 (B) an analysis of potential sea level rise
7 migration corridors for blue carbon ecosystems;

8 (C) an analysis of anticipated fish and
9 wildlife uses of blue carbon ecosystems; and

10 (D) identification of priority strategies and
11 investments for preserving, restoring, and en-
12 hancing the resilience and carbon sequestration
13 potential of such blue carbon ecosystems.

14 (2) TIMING.—The interagency working group
15 shall—

16 (A) submit the strategic plan under para-
17 graph (1) to the Committee on Natural Re-
18 sources and the Committee on Science, Space,
19 and Technology of the House of Representa-
20 tives and the Committee on Commerce, Science,
21 and Transportation of the Senate on a date
22 that is not later than 1 year after the date of
23 enactment of this Act; and

24 (B) submit a revised version of such plan
25 to such committees every 5 years thereafter.

1 (3) FEDERAL REGISTER.—Not less than 90
2 days before the strategic plan, or any revision there-
3 of, is submitted under paragraph (2), the inter-
4 agency working group shall publish such plan in the
5 Federal Register and solicit public comments on
6 such plan for a period of not less than 60 days.

7 **SEC. 107. COASTAL CARBON AREAS OF SIGNIFICANCE.**

8 (a) DESIGNATION.—The Administrator, consistent
9 with this section, shall designate as a coastal carbon area
10 of significance any area that is—

11 (1) in the coastal zone (as such term is defined
12 in section 304 of the Coastal Zone Management Act
13 of 1972 (16 U.S.C. 1453)), in territorial waters of
14 the United States, or in the exclusive economic zone;
15 and

16 (2) the location of water, a substrate, or an eco-
17 system that—

18 (A) provides for long-term storage and se-
19 questration of significant amounts of ecosystem
20 carbon; and

21 (B)(i) limits erosion and future landward
22 migration;

23 (ii) provides a buffer against storm surge,
24 especially for communities of color, low-income

1 communities, and Tribal and Indigenous com-
2 munities;

3 (iii) provides a spawning, breeding, feed-
4 ing, or nesting habitat for wildlife; or

5 (iv) is estuarine habitat designated as es-
6 sential fish habitat under the Magnuson-Ste-
7 vens Fishery Conservation and Management
8 Act (16 U.S.C. 1601 et seq.).

9 (b) GUIDELINES.—The Administrator, in consulta-
10 tion with the interagency working group, shall, not later
11 than 1 year after the date of enactment of this Act, estab-
12 lish by regulation guidelines based on the best available
13 science to describe and identify coastal carbon areas of
14 significance and measures to ensure the protection of
15 coastal carbon areas of significance.

16 (c) REVIEW AND UPDATE.—The Administrator, in
17 consultation with the interagency working group, shall re-
18 view and update guidelines established under subsection
19 (b) not less frequently than once every 5 years or when
20 new information warrants such an update.

21 (d) SCHEDULE.—The Administrator, in consultation
22 with the interagency working group, shall establish a
23 schedule for the identification of coastal carbon areas of
24 significance under subsection (b) and for reviews and up-
25 dates under subsection (c), and shall make initial designa-

1 tions of a coastal carbon area of significance in each coast-
2 al State not later than 1 year after the date of enactment
3 of this Act.

4 (e) RECOMMENDATIONS AND INFORMATION.—The
5 Administrator, in consultation with the interagency work-
6 ing group, shall, with respect to each coastal carbon area
7 of significance, provide recommendations and information
8 regarding the adverse impacts and threats to the carbon
9 storage, ecosystem services, and habitat capacity of the
10 area, and the actions that should be considered to avoid
11 adverse impacts and ensure the conservation and enhance-
12 ment of that area.

13 (f) PROGRAMS ADMINISTERED BY THE SECRETARY
14 OF COMMERCE.—The Administrator, in consultation with
15 the interagency working group, shall use programs admin-
16 istered by the Secretary of Commerce to carry out this
17 section and ensure the conservation and enhancement of
18 each coastal carbon area of significance.

19 (g) REQUIREMENTS FOR FEDERAL ACTIONS.—With
20 respect to any proposed agency action that has the poten-
21 tial to cause an adverse impact on the carbon storage, eco-
22 system services, or habitat capacity of any coastal carbon
23 area of significance, each Federal agency shall comply
24 with the following requirements:

1 (1) NOTIFICATION.—Such Federal agency shall
2 notify the Administrator of such proposed agency ac-
3 tion.

4 (2) DETERMINATION OF ADVERSE IMPACT.—
5 The Administrator, in consultation with the pro-
6 posing agency and subject to public comment, shall
7 determine whether the proposed agency action will
8 cause an adverse impact on the carbon storage, eco-
9 system, or habitat of a coastal carbon area of signifi-
10 cance.

11 (3) ALTERNATIVE.—With respect to any pro-
12 posed action the Administrator determines will have
13 an adverse impact under paragraph (2), the pro-
14 posing agency, in consultation with the Adminis-
15 trator, shall determine whether there is an alter-
16 native action that would prevent such adverse im-
17 pact and fulfill the purpose of the proposed action.
18 The proposing agency shall not take an action that
19 would cause an adverse impact if an alternative that
20 would not cause such adverse impact is available and
21 would fulfill the purpose of such action.

22 (4) CARBON STORAGE OFFSETS.—With respect
23 to a proposed action for which the agency deter-
24 mines no alternative is available under paragraph
25 (3), the proposing agency shall—

1 (A) in consultation with the Administrator,
2 take measures to minimize and mitigate such
3 adverse impact;

4 (B) take such action as the Administrator
5 determines necessary to create a coastal or ma-
6 rine blue carbon ecosystem storage offset that,
7 taken in conjunction with the proposed action,
8 results in a long term net increase in carbon
9 storage, lasting an equivalent time period as the
10 carbon storage lost by the adverse impact; and

11 (C) demonstrate quantitatively, using the
12 best available science, that the carbon storage
13 offset will result in a net increase in ecological
14 carbon storage and is located in close proximity
15 to the original site to keep the affected commu-
16 nities whole; and

17 (D) maintain such carbon storage offset
18 for a period of time to be determined by the
19 Administrator but not less than 100 years; and

20 (E) publish the agency's proposed course
21 of mitigation in the Federal Register for public
22 notice and comment.

23 (h) REQUIREMENT FOR AUTHORIZATION OR APPRO-
24 PRIATION.—Any requests for a new authorization or ap-
25 propriation from a Federal agency transmitted to the Of-

1 fice of Management and Budget shall include, if such au-
2 thorization or appropriation may affect a coastal carbon
3 area of significance, a certification that such agency will
4 use such authorization or appropriation in compliance
5 with this section.

6 (i) REQUIRED RESTRICTIONS.—A Federal agency
7 may not enter into a lease, easement, right-of-way, or sale
8 of any land designated as a coastal carbon area of signifi-
9 cance unless such agency attaches appropriate restrictions
10 to the use of the property to protect the coastal carbon
11 area of significance.

12 (j) EXCEPTION.—Preparation, revision, implementa-
13 tion, or enforcement of a fishery management plan under
14 the Magnuson-Stevens Fishery Conservation and Manage-
15 ment Act (16 U.S.C. 1801 et seq.) that applies to area
16 that is subject to a prohibition on all bottom-tending fish-
17 ing gear shall not be treated as an action that is subject
18 to subsection (g).

19 **SEC. 108. AUTHORIZATION OF SMITHSONIAN INSTITUTION**
20 **BLUE CARBON ACTIVITIES.**

21 (a) IN GENERAL.—The Secretary of the Smithsonian
22 Institution, in coordination with the Administrator and
23 the interagency working group, shall provide for the long-
24 term stewardship, continuity, use, and interoperability of,
25 and access to, data relating to coastal blue carbon eco-

1 systems and national mapping, including United States
2 Territories and Tribal lands, by supporting the mainte-
3 nance of the Coastal Carbon Data Clearinghouse.

4 (b) COASTAL CARBON DATA CLEARINGHOUSE DU-
5 TIES.—Acting through the Coastal Carbon Data Clearing-
6 house, the Secretary of the Smithsonian Institution in co-
7 ordination with the Administrator and interagency work-
8 ing group shall process, store, archive, provide access to,
9 and incorporate to the extent possible, all coastal and ma-
10 rine blue carbon data collected through federally funded
11 research by a Federal agency, State, local agency, Tribe,
12 academic scientist, or other relevant entity.

13 (c) GLOBAL AND NATIONAL DATA ASSETS.—The
14 Secretary of the Smithsonian Institution, in coordination
15 with the Administrator and the interagency working
16 group, shall ensure that existing global and national data
17 assets are incorporated into the Coastal Carbon Data
18 Clearinghouse to the greatest extent possible.

19 (d) ESTABLISHMENT OF STANDARDS, PROTOCOLS,
20 AND PROCEDURES.—The Secretary of the Smithsonian
21 Institution, in coordination with the Administrator and
22 members of the interagency working group, shall establish
23 standards, protocols, and procedures for the processing,
24 storing, archiving, and providing access to data in the
25 Coastal Carbon Data Clearinghouse and best practices for

1 sharing such data with State, local, and Tribal govern-
2 ments, coastal stakeholders, non-Federal resource man-
3 agers, and academia. The Administrator shall publish, up-
4 date, and keep current such data on a publicly available
5 website.

6 (e) DIGITAL TOOLS AND RESOURCES.—The Sec-
7 retary of the Smithsonian Institution, in coordination with
8 the Administrator and members of the interagency work-
9 ing group, shall develop digital tools and resources to sup-
10 port the public use of the Coastal Carbon Data Clearing-
11 house.

12 (f) AUTHORIZATION OF APPROPRIATIONS.—There
13 are authorized to be appropriated to the Secretary of the
14 Smithsonian Institution \$5,000,000 for each of fiscal
15 years 2021 through 2025 to carry out this section.

16 **SEC. 109. AUTHORIZATION OF APPROPRIATIONS.**

17 There is authorized to be appropriated to the Admin-
18 istrator \$50,000,000 for each of the fiscal years 2021 to
19 2025 to carry out this title.

20 **SEC. 110. DEFINITIONS.**

21 In this title:

22 (1) BLUE CARBON STOCKS.—The term “blue
23 carbon stocks” means terrestrial and marine vegeta-
24 tion and underlying sediment that has the capacity
25 to sequester and store atmospheric carbon.

1 (2) COASTAL BLUE CARBON ECOSYSTEM.—The
2 term “coastal blue carbon ecosystem” means vege-
3 tated coastal habitats including mangroves, tidal
4 marshes, seagrasses, kelp forests, and other tidal or
5 salt-water wetlands that have the capacity to seques-
6 ter carbon from the atmosphere for a period of not
7 less than 100 years.

8 (3) COASTAL CARBON AREAS OF SIGNIFI-
9 CANCE.—The term “coastal carbon area of signifi-
10 cance” means any area designated by the Adminis-
11 trator under section 107 as a coastal carbon area of
12 significance.

13 (4) GRANT PROGRAM.—The term “grant pro-
14 gram” means the Blue Carbon Partnership Grant
15 Program established pursuant to section 104.

16 (5) INTERAGENCY WORKING GROUP.—The term
17 “interagency working group” means the Interagency
18 Working Group on Coastal Blue Carbon established
19 under section 106.

20 (6) MARINE BLUE CARBON.—The term “Ma-
21 rine Blue Carbon” means the sequestration of car-
22 bon in pelagic and deep sea ecosystems, including in
23 sediments and through the ecosystem impacts of in-
24 creased biomass of large marine wildlife.

1 (7) PROGRAM.—The term “Program” means
2 the Blue Carbon Program required by section
3 101(a).

4 **TITLE II—MARINE PROTECTED**
5 **AREAS**

6 **SEC. 201. POLICY.**

7 (a) PROTECTION OF HABITAT.—It is the policy of the
8 United States—

9 (1) to prohibit any commercial extractive or de-
10 structive human activity in at least 30 percent of the
11 ocean under United States jurisdiction by 2030. The
12 30 percent shall include existing areas in which com-
13 mercial extractive and destructive human activities
14 are and continue to be prohibited; and

15 (2) to support the adoption and implementation
16 of a global goal to protect at least 30 percent of land
17 and 30 percent of ocean areas by 2030 under the
18 Convention on Biological Diversity.

19 (b) HABITATS AND ECOSYSTEMS SUBJECT TO PRO-
20 TECTION.—It is the policy of the United States to protect
21 ocean habitats and ecosystems that represent—

22 (1) the diversity of the United States’ ocean;

23 (2) areas important for conserving and, where
24 appropriate, preserving biodiversity;

1 (3) critical breeding, resting, and feeding habi-
2 tats for wildlife;

3 (4) interconnected networks of marine protected
4 areas and wildlife migration corridors;

5 (5) areas that will help mitigate the impacts of
6 the climate crisis, including those areas that provide
7 carbon storage, adaptation, and resilience benefits;

8 (6) areas that are relatively pristine and least
9 impacted by human activity; and

10 (7) areas that help mitigate threats to the
11 United States' most vulnerable coastal communities,
12 including protections for natural resources that sup-
13 port the economy and health of communities that
14 rely on a healthy and clean ocean, in particular com-
15 munities of color, low-income communities, and
16 Tribal and Indigenous communities adversely af-
17 fected by climate change.

18 (c) CONSIDERATIONS IN CARRYING OUT POLICY.—
19 A Federal agency carrying out the policies described in
20 this section shall seek to carry out such policies in a man-
21 ner that—

22 (1) relies on best available science;

23 (2) includes meaningful input from States, local
24 communities, and Native American Tribes, and re-
25 spects Tribal history of sustainable resource man-

1 agement, Indigenous sustainable resource manage-
2 ment, Tribal sovereignty, and the right to Tribal
3 self-determination;

4 (3) improves access to nature for all people,
5 with an emphasis on increasing access for commu-
6 nities of color and low-income communities;

7 (4) provides ecological and geographic represen-
8 tation, taking into account that some Fishery Man-
9 agement Councils have taken action to ban the use
10 of all bottom-tending fishing gear and all fishing
11 gear with bycatch rates that adversely affect marine
12 wildlife populations;

13 (5) conserves, protects, and restores biodiver-
14 sity;

15 (6) protects ecosystems and the services of eco-
16 systems, restores degraded ecosystems, and main-
17 tains ecological functions;

18 (7) enhances climate mitigation, adaptation,
19 and resilience, including by protecting ecosystems,
20 species and genetic diversity;

21 (8) supports sustainable economic opportunity
22 for people who depend on the ocean for their liveli-
23 hoods by making the ocean more resilient to climate
24 change and enhancing ecosystem functioning;

1 (9) evaluates the negative and positive economic
2 impacts of such policies and considers ways to miti-
3 gate such negative impacts;

4 (10) considers local and regional input in the
5 design and implementation of protected areas, in-
6 cluding input from stakeholders, and considers the
7 cultural values, including seafaring and maritime
8 heritage values, of the United States; and

9 (11) provides tools and resources to ensure that
10 protected areas are effectively managed.

11 (d) DEFINITIONS.—In this section:

12 (1) COMMUNITIES OF COLOR.—the term “com-
13 munities of color” means a geographically distinct
14 area in which the population of any of the following
15 categories of individuals is higher than the average
16 populations of that category for the State in which
17 the community is located:

18 (A) Black.

19 (B) African American.

20 (C) Asian American.

21 (D) Pacific Islander.

22 (E) Other non-White race.

23 (F) Hispanic.

24 (G) Latino.

25 (H) Linguistically isolated.

1 (2) PROTECT AND PROTECTION.—Each of the
2 terms “protect” and “protection” means the estab-
3 lishment of enduring measures on land, waters, and
4 oceans that support thriving biodiversity, contribute
5 to climate resilience, and provide ecosystem services,
6 such that their natural character, resources, and
7 functions are conserved, protected, restored and,
8 when shown necessary, enhanced for current and fu-
9 ture generations.

10 **SEC. 202. INTERAGENCY TASK FORCE.**

11 (a) ESTABLISHMENT.—Not later than 45 days after
12 the date of enactment of this Act, the President shall es-
13 tablish the 30x30 Interagency Task Force.

14 (b) CHAIR.—The task force shall be chaired by the
15 chair of the Council on Environmental Quality.

16 (c) COMPOSITION.—The President shall appoint the
17 following individuals as members of the task force:

18 (1) The Administrator of the Environmental
19 Protection Agency.

20 (2) The Administrator;

21 (3) The Secretary of the Interior.

22 (4) The Secretary of Defense.

23 (5) The Secretary of State.

24 (6) The Secretary of Energy.

25 (7) The Secretary of Homeland Security.

1 (8) The Director of the Office of Science and
2 Technology Policy.

3 (d) PLAN.—Not later than one year after the date
4 on which the task force is established, the task force
5 shall—

6 (1) develop a plan and schedule consistent with
7 the policy of prohibiting any commercial extractive
8 or destructive human activity on at least 30 percent
9 of the ocean under United States jurisdiction by
10 2030 that includes—

11 (A) an update to the National Marine Pro-
12 tected Area Center’s Marine Protected Area In-
13 ventory;

14 (B) the identification of candidate areas
15 for protection that meet one or more of the cri-
16 teria set out in section 201(b); and

17 (C) annual benchmarks for achieving the
18 policy described in subsection (d)(1); and

19 (2) develop a plan to provide technical assist-
20 ance, data, and other resources for identifying and
21 establishing strongly protected areas of the ocean in
22 areas beyond national jurisdiction that includes—

23 (A) an inventory of areas already protected
24 in areas of the ocean beyond the jurisdiction of
25 the United States, and a description of any ac-

1 tivities that are currently allowed in each of the
2 areas; and

3 (B) an inventory of areas that other coun-
4 tries or international governing bodies are con-
5 sidering making a marine protected area.

6 (e) INVENTORY.—The task force shall conduct an in-
7 ventory of areas under United States jurisdiction that are
8 subject to both a prohibition on all bottom-tending fishing
9 gear and a prohibition on all fishing gear with bycatch
10 rates that adversely affect marine wildlife populations, and
11 identify additional prohibitions on nonfishing commercial
12 activities in those areas.

13 (f) ANNUAL REPORT.—Not later than 2 years after
14 the date of enactment of this Act, and annually thereafter,
15 the task force shall submit a report to Congress on the
16 progress of the United States in meeting the policy de-
17 scribed in subsection (d)(1).

18 (g) AGENCY PLANS.—Not later than 180 days after
19 the date on which the task force issues a plan under sub-
20 section (d), each member of the task force shall develop
21 and implement an agency plan for actions to be taken to
22 implement such task force plan.

23 (h) PUBLIC COMMENT AND CONSULTATION.—The
24 development of a plan under subsection (e) and the devel-
25 opment of a plan under subsection (g) shall be subject to

1 public comment and carried out in consultation with rel-
2 evant Regional Fishery Management Councils established
3 under the Magnuson-Stevens Fishery Conservation and
4 Management Act (16 U.S.C. 1801 et seq.).

5 (i) DEFINITIONS.—In this section the term “task
6 force” means the 30x30 interagency task force established
7 pursuant to subsection (a).

8 **SEC. 203. INITIATE DESIGNATION PROCESS FOR SUCCESS-**
9 **FUL SANCTUARY NOMINATIONS AND TECH-**
10 **NICAL CORRECTIONS TO THE NATIONAL MA-**
11 **RINE SANCTUARIES ACT.**

12 (a) IN GENERAL.—Not later than 180 days after the
13 date of enactment of this Act, the Secretary of Commerce
14 shall initiate the process to designate as a national marine
15 sanctuary under section 304 of the National Marine Sanc-
16 tuaries Act (16 U.S.C. 1433) each of the areas identified
17 in the Inventory of Successful Nominations of the Na-
18 tional Oceanic and Atmospheric Administration as of Oc-
19 tober 20, 2020.

20 (b) REMOVAL OF LIMITATIONS ON DESIGNATIONS.—
21 Section 304 of the Marine Protection, Research, and
22 Sanctuaries Act of 1972 (16 U.S.C. 1434) is amended by
23 striking subsection (f).

1 **SEC. 204. INCREASED PROTECTION FOR DEEP SEA CORALS.**

2 (a) DESIGNATION.—The Administrator shall des-
3 ignate as a Deep Sea Coral Marine Conservation Area any
4 area where deep sea coral is found —

5 (1) that is—

6 (A) within the waters of the exclusive eco-
7 nomic zone; or

8 (B) on the Outer Continental Shelf; and

9 (2) in which the Administrator or a Regional
10 Fishery Management Council established under sec-
11 tion 302 of the Magnuson-Stevens Fishery Con-
12 servation and Management Act (16 U.S.C. 1852)
13 has prohibited the use of gear in contact with the
14 ocean bottom, and towed from a vessel, which is
15 moved through the water during fishing in order to
16 capture fish, including otter trawls, beam trawls, hy-
17 draulic dredges, non-hydraulic dredges, and seines
18 (with the exception of a purse seine).

19 (b) PROHIBITIONS.—Except as provided in sub-
20 section (c), the following activities are prohibited in a
21 Deep Sea Coral Marine Conservation Area—

22 (1) exploring for, developing, or producing oil,
23 gas, or minerals;

24 (2) using or attempting to use poisons, elec-
25 trical charges, or explosives in the collection or har-
26 vest of any marine resource;

1 (3) intentionally introducing or otherwise re-
2 leasing any non-native species;

3 (4) anchoring on any living or dead coral; and

4 (5) drilling into, dredging, or otherwise altering
5 the seafloor;

6 (6) use of bottom trawl nets or other bottom-
7 tending fishing gear; and

8 (7) deliberate dumping or discharge of noxious
9 substances, materials that may cause eutrophication,
10 or materials that artificially increase endemic pest
11 outbreaks.

12 (c) EXCEPTIONS.—Subsection (b) shall not apply
13 to—

14 (1) otherwise lawful conduct of the armed
15 forces (as such term is defined in section 101 of title
16 10, United States Code) unless such conduct is
17 deemed destructive by the Secretary of Commerce to
18 a national marine monument or marine sanctuary;

19 (2) an action necessary to respond to an emer-
20 gency threatening life, property, or the environment,
21 or an activity necessary for a national security or
22 law enforcement purpose; and

23 (3) scientific exploration or research activities,
24 subject to such terms and conditions as the Secre-
25 taries consider necessary for the care and manage-

1 ment of the living and nonliving marine resources of
2 the Conservation Area.

3 (d) ANALYSIS.—The Administrator shall, every two
4 years, conduct an analysis and provide recommendations
5 to each Regional Fishery Management Council established
6 under 302 of the Magnuson-Stevens Fishery Conservation
7 and Management Act (16 U.S.C. 1852) as to whether any
8 additional area should be protected by a prohibition on
9 the use of gear in contact with the ocean bottom, and
10 towed from a vessel, which is moved through the water
11 during fishing in order to capture fish, including otter
12 trawls, beam trawls, hydraulic dredges, non-hydraulic
13 dredges, and seines (with the exception of a purse seine).

14 **SEC. 205. MARINE BIODIVERSITY GAP ANALYSIS.**

15 (a) IN GENERAL.—Not later than 90 days after the
16 date of enactment of this Act, the Secretary of Commerce
17 and the Secretary of the Interior, in coordination with rel-
18 evant Federal and State agencies, shall begin a marine
19 biodiversity gap analysis meeting the requirements de-
20 scribed in subsection (b) to be completed not later than
21 18 months after such date. Such Secretaries, in coordina-
22 tion with relevant Federal and State agencies, shall update
23 such analysis not less frequently than every 2 years there-
24 after.

1 (b) REQUIREMENTS.—The requirements of this sub-
2 section are that the Marine Biodiversity Gap Analysis
3 shall—

4 (1) be consistent with the policy set out in sec-
5 tion 201;

6 (2) assess habitats, species, and ecosystems
7 across the United States ocean waters and coasts;
8 and

9 (3) determine what types of habitats, species,
10 and ecosystems and the percentage of each type of
11 habitat, species, and ecosystem are necessary to pro-
12 tect in order to—

13 (A) protect biodiversity; and

14 (B) mitigate and provide resilience to the
15 impacts of climate change.

16 (c) PUBLICATION.—The Secretary of Commerce shall
17 publish the marine biodiversity gap analysis required by
18 subsection (a) on a public website.

19 (d) REPORT.—Biennially, the Secretary of Commerce
20 and Secretary of the Interior shall publish a report on can-
21 didate areas for protection, and on progress for advancing
22 protection of habitats, species, and biodiversity identified
23 in the gap analysis required by subsection (a).

1 (e) AUTHORIZATION OF APPROPRIATIONS.—There is
2 authorized to be appropriated \$2,000,000 in each fiscal
3 year to carry out this section.

4 **TITLE III—OFFSHORE ENERGY**
5 **Subtitle A—Oil and Gas Leasing in**
6 **the Outer Continental Shelf**

7 **SEC. 301. PROHIBITION OF OIL AND GAS LEASING IN ALL**
8 **AREAS OF THE OUTER CONTINENTAL SHELF.**

9 (a) IN GENERAL.—Notwithstanding any provision of
10 law, beginning on the date of enactment of this section,
11 with respect to any area on the Outer Continental Shelf,
12 no agency of the United States or person may conduct
13 or authorize any other person to conduct—

14 (1) oil and gas preleasing, leasing and related
15 activities; or

16 (2) geological or geophysical activities in sup-
17 port of oil, gas, or methane hydrate exploration or
18 development except such activities conducted pursu-
19 ant to a lease issued before the date of enactment
20 of this section.

21 (b) BEST AVAILABLE TECHNOLOGY.—In addition to
22 any other measures required by law, the Secretary of the
23 Interior shall require any lessee conducting geophysical ex-
24 ploration on the Outer Continental Shelf to use the best

1 commercially available technology with respect to reducing
2 acoustic pressure levels to conduct such exploration.

3 (c) OUTER CONTINENTAL SHELF.—In this section,
4 the term “Outer Continental Shelf” has the meaning given
5 the term “outer Continental Shelf” in Section 2 of the
6 Outer Continental Shelf Lands Act (43 U.S.C. 1331).

7 **Subtitle B—Offshore Renewable** 8 **Energy**

9 **SEC. 311. SENSE OF CONGRESS ON THE IMPORTANCE OF** 10 **OFFSHORE WIND ENERGY.**

11 (a) FINDINGS.—Congress finds the following:

12 (1) Rapid decarbonization of the electric sector
13 is central to stopping global temperature rise at 1.5
14 degrees Celsius.

15 (2) The United States can and must address
16 this crisis by putting people to work building the
17 necessary infrastructure to overcome the climate
18 threat.

19 (3) The United States’ offshore wind resources
20 must be harnessed in order to both rapidly reduce
21 our carbon emissions and put people back to work.

22 (4) Deploying 30,000 megawatts of offshore
23 wind by 2030 will result in up to 83,000 jobs,
24 \$57,000,000,000 of cumulative investment in the

1 United States economy, and \$25,000,000,000 in an-
2 nual economic input.

3 (b) SENSE OF CONGRESS.—It is the sense of Con-
4 gress that—

5 (1) the United States should rapidly build out
6 its offshore wind resources as a key part of achiev-
7 ing a national goal of net zero emissions;

8 (2) offshore wind lease areas should be deter-
9 mined by a robust and transparent stakeholder proc-
10 ess that incorporates early engagement and input
11 from diverse user groups as well as Federal, State,
12 and local governments;

13 (3) offshore wind buildout must ensure eco-
14 system health and the protection of vulnerable and
15 endangered species; and

16 (4) permitting agencies must have sufficient re-
17 sources to carry out a robust and efficient permit-
18 ting process.

19 **SEC. 312. NATIONAL OFFSHORE WIND GOALS.**

20 (a) TARGETS.—The Secretary of the Interior shall
21 seek to permit—

22 (1) not less than 12.5 gigawatts of offshore
23 wind energy production on the Outer Continental
24 Shelf by January 1, 2025; and

1 (2) not less than 25 gigawatts of offshore wind
2 energy production on the Outer Continental Shelf by
3 January 1, 2030.

4 (b) REPORT.—The Secretary of the Interior shall re-
5 port to the Committee on Natural Resources of the House
6 of Representatives and the Committee on Energy and
7 Natural Resources of the Senate beginning in December
8 2020 and each year thereafter on the Secretary’s progress
9 in meeting the targets described in subsection (a).

10 **SEC. 313. REMOVING ROADBLOCKS FOR DATA SHARING.**

11 Section 402(b) of the Magnuson-Stevens Fishery
12 Conservation and Management Act (16 U.S.C. 1881a(b))
13 is amended—

14 (1) in paragraph (1)—

15 (A) in subparagraph (G), by striking “or”;

16 (B) in subparagraph (H), by striking the
17 period at the end and insert “; or”; and

18 (C) by adding at the end the following:

19 “(I) to the Secretary of the Interior for use
20 relating to siting, exploration, production, or
21 promotion of offshore wind energy on the Outer
22 Continental Shelf.”; and

23 (2) in paragraph (2), by striking “(H)” and in-
24 serting “(I)”.

1 **SEC. 314. INCREASING FUNDING FOR SCIENTIFIC RE-**
2 **SEARCH.**

3 (a) IN GENERAL.—Of the amounts obtained from
4 each lease sale beginning on the date that is 60 days after
5 the date of enactment of this Act, \$5,000,000 shall be
6 available without subsequent appropriation to Adminis-
7 trator to fund cooperative research on the interaction be-
8 tween wind-development, fisheries, protected species, and
9 marine species of mammals, birds, and sea turtles, and
10 the technologies for data collection and other scientific and
11 permitting needs deemed necessary by the Secretary of
12 Commerce, in consultation with the Secretary of the Inte-
13 rior and the Secretary of Energy, to support responsible
14 long-term development of offshore wind energy resources
15 on the Outer Continental Shelf.

16 (b) CONFORMING AMENDMENT.—Section 9 of the
17 Outer Continental Shelf Lands Act (43 U.S.C. 1338) is
18 amended by striking “all” and inserting “Except as pro-
19 vided in section 314 of the Ocean-Based Climate Solutions
20 Act of 2020, all”.

21 **SEC. 315. EXTENDING COLLABORATION WITH INDUSTRY.**

22 Section 113 of Division G of public law 113–7 is
23 amended to read as follows:

24 “CONTRIBUTION AUTHORITY

25 “SEC. 113. The Secretary of the Interior may accept
26 from public and private sources contributions of money

1 and services for use by the Bureau of Ocean Energy Man-
2 agement or the Bureau of Safety and Environmental En-
3 forcement to conduct work in support of the orderly explo-
4 ration and development of Outer Continental Shelf re-
5 sources, including preparation of environmental docu-
6 ments such as impact statements and assessments, stud-
7 ies, and related research, during fiscal years—

8 “(1) 2014 through 2024; or

9 “(2) with respect to work supporting offshore wind
10 exploration or development, 2014 through 2030.”.

11 **SEC. 316. DEVELOPING STRATEGIES TO PROTECT WILD-**
12 **LIFE.**

13 Not later than 1 year after the date of enactment
14 of this Act, the National Academies shall prepare a report
15 that reviews, compiles, and synthesizes existing research
16 and best practices for offshore wind development that min-
17 imize effects on wildlife and protected species. The report
18 shall—

19 (1) provide a quantitative assessment of the
20 contributions of offshore wind in reducing carbon
21 emissions in the electricity sector and helping to im-
22 prove human health and wildlife populations along
23 the Atlantic and Pacific coasts of the United States;
24 and

1 (2) provide a quantitative assessment of effective-
2 tiveness of methods to measure the effects of off-
3 shore wind on wildlife and best practices to monitor,
4 avoid, minimize, and mitigate harm to wildlife.

5 **SEC. 317. OFFSHORE WIND FOR THE TERRITORIES.**

6 (a) APPLICATION OF OUTER CONTINENTAL SHELF
7 LANDS ACT WITH RESPECT TO TERRITORIES OF THE
8 UNITED STATES.—

9 (1) IN GENERAL.—Section 2 of the Outer Con-
10 tinental Shelf Lands Act (43 U.S.C. 1331) is
11 amended—

12 (A) in paragraph (a)—

13 (i) by inserting after “control” the fol-
14 lowing: “or lying within the exclusive eco-
15 nomic zone of the United States and the
16 outer Continental Shelf adjacent to any
17 territory or possession of the United
18 States”; and

19 (ii) by adding at the end before the
20 semicolon the following: “, except that such
21 term shall not include any area conveyed
22 by Congress to a territorial government for
23 administration”;

24 (B) in paragraph (p), by striking “and”
25 after the semicolon at the end;

1 (C) in paragraph (q), by striking the pe-
2 riod at the end and inserting “; and”; and

3 (D) by adding at the end the following:

4 “(r) The term ‘State’ means the several States, the
5 Commonwealth of Puerto Rico, Guam, American Samoa,
6 the United States Virgin Islands, and the Commonwealth
7 of the Northern Mariana Islands.”.

8 (2) EXCLUSIONS.—Section 18 of the Outer
9 Continental Shelf Lands Act (43 U.S.C. 1344) is
10 amended by adding at the end the following:

11 “(i) This section shall not apply to the scheduling of
12 lease sales in the outer Continental Shelf adjacent to the
13 Territories and possessions of the United States.”.

14 (b) WIND LEASE SALES FOR AREAS OF OUTER CON-
15 TINENTAL SHELF.—The Outer Continental Shelf Lands
16 Act (43 U.S.C. 1331 et seq.) is amended by adding at
17 the end the following:

18 **“SEC. 33. WIND LEASE SALES FOR AREAS OF OUTER CONTI-
19 NENTAL SHELF.**

20 “(a) AUTHORIZATION.—The Secretary may conduct
21 wind lease sales on the outer Continental Shelf.

22 “(b) WIND LEASE SALE PROCEDURE.—Any wind
23 lease sale conducted under this section shall be considered
24 a lease under section 8(p).

1 “(c) WIND LEASE SALES OFF COASTS OF TERRI-
2 TORIES OF THE UNITED STATES.—

3 “(1) STUDY ON FEASIBILITY OF CONDUCTING
4 WIND LEASE SALES.—

5 “(A) IN GENERAL.—The Secretary shall
6 conduct a study on the feasibility, including the
7 technological and long-term economic feasibility,
8 and the potential environmental effects of, con-
9 ducting wind lease sales on an area of the outer
10 Continental Shelf within the territorial jurisdic-
11 tion of American Samoa, Guam, the Common-
12 wealth of the Northern Mariana Islands, Puerto
13 Rico, and the Virgin Islands of the United
14 States.

15 “(B) CONSULTATION.—In conducting the
16 study required in paragraph (A), the Secretary
17 shall consult—

18 “(i) the National Laboratories, that
19 term is defined in section 2(3) of the En-
20 ergy Policy Act of 2005 (42 U.S.C.
21 15801(3));

22 “(ii) the National Oceanic and Atmos-
23 pheric Administration, including the Office
24 of National Marine Sanctuaries and Na-
25 tional Marine Fisheries Service; and

1 “(iii) the Governor of each of Amer-
2 ican Samoa, Guam, the Northern Mariana
3 Islands, Puerto Rico, and the Virgin Is-
4 lands of the United States.

5 “(C) PUBLICATION.—The study required
6 in paragraph (A) shall be published in the Fed-
7 eral Register for public comment for a period of
8 not fewer than 60 days.

9 “(D) SUBMISSION OF RESULTS.—Not later
10 than 18 months after the date of the enactment
11 of this section, the Secretary shall submit the
12 results of the study conducted under subpara-
13 graph (A) to:

14 “(i) the Committee on Energy and
15 Natural Resources of the Senate;

16 “(ii) the Committee on Natural Re-
17 sources of the House of Representatives;
18 and

19 “(iii) each of the delegates or resident
20 commissioners to the House of Representa-
21 tives from American Samoa, Guam, the
22 Northern Mariana Islands, Puerto Rico,
23 and the Virgin Islands of the United
24 States.

1 “(E) PUBLIC AVAILABILITY.—The Sec-
2 retary shall publish the study required under
3 subparagraph (A) and results submitted under
4 subparagraph (C) on a public website.

5 “(2) CALL FOR INFORMATION AND NOMINA-
6 TIONS.—The Secretary shall issue a call for informa-
7 tion and nominations for proposed wind lease sales
8 for areas determined to be feasible under the study
9 conducted under paragraph (1).

10 “(3) CONDITIONAL WIND LEASE SALES.—

11 “(A) IN GENERAL.—For each territory,
12 the Secretary shall conduct not less than 1 wind
13 lease sale on an area of the outer Continental
14 Shelf within the territorial jurisdiction of such
15 territory that meets each of the following cri-
16 teria:

17 “(i) The study required under para-
18 graph (1)(A) concluded that a wind lease
19 sale on the area is feasible.

20 “(ii) The Secretary has determined
21 that the call for information has generated
22 sufficient interest for the area.

23 “(iii) The Secretary has consulted
24 with the Secretary of Defense and other

1 relevant Federal agencies regarding such a
2 sale.

3 “(iv) The Secretary has consulted
4 with the Governor of the territory regard-
5 ing the suitability of the area for wind en-
6 ergy development.

7 “(B) EXCEPTION.—If no area of the outer
8 Continental Shelf within the territorial jurisdic-
9 tion of a territory meets each of the criteria in
10 clauses (i) through (iii) of subparagraph (A),
11 the requirement under subparagraph (A) shall
12 not apply to such territory.”.

13 **SEC. 318. MARINE ENERGY RESEARCH.**

14 (a) IN GENERAL.—Subtitle C of title VI of the En-
15 ergy Independence and Security Act of 2007 (42 U.S.C.
16 17001 et seq.) is amended to read as follows:

17 **“SEC. 631. SHORT TITLE.**

18 “This subtitle may be cited as the ‘Marine Energy
19 Research and Development Act’.

20 **“SEC. 632. DEFINITIONS.**

21 “In this subtitle:

22 “(1) ELIGIBLE ENTITY.—The term ‘eligible en-
23 tity’ means any of the following entities:

24 “(A) An institution of higher education.

25 “(B) A National Laboratory.

1 “(C) A Federal research agency.

2 “(D) A State research agency.

3 “(E) A nonprofit research organization.

4 “(F) An industrial entity or a multi-insti-
5 tutional consortium thereof.

6 “(2) INSTITUTION OF HIGHER EDUCATION.—

7 The term ‘institution of higher education’ has the
8 meaning given such term in section 101 of the High-
9 er Education Act of 1965 (20 U.S.C. 1001).

10 “(3) MARINE ENERGY.—The term ‘marine en-
11 ergy’ means energy from—

12 “(A) waves, tides, and currents in oceans,
13 estuaries, and tidal areas;

14 “(B) free flowing water in rivers, lakes,
15 streams, and man-made channels;

16 “(C) differentials in salinity and pressure
17 gradients; and

18 “(D) differentials in water temperature, in-
19 cluding ocean thermal energy conversion.

20 “(4) NATIONAL LABORATORY.—The term ‘Na-
21 tional Laboratory’ has the meaning given such term
22 in section 2(3) of the Energy Policy Act of 2005 (42
23 U.S.C. 15801(3)).

24 “(5) MICROGRID.—The term ‘microgrid’ has
25 the meaning given such term in section 641 of the

1 Energy Independence and Security Act of 2007 (42
2 U.S.C. 17231).

3 **“SEC. 633. MARINE ENERGY RESEARCH, DEVELOPMENT,**
4 **AND DEMONSTRATION.**

5 “(a) IN GENERAL.—The Secretary, in consultation
6 with the Department of Defense, Secretary of Commerce
7 (acting through the Under Secretary of Commerce for
8 Oceans and Atmosphere), the Secretary of the Interior,
9 and other relevant Federal agencies, shall conduct a pro-
10 gram of research, development, demonstration, and com-
11 mercial application of marine energy technology, including
12 activities to—

13 “(1) assist technology development to improve
14 the components, processes, and systems used for
15 power generation from marine energy resources at a
16 variety of scales;

17 “(2) establish and expand critical testing infra-
18 structure and facilities necessary to—

19 “(A) demonstrate and prove marine energy
20 devices at a range of scales in a manner that
21 is cost-effective and efficient; and

22 “(B) accelerate the technological readiness
23 and commercial application of such devices;

1 “(3) address marine energy resource variability
2 issues, including through the application of energy
3 storage technologies;

4 “(4) advance efficient and reliable integration
5 of marine energy with the electric grid, which may
6 include smart building systems;

7 “(5) identify and study critical short- and long-
8 term needs to maintaining a sustainable marine en-
9 ergy supply chain based in the United States;

10 “(6) increase the reliability, security, and resil-
11 ience of marine energy technologies;

12 “(7) validate the performance, reliability, main-
13 tainability, and cost of marine energy device designs
14 and system components in an operating environ-
15 ment;

16 “(8) consider the protection of critical infra-
17 structure, such as adequate separation between ma-
18 rine energy devices and projects and submarine tele-
19 communications cables, including through the devel-
20 opment of voluntary, consensus-based standards for
21 such purposes;

22 “(9) identify opportunities for crosscutting re-
23 search, development, and demonstration programs
24 between existing energy research programs;

1 “(10) identify and improve, in conjunction with
2 the Secretary of Commerce, acting through the
3 Under Secretary of Commerce for Oceans and At-
4 mosphere, and other relevant Federal Agencies as
5 appropriate, the environmental impact, including po-
6 tential cumulative environmental impacts, of marine
7 energy technologies, including—

8 “(A) potential impacts on fisheries and
9 other marine resources; and

10 “(B) developing technologies, including
11 mechanisms for self-evaluation, and other
12 means available for improving environmental
13 impacts, including potential cumulative environ-
14 mental impacts;

15 “(11) identify, in consultation with relevant
16 Federal agencies, potential navigational impacts of
17 marine energy technologies and strategies to prevent
18 possible adverse impacts, in addition to opportunities
19 for marine energy systems to aid the United States
20 Coast Guard, such as remote sensing for coastal bor-
21 der security;

22 “(12) develop numerical and physical tools, in-
23 cluding models and monitoring technologies, to as-
24 sist industry in device and system design, installa-

1 tion, operation, and maintenance, including methods
2 to validate such tools;

3 “(13) support materials science as it relates to
4 marine energy technology, such as the development
5 of corrosive-resistant materials;

6 “(14) improve marine energy resource fore-
7 casting and general understanding of aquatic system
8 behavior, including turbulence and extreme condi-
9 tions;

10 “(15) develop metrics and voluntary consensus-
11 based standards in coordination with the National
12 Institute of Standards and Technology and appro-
13 priate standard development organizations for ma-
14 rine energy components, systems, and projects, in-
15 cluding—

16 “(A) measuring performance of marine en-
17 ergy technologies; and

18 “(B) characterizing environmental condi-
19 tions;

20 “(16) enhance integration with hybrid energy
21 systems, including desalination;

22 “(17) identify opportunities to integrate marine
23 energy technologies into new and existing infrastruc-
24 ture; and

1 “(18) develop technology necessary to support
2 the use of marine energy—

3 “(A) for the generation and storage of
4 power at sea; and

5 “(B) for the generation and storage of
6 power to promote the resilience of coastal com-
7 munities, including in applications relating to—

8 “(i) desalination;

9 “(ii) disaster recovery and resilience;

10 and

11 “(iii) community microgrids in iso-
12 lated power systems.

13 “(b) STUDY OF NON-POWER SECTOR APPLICATIONS
14 FOR ADVANCED MARINE ENERGY TECHNOLOGIES.—

15 “(1) IN GENERAL.—The Secretary, in consulta-
16 tion with the Secretary of Transportation and the
17 Secretary of Commerce, shall conduct a study to ex-
18 amine opportunities for research and development in
19 advanced marine energy technologies for non-power
20 sector applications, including applications with re-
21 spect to—

22 “(A) the maritime transportation sector;

23 “(B) associated maritime energy infra-
24 structure, including infrastructure that serves

1 ports, to improve system resilience and disaster
2 recovery; and

3 “(C) enabling scientific missions at sea
4 and in extreme environments, including the
5 Arctic.

6 “(2) REPORT.—Not later than 1 year after the
7 date of enactment of this section, the Secretary shall
8 submit to the Committee on Energy and Natural
9 Resources of the Senate and the Committee on
10 Science, Space, and Technology of the House of
11 Representatives a report that describes the results of
12 the study conducted under paragraph (1).

13 **“SEC. 634. NATIONAL MARINE ENERGY CENTERS.**

14 “(a) CENTERS.—The Secretary shall award grants,
15 with each grant up to \$10,000,000 per year, to institu-
16 tions of higher education (or consortia thereof) for—

17 “(1) the continuation and expansion of the re-
18 search, development, demonstration, testing, and
19 commercial application activities at the National Ma-
20 rine Energy Centers (referred to in this section as
21 ‘Centers’) established as of January 1, 2020; and

22 “(2) the establishment of new National Marine
23 Energy Centers.

1 “(b) LOCATION SELECTION.—In selecting institu-
2 tions of higher education for new Centers, the Secretary
3 shall consider the following criteria:

4 “(1) Whether the institution hosts an existing
5 marine energy research and development program.

6 “(2) Whether the institution has proven tech-
7 nical expertise to support marine energy research.

8 “(3) Whether the institution has access to ma-
9 rine resources.

10 “(c) PURPOSES.—The Centers shall coordinate
11 among themselves, the Department, and the National
12 Laboratories to—

13 “(1) advance research, development, demonstra-
14 tion and commercial application of marine energy
15 technologies in response to industry and commercial
16 needs;

17 “(2) support in-water testing and demonstra-
18 tion of marine energy technologies, including facili-
19 ties capable of testing—

20 “(A) marine energy systems of various
21 technology readiness levels and scales;

22 “(B) a variety of technologies in multiple
23 test berths at a single location;

24 “(C) arrays of technology devices; and

1 “(D) interconnectivity to an electrical grid,
2 including microgrids; and

3 “(3) collect and disseminate information on
4 best practices in all areas relating to developing and
5 managing marine energy resources and energy sys-
6 tems.

7 “(d) COORDINATION.—To the extent practicable, the
8 Centers shall coordinate their activities with the Secretary
9 of Commerce, acting through the Undersecretary of Com-
10 merce for Oceans and Atmosphere, and other relevant
11 Federal agencies.

12 “(e) TERMINATION.—To the extent otherwise author-
13 ized by law, the Secretary may terminate funding for a
14 Center described in paragraph (a) if such Center is under-
15 performing.

16 **“SEC. 635. ORGANIZATION AND ADMINISTRATION OF PRO-**
17 **GRAMS.**

18 “(a) COORDINATION.—In carrying out this subtitle,
19 the Secretary shall coordinate activities, and effectively
20 manage cross-cutting research priorities across programs
21 of the Department and other relevant Federal agencies,
22 including the National Laboratories and the National Ma-
23 rine Energy Centers.

24 “(b) COLLABORATION.—

1 “(1) IN GENERAL.—In carrying out this sub-
2 title, the Secretary shall collaborate with industry,
3 National Laboratories, other relevant Federal agen-
4 cies, institutions of higher education, including Mi-
5 nority Serving Institutions, National Marine Energy
6 Centers, Tribal entities, including Alaska Native
7 Corporations, and international bodies with relevant
8 scientific and technical expertise.

9 “(2) PARTICIPATION.—To the extent prac-
10 ticable, the Secretary shall encourage research
11 projects that promote collaboration between entities
12 specified in paragraph (1) and include entities not
13 historically associated with National Marine Energy
14 Centers, such as Minority Serving Institutions.

15 “(3) INTERNATIONAL COLLABORATION.—The
16 Secretary of Energy, in coordination with other ap-
17 propriate Federal and multilateral agencies (includ-
18 ing the United States Agency for International De-
19 velopment) shall support collaborative efforts with
20 international partners to promote the research, de-
21 velopment, and demonstration of technologies used
22 to develop marine energy resources.

23 “(c) DISSEMINATION OF RESULTS AND PUBLIC
24 AVAILABILITY.—The Secretary shall—

1 “(1) publish the results of projects supported
2 under this subtitle through Department websites, re-
3 ports, databases, training materials, and industry
4 conferences, including information discovered after
5 the completion of such projects, withholding any in-
6 dustrial proprietary information; and

7 “(2) share results of such projects with the
8 public except to the extent that the information is
9 protected from disclosure under section 552(b) of
10 title 5, United States Code.

11 “(d) AWARD FREQUENCY.—The Secretary shall so-
12 licit applications for awards under this subtitle no less fre-
13 quently than once per fiscal year.

14 “(e) EDUCATION AND OUTREACH.—In carrying out
15 the activities described in this subtitle, the Secretary shall
16 support education and outreach activities to disseminate
17 information and promote public understanding of marine
18 energy technologies and the marine energy workforce, in-
19 cluding activities at the National Marine Energy Centers.

20 “(f) TECHNICAL ASSISTANCE AND WORKFORCE DE-
21 VELOPMENT.—In carrying out this subtitle, the Secretary
22 may also conduct, for purposes of supporting technical,
23 non-hardware, and information-based advances in marine
24 energy development and operations—

1 “(1) technical assistance and analysis activities
2 with eligible entities, including activities that sup-
3 port expanding access to advanced marine energy
4 technologies for rural, Tribal, and low-income com-
5 munities; and

6 “(2) workforce development and training activi-
7 ties, including to support the dissemination of stand-
8 ards and best practices for enabling marine energy
9 production.

10 “(g) STRATEGIC PLAN.—In carrying out the activi-
11 ties described in this subtitle, the Secretary shall—

12 “(1) not later than one year after the date of
13 the enactment of the Marine Energy Research and
14 Development Act, draft a plan, considering input
15 from relevant stakeholders such as industry and aca-
16 demia, to implement the programs described in this
17 subtitle and update the plan on an annual basis; and

18 “(2) the plan shall address near-term (up to 2
19 years), mid-term (up to 7 years), and long-term (up
20 to 15 years) challenges to the advancement of ma-
21 rine energy systems.

22 “(h) REPORT TO CONGRESS.—Not later than 1 year
23 after the date of the enactment of this Act, and at least
24 once every 2 years thereafter, the Secretary shall provide,
25 and make available to the public and the relevant author-

1 izing and appropriations committees of Congress, a report
2 on the findings of research conducted and activities car-
3 ried out pursuant to this subtitle, including the most cur-
4 rent strategic plan under subsection (g) and the progress
5 made in implementing such plan.

6 **“SEC. 636. APPLICABILITY OF OTHER LAWS.**

7 “Nothing in this subtitle shall be construed as
8 waiving, modifying, or superseding the applicability of any
9 requirement under any environmental or other Federal or
10 State law.

11 **“SEC. 637. AUTHORIZATION OF APPROPRIATIONS.**

12 “There are authorized to be appropriated to the Sec-
13 retary to carry out this subtitle—

14 “(1) \$112,580,000 for marine energy research,
15 development, and demonstration activities for fiscal
16 year 2021;

17 “(2) \$116,303,200 for marine energy research,
18 development, and demonstration activities for fiscal
19 year 2022;

20 “(3) \$120,175,562 for marine energy research,
21 development, and demonstration activities for fiscal
22 year 2023;

23 “(4) \$124,203,295 for marine energy research,
24 development, and demonstration activities for fiscal
25 year 2024; and

1 “(5) \$128,392,869 for marine energy research,
2 development, and demonstration activities for fiscal
3 year 2025.”.

4 (b) CONFORMING TABLE OF CONTENTS AMEND-
5 MENT.—The table of contents for the Energy Independ-
6 ence and Security Act of 2007 is amended by striking the
7 items relating to subtitle C of title VI and inserting the
8 following:

“Subtitle C—Marine Energy Research and Development

“Sec. 631. Short title.

“Sec. 632. Definitions.

“Sec. 633. Marine energy research, development, and demonstrations.

“Sec. 634. National Marine Energy Centers.

“Sec. 635. Organization and administration of programs.

“Sec. 636. Applicability of other laws.

“Sec. 637. Authorization of appropriations.”.

9 (c) CONFORMING AMENDMENTS.—

10 (1) ENERGY POLICY ACT OF 2005.—The Energy
11 Policy Act of 2005 (42 U.S.C. 15801 et seq.) is
12 amended—

13 (A) in section 201(a), by striking “ocean
14 (including tidal, wave, current, and thermal)”
15 and inserting “marine”;

16 (B) in section 203(b)(2), by—

17 (i) inserting “marine energy (as de-
18 fined in section 632 of the Energy Inde-
19 pendence and Security Act of 2007) or”
20 before “electric energy”; and

1 (ii) by striking “ocean (including
2 tidal, wave, current, and thermal)”;

3 (C) in section 931(a)(2)(E)(i), by striking
4 “ocean energy, including wave energy” and in-
5 serting “marine energy (as defined in section
6 632 of the Energy Independence and Security
7 Act of 2007)”; and

8 (D) in section 1833(a), by striking “ocean
9 energy resources (including tidal, wave, and
10 thermal energy)” and inserting “marine energy
11 resources (within the meaning of section 632 of
12 the Energy Independence and Security Act of
13 2007)”.
14

15 (2) ENERGY POLICY ACT OF 1992.—Section
16 1212 of the Energy Policy Act of 1992 (42 U.S.C.
17 13317) is amended—

18 (A) in subsection (a)(4)(A)(i), by striking
19 “ocean (including tidal, wave, current, and ther-
20 mal)” and inserting “marine energy (as defined
21 in section 632 of the Energy Independence and
22 Security Act of 2007)”;
23

24 (B) in subsection (b), in the matter pre-
25 ceding paragraph (1), by striking “ocean (in-
cluding tidal, wave, current, and thermal)” and
inserting “marine energy (as defined in section

1 632 of the Energy Independence and Security
2 Act of 2007)”; and

3 (C) in subsection (e)(1), in the first sen-
4 tence, by striking “ocean (including tidal, wave,
5 current, and thermal)” and inserting “marine
6 energy (as defined in section 632 of the Energy
7 Independence and Security Act of 2007)”.

8 (3) RENEWABLE ENERGY AND ENERGY EFFI-
9 CIENCY TECHNOLOGY COMPETITIVENESS ACT OF
10 1989.—The Renewable Energy and Energy Effi-
11 ciency Technology Competitiveness Act of 1989 (42
12 U.S.C. 12001 et seq.) is amended—

13 (A) in section 4 (42 U.S.C. 12003)—

14 (i) in subsection (a)(5), by striking
15 “Ocean” and inserting “Marine”; and

16 (ii) in subsection (c), in the matter
17 preceding paragraph (1), by striking
18 “Ocean” and inserting “Marine”; and

19 (B) in section 9(c) (42 U.S.C. 12006(c)),
20 by striking “ocean,” and inserting “marine,”.

21 **SEC. 319. INCREASING FUNDING FOR COASTAL CONSERVA-**
22 **TION AND RESILIENCE.**

23 Section 8(p)(2) of the Outer Continental Shelf Lands
24 Act (43 U.S.C. 1337(p)(2)) is amended by adding at the
25 end the following:

1 “(C) With respect to any lease under this
2 subsection for the production of wind energy,
3 30 percent of the revenue from such lease shall
4 be deposited in the National Oceans and Coast-
5 al Security Fund established by section 904 of
6 the National Oceans and Coastal Security Act
7 (16 U.S.C. 7503).”.

8 **TITLE IV—CLIMATE-READY FISH-**
9 **ERIES, EFFICIENT FISHERY**
10 **VESSELS, AND BUY AMER-**
11 **ICAN SEAFOOD**

12 **SEC. 401. SENSE OF CONGRESS.**

13 It is the sense of Congress that—

14 (1) American wild-caught seafood is integral to
15 the nation’s food supply and to American food secu-
16 rity;

17 (2) the seafood supply chain is often long and
18 complex;

19 (3) American caught and American-processed
20 seafood can be a sustainable healthy source of pro-
21 tein and micronutrients;

22 (4) fresh, frozen, dried, and canned domestic
23 seafood can be produced, processed, and transported
24 in a manner that has a low carbon footprint;

1 (5) marine species that are small, at lower
2 trophic levels, and pelagic typically have the smallest
3 carbon footprint; and

4 (6) therefore, any executive agency that pur-
5 chases seafood products should, to the extent prac-
6 ticable, buy local American-caught or American-har-
7 vested and American-processed seafood products
8 from fisheries that are not overfished or experi-
9 encing overfishing in order to reduce the greenhouse
10 gas emissions associated with the supply chain of
11 seafood products.

12 **SEC. 402. CAUGHT IN THE USA.**

13 Section 2(c)(1) of the Act of August 11, 1939 (15
14 U.S.C. 713c-3(e)(1)) is amended to read as follows:

15 “(1) The Secretary shall make grants from the
16 fund established under subsection (b) to—

17 “(A) assist persons in carrying out re-
18 search and development projects addressed to
19 any aspect of United States fisheries, including
20 harvesting, processing, marketing, and associ-
21 ated infrastructures; or

22 “(B) assist persons to market and promote
23 the consumption of—

24 “(i) local or domestic fishery products;

1 “(ii) environmentally- and climate-
2 friendly fishery products that minimize by-
3 catch and impacts on marine mammals;
4 “(iii) invasive species; or
5 “(iii) well-managed but less known
6 species.”.

7 **SEC. 403. ELIMINATE FISH SUBSIDIES IN TRADE AGREE-**
8 **MENTS.**

9 (a) IN GENERAL.—Section 102(b) of the Bipartisan
10 Congressional Trade Priorities and Accountability Act of
11 2015 (19 U.S.C. 4201(b)) is amended by adding at the
12 end the following:

13 “(23) FISH SUBSIDIES.—The principal negoti-
14 ating objectives of the United States with respect to
15 fish subsidies are the following:

16 “(A) To eliminate subsidies that contribute
17 to overcapacity, overfishing, or illegal, unre-
18 ported, and unregulated fishing, such as sub-
19 sidies that—

20 “(i) increase the marine fishing capac-
21 ity of fishing vessels or support the acqui-
22 sition of equipment that increases the abil-
23 ity of fishing vessels to find fish;

24 “(ii) support the construction of fish-
25 ing vessels, importation of fishing vessels,

1 or government repurchase of fishing ves-
2 sels outside of a binding and effective fish-
3 ing capacity reduction program that in-
4 cludes the corresponding elimination of
5 fishing rights and a binding and effective
6 prohibition on the reuse of vessels for fish-
7 ing to increase capacity in any fishery;

8 “(iii) affect fish stocks in any fish-
9 ery—

10 “(I) in an overfished or worse
11 condition;

12 “(II) whose stock levels are de-
13 clining; or

14 “(III) whose stock level status re-
15 mains unknown;

16 “(iv) are provided to fishing enter-
17 prises engaged in long-distance fishing, ei-
18 ther on the high seas or in the exclusive
19 economic zone of a third country;

20 “(v) support the transfer or reflagging
21 of fishing vessels to third countries, includ-
22 ing through the creation of joint ventures
23 with partners of those countries;

24 “(vi) are provided to the fishing enter-
25 prises or to owners or operators of vessels

1 that have been determined to have engaged
2 in illegal, unreported, and unregulated
3 fishing by a coastal state or a regional
4 fisheries management organization; or

5 “(vii) reduce fuel, insurance, or other
6 operating costs solely for fishing enter-
7 prises.

8 “(B) To require parties to trade agree-
9 ments—

10 “(i) to report to an environmental af-
11 fairs committee established under the
12 agreement, on an annual basis, all marine
13 fishing-related subsidies provided by the
14 parties, including fleet capacity and trade
15 data concerning the fisheries that the sub-
16 sidies affect;

17 “(ii) to establish an independent body
18 to make annual assessments of the health
19 of fish stocks in each domestic fishery and
20 report such assessments to such environ-
21 mental affairs committee;

22 “(iii) with respect to shared or inter-
23 national fisheries in which each party is in-
24 volved in fishing activities, to commit to
25 cooperating with third countries, regional

1 fisheries management organizations, and
2 assessment bodies in annual assessments
3 of the health of fish stocks in such fish-
4 eries; and

5 “(iv) to certify to such environmental
6 affairs committee that they have made and
7 continue to make adequate progress to-
8 ward the goal of protecting and conserving,
9 through well-connected and effective sys-
10 tem of protected areas and other effective
11 area-based conservation measures, at least
12 30 per cent of the planet by 2030, with the
13 focus on areas particularly important for
14 biodiversity.

15 “(C) To require parties to trade agree-
16 ments that are also members of the World
17 Trade Organization to work collaboratively at
18 the Organization to establish and maintain ro-
19 bust disciplines on fisheries subsidies.”.

20 (b) EFFECTIVE DATE.—The amendments made by
21 subsection (a)—

22 (1) take effect on the date of the enactment of
23 this Act; and

24 (2) apply with respect to negotiations for trade
25 agreements subject to the provisions of section 103

1 of the Bipartisan Congressional Trade Priorities and
2 Accountability Act of 2015 (19 U.S.C. 4202) en-
3 tered into on or after such date of enactment.

4 **SEC. 404. FUEL EFFICIENT FISHING VESSELS.**

5 Section 53708(b)(2) of title 46, United States Code,
6 is amended—

7 (1) in subparagraph (A) by striking “or” at the
8 end;

9 (2) in subparagraph (B) by striking “increased
10 fuel efficiency or improved safety.” and inserting
11 “improved safety; or”; and

12 (3) by adding at the end the following:

13 “(C) increasing fuel efficiency and reduc-
14 ing fuel usage, which may include—

15 “(i) installation of solar panels;

16 “(ii) engine replacement or retrofit,
17 including the installation of new fuel-effi-
18 cient, low-emission engines, including hy-
19 brid electric marine engines or generators;

20 “(iii) gearbox or propeller replace-
21 ment;

22 “(iv) modifications to hull shape; and

23 “(v) modifications to fishing gear.”.

1 **SEC. 405. CLIMATE AND FISHERIES RESEARCH AND MAN-**
2 **AGEMENT PROGRAM.**

3 Title IV of the Magnuson-Stevens Fishery Conserva-
4 tion and Management Act (16 U.S.C. 1881 et seq.) is
5 amended by adding at the end the following:

6 **“SEC. 409. CLIMATE AND FISHERIES RESEARCH AND MAN-**
7 **AGEMENT PROGRAM.**

8 “(a) ESTABLISHMENT OF THE PROGRAM.—The Sec-
9 retary, in consultation with appropriate Regional Fishery
10 Management Councils and in coordination with other Fed-
11 eral agencies and educational institutions, shall establish
12 a program to identify, develop, and implement adaptive
13 strategies, consistent with the requirements of this Act,
14 to improve the management of fisheries under current and
15 anticipated impacts of climate change. In administering
16 such program, the Secretary shall—

17 “(1) expand and improve fisheries science, mon-
18 itoring, and data collection in order to support and
19 promote integrated, climate-informed fishery man-
20 agement and ensure that the requirements of this
21 Act are met under changing climatic conditions;

22 “(2) prepare and adapt fishery management for
23 climate change by promoting a precautionary ap-
24 proach to management and supporting the develop-
25 ment and use of relevant science and management
26 tools, including forecasting, risk assessment, sce-

1 nario planning, coupled climate and ecosystem mod-
2 eling, and management strategy evaluation;

3 “(3) improve agency understanding of stock
4 shifts to inform catch advice, resolve jurisdictional
5 issues, and support achievement of conservation
6 mandates in the face of shifting stocks;

7 “(4) promote the use of climate-informed stock
8 assessments;

9 “(5) provide guidance on the use of climate-re-
10 sponsive control rules in fishery management;

11 “(6) promote management approaches that in-
12 crease resilience to current and anticipated climate
13 impacts in managed species and marine ecosystems,
14 including by coordinating with and advancing pro-
15 grams to protect genetic diversity and age structure,
16 protect marine habitat, minimize and better account
17 for bycatch, and incorporating into management the
18 ecological role of forage fish in the marine food web;

19 “(7) increase understanding of the socio-
20 economic impacts of climate change on fishing par-
21 ticipants and related industries;

22 “(8) coordinate within the National Oceanic
23 and Atmospheric Administration on issues related to
24 climate change and fisheries, including on data
25 needs and availability;

1 “(9) ensure that the research, resource manage-
2 ment, and expenditures to prepare fisheries for cli-
3 mate change promote racial and socioeconomic eq-
4 uity with respect to environmental and economic
5 outcomes across fisheries and regions;

6 “(10) promote the incorporation of climate
7 change into fisheries management at regional fishery
8 management organizations and other international
9 bodies; and

10 “(11) advance other climate change fishery
11 science and management as appropriate.

12 “(b) EVALUATION.—The Secretary, in consultation
13 with the Councils, shall, not later than 3 years after the
14 date of enactment of the Ocean-Based Climate Solutions
15 Act of 2020 and every 3 years thereafter, conduct an inde-
16 pendent review that will be provided to Congress and the
17 public on the results of the program, including—

18 “(1) steps taken to modify or enhance research
19 and data collection programs to better understand
20 the effects of climate change on fishery resources;

21 “(2) steps taken to evaluate various manage-
22 ment strategies in the context of future climate sce-
23 narios;

1 “(3) how tools and solutions identified by the
2 program have been or will be implemented in fishery
3 science and management; and

4 “(4) the degree to which equity in outcomes of
5 fulfilling programmatic duties was achieved as re-
6 quired by subsection (a)(9).”.

7 **SEC. 406. CLIMATE-READY FISHERIES INNOVATION PRO-**
8 **GRAM.**

9 (a) CLIMATE-READY FISHERIES INNOVATION PRO-
10 GRAM.—Not later than 1 year after the date of enactment
11 of this Act, the Administrator shall establish a program,
12 including grants, to develop innovative tools and ap-
13 proaches designed to increase the adaptive capacity of
14 fishery management to the impacts of climate change. In
15 administering such program, the Administrator shall—

16 (1) develop science and management ap-
17 proaches that address regional and national prior-
18 ities to improve the conservation and management of
19 fishery resources under current and anticipated cli-
20 mate impacts;

21 (2) provide for routine consultation with fishery
22 managers and scientists in order to maximize oppor-
23 tunities to incorporate results of the program in
24 fishery management actions;

1 (3) promote adoption of methods developed
2 under the program in fishery management plans de-
3 veloped by the Regional Fishery Management Coun-
4 cils;

5 (4) provide information and outreach to the pri-
6 vate sector and academic sector to encourage devel-
7 opment of tools and approaches to manage the ef-
8 fects of climate change on fisheries; and

9 (5) provide information and outreach to fishery
10 participants to increase understanding of and en-
11 courage adoption and use of tools and approaches
12 developed under the program.

13 (b) COORDINATION OF THE PROGRAM.—

14 (1) The Administrator shall establish a process
15 to ensure coordination with and outreach to—

16 (A) regional offices and science centers of
17 the National Marine Fisheries Service.

18 (B) the Regional Fishery Management
19 Councils;

20 (C) the scientific and statistical committees
21 of such Fishery Management Councils; and

22 (D) other relevant programs, including the
23 cooperative research and management program
24 under Section 318 of the Magnuson-Stevens
25 Fishery Conservation and Management Act (16

1 U.S.C. 1867), the Integrated Ocean Observing
2 System, and programs within the National Oce-
3 anic and Atmospheric Administration designed
4 to address ocean acidification.

5 (2) Such coordination should include identifica-
6 tion of multi-year research priorities to study and
7 understand the current and anticipated impacts of
8 climate change on fisheries, fisheries interactions,
9 habitats, fishery participants, fisheries science and
10 monitoring, or other relevant priority. Such prior-
11 ities should be routinely reviewed in a timeframe not
12 to exceed 5 years and updated as necessary.

13 (c) REPORT.—Every 2 years, beginning 2 years after
14 the date of the enactment of this Act, the Administrator
15 shall transmit a report to the Senate Committee on Com-
16 merce, Science, and Transportation and the House of Rep-
17 resentatives Committee on Natural Resources that—

18 (1) describes funding provided to implement
19 this section;

20 (2) includes descriptions of and developments in
21 tools and approaches achieved under this section;

22 (3) describes how and in which fisheries these
23 tools and approaches have been implemented; and

1 (4) describes improvements in fishery climate-
2 readiness associated with implementing this section,
3 as well as proposals to address remaining problems.

4 **SEC. 407. SHIFTING STOCKS TASK FORCE.**

5 (a) ESTABLISHMENT.—The Administrator shall es-
6 tablish, not later than 120 days after the date of enact-
7 ment of this Act, a task force to be known as the “Shifting
8 Stocks Task Force” consisting of 10 members, including
9 1 member recommended by each of 8 Regional Fishery
10 Management Councils and the Highly Migratory Species
11 Advisory Panel and the Administrator or their designee.

12 (b) MEMBERSHIP.—

13 (1) TERMS.—Except as provided by paragraph
14 (2), terms of appointed members of the Task Force
15 shall be staggered, shall be 2 years in duration, and
16 no member shall serve more than 3 terms.

17 (2) VACANCY.—Any member appointed to fill a
18 vacancy occurring before the expiration of the term
19 for which the member’s predecessor was appointed
20 shall be appointed only for the remainder of that
21 term.

22 (3) CRITERIA FOR APPOINTMENT.—Members
23 appointed to the Task Force shall be Federal em-
24 ployees, State employees, Tribal and Indigenous rep-
25 resentatives, academics, or independent experts,

1 shall have strong scientific or technical credentials
2 and experience, and shall not include members of the
3 Regional Fishery Management Councils.

4 (4) TRAVEL EXPENSES.—Each member shall
5 receive travel expenses, including per diem in lieu of
6 subsistence, in accordance with applicable provisions
7 under subchapter I of chapter 57 of title 5, United
8 States Code.

9 (5) CHAIRPERSON.—The chairperson of the
10 Task Force shall be elected by the members.

11 (c) MEETINGS.—The Task Force shall meet not less
12 than 4 times annually.

13 (d) STAFF SUPPORT.—Upon request of the Task
14 Force, the Administrator may detail on a reimbursable
15 basis personnel to the Task Force to assist such Task
16 Force.

17 (e) DEVELOPMENT OF CRITERIA.—Not later than 1
18 year after the date of enactment of this Act, the Task
19 Force shall develop, in consultation with the Adminis-
20 trator and the Regional Fishery Management Councils,
21 science-based decision-making criteria to make jurisdic-
22 tion, allocation, and fishery management decisions that
23 minimize the risk of overfishing and maximize stock and
24 ecosystem resilience to the effects of climate change, are
25 consistent with the national standards, the other provi-

1 sions of the Magnuson-Stevens Fishery Conservation and
2 Management Act (16 U.S.C. 1801 et seq.), regulations im-
3 plementing recommendations by international organiza-
4 tions in which the United States participates (including
5 but not limited to closed areas, quotas, and size limits),
6 and any other applicable law.

7 (f) RECOMMENDATIONS.—The Task Force shall
8 make recommendations to the Administrator and to the
9 Regional Fishery Management Councils recommendations
10 for the allocation and distribution of fishing privileges
11 based on the criteria developed under subsection (e).

12 (g) PETITIONS.—Any member of the public may sub-
13 mit a petition to request the review of potentially shifting
14 stock. In order to be eligible for consideration, a petition
15 must include sufficiently descriptive information regarding
16 the stock or stocks in question, the jurisdiction or alloca-
17 tion concerns, and any other relevant information.

18 (h) PETITION REVIEW AND RECOMMENDATION.—

19 (1) DETERMINATION OF SUFFICIENT INFORMA-
20 TION.—Upon receipt of a petition under subsection
21 (f), the Task Force shall, not later than 60 days
22 after the date of such receipt, determine by majority
23 vote whether the petition contains sufficient infor-
24 mation to show that a substantial shift in the dis-
25 tribution of a stock has occurred.

1 (2) REVIEW PROCESS.—If the Task Force
2 makes a determination under paragraph (1) that a
3 petition contains sufficient information, the Task
4 Force shall review such petition. Such review shall
5 include—

6 (A) a public hearing in the affected region;
7 and

8 (B) a public notice and comment period of
9 not less than 90 days.

10 (3) WRITTEN RECOMMENDATION.—Upon com-
11 pletion of a review under paragraph (2), the Task
12 Force shall—

13 (A) determine which Regional Fishery
14 Management Council's or Councils' geographic
15 area of authority the fishery is located in; and

16 (B) submit to the Administrator, each af-
17 fected Regional Fishery Management Council,
18 and the petitioner written recommendations for
19 allocation and distribution of fishing privileges
20 within the fishery.

21 (4) RESPONSE.—Upon receipt of a rec-
22 ommendation from the Task Force under paragraph
23 (3), the Administrator shall—

24 (A) begin consultation with the affected
25 Regional Fishery Management Council regard-

1 ing necessary changes to fishery management
2 plans; and

3 (B) not later than 180 days after the date
4 of receipt of the Task Force’s recommendation,
5 ensure that a compliant fishery management
6 plan that fully accounts for the best available
7 science on shifting stocks and the recommenda-
8 tions of the Task Force is created, published,
9 and implemented.

10 (5) PUBLICATION.—The Task Force shall pub-
11 lish on the internet each petition received under this
12 section, the determination as made under paragraph
13 (1) and any written recommendations produced
14 under paragraph (3).

15 (i) TASK FORCE.—In this section, the term “Task
16 Force” means the Shifting Stocks Task Force established
17 pursuant to subsection (a).

18 **SEC. 408. ESSENTIAL FISH HABITAT CONSULTATION.**

19 Section 305(b) of the Magnuson-Stevens Fishery
20 Conservation and Management Act (16 U.S.C. 1855(b))
21 is amended—

22 (1) in paragraph (1)(A)—

23 (A) by inserting “every five years” after
24 “updating”; and

1 (B) by inserting “, changes to habitat, in
2 part due to climate change,” after “evidence”;
3 (2) in paragraph (1)(D), by inserting “and such
4 agencies shall take action” after “agencies”;
5 (3) by striking paragraphs (2) through (4) and
6 inserting after paragraph (1) the following:

7 “(2) CONSULTATIONS REGARDING FEDERAL
8 AGENCY ACTION WITH ADVERSE EFFECTS ON ES-
9 SENTIAL FISH HABITAT.—

10 “(A) REQUIREMENT TO AVOID OR MITI-
11 GATE ADVERSE EFFECTS.—

12 “(i) ESSENTIAL FISH HABITAT.—With
13 respect to any Federal agency action that
14 may have an adverse affect on essential
15 fish habitat, each Federal agency shall, in
16 consultation with the Secretary, ensure
17 that any action authorized, funded, or un-
18 dertaken by such agency avoids the ad-
19 verse effect of such action on essential fish
20 habitat or, to the extent that the adverse
21 effect cannot be avoided, the agency shall
22 minimize and mitigate the adverse effect.

23 “(ii) HABITAT AREA OF PARTICULAR
24 CONCERN.—No Federal agency may au-
25 thorize, fund, or undertake an action if

1 such agency determines, in consultation
2 with the Secretary, that such action would
3 have an adverse effect on a habitat area of
4 particular concern.

5 “(B) REGULATIONS.—The Secretary shall
6 establish regulations for the consultation proc-
7 ess required by subparagraph (A), including to
8 ensure that recommendations made by the Sec-
9 retary pursuant to such subparagraph would re-
10 sult in the avoidance, if possible, of adverse ef-
11 fects on essential fish habitat and, if avoidance
12 is not possible, the minimization and mitigation
13 of any such adverse effects.

14 “(3) INFORMATION TO COUNCIL.—The Sec-
15 retary shall inform each affected Council of any con-
16 sultation carried out under paragraph (2), including
17 information on the proposed action and any poten-
18 tial adverse effects, and each affected Council—

19 “(A) may comment on and make rec-
20 ommendations to the Secretary and any Federal
21 or State agency concerning the underlying ac-
22 tion if, in the view of the Council, such action
23 may affect the habitat of a fishery resource
24 under the authority of such Council; and

1 “(B) shall comment on and make rec-
2 ommendations to the Secretary and any Federal
3 or State agency concerning the underlying ac-
4 tion if, in the view of the Council, such action
5 is likely to adversely affect the habitat of an
6 anadromous fishery resource under the author-
7 ity of such Council.

8 “(4) INFORMATION FROM OTHER SOURCES.—

9 “(A) RECEIPT OF INFORMATION.—If the
10 Secretary receives information from any source
11 and determines that an action taken, funded, or
12 authorized or proposed to be taken, funded, or
13 authorized by a State or Federal agency may
14 have an adverse effect on an essential fish habi-
15 tat identified under this Act, the Secretary shall
16 recommend to such agency measures that avoid
17 such adverse effects and minimize or mitigate
18 such adverse effects that cannot be avoided.

19 “(B) REQUIRED RESPONSE.—Not later
20 than 30 days after receiving a recommendation
21 under subparagraph (A), a Federal, State, or
22 local agency shall provide a detailed response in
23 writing to any Council comment under para-
24 graph (3) and the Secretary regarding the mat-
25 ter. The response shall include a description of

1 measures proposed by the agency for avoiding
2 the adverse effects, or to the extent the adverse
3 effects cannot be avoided, mitigating the ad-
4 verse effects of the action on such essential fish
5 habitat. In the case of a response that is incon-
6 sistent with the recommendations of the Sec-
7 retary, the Federal agency shall explain how the
8 alternative measures proposed will avoid the ad-
9 verse effects of such action on essential fish
10 habitat or, to the extent that adverse effects
11 cannot be avoided, mitigate the adverse effects.

12 “(C) PUBLICATION.—The Secretary shall
13 make available to the public—

14 “(i) any recommendation made under
15 subparagraph (A) on the date on which
16 such recommendation is made; and

17 “(ii) any response made by an agency
18 under subparagraph (B) on the date on
19 which such response is received.

20 “(5) ESSENTIAL FISH HABITAT.—In this sub-
21 section, the term ‘habitat areas of particular con-
22 cern’ means specific types of areas that are part of
23 or within essential fish habitat that—

24 “(A) provide an important ecological func-
25 tion, including for maintaining and restoring

1 the biomass, demographic, spatial, or genetic
2 characteristics of fish populations;

3 “(B) are sensitive to human-induced envi-
4 ronmental degradation;

5 “(C) are or will be significantly stressed by
6 human activities;

7 “(D) due to prevailing or anticipated fu-
8 ture environmental conditions, are or may be-
9 come important to the health of managed spe-
10 cies; or

11 “(E) are rare.”.

12 **SEC. 409. OCEAN AQUACULTURE RESEARCH AND POLICY**
13 **PROGRAM.**

14 (a) ESTABLISHMENT.—The Administrator shall es-
15 tablish an Ocean Aquaculture Research and Policy Pro-
16 gram to address opportunities, challenges, and innovation
17 in restorative ocean aquaculture development, siting, and
18 operations in the coastal waters and exclusive economic
19 zone through—

20 (1) investment in research and technical assist-
21 ance to ensure adverse impacts to the marine envi-
22 ronment can be fully understood, anticipated, ac-
23 counted for, and avoided and impacts to wild-cap-
24 ture fisheries and marine wildlife are minimized dur-

1 ing the species selection, design, development, siting,
2 and operation of aquaculture facilities; and

3 (2) the development and application of best
4 management practices to ensure the species selec-
5 tion, design, development, siting, and operation of
6 restorative ocean aquaculture maximizes potential
7 benefits while minimizing potential adverse impacts
8 to the marine environment and wild-capture fish-
9 eries.

10 (b) USE OF EXISTING PROGRAMS.—The Adminis-
11 trator shall use existing grant and research programs to
12 support the design, development, siting, and operation of
13 restorative ocean aquaculture using best management
14 practices to maximize potential benefits and minimize po-
15 tential adverse impacts to the marine environment.

16 (c) PRIORITIZATION IN OTHER PROGRAMS.—In car-
17 rying out other programs relating to aquaculture research
18 and development, the Administrator shall prioritize restor-
19 ative ocean aquaculture, including in carrying out—

20 (1) the Small Business Innovation Research
21 Program of the National Oceanic and Atmospheric
22 Administration;

23 (2) National Sea Grant College Program; and

24 (3) section 2 of the Act of August 11, 1939 (15
25 U.S.C. 713c–3).

1 (d) PRIORITIZATION WITHIN THE PROGRAM.—In
2 carrying out this section, the Administrator shall prioritize
3 support for research and technology development that in-
4 cludes—

5 (1) design analyses of restorative aquaculture
6 systems to maximize ecosystem benefits while avoid-
7 ing adverse impacts to the marine environment and
8 wild-capture fisheries and marine wildlife;

9 (2) spatial analyses to understand and evaluate
10 where siting of restorative aquaculture can minimize
11 adverse impacts to migratory birds and waterbirds,
12 marine birds and mammals, endangered species, and
13 other aspects of the marine ecosystem;

14 (3) monitoring both the individual and cumu-
15 lative environmental impacts of current and pro-
16 posed small scale aquaculture operations to inform
17 potential impacts of large-scale operations and
18 siting;

19 (4) offshore monitoring, remediation, and miti-
20 gation technology development; and

21 (5) understanding and preparing for impacts
22 that climate change may have on design develop-
23 ment, siting, and operations of restorative aqua-
24 culture facilities and the marine environment.

1 (e) REPORT.—Not later than 1 year after the date
2 of the enactment of this Act, the National Academies shall
3 submit to the Administrator and to Congress a report that
4 reviews, compiles, and synthesizes existing technologies
5 and assessments of restorative ocean aquaculture to fur-
6 ther inform ongoing research and technical assistance
7 funded under subsection (c).

8 (f) CONTENT.—The report required by subsection (e)
9 shall include the following:

10 (1) A quantitative assessment of the capacity
11 for sequestering and storing significant amounts of
12 carbon from the atmosphere and ocean to mitigate
13 the impacts of climate change.

14 (2) A comprehensive assessment of the blue
15 carbon potential for an aquaculture project, includ-
16 ing its potential environmental impacts, including
17 cumulative impacts, to native marine species and
18 marine habitat and the potential adverse wildlife
19 interactions likely to result from the use of restora-
20 tive aquaculture technologies in use or under devel-
21 opment worldwide.

22 (3) A comprehensive assessment of the poten-
23 tial impacts, including cumulative impacts, to wild-
24 capture fisheries and marine wildlife and the produc-
25 tivity thereof likely to result from the use of restora-

1 tive aquaculture technologies in use or under devel-
2 opment worldwide.

3 (4) An assessment of any known ecosystems
4 services that have been derived from restorative
5 ocean aquaculture and design, including siting and
6 size parameters that maximize those benefits.

7 (5) A detailed discussion of the mitigation
8 measures available currently to reduce any negative
9 environmental or wild-capture fisheries and marine
10 wildlife impacts identified and their degree of effi-
11 cacy, as well as the real-time facility monitoring op-
12 tions available.

13 (6) Recommendations of regionally-relevant
14 siting, installation, and operations standards nec-
15 essary to ensure that restorative ocean aquaculture
16 facilities are developed and operated in a manner
17 which minimizes impacts to the marine environment
18 and avoids and minimizes harmful interactions with
19 marine wildlife and habitat or conflict with other ex-
20 isting ocean-user groups.

21 (7) Economic analysis identifying the potential
22 benefits and impacts to commercial and recreational
23 fishing and ocean recreation industries resulting
24 from restorative ocean aquaculture.

1 (8) Recommendations for further research and
2 assessments that should be supported.

3 (9) A sustainability classification system to as-
4 sess the various types of restorative aquaculture on
5 a range of life cycle ecological and social benefits
6 and provides a composite score with which to rank
7 such types of restorative aquaculture.

8 **TITLE V—COASTAL BARRIER**
9 **RESOURCE ACT AMENDMENTS**

10 **SEC. 501. UNDEVELOPED COASTAL BARRIER.**

11 Section 3(1) of the Coastal Barrier Resources Act
12 (16 U.S.C. 3502(1)) is amended—

13 (1) by striking “means” and inserting “in-
14 cludes”; and

15 (2) in subparagraph (A), by inserting “bluff,”
16 after “barrier spit,”; and

17 (3) in subparagraph (B), by inserting “includ-
18 ing areas that are and will be vulnerable to coastal
19 hazards, such as flooding, storm surge, wind, ero-
20 sion, and sea level rise” after “nearshore waters”.

21 **SEC. 502. COASTAL HAZARD PILOT PROJECT.**

22 (a) IN GENERAL.—

23 (1) PROJECT.—The Secretary of the Interior
24 shall carry out a coastal hazard pilot project to
25 produce draft maps of areas which could be added

1 to the John H. Chafee Coastal Barrier Resources
2 System that are and will be vulnerable to coastal
3 hazards, such as flooding, storm surge, wind, erosion
4 and sea level rise, and areas not in such System to
5 which barriers and associated habitats are likely to
6 migrate as sea level rises.

7 (2) NUMBER OF UNITS.—The coastal hazard
8 pilot project shall consist of the creation of maps for
9 no more than 10 percent of the System, one-third of
10 which shall be otherwise protected areas as that
11 term is defined in section 12 of the Coastal Barrier
12 Improvement Act of 1990 (16 U.S.C. 3503 note;
13 Public Law 101–591).

14 (b) REPORT.—

15 (1) IN GENERAL.—Not later than 2 years after
16 the date of enactment of this Act, the Secretary
17 shall submit to the Committee on Environment and
18 Public Works of the Senate and the Committee on
19 Natural Resources of the House of Representatives
20 a report describing the results of the coastal hazard
21 pilot project and the criteria and costs of completing
22 coastal hazard maps for the entire System.

23 (2) CONTENTS.—The report shall include a de-
24 scription of—

1 (A) the final recommended maps created
2 under the coastal hazard pilot project;

3 (B) recommendations for the adoption of
4 the digital maps created under this section by
5 Congress;

6 (C) a summary of the comments received
7 from the Governors of the States, other govern-
8 ment officials, and the public regarding the
9 maps; and

10 (D) a description of the criteria and the
11 amount of funding necessary for completing
12 coastal hazard maps for the entire System.

13 (c) CONSULTATION.—The Secretary shall prepare the
14 report required under subsection (b)—

15 (1) in consultation with the Governors of the
16 States in which any System units and otherwise pro-
17 tected areas are located; and

18 (2) after—

19 (A) providing an opportunity for the sub-
20 mission of public comments; and

21 (B) considering any public comments sub-
22 mitted under subparagraph (A).

1 **SEC. 503. REPORT ON EXPANDING COASTAL BARRIER RE-**
2 **SOURCES ACT TO THE PACIFIC COAST, IN-**
3 **CLUDING PACIFIC TERRITORIES AND FREELY**
4 **ASSOCIATED STATES.**

5 (a) REPORT.—Not later than 1 year after the date
6 of enactment of this Act, the Secretary shall prepare and
7 submit a report to Congress on ways to protect undevel-
8 oped coastal barriers along the Pacific Coast of the United
9 States, including in the Pacific Territories and Freely As-
10 sociated States. Such study shall examine the potential for
11 loss of human life and damage to fish, wildlife, and other
12 natural resources, and the potential for the wasteful ex-
13 penditure of Federal revenues, along the Pacific Coast,
14 giving particular attention to tsunami, flood, erosion, and
15 storm damage, and sea level rise impacts.

16 (b) CONTENTS.—The report required under sub-
17 section (a) shall evaluate ways in which the definition of
18 the term “undeveloped coastal barrier” under section 3
19 of the Coastal Barrier Resources Act (16 U.S.C. 3502)
20 could be expanded to more accurately address the geology
21 and functions of coastal barriers in areas along the Pacific
22 Coast, including in the Pacific Territories and Freely As-
23 sociated States, including the ways in which coastal bluffs,
24 rocky outcroppings, beaches, wetlands, estuaries, coral
25 reefs, mangroves, and other landforms in such areas func-
26 tion as coastal barriers by absorbing storm impacts, pro-

1 tecting inland communities from sea level rise impacts,
2 providing habitat, and being subject to erosion.

3 (c) PREPARATION AND SUBMISSION OF MAPS.—

4 (1) PREPARATION.—As soon as practicable
5 after the date of enactment of this Act, the Sec-
6 retary shall prepare maps identifying the boundaries
7 of those undeveloped coastal barriers of the United
8 States along the Pacific Coast, including in the Pa-
9 cific Territories and Freely Associated States.

10 (2) SUBMISSION TO CONGRESS.—Not later than
11 2 years after the date of enactment of this Act, the
12 Secretary shall submit to Congress maps identifying
13 the boundaries of those undeveloped coastal barriers
14 of the United States along the Pacific Coast, includ-
15 ing the Pacific Territories and Freely Associated
16 States, that the Secretary considers to be appro-
17 priate for inclusion in the John H. Chafee Coastal
18 Barrier Resources System.

19 (d) PACIFIC TERRITORIES AND FREELY ASSOCIATED
20 STATES DEFINED.—In this section the term “Pacific Ter-
21 ritories and Freely Associated States” means each of
22 American Samoa, Guam, the Republic of the Marshall Is-
23 lands, the Federated States of Micronesia, and Palau.

1 **SEC. 504. REQUIRE DISCLOSURE TO PROSPECTIVE BUYERS**
2 **THAT PROPERTY IS IN THE COASTAL BAR-**
3 **RIER RESOURCES SYSTEM.**

4 Section 5 of the Coastal Barrier Resources Act (16
5 U.S.C. 3504) is amended by adding at the end the fol-
6 lowing:

7 “(c) DISCLOSURE OF LIMITATIONS.—

8 “(1) REQUIREMENT.—No person shall sell any
9 interest in real property located in the System unless
10 the person has disclosed to the buyer that the prop-
11 erty is in the System and subject to the limitations
12 under this section.

13 “(2) NOTIFICATION TO THE SECRETARY.—Not
14 later than 30 days after the date of sale of any in-
15 terest in real property located in the System, the
16 seller shall notify the Secretary using the online sys-
17 tem required by paragraph (3) of such sale and shall
18 certify to the Secretary that such seller complied
19 with the requirements of paragraph (1).

20 “(3) ONLINE REPORTING SYSTEM.—Not later
21 than 30 days after the date of enactment of this
22 Act, the Secretary shall establish and maintain an
23 online reporting system to facilitate notifications to
24 the Secretary required by paragraph (2).

1 “(4) CIVIL PENALTY.—Any person who violates
2 this subsection shall be subject to a civil penalty of
3 not more than \$10,000.”.

4 **SEC. 505. IMPROVE FEDERAL AGENCY COMPLIANCE WITH**
5 **COASTAL BARRIER RESOURCES ACT.**

6 (a) IN GENERAL.—Section 7(b) of the Coastal Bar-
7 rier Resources Act (16 U.S.C. 3506(b)) is amended to
8 read as follows:

9 “(b) REPORTS AND CERTIFICATION.—

10 “(1) The head of each Federal agency affected
11 by this Act shall annually report to the Committees
12 and the Secretary that such agency is in compliance
13 with this Act.

14 “(2) CERTIFICATION.—The Secretary shall an-
15 nually certify whether each such agency is in compli-
16 ance with this Act.

17 “(3) FAILURE TO COMPLY.—If the Secretary
18 certifies that an agency is not in compliance with
19 this Act, the head of the agency shall report to Con-
20 gress not later than 90 days after the date of such
21 certification regarding how the agency will achieve
22 compliance.”.

23 (b) TECHNICAL CORRECTION.—Section 3 of the
24 Coastal Barrier Resources Act (16 U.S.C. 3502) is

1 amended by striking “Committee on Resources” and in-
2 serting “Committee on Natural Resources”.

3 **SEC. 506. EXCESS FEDERAL PROPERTY.**

4 Section 4(e) of the Coastal Barrier Resources Act (16
5 U.S.C. 3503(e)) is amended by—

6 (1) in paragraph (1), by striking “an undevel-
7 oped” each place such term appears and inserting
8 “a”; and

9 (2) by adding at the end the following:

10 “(3) COASTAL BARRIER DEFINED.—In this sub-
11 section, the term ‘coastal barrier’ means—

12 “(A) a depositional geologic feature (such
13 as a bay barrier, tombolo, barrier spit, or bar-
14 rier island) that—

15 “(i) is subject to wave, tidal, and wind
16 energies; and

17 “(ii) protects landward aquatic habi-
18 tats from direct wave attack; and

19 “(B) all associated aquatic habitats includ-
20 ing the adjacent wetlands, marshes, estuaries,
21 inlets, and nearshore waters.”.

22 **SEC. 507. AUTHORIZATION OF APPROPRIATIONS.**

23 Section 9 of the Coastal Barrier Resources Act (16
24 U.S.C. 3508) is amended by striking “\$2,000,000” and
25 all that follows through the end of the sentence and insert-

1 ing “\$5,000,000 for each of fiscal years 2021 through
2 2025.”.

3 **TITLE VI—COASTAL ZONE MAN-** 4 **AGEMENT ACT AMENDMENTS**

5 **SEC. 601. GRANTS TO FURTHER ACHIEVEMENT OF TRIBAL** 6 **COASTAL ZONE OBJECTIVES.**

7 (a) GRANTS AUTHORIZED.—The Coastal Zone Man-
8 agement Act of 1972 (16 U.S.C. 1451 et seq.) is amended
9 by adding at the end the following:

10 “GRANTS TO FURTHER ACHIEVEMENT OF TRIBAL
11 COASTAL ZONE OBJECTIVES

12 “SEC. 320.

13 “(a) GRANTS AUTHORIZED.—The Secretary may
14 award competitive grants to Indian Tribes to further
15 achievement of the objectives of such a Tribe for such
16 Tribe’s Tribal coastal zone.

17 “(b) COST SHARE.—

18 “(1) IN GENERAL.—The Federal share of the
19 cost of any activity carried out with a grant under
20 this section shall be—

21 “(A) in the case of a grant of less than
22 \$200,000, 100 percent of such cost; and

23 “(B) in the case of a grant of \$200,000 or
24 more, 95 percent of such cost, except as pro-
25 vided in paragraph (2).

1 “(2) WAIVER.—The Secretary may waive the
2 application of paragraph (1)(B) with respect to a
3 grant to an Indian Tribe, or otherwise reduce the
4 portion of the share of the cost of an activity re-
5 quired to be paid by an Indian Tribe under such
6 paragraph, if the Secretary determines that the
7 Tribe does not have sufficient funds to pay such por-
8 tion.

9 “(c) COMPATIBILITY.—The Secretary may not award
10 a grant under this section unless the Secretary determines
11 that the activities to be carried out with the grant are
12 compatible with this title and that the grantee has con-
13 sulted with the affected coastal state regarding the grant
14 objectives and purposes.

15 “(d) AUTHORIZED OBJECTIVES AND PURPOSES.—
16 Amounts awarded as a grant under this section shall be
17 used for 1 or more of the objectives and purposes author-
18 ized under subsections (b) and (c), respectively, of section
19 306A.

20 “(e) FUNDING.—Of amounts appropriated to carry
21 out this Act, \$5,000,000 is authorized to carry out this
22 section for each of fiscal years 2021 through 2025.

23 “(f) DEFINITIONS.—In this section:

1 “(1) INDIAN LAND.—The term ‘Indian land’
2 has the meaning given such term in section 2601 of
3 the Energy Policy Act of 1992 (25 U.S.C. 3501).

4 “(2) INDIAN TRIBE.—The term ‘Indian Tribe’
5 means an Indian Tribe, as that term is defined in
6 section 4 of the Indian Self-Determination and Edu-
7 cation Assistance Act (25 U.S.C. 5304).

8 “(3) TRIBAL COASTAL ZONE.—The term ‘Tribal
9 coastal zone’ means any Indian land of an Indian
10 Tribe that is within the coastal zone.

11 “(4) TRIBAL COASTAL ZONE OBJECTIVE.—The
12 term ‘Tribal coastal zone objective’ means, with re-
13 spect to an Indian Tribe, any of the following objec-
14 tives:

15 “(A) Protection, restoration, or preserva-
16 tion of areas in the Tribal coastal zone of such
17 Tribe that hold—

18 “(i) important ecological, cultural, or
19 sacred significance for such Tribe; or

20 “(ii) traditional, historic, and esthetic
21 values essential to such Tribe.

22 “(B) Preparing and implementing a special
23 area management plan and technical planning
24 for important coastal areas.

1 “(C) Any coastal or shoreline stabilization
2 measure, including any mitigation measure, for
3 the purpose of public safety, public access, or
4 cultural or historical preservation.”.

5 (b) GUIDANCE.—Not later than 180 days after the
6 date of the enactment of this Act, the Secretary of Com-
7 merce shall issue guidance for the program established
8 under the amendment made by subsection (a), including
9 the criteria for awarding grants under such program based
10 on consultation with Indian Tribes (as that term is defined
11 in that amendment).

12 (c) USE OF STATE GRANTS TO FULFILL TRIBAL OB-
13 JECTIVES.—Section 306A(c)(2) of the Coastal Zone Man-
14 agement Act of 1972 (16 U.S.C. 1455a(c)(2)) is amended
15 by striking “and” after the semicolon at the end of sub-
16 paragraph (D), by striking the period at the end of sub-
17 paragraph (E) and inserting “; and”, and by adding at
18 the end the following:

19 “(F) fulfilling any Tribal coastal zone ob-
20 jective (as that term is defined in section
21 320).”.

22 (d) OTHER PROGRAMS NOT AFFECTED.—Nothing in
23 this section and the amendments made by this section may
24 be construed to affect the ability of an Indian Tribe to
25 apply for, receive assistance under, or participate in any

1 program authorized by the Coastal Zone Management Act
2 of 1972 (16 U.S.C. 1451 et seq.) or other related Federal
3 laws.

4 **SEC. 602. ELIGIBILITY OF DISTRICT OF COLUMBIA FOR**
5 **FEDERAL FUNDING UNDER THE COASTAL**
6 **ZONE MANAGEMENT ACT OF 1972.**

7 Section 304(4) of the Coastal Zone Management Act
8 of 1972 (16 U.S.C. 1453(4)) is amended by inserting “the
9 District of Columbia,” after “the term also includes”.

10 **SEC. 603. COASTAL AND ESTUARINE LAND CONSERVATION**
11 **PROGRAM.**

12 Section 307A of the Coastal Zone Management Act
13 of 1972 (16 U.S.C. 1456–1) is amended—

14 (1) By striking the heading and inserting
15 “COASTAL AND ESTUARINE LAND CONSERVATION
16 PROGRAM”;

17 (2) By amending subsection (a) to read as fol-
18 lows:

19 “(a) IN GENERAL.—The Secretary may conduct a
20 Coastal and Estuarine Land Conservation Program, in co-
21 operation with State, regional, and other units of govern-
22 ment, for the purposes of protecting important coastal and
23 estuarine areas that—

1 “(1) have significant conservation, recreation,
2 coastal access, ecological, historical, or aesthetic
3 value;

4 “(2) are threatened by conversion from their
5 natural, undeveloped, or recreational state to other
6 uses; or

7 “(3) could be managed or restored to effectively
8 conserve, enhance, or restore ecological function or
9 mitigate climate change.”;

10 (3) In subsection (c)—

11 (A) by amending paragraph (7) to read as
12 follows:

13 “(7) Priority shall be given to lands that—

14 “(A) can be effectively managed and pro-
15 tected and that have significant ecological
16 value;

17 “(B)(i) are under an imminent threat of
18 conversion to a use that will degrade or other-
19 wise diminish their natural, undeveloped, or rec-
20 reational state;

21 “(ii) serve to mitigate the adverse impacts
22 caused by coastal population growth in the
23 coastal environment;

24 “(iii) are within a national estuarine re-
25 search reserve designated under section 315, a

1 national wildlife refuge, or a national estuary
2 program, or are proposed for designation as
3 such a reserve or other such protected area; or

4 “(iv) are under threat due to climate
5 change or may serve to mitigate the adverse ef-
6 fects of climate change, including through the
7 storage of blue carbon, and to facilitate inland
8 migration of coastal ecosystems in response to
9 sea level rise; and

10 “(C) to the maximum extent practicable,
11 benefit communities that may not have ade-
12 quate resources to prepare for or respond to
13 coastal hazards or to access the coastline, in-
14 cluding low income communities, communities
15 of color, Tribal and Indigenous communities,
16 and rural communities.”; and

17 (B) in paragraph (10), by striking “tri-
18 ennially” and inserting “every 5 years”.

19 (4) In subsection (f)—

20 (A) in paragraph (2)(B), by inserting “for
21 any territory of the United States that is un-
22 able to provide the match,” after “commu-
23 nity,”; and

24 (B) in paragraph (4)—

1 (i) in subparagraph (A)(i), by striking
2 “meets the criteria set forth in section
3 2(b)” and inserting “the goals set forth in
4 subsection (b)”; and
5 (ii) in subparagraph (C), by striking
6 “(A)” and inserting “subparagraph (A)”.;
7 (5) in subsection (h), by striking the second
8 sentence; and
9 (6) in subsection (l), by striking “fiscal years
10 2009 through 2013” and inserting “2021 through
11 2025”.

12 **SEC. 604. COASTAL ZONE MANAGEMENT FUND.**

13 Section 308 of Coastal Zone Management Act of
14 1972 (16 U.S.C. 1456a) is amended to read as follows:

15 “COASTAL ZONE MANAGEMENT FUND

16 “SEC. 308.

17 “(a) ESTABLISHMENT.—There is established a fund,
18 to be known as the ‘Coastal Zone Management Fund’,
19 which shall consist of fees deposited into the Fund under
20 section 307(i)(3) and any other funds appropriated to the
21 Fund.

22 “(b) GRANTS FOR POST-DISASTER RESPONSE TO SE-
23 VERE COASTAL FLOOD EVENTS.—

24 “(1) IN GENERAL.—In response to a major dis-
25 aster declared under the Robert T. Stafford Disaster
26 Relief and Emergency Assistance Act (42 U.S.C.

1 5121 et seq.) as a result of flood and related dam-
2 ages in the coastal zone of a State, the Secretary
3 may issue a grant to such State for a purpose de-
4 scribed in paragraph (2).

5 “(2) ELIGIBLE USES.—A State may use funds
6 provided under this subsection to—

7 “(A) improve resilience to future severe
8 coastal flood hazards including activities and
9 projects related to—

10 “(i) publicly owned infrastructure;

11 “(ii) residential and commercial struc-
12 tures;

13 “(iii) natural infrastructure; or

14 “(iv) waste disposal sites and indus-
15 trial facilities.

16 “(B) assess damages after a major disaster
17 described in paragraph (1);

18 “(C) plan, design, or engineer a project
19 to—

20 “(i) restore, expand, install, or relo-
21 cate natural infrastructure;

22 “(ii) remove damaged assets, restore
23 sites to safe conditions, and select alter-
24 native sites; or

1 “(iii) facilitate the landward migration
2 of coastal ecosystems; or

3 “(D) implement a project described by
4 subparagraph (C).

5 “(3) FEDERAL SHARE.—The Secretary may
6 issue a grant under this subsection for an amount
7 not to exceed—

8 “(A) 90 percent of the cost of an activity
9 described in subparagraph (A) or (B) of para-
10 graph (2);

11 “(B) except as provided in subparagraph
12 (C), 60 percent of the cost of an activity de-
13 scribed in paragraph (2)(D);

14 “(C) 75 percent of the cost of an activity
15 provided for in a plan approved under sub-
16 section (d); or

17 “(D) 100 percent of the cost of any activ-
18 ity described in subparagraph (A), (B), or (C)
19 of paragraph (2) responding to the effects of a
20 severe coastal flood in a disadvantaged commu-
21 nity that is identified in a plan approved under
22 subsection (d).

23 “(c) GRANTS FOR SEVERE COASTAL FLOOD HAZARD
24 PLANNING.—

1 “(1) IN GENERAL.—The Secretary, at the re-
2 quest of a Governor of a coastal state, may use
3 amounts in the Fund to issue a grant to a coastal
4 state with an approved coastal zone management
5 program for the timely response to a severe coastal
6 flood hazard.

7 “(2) PROPOSAL.—To be considered for a grant
8 under this section, a State shall submit a grant pro-
9 posal to the Secretary in a time, place, and manner
10 determined by the Secretary. Such proposal shall—

11 “(A) describe the risks that severe coastal
12 flood hazards pose in the State and goals for
13 reducing loss of life and property and sus-
14 taining coastal ecosystems in response to these
15 risks;

16 “(B) include consideration of related plans
17 including the Coastal Zone Management Plan
18 of the State, the Hazard Mitigation Plan of the
19 State, and the severe coastal flood hazard pre-
20 paredness plans, if any, of neighboring States;

21 “(C) be developed in conjunction with local
22 governments in the coastal zone of the State
23 and provided for public review and comment on
24 the plan, including holding a public hearing and
25 engaging disadvantaged communities; and

1 “(D) be substantially consistent with the
2 guidance issued under subsection (e)(1)(C).

3 “(3) CRITERIA.—In determining the amount of
4 a grant under this subsection, the Secretary shall
5 consider the—

6 “(A) area and population of the coastal
7 zone of the applicant State;

8 “(B) the risks that severe coastal flood
9 hazards pose to the State; and

10 “(C) the reduction of severe coastal flood
11 hazards expected as a result of the proposal.

12 “(4) LIMITATION ON AMOUNT OF FUNDS TO BE
13 AWARDED.—Grants made pursuant to this sub-
14 section in any fiscal year shall not exceed 50 percent
15 of the funds in the Fund as a result of appropria-
16 tions pursuant to subsection (j)(1).

17 “(5) FEDERAL SHARE.—

18 “(A) IN GENERAL.—Except as provided in
19 subparagraph (B), the Federal share of the cost
20 of an activity funded by a grant issued under
21 this subsection shall not exceed—

22 “(i) 75 percent of the cost of the ac-
23 tivity; or

24 “(ii) 85 percent of the cost of the ac-
25 tivity in the case of a State that has en-

1 acted a requirement for the disclosure of
2 severe coastal flood hazards, including sea
3 level rise, that meets criteria for such dis-
4 closure established by the Secretary, to
5 buyers of real estate in the coastal zone.

6 “(B) EXCEPTION.—The Secretary may re-
7 duce or waive the matching requirement under
8 paragraph (5) if a coastal state submits a writ-
9 ten request to the Secretary for a waiver with
10 a justification as to why the State cannot meet
11 the match requirement, and the Secretary de-
12 termines such justification sufficient to waive
13 such requirement.

14 “(d) GRANTS FOR SEVERE COASTAL FLOOD HAZARD
15 PLAN IMPLEMENTATION.—

16 “(1) The Secretary, at the Secretary’s discre-
17 tion or at the request of the Governor of a State,
18 may use amounts in the Fund to issue grants to a
19 coastal state with a severe coastal flood hazard pre-
20 paredness plan approved under to subsection (d) to
21 implement the approved plan.

22 “(2) Activities eligible for funding under this
23 subsection include:

1 “(A) conducting a public awareness cam-
2 paign to inform the public and decision-makers
3 about severe coastal flood hazards;

4 “(B) developing, enacting, and admin-
5 istering a state or local law prohibiting new and
6 significantly expanded development in areas at
7 risk of severe coastal flood hazards; and

8 “(C) developing, enacting, and admin-
9 istering a state requirement for disclosure of se-
10 vere coastal flood hazards, including sea level
11 rise, to buyers of real estate;

12 “(D) making grants to local governments,
13 or regional consortiums of local governments, to
14 implement the state plan, including develop-
15 ment of local or regional plans and site-specific
16 plans or projects;

17 “(E) planning, designing, and imple-
18 menting projects to—

19 “(i) protect existing public infrastruc-
20 ture and residential and commercial prop-
21 erties, including built structures, natural
22 infrastructure, and living shorelines;

23 “(ii) relocate infrastructure or struc-
24 tures at risk of damage by severe coastal

1 flood hazards, restore such sites to safe
2 conditions, and select alternative sites;

3 “(iii) remove structures damaged by
4 severe coastal flood hazards and restore
5 such site to safe conditions;

6 “(iv) protect waste disposal facilities
7 in areas at risk of severe coastal flood haz-
8 ards or relocate such facilities to alter-
9 native sites; and

10 “(v) facilitate the landward migration
11 of coastal ecosystems.

12 “(3) Grants made pursuant to this subsection
13 shall be in response to an annual request for pro-
14 posals. In determining the amount of a grant, the
15 Secretary shall consider—

16 “(A) the area and population of the coastal
17 zone of the state;

18 “(B) the risks that severe coastal flood
19 hazards pose in the state and the reduction of
20 coastal flood hazards expected as a result of the
21 proposal;

22 “(C) demonstration of innovative ap-
23 proaches to preparing for severe coastal flood
24 hazards; and

1 “(D) benefits to disadvantaged commu-
2 nities identified in a plan approved pursuant to
3 subsection (d).

4 “(4) A grant under this subsection shall be lim-
5 ited to 75 percent of the cost of the proposal, except
6 that the Secretary may reduce or waive the such
7 matching requirement if a coastal state submits to
8 the Secretary in writing a request for a waiver with
9 a justification as to why the state cannot meet the
10 match requirement, and the Secretary agrees with
11 the justification and grants the waiver.

12 “(e) TECHNICAL SUPPORT TO STATES.—

13 “(1) The Secretary shall take such actions as
14 the Secretary determines necessary to support
15 States in carrying out this section, including at a
16 minimum the following:

17 “(A) Periodic assessment of storm flood
18 risk and relative sea level and lake level changes
19 along the United States coastline, including es-
20 timates of changes in storm intensity and rel-
21 ative sea or lake levels by 2040, 2060, 2080,
22 and 2100.

23 “(B) Operation of an online mapping tool
24 to describe areas at risk of temporary flooding
25 from future coastal storms and permanent in-

1 undation as a result of sea or long term lake
2 level changes.

3 “(C) Publication, not later than 1 year
4 after the date of enactment of this section and
5 periodically thereafter, of guidance for the de-
6 velopment of state plans developed pursuant to
7 subsection (d).

8 “(D) Establishment, not later than 1 year
9 after the date of enactment of this section, of
10 minimum criteria for disclosure of severe coast-
11 al flood hazards, including sea level rise, to buy-
12 ers of real estate in the coastal zone.

13 “(E) Creation, not later than 1 year after
14 the date of enactment of this section, and peri-
15 odic updating, of an online dashboard describ-
16 ing the key features of state or local govern-
17 ment requirements for disclosure of severe
18 coastal flood hazards to buyers of real estate.

19 “(F) Establishment, not later than 1 year
20 after the date of enactment of this section, after
21 consultation with the Administrator of the En-
22 vironmental Protection Agency, of standards for
23 restoration to safe conditions of sites from
24 which infrastructure or other structures have
25 been relocated.

1 “(2) The guidance developed by the Secretary
2 pursuant to subparagraph (C) of paragraph (1) of
3 this subsection shall, at a minimum—

4 “(A) provide information states need to es-
5 tablish state-specific estimates of severe coastal
6 flood hazards, including more severe storms and
7 relative sea and lake levels, and planning tar-
8 gets for such hazards for the years 2040, 2060,
9 2080, and 2100;

10 “(B) describe approaches the state should
11 consider to prohibit new or expanded develop-
12 ment in areas at risk of severe coastal flood
13 hazards;

14 “(C) outline considerations for state grants
15 to support local governments in the coastal
16 zone, or consortiums of such governments act-
17 ing on a regional basis, in developing or imple-
18 menting parts of a plan pursuant to subsection
19 (d);

20 “(D) describe methods for evaluation of re-
21 sponse options including construction of struc-
22 tures to protect assets and relocation to alter-
23 native sites, including cost comparison in the
24 context of available resources, and related con-
25 siderations;

1 “(E) review options for establishing prior-
2 ities for removal of damaged or abandoned
3 structures and restoration of sites to safe condi-
4 tions;

5 “(F) describe social justice policies and
6 practices the state should consider adopting, in-
7 cluding criteria for identifying disadvantaged
8 communities within the coastal zone of the state
9 and the policies and practices the state should
10 consider adopting to assure that interests of
11 such communities are addressed in state plans
12 developed pursuant to this section;

13 “(G) identify areas in coastal communities,
14 or other locations in the state, that have mini-
15 mal severe coastal flood hazards, that are ap-
16 propriate for relocation of people and assets,
17 and can sustain the identity and cultural herit-
18 age of relocated communities;

19 “(H) provide information and practices for
20 identifying coastal areas that are important to
21 the successful landward migration of eco-
22 systems in response to severe coastal flood haz-
23 ards and measures for protecting these migra-
24 tion pathways;

1 “(I) identify tools to identify waste dis-
2 posal sites and related sites that pose a risk of
3 water pollution as a result of severe coastal
4 flood hazards and describe practices the state
5 should consider to protect or relocate such fa-
6 cilities or sites; and

7 “(J) describe opportunities to improve
8 public access to the shoreline as a result of im-
9 proved preparedness for severe coastal flood
10 hazards.

11 “(f) ADMINISTRATION.—The Secretary may use
12 amounts in the Fund for expenses incident to the adminis-
13 tration of this section, in an amount not to exceed
14 \$250,000 or 3 percent of the amount in the Fund, which-
15 ever is less, for each year.

16 “(g) REPORT TO CONGRESS.—The Secretary shall,
17 not later than 3 years after the date of enactment of this
18 section and every 3 years thereafter, submit to the Com-
19 mittee on Natural Resources of the United States House
20 of Representatives and the Committee on Commerce of the
21 United States Senate a report describing the development
22 of plans and projects under this section, changes in severe
23 coastal flood hazards, including changes to risks to dis-
24 advantaged communities, and making recommendations to
25 better respond to these challenges.

1 “(h) DEFINITIONS.—For the purposes of this section:

2 “(1) The term ‘severe coastal flood hazards’
3 means temporary flooding resulting from coastal
4 storms and storm surge, tsunamis, and changing
5 lake levels and permanent inundation from rising
6 sea levels and land subsidence, including landward
7 migration of shorelines impacting residential and
8 commercial property, infrastructure, and ecosystems.

9 “(2) The term ‘natural infrastructure’ means
10 coastal wetlands, beaches, dunes, marshes, mangrove
11 forests, municipal green infrastructure, and living
12 shorelines.

13 “(3) The term ‘publicly owned infrastructure’
14 means buildings, structures, and facilities and ap-
15 purtenances of drinking water, sewage treatment,
16 natural gas, or electric power utilities owned by a
17 municipal, county, or State government or a com-
18 bination of such governments.

19 “(4) The term ‘waste disposal site’ means a
20 publicly or privately owned solid waste landfill or
21 disposal site, hazardous waste landfill of disposal
22 site, sites included on the National Priorities List
23 developed under the Comprehensive Environmental
24 Response, Compensation, and Liability Act of 1980,
25 and sites for the disposal of coal combustion residu-

1 als from coal-fired power plants, provided that such
2 sites are identified in a plan developed and approved
3 under subsection (d).

4 “(5) The term ‘disadvantaged communities’
5 means areas of the coastal state identified in a plan
6 approved under subsection (d) which disproportion-
7 ately suffer from a combination of economic, health,
8 and environmental burdens including poverty, high
9 unemployment, air and water pollution, presence of
10 hazardous wastes as well as high incidence of asth-
11 ma and heart disease.

12 “(6) The term ‘living shoreline’ means a pro-
13 tected, stabilized coastal edge made of natural mate-
14 rials such as plants designed to provide wildlife habi-
15 tat, as well as natural resilience to shorelines.

16 “(7) The term ‘municipal green infrastructure’
17 has the meaning provided in 33 U.S. Code § 1362
18 (27).

19 “(8) The term ‘safe conditions’ refers to stand-
20 ards for restoration of sites from which infrastruc-
21 ture or structures are relocated established by the
22 Secretary pursuant to subsection (f)(1)(F) are pro-
23 tective of human health and the environment.

24 “(i) AUTHORIZATION OF APPROPRIATIONS.—

1 “(1) There is authorized to be appropriated into
2 the Fund for use by the Secretary \$100,000,000 for
3 each of fiscal years 2021 through 2025, which shall
4 remain available until expended without fiscal year
5 limitation.

6 “(2) There is authorized to be appropriated into
7 the Fund for use by the Secretary to respond to a
8 major disaster declared under the Robert T. Staf-
9 ford Disaster Relief and Emergency Assistance Act
10 (42 U.S.C. 5121 et seq.) such sums as may be nec-
11 essary. Funds appropriated pursuant to this para-
12 graph may only be used to make grants to the state
13 or states in which the major disaster occurred and
14 shall remain available until expended without fiscal
15 year limitation.”.

16 **SEC. 605. AUTHORIZATION OF APPROPRIATIONS.**

17 Section 318(a) of the Coastal Zone Management Act
18 of 1972 (16 U.S.C. 1464) is amended to read as follows:

19 “(a) SUMS APPROPRIATED TO THE SECRETARY.—
20 There are authorized to be appropriated to the Secretary,
21 to remain available until expended—

22 “(1) for grants under sections 306, 306A, and
23 309, \$95,000,000 for each of fiscal years 2021
24 through 2025; and

1 “(2) for grants under section 315, \$37,000,000
2 for each of fiscal years 2021 through 2025.”.

3 **SEC. 606. AMENDMENTS TO NATIONAL ESTUARINE RE-**
4 **SEARCH RESERVE SYSTEM PROGRAM.**

5 (a) DESIGNATION OF ADDITIONAL RESERVES.—Not
6 later than 5 years after the date of the enactment of this
7 Act, the Secretary of Commerce shall designate not less
8 than 5 new national estuarine reserves under section 315
9 of the Coastal Zone Management Act of 1972 (16 U.S.C.
10 1461) that ensure the National Estuarine Research Re-
11 serve System includes areas in—

12 (1) all biogeographic regions of the United
13 States; and

14 (2) each coastal state (as that term is defined
15 in that Act).

16 (b) GUIDELINES FOR TRACKING AND MODELING THE
17 IMPACTS OF CLIMATE CHANGE.—Section 315(c) of the
18 Coastal Zone Management Act of 1972 (16 U.S.C.
19 1461(c)) is amended—

20 (1) by redesignating paragraphs (3) through
21 (5) as paragraphs (4) through (6), and

22 (2) by inserting after paragraph (2) the fol-
23 lowing:

24 “(3) the establishment of coordinated long-term
25 data monitoring and methods throughout the Sys-

1 tem for tracking and modeling the impacts of cli-
2 mate change on estuarine systems, including impacts
3 on lake levels and sea levels;”.

4 (c) PROMOTION AND COORDINATION OF ESTUARINE
5 RESEARCH.—Section 315(d) of the Coastal Zone Manage-
6 ment Act of 1972 (16 U.S.C. 1461(d)) is amended by
7 striking “and” after the semicolon at the end of paragraph
8 (1), by striking the period at the end of paragraph (2)
9 and inserting a semicolon, and by adding at the end the
10 following:

11 “(3) establishing and managing the Margaret
12 A. Davidson Graduate Research Fellowship to pro-
13 vide, subject to the availability of appropriations, fi-
14 nancial assistance to graduate research that utilizes
15 the national estuarine research reserves;

16 “(4) establishing a Central Data Management
17 office and System Science Collaborative, and

18 “(5) carrying out monitoring, education, exten-
19 sion, and coastal training programs throughout the
20 System.”.

21 (d) LAND ACQUISITION AND CONSTRUCTION.—Sec-
22 tion 315 of the Coastal Zone Management Act of 1972
23 (16 U.S.C. 1461) is amended by adding at the end the
24 following:

1 “(h) LAND ACQUISITION AND CONSTRUCTION.—The
2 Secretary may use funds authorized under section 318 for
3 land acquisition and the construction and renovations of
4 facilities required to meet delivery of System programs
5 and services, or to meet changing needs of program under
6 this title. Such construction must incorporate green design
7 principles, materials, energy efficiency, and adaptive reuse
8 strategies, and the development of innovative coastal tech-
9 nology and management strategies that enhance resilience
10 of System facilities and lands.”.

11 **TITLE VII—INSULAR AFFAIRS**

12 **SEC. 701. DEFINITIONS.**

13 In this title:

14 (1) FREELY ASSOCIATED STATES.—The term
15 “Freely Associated States” means the Republic of
16 the Marshall Islands, the Federated States of Micro-
17 nesia, and the Republic of Palau.

18 (2) TERRITORIES.—The term “Territories”
19 means American Samoa, the Commonwealth of the
20 Northern Mariana Islands, Guam, Puerto Rico, and
21 the Virgin Islands of the United States.

22 **SEC. 702. COASTAL MANAGEMENT TECHNICAL ASSISTANCE** 23 **AND REPORT.**

24 (a) TECHNICAL ASSISTANCE.—

1 (1) IN GENERAL.—The Administrator shall pro-
2 vide technical assistance to the Territories and Free-
3 ly Associated States to enhance such entities’ coastal
4 management and climate change programs.

5 (2) AUTHORIZATION OF APPROPRIATIONS.—To
6 carry out this subsection there is authorized to be
7 appropriated to the Administrator \$5,000,000 for
8 each of fiscal years 2021 through 2025.

9 (b) ANNUAL REPORT.—The Administrator shall sub-
10 mit an annual report to the Committee on Natural Re-
11 sources of the House of Representatives and the Com-
12 mittee on Commerce, Science, and Transportation of the
13 Senate on the status of—

14 (1) wetland, mangrove, and estuary conditions
15 in the Territories and Freely Associated States; and

16 (2) climate change impacts, including ecological,
17 economic and cultural impacts, in the Territories
18 and Freely Associated States.

19 **SEC. 703. CLIMATE CHANGE INSULAR RESEARCH GRANT**
20 **PROGRAM.**

21 (a) IN GENERAL.—The Secretary of Commerce, act-
22 ing through the Administrator, shall establish a Climate
23 Change Insular Research Grant Program to provide
24 grants to institutions of higher education in the Terri-
25 tories and Freely Associated States for monitoring, col-

1 lecting, synthesizing, analyzing, and publishing local cli-
2 mate change data.

3 (b) AUTHORIZATION OF APPROPRIATIONS.—To carry
4 out this section there is authorized to be appropriated to
5 the Secretary \$5,000,000 for each of fiscal years 2021 and
6 2022.

7 **SEC. 704. EXTREME WEATHER AND CLIMATE OUTREACH TO**
8 **INSULAR AREAS.**

9 (a) TECHNICAL ASSISTANCE AND OUTREACH.—

10 (1) IN GENERAL.—The Administrator shall pro-
11 vide technical assistance and outreach to insular
12 areas of the United States through the San Juan,
13 Tiyan, and Pago Pago Weather Forecast Offices of
14 the National Weather Service. For the purposes of
15 this section, the Administrator may also employ
16 other agency entities as the Administrator deems
17 necessary, in order to improve weather data collec-
18 tion, produce more accurate tropical weather fore-
19 casts, and provide science, data, information, and
20 impact-based decision support services to reduce
21 hurricane and typhoon impacts in the Territories
22 and Freely Associated States.

23 (2) AUTHORIZATION OF APPROPRIATIONS.—To
24 carry out this subsection there is authorized to be

1 appropriated to the Secretary \$5,000,000 for each of
2 fiscal years 2021 through 2025.

3 (b) GRANTS.—

4 (1) IN GENERAL.—The Secretary of Commerce,
5 acting through the Administrator, may provide
6 grants to academic, nonprofit, and local entities to
7 conduct climate change research in the Territories
8 and Freely Associated States.

9 (2) INCLUDED GRANT PURPOSE.—The purpose
10 of a grant under this subsection may include re-
11 search on oceanic heat content to assess past and
12 future hurricane and typhoon trends.

13 (3) AUTHORIZATION OF APPROPRIATIONS.—To
14 carry out this subsection there is authorized to be
15 appropriated to the Secretary \$5,000,000 for each of
16 fiscal years 2021 through 2025.

17 **SEC. 705. CORAL REEFS.**

18 (a) PRIZE COMPETITIONS.—The Director of the Of-
19 fice of Science and Technology Policy shall work with the
20 head of each Federal agency represented on the U.S. Coral
21 Reef Task Force established under Executive Order 13089
22 (63 Fed. Reg. 32701) to establish prize competitions that
23 promote coral reef research and conservation in the Terri-
24 tories and Freely Associated States.

1 (b) WAIVER OF MATCHING REQUIREMENT.—Section
2 204(b) of the Coral Reef Conservation Act of 2000 (16
3 U.S.C. 6403(b)) is amended—

4 (1) by striking the enumerator and heading for
5 paragraph (2) and inserting the following:

6 “(2) WAIVERS.—

7 “(A) NEED AND BENEFIT.—”; and

8 (2) by adding at the end of paragraph (2) the
9 following:

10 “(B) SUSTAINING CORAL REEF MANAGE-
11 MENT AND MONITORING.—The Secretary shall
12 waive all the matching requirement under para-
13 graph (2) for grants to implement State and
14 territorial coral reef conservation cooperative
15 agreements to sustain coral reef management
16 and monitoring in Florida, Hawaii, American
17 Samoa, the Commonwealth of the Northern
18 Mariana Islands, Guam, Puerto Rico, and the
19 Virgin Islands of the United States.”.

20 **SEC. 706. OCEAN AND COASTAL MAPPING INTEGRATION**
21 **ACT.**

22 (a) EFFECTS OF CLIMATE CHANGE ON INSULAR
23 AREAS.—Section 12204 of the Ocean and Coastal map-
24 ping Integration Act (33 U.S.C. 3503) is amended—

25 (1) in paragraph (12) by striking “and”;

1 (2) in paragraph (13) by striking the period at
2 the end and inserting “; and”; and

3 (3) by adding at the end the following:

4 “(14) The study of insular areas and the effects
5 of climate change, particularly in bioluminescent
6 bodies of water.”.

7 (b) REAUTHORIZATION.—Section 12207 of the Ocean
8 and Coastal Mapping Integration Act (33 U.S.C. 3506)
9 is amended—

10 (1) in subsection (a) by striking “this subtitle”
11 and all that follows through the end of the sub-
12 section and inserting “this subtitle \$45,000,000 for
13 each of fiscal years 2021 through 2025.”; and

14 (2) in subsection (b), by striking “this subtitle”
15 and all that follows through the end of the sub-
16 section and inserting “this subtitle \$45,000,000 for
17 each of fiscal years 2021 through 2025.”.

18 **SEC. 707. OFFICE OF INSULAR AFFAIRS TECHNICAL ASSIST-**
19 **ANCE PROGRAM.**

20 (a) IN GENERAL.—The Secretary of the Interior
21 shall, acting through the Office of Insular Affairs Tech-
22 nical Assistance Program, shall provide technical assist-
23 ance for climate change planning, mitigation, and adapta-
24 tion to Territories and Freely Associated States under the
25 jurisdiction of such Program.

1 (b) AUTHORIZATION OF APPROPRIATIONS.—There is
2 authorized to be appropriated to the Secretary of the Inte-
3 rior \$5,000,000 for each of fiscal years 2021 through
4 2025.

5 **SEC. 708. DISASTER RELIEF FEDERAL COST-SHARE WAIV-**
6 **ER.**

7 Any funding made available to Territories and Freely
8 Associated States for disaster relief, long-term recovery,
9 restoration of infrastructure and housing, economic revi-
10 talization, and mitigation pursuant to the Robert T. Staf-
11 ford Disaster Relief and Emergency Assistance Act (42
12 U.S.C. 5121 et seq.) shall not be subject to a non-Federal
13 share funding requirement.

14 **TITLE VIII—STRENGTHENING**
15 **MARINE MAMMAL CONSERVA-**
16 **TION**

17 **SEC. 801. CONSERVATION OF MARINE MAMMALS AD-**
18 **VERSELY AFFECTED BY CLIMATE CHANGE.**

19 (a) IN GENERAL.—The Marine Mammal Protection
20 Act of 1974 (16 U.S.C. 1361 et seq.) is amended by in-
21 serting after section 120 the following:

22 **“SEC. 121. CONSERVATION OF MARINE MAMMALS AD-**
23 **VERSELY AFFECTED BY CLIMATE CHANGE.**

24 **“(a) CLIMATE IMPACT MANAGEMENT PLANS.—**

1 “(1) Within 18 months after the date of enact-
2 ment of this section, the Secretary, in consultation
3 with the Marine Mammal Commission, shall publish
4 in the Federal Register, after notice and opportunity
5 for public comment, a list of those marine mammal
6 species and population stocks in waters under the
7 jurisdiction of the United States for which climate
8 change, alone or in combination or interaction with
9 other factors, has more than a remote possibility of
10 resulting in a decline in population abundance, of
11 impeding population recovery, or of reducing car-
12 rying capacity. The list shall identify—

13 “(A) any species or population stock for
14 which such impacts are likely to occur within
15 20 years;

16 “(B) any species or population stock listed
17 as a threatened species or endangered species
18 under the Endangered Species Act of 1973 (16
19 U.S.C. 1531 et seq.) for which such impacts
20 have more than a remote possibility of occur-
21 ring within 100 years; and

22 “(C) any other species or population stock
23 for which such impacts have more than a re-
24 mote possibility of occurring within 100 years.

1 “(2)(A) The Secretary, in consultation with the
2 Marine Mammal Commission, shall review the list
3 adopted pursuant to paragraph (1) at least once
4 every 5 years, or more frequently if significant new
5 information becomes available, and, after notice and
6 opportunity for public comment, shall publish a re-
7 vised list in the Federal Register.

8 “(B) Within 12 months after receiving the peti-
9 tion of an interested person under section 553(e) of
10 title 5, United States Code, to add a marine mam-
11 mal species or population stock to the list published
12 under paragraph (1), the Secretary, in consultation
13 with the Marine Mammal Commission and after no-
14 tice and opportunity for public comment, shall pub-
15 lish in the Federal Register its finding of whether
16 the petitioned action is warranted. If the petitioned
17 action is deemed warranted, the Secretary shall pub-
18 lish at the same time the revision adding such spe-
19 cies or population stock.

20 “(3) The list published under paragraph (1),
21 and any revisions thereto made in accordance with
22 paragraph (2), shall include a determination of
23 whether a climate impact management plan will pro-
24 mote the conservation of species or stocks listed pur-
25 suant to paragraph (1)(C).

1 “(4)(A)(i) The Secretary shall publish in the
2 Federal Register a draft climate impact management
3 plan, and proposed regulations implementing the
4 plan, for each marine mammal species or population
5 stock—

6 “(I) listed under paragraph (1)(A), within
7 18 months after the listing;

8 “(II) listed under paragraph (1)(B), within
9 30 months after the listing; and

10 “(III) listed under paragraph (1)(C) of
11 this subsection, within 5 years after the listing
12 if the Secretary determines that such a plan
13 will promote the conservation of the species or
14 stock.

15 “(ii) Each draft climate impact management
16 plan shall be developed in consultation with the Ma-
17 rine Mammal Commission and, as appropriate, other
18 Federal agencies, and shall be made available for
19 public review and comment for a period not to ex-
20 ceed 90 days.

21 “(iii) No later than 120 days after the close of
22 the comment period required under clause (ii), the
23 Secretary shall issue a final climate impact manage-
24 ment plan and implementing regulations that are
25 consistent with the other provisions of this section

1 and, to the full extent available under the Sec-
2 retary's authorities under this Act and other stat-
3 utes, implement the conservation and management
4 measures identified in the plan.

5 “(B) Each management plan under subpara-
6 graph (A) shall include a comprehensive strategy for
7 mitigating the direct and indirect effects of climate
8 change and increasing resiliency in the species or
9 population stock, and shall identify conservation and
10 management measures to—

11 “(i) mitigate to the extent possible the di-
12 rect adverse effects of climate change on such
13 species and population stocks and their prey;

14 “(ii) monitor, reduce, and prevent inter-
15 actions with fisheries and other human activi-
16 ties that may occur as a result of changes in
17 marine mammal distribution or other indirect
18 effects of climate change;

19 “(iii) increase resiliency by materially re-
20 ducing other human impacts on such species
21 and population stocks, including but not limited
22 to the reduction of incidental taking of marine
23 mammals and of the degradation of the habitat
24 of such species and population stocks, and by
25 managing prey species to improve the avail-

1 ability of prey to such species and population
2 stocks; and

3 “(iv) take any other action as may be nec-
4 essary to implement the strategy set forth in
5 the plan.

6 “(C) Each management plan under subpara-
7 graph (A) shall include objective, measurable criteria
8 for evaluating the effectiveness and sufficiency of
9 such measures to meet the purposes of this Act.

10 “(D) All other Federal agencies shall, in con-
11 sultation with and with the assistance of the Sec-
12 retary, utilize their authorities in furtherance of the
13 strategy and conservation and management meas-
14 ures set forth in climate impact management plans
15 developed under this subsection and ensure that
16 their actions do not conflict or interfere with the ob-
17 jectives of such management plans. The Secretary
18 shall consult with the Marine Mammal Commission
19 and, as may be warranted, other agencies in the im-
20 plementation of such plans.

21 “(E) When appropriate, the Secretary may, and
22 is encouraged to, integrate climate impact manage-
23 ment plans into conservation plans adopted under
24 section 115(b) or recovery plans adopted under sec-

1 tion 4(f) of the Endangered Species Act of 1973 (16
2 U.S.C. 1533(f)).

3 “(F) The Secretary shall review climate impact
4 management plans and implementing regulations at
5 least once every 5 years, and shall revise and amend
6 them as necessary to meet the goals and require-
7 ments of this section. Any changes shall be subject
8 to the procedures and requirements applicable to the
9 adoption of the initial plans and regulations.

10 “(5) The Secretary shall report to Congress 4
11 years after the date of enactment of this section,
12 and every 2 years thereafter, on—

13 “(A) actions taken to implement this sec-
14 tion;

15 “(B) any backlog in meeting the schedule
16 set forth in this subsection for adopting, review-
17 ing, and implementing climate impact manage-
18 ment plans, or additional resources necessary to
19 address any such backlog; and

20 “(C) the effectiveness of implementation
21 and sufficiency of the measures adopted in cli-
22 mate impact management plans, and any rec-
23 ommendations for improving the process or the
24 applicable legislation.

1 “(b) MONITORING OF CLIMATE IMPACTS.—The Sec-
2 retary shall establish a program to monitor the adverse
3 impacts of climate change on marine mammals. The pur-
4 poses of the monitoring program shall be to—

5 “(1) improve models of projected future
6 changes in marine mammal distribution and den-
7 sities resulting from climate change;

8 “(2) identify and monitor interactions with fish-
9 eries and other human activities that may occur as
10 a result of changes in marine mammal distribution
11 or other effects of climate change;

12 “(3) monitor the abundance of species and pop-
13 ulation stocks, to an extent sufficient to detect a 20
14 percent population decline over 20 years;

15 “(4) improve understanding of the impacts of
16 climate change on marine mammal species and pop-
17 ulation stocks; and

18 “(5) assess the direct and indirect contributions
19 of marine mammals to carbon reduction, including
20 through carbon sequestration and nutrient cycling.

21 “(c) PROMULGATION OF REGULATIONS FOR LISTING
22 MARINE MAMMALS ADVERSELY IMPACTED BY CLIMATE
23 CHANGE.—The Secretary shall, within 120 days after the
24 date of the enactment of this section—

1 “(1) publish in the Federal Register for public
2 comment, for a period of not less than 60 days, reg-
3 ulations for listing marine mammal species and pop-
4 ulation stocks adversely impacted by climate change,
5 alone or in combination or interaction with other
6 factors, as described in paragraphs (1) and (2) of
7 subsection (a), taking into account both quantitative
8 and qualitative indicators of adverse impacts of cli-
9 mate change and human activities on such species
10 and stocks, including—

11 “(A) direct and indirect mortality and seri-
12 ous injury;

13 “(B) loss or degradation of habitat;

14 “(C) changes in the distribution or avail-
15 ability of prey;

16 “(D) changes in the distribution of marine
17 mammal species and population stocks;

18 “(E) decreased genetic diversity or repro-
19 ductive success;

20 “(F) increased susceptibility to pathogens;
21 and

22 “(G) increased likelihood of interactions
23 with fisheries and other human activities; and

24 “(2) no later than 90 days after the close of the
25 period for such public comment, publish in the Fed-

1 eral Register final regulations for listing marine
2 mammals as required by paragraph (a), to be re-
3 viewed at least once every three years.

4 “(d) LACK OF QUANTITATIVE INFORMATION.—The
5 lack of quantitative information shall not be a basis for
6 a determination under subsection (c) that a species or pop-
7 ulation stock is not adversely impacted by climate change,
8 alone or in combination or interaction with other factors,
9 as described in paragraphs (1) and (2) of subsection (a).

10 “(e) ESTIMATION OF POTENTIAL BIOLOGICAL RE-
11 MOVAL.—

12 “(1) The Secretary, in estimating the potential
13 biological removal level in stock assessments pre-
14 pared in accordance with section 117, shall take ac-
15 count of the adverse impacts of climate change in
16 determining the recovery factor applied to each
17 stock.

18 “(2) The Secretary, in preparing stock assess-
19 ments in accordance with section 117, shall reexam-
20 ine the stock definition and geographic range of ma-
21 rine mammal species and population stocks to iden-
22 tify climate-related changes in spatial distribution
23 and stock definition and to identify how such
24 changes may affect human impacts to the species.

1 “(f) AUTHORITY TO ENTER INTO AGREEMENTS.—

2 The Secretary shall—

3 “(1) periodically review the status of agree-
4 ments with foreign governments under section
5 108(a) concerning the management of transbound-
6 ary marine mammal species and population stocks,
7 and their prey species, that are or may be affected
8 by climate change; and

9 “(2) through the Secretary of State, initiate the
10 amendment of any such agreement, or negotiations
11 for the development of bilateral or multinational
12 agreements, consistent with the goals and policies of
13 this section.

14 “(g) CONSTRUCTION.—This section shall not be con-
15 strued to limit or restrict any other responsibility of the
16 Secretary or of any other person under this Act or any
17 other statute.”.

18 (b) CLERICAL AMENDMENT.—The table of contents
19 in the first section of such Act is amended by inserting
20 after the item relating to section 120 the following:

“Sec. 121. Conservation of marine mammals adversely affected by climate
change.”.

21 **SEC. 802. VESSEL SPEED RESTRICTIONS IN MARINE MAM-**
22 **MAL HABITAT.**

23 (a) IN GENERAL.—The Administrator shall, in co-
24 ordination with the Commandant of the Coast Guard and

1 applying the best available scientific information, shall
2 designate areas of importance to marine mammals and es-
3 tablish for each such area a seasonal or year-round man-
4 datory vessel speed limit of 10 knots or less for all vessels
5 greater than or equal to 49 feet in overall length operating
6 in such area.

7 (b) AREAS OF IMPORTANCE.—Areas to be designated
8 under subsection (a)—

9 (1) shall include—

10 (A) the important feeding, breeding,
11 calving, rearing, or migratory habitat for stra-
12 tegic stocks of marine mammals, including all
13 areas designated as critical habitat for any ma-
14 rine mammal under section 4 of the Endan-
15 gered Species Act of 1973 (16 U.S.C. 1533);
16 and

17 (B) areas of high marine mammal mor-
18 tality, injury, or harassment, including the dis-
19 ruption of vocalization patterns and masking of
20 biologically important sounds, caused by vessel
21 ship strikes or underwater vessel noise; and

22 (2) may include—

23 (A) any area designated as a National Ma-
24 rine Sanctuary, National Marine Monument,
25 National Park, or National Wildlife Refuge; and

1 (B) areas of high marine mammal primary
2 productivity with year-round or seasonal aggre-
3 gations of marine mammals to which this sec-
4 tion applies.

5 (c) DEADLINE FOR REGULATIONS.—Not later than
6 24 months after the date of enactment of this Act, the
7 Administrator shall designate such areas and issue such
8 regulations as are necessary to carry out this section and
9 to designate areas of importance pursuant to this section,
10 consistent with notice and comment requirements under
11 chapter 5 of title 5, United States Code.

12 (d) MODIFYING OR DESIGNATING NEW AREAS OF
13 IMPORTANCE.—

14 (1) The Administrator shall issue regulations to
15 modify or designate the areas of importance under
16 this section within 180 days after the issuance of
17 regulations to establish or to modify critical habitat
18 for strategic stocks of marine mammals pursuant to
19 the Endangered Species Act of 1973 (16 U.S.C.
20 1531 et seq.).

21 (2) The Administrator shall reexamine the
22 areas of importance designated under this section
23 every five years following the initial issuance of the
24 regulations to determine if the best available sci-
25 entific information warrants modification or designa-

1 tion of areas of importance, and shall publish any
2 revisions in the Federal Register after notice and op-
3 portunity for public comment.

4 (3) Within 90 days after receiving the petition
5 of an interested person under 553(e) of title 5,
6 United States Code, to designate, modify, or add an
7 area of importance under this section, the Adminis-
8 trator shall make a finding as to whether the peti-
9 tion presents substantial scientific information indi-
10 cating that the petitioned action may be warranted.
11 The Administrator shall promptly publish such find-
12 ing in the Federal Register for comment. Within
13 180 days after the close of comments, the Adminis-
14 trator shall publish in the Federal Register a finding
15 of whether the petitioned action is warranted and, if
16 the Administrator determines that the petitioned ac-
17 tion is warranted, shall publish draft regulations
18 designating the area of importance and any relevant
19 technical control operations pursuant to subsection
20 (j). Within 180 days after the close of comments on
21 the draft regulations, the Administrator shall issue
22 final regulations designating the area of importance
23 and any relevant technical control operations pursu-
24 ant to subsection (j).

1 (e) EXCEPTIONS FOR SAFE MANEUVERING AND
2 USING AUTHORIZED TECHNOLOGY.—

3 (1) The restriction established under subsection
4 (a) shall not apply to a vessel operating at a speed
5 necessary to maintain safe maneuvering speed if
6 such speed is justified because the vessel is in an
7 area where oceanographic, hydrographic, or meteorological
8 conditions severely restrict the maneuverability
9 of the vessel and the need to operate at such
10 speed is confirmed by the pilot on board or, when a
11 vessel is not carrying a pilot, the master of the vessel.
12 If a deviation from the applicable speed limit is
13 necessary pursuant to this subsection, the reasons
14 for the deviation, the speed at which the vessel is operated,
15 the latitude and longitude of the area, and
16 the time and duration of such deviation shall be entered
17 into the logbook of the vessel. The master of
18 the vessel shall attest to the accuracy of the logbook
19 entry by signing and dating it.

20 (2)(A) The speed limit established under subsection
21 (a) shall not apply to a vessel operating
22 using technology authorized by regulations issued by
23 the Administrator under subparagraph (B).

24 (B) The Administrator may issue regulations
25 authorizing a vessel to operate using technology

1 specified by the Administrator under this subpara-
2 graph if the Administrator determines that such op-
3 eration is at least as effective as the speed limit
4 under subsection (a) in reducing mortality and in-
5 jury to marine mammals and the disturbance of ma-
6 rine mammal habitat.

7 (f) APPLICABILITY.—The speed restriction estab-
8 lished under subsection (a)—

9 (1) shall apply to all vessels subject to the juris-
10 diction of the United States, and all other vessels
11 entering or departing a port or place subject to the
12 jurisdiction of the United States; and

13 (2) shall not apply to—

14 (A) United States vessels engaged in mili-
15 tary readiness activities; or

16 (B) law enforcement vessels of the Federal
17 Government, when engaged in law enforcement
18 or search and rescue duties.

19 (g) AUTOMATIC IDENTIFICATION SYSTEMS.—Section
20 70114(a) of title 46, United States Code, is amended to
21 read as follows:

22 “(1) Subject to paragraph (2), the following
23 vessels, while operating on the navigable waters of
24 the United States, in the United States exclusive
25 economic zone, and on the high seas, shall be

1 equipped with and operate an automatic identifica-
2 tion system under regulations prescribed by the Sec-
3 retary:

4 “(A) A self-propelled commercial vessel of
5 at least 49 feet overall in length.

6 “(B) A vessel carrying more than a num-
7 ber of passengers for hire determined by the
8 Secretary.

9 “(C) A towing vessel of more than 26 feet
10 overall in length and 600 horsepower.

11 “(D) Any other vessel for which the Sec-
12 retary decides that an automatic identification
13 system is necessary for the safe navigation of
14 the vessel.”.

15 (h) ADJUDICATIVE ENFORCEMENT PROCESS.—

16 (1) IN GENERAL.—It is unlawful for any vessel
17 identified in subsection (f)(1) to violate the speed re-
18 striction established in subsection (a).

19 (2) REGULATIONS REQUIRED.—Not later than
20 24 months after the date enactment of this Act, the
21 Administrator shall issue such regulations as are
22 necessary to create a process for investigating and
23 adjudicating violations of paragraph (1).

24 (3) FILING OF COMPLAINT.—Any entity may
25 file a complaint regarding a violation of this section

1 in a manner determined appropriate by the Adminis-
2 trator, upon which the Administrator shall initiate
3 an investigation.

4 (4) STATUTORY CONSTRUCTION.—Nothing in
5 this Act shall be construed as modifying, limiting, or
6 superseding enforcement processes established under
7 the Endangered Species Act of 1973 (16 U.S.C.
8 1531 et seq.) or the Marine Mammal Protection Act
9 of 1972 (16 U.S.C. 1361 et seq.).

10 (i) PENALTIES.—Any person found to have violated
11 this section shall be held liable for their actions. A finding
12 of willful violation or a finding of reckless disregard for
13 restrictions implemented pursuant to this section may
14 warrant civil penalties—

15 (1) including fines up to and including the stat-
16 utory maximum civil penalties and criminal fines
17 identified under the Endangered Species Act of
18 1973 (16 U.S.C. 1531 et seq.) and the Marine
19 Mammal Protection Act of 1972 (16 U.S.C. 1361 et
20 seq.); and

21 (2) in the case of a vessel subject to the juris-
22 diction of the United States, may include—

23 (A) suspension or rescission of vessel oper-
24 ation license;

1 (B) suspension or revocation of fishing
2 permits; and

3 (C) revocation of incidental take permits.

4 (j) TECHNICAL CONTROL OPERATIONS.—In carrying
5 out this section, the Administrator, in consultation with
6 the Secretary of Homeland Security, Secretary of Defense,
7 Secretary of Transportation, and Secretary of the Interior,
8 may implement technical control operations to complement
9 vessel speed reductions' goal of reduced risk to vulnerable
10 marine species. Such operations which may include—

11 (1) temporary, seasonal, or dynamic, area clo-
12 sures;

13 (2) gear restrictions or modification require-
14 ments;

15 (3) limitations on volume of vessel traffic; and

16 (4) the establishment of additional size-specific
17 speed limits beyond the limit in subsection (a).

18 (k) STATUTORY CONSTRUCTION.—

19 (1) Nothing in this section shall be interpreted
20 or implemented in a manner that—

21 (A) subject to paragraph (2), preempts or
22 modifies any obligation of any person subject to
23 the provisions of this title to act in accordance
24 with applicable State laws, except to the extent
25 that those laws are inconsistent with any provi-

1 sion of this title, and then only to the extent of
2 the inconsistency;

3 (B) affects or modifies any obligation
4 under Federal law; or

5 (C) Preempts or supersedes the Final Rule
6 To Implement Speed Restrictions to Reduce the
7 Threat of Ship Collisions With North Atlantic
8 Right Whales, codified at section 224.105 of
9 title 50, Code of Federal Regulations, except
10 for actions that are more protective than the
11 Final Rule and further reduce the risk of take
12 to North Atlantic right whales.

13 (2) The Administrator may determine whether
14 inconsistencies referred to in paragraph (1)(A) exist,
15 but may not determine that any State law is incon-
16 sistent with any provision of this title if the Admin-
17 istrator determines that such law gives greater pro-
18 tection to covered marine species and their habitat.

19 **SEC. 803. MONITORING OCEAN NOISE FOR MARINE MAM-**
20 **MAL HEALTH.**

21 (a) IN GENERAL.—The Administrator shall maintain
22 and expand an Ocean Noise Reference Station Network,
23 utilizing and coordinating with the Integrated Ocean Ob-
24 serving System to—

1 (1) provide grants to expand the deployment of
2 Federal and non-Federal observation systems capa-
3 ble of collecting measurements of underwater sound
4 in high-priority ocean and coastal locations for pur-
5 poses of monitoring and analyzing baselines and
6 trends in the underwater soundscape to protect and
7 manage marine life;

8 (2) continue to develop and apply standardized
9 forms of measurements to assess sounds produced
10 by marine animals, physical processes, and anthro-
11 pogenic activities; and

12 (3) coordinate and make accessible to the public
13 the datasets, modeling and analysis, and user-driven
14 products and tools, resulting from observations of
15 underwater sound funded through grants authorized
16 by this section.

17 (b) **AUTHORIZATION OF APPROPRIATIONS.**—There is
18 authorized to be appropriated to the Administrator to sup-
19 port integrated ocean observations activities carried out
20 under this section, \$1,000,000 for each of fiscal years
21 2021 through 2025.

1 **SEC. 804. GRANTS FOR SEAPORTS TO ESTABLISH PRO-**
2 **GRAMS TO REDUCE THE IMPACTS OF VESSEL**
3 **TRAFFIC AND PORT OPERATIONS ON MARINE**
4 **MAMMALS.**

5 (a) IN GENERAL.—The Administrator shall, within
6 6 months of the date of enactment of this Act, establish
7 a grant program to provide assistance to up to ten sea-
8 ports to develop and implement mitigation measures that
9 will lead to a quantifiable reduction in threats to marine
10 mammals from shipping activities and port operations.

11 (b) ELIGIBLE USES.—Grants provided under this
12 section may be used to develop and carry out activities
13 that quantifiably reduce threats and enhance the habitats
14 of marine mammals by—

15 (1) reducing underwater noise related to marine
16 traffic;

17 (2) reducing ship strike mortality and other
18 physical disturbances;

19 (3) enhancing marine mammal habitat, includ-
20 ing the habitat for prey of marine mammals; or

21 (4) monitoring underwater noise, vessel inter-
22 actions with marine mammals, or other types of
23 monitoring that are consistent with reducing the
24 threats to and enhancing the habitats of marine
25 mammals.

1 (c) PRIORITY.—The Administrator shall prioritize as-
2 sistance under this section for projects that—

3 (1) assist Ports with higher relative threat lev-
4 els to vulnerable marine mammals from vessel traf-
5 fic;

6 (2) project higher levels of—

7 (A) reduction of noise from vessels; and

8 (B) reduction of disturbance or ship strike
9 mortality risk; or

10 (3) allow eligible entities to conduct risk assess-
11 ments, and track progress toward threat reduction
12 and habitat enhancement.

13 (d) OUTREACH.—The Administrator shall conduct
14 outreach to seaports to provide information on how to
15 apply for assistance under this section, the benefits of the
16 program under this section, and facilitation of best prac-
17 tices and lessons learned.

18 (e) ELIGIBLE ENTITIES.—A person shall be eligible
19 for assistance under this section if the person is—

20 (1) a port authority for a seaport;

21 (2) a State, regional, local, or Tribal agency
22 that has jurisdiction over a maritime port authority
23 or a seaport; or

24 (3) a private or government entity, applying for
25 a grant awarded under this section in collaboration

1 with another entity described in paragraph (1) or
2 (2), that owns or operates a maritime terminal.

3 (f) REPORT.—The Administrator shall submit annu-
4 ally to the Committee on Natural Resources of the House
5 of Representatives, and the Committee on Commerce,
6 Science, and Transportation of the Senate, a report that
7 includes the following:

8 (1) The name and location of each entity receiv-
9 ing a grant.

10 (2) Amount of each grant.

11 (3) The name and location of the seaport in
12 which the activities took place.

13 (4) A description of the activities carried out
14 with the grant funds.

15 (5) An estimate of the impact of the project to
16 reduce threats or enhance habitat of marine mam-
17 mals.

18 (g) AUTHORIZATION OF APPROPRIATIONS.—There is
19 authorized to be appropriated to the Administrator for
20 carrying out this section, \$4,000,000 for each of fiscal
21 years 2021 through 2025, to remain available until ex-
22 pended.

1 **TITLE IX—INTERNATIONAL**
2 **AGREEMENTS, EFFORTS IN**
3 **THE ARCTIC, AND BUREAU OF**
4 **INDIAN AFFAIRS TRIBAL RE-**
5 **SILIENCE PROGRAM**

6 **Subtitle A—International**
7 **Agreements**

8 **SEC. 901. UNITED NATIONS CONVENTION ON THE LAW OF**
9 **THE SEA.**

10 It is the sense of the House of Representatives that—

11 (1) the United States Senate should give its ad-
12 vice and consent to the ratification of the United
13 Nations Convention on the Law of the Sea
14 (UNCLOS), adopted by the Third United Nations
15 Conference on the Law of the Sea in December
16 1982 and entered into force in November 1994, to
17 establish a treaty regime to govern activities on,
18 over, and under the world's oceans;

19 (2) UNCLOS builds on four 1958 Law of the
20 Sea conventions to which the United States is a
21 party, namely—

22 (A) the Convention on the Territorial Sea
23 and the Contiguous Zone;

24 (B) the Convention on the High Seas;

1 (C) the Convention on the Continental
2 Shelf; and

3 (D) the Convention on Fishing and Con-
4 servation of the Living Resources of the High
5 Seas;

6 (3) UNCLOS and an associated 1994 agree-
7 ment relating to implementation of the treaty were
8 transmitted to the Senate on October 6, 1994;

9 (4) in the absence of advice and consent from
10 the Senate, the United States is not a party to
11 UNCLOS nor to the associated 1994 agreement;

12 (5) becoming a party to UNCLOS would give
13 the United States standing to participate in discus-
14 sions relating to the treaty and thereby improve the
15 ability of the United States to intervene as a full
16 party in disputes relating to navigational rights and
17 defend United States interpretations of the treaty's
18 provisions, including those relating to the rights of
19 coastal states to regulate foreign military activities
20 in their exclusive economic zones;

21 (6) becoming a party to the treaty would im-
22 prove the ability of the United States to achieve the
23 environmental, social, and economic purposes of sup-
24 porting the implementation and enforcement of
25 international fisheries agreements and the protection

1 of highly migratory species under the Magnuson Ste-
2 vens Act, the Shark Conservation Act, and the High
3 Seas Driftnet Fishing Moratorium Protection Act;
4 and

5 (7) relying on customary international norms to
6 defend United States interests or relying on other
7 countries to assert claims on behalf of the United
8 States at the Hague Convention is insufficient to de-
9 fend and uphold United States sovereign rights and
10 interests under UNCLOS.

11 **Subtitle B—Efforts in the Arctic**

12 **SEC. 911. REINSTATEMENT OF EXECUTIVE ORDER 13754;**

13 **NORTHERN BERING SEA CLIMATE RESIL-** 14 **IENCE AREA.**

15 Beginning on the date of the enactment of this Act—

16 (1) section 4(c) of Executive Order 13795 of
17 April 28, 2017, shall have no force or effect; and

18 (2) Executive Order 13754 of December 9,
19 2016 (relating to Northern Bering Sea Climate Re-
20 silience) shall have the force and effect of law.

21 **SEC. 912. PLAN FOR THE UNITED STATES TO CUT BLACK**

22 **CARBON EMISSIONS TO 33 PERCENT BELOW** 23 **2013 LEVELS BY 2025.**

24 (a) FINDINGS.— Congress finds that—

1 (1) black carbon is a highly potent greenhouse
2 gas that is likely responsible for about a quarter of
3 the warming the Arctic has experienced over the last
4 century;

5 (2) black carbon particles have a short lifecycle
6 in the atmosphere but trap heat far more powerfully
7 than carbon dioxide; and

8 (3) when black carbon falls on land and sea ice,
9 it darkens surfaces and thus absorbs more heat,
10 causing ice to melt at a faster rate.

11 (b) SENSE OF CONGRESS.—It is the sense of Con-
12 gress that the United States should honor its commitment
13 to the Arctic Council to cut black carbon emissions by
14 2025 to a level that is between 25 and 33 percent below
15 the levels emitted by the United States in 2013.

16 (c) IN GENERAL.—Not later than 180 days after the
17 date of the enactment of this Act, the Secretary of State,
18 in consultation with the Secretary of Transportation, the
19 Administrator, and the Administrator of the Environ-
20 mental Protection Agency, shall submit to the appropriate
21 congressional committees and make available to the public
22 a plan for the United States to cut black carbon emissions
23 by 2025 to a level that is between 25 and 33 percent below
24 the levels emitted by the United States in 2013 that de-
25 scribes—

1 (1) the measures the Federal Government will
2 take to achieve such targeted emissions level; and

3 (2) how the United States may use multilateral
4 and bilateral diplomatic tools to encourage and as-
5 sist other member countries of the Arctic Council to
6 fulfill the goals announced in 2017.

7 (d) UPDATES TO PLAN.—Not later than 1 year after
8 the date of the enactment of this Act, and annually there-
9 after, the Secretary of State, in consultation with the Sec-
10 retary of Transportation, the Administrator, and the Ad-
11 ministrator of the Environmental Protection Agency, shall
12 submit to the appropriate congressional committees and
13 make available to the public a report on the progress made
14 toward implementing the plan submitted pursuant to sub-
15 section (c).

16 (e) APPROPRIATE CONGRESSIONAL COMMITTEES DE-
17 FINED.—In this section, the term “appropriate congres-
18 sional committees” means—

19 (1) the Committee on Foreign Affairs, the
20 Committee on Natural Resources, and the Com-
21 mittee on Energy and Commerce of the House of
22 Representatives; and

23 (2) the Committee on Foreign Relations, the
24 Committee on Commerce, the Committee on Envi-

1 ronment and Public Works, and the Committee on
2 Energy and Natural Resources of the Senate.

3 (f) PUBLIC COMMENT.—The Secretary of State
4 shall—

5 (1) before submitting such plan and report to
6 the appropriate congressional committees—

7 (A) publish the plan and the report in the
8 Federal Register; and

9 (B) provide a period of at least 90 days for
10 public comment on each of the plan and the re-
11 port; and

12 (2) after each such period for public comment,
13 continue to make the proposed plan and report, as
14 well as the comments received, available to the pub-
15 lic on regulations.gov (or any successor website).

16 **Subtitle C—Bureau of Indian**
17 **Affairs Tribal Resilience Program**

18 **SEC. 921. BUREAU OF INDIAN AFFAIRS TRIBAL RESILIENCE**
19 **PROGRAM.**

20 (a) ESTABLISHMENT.—The Secretary of the Interior
21 (hereafter in this subtitle referred to as the “Secretary”)
22 shall establish a program—

23 (1) to improve the resilience of Indian Tribes to
24 the effects of a changing climate;

1 (2) to support Native American leaders in
2 building strong communities that are resilient to cli-
3 mate change;

4 (3) to ensure agency effectiveness in fulfilling
5 Federal Indian trust responsibilities in the face of
6 climate change; and

7 (4) to ensure the development of modern, cost-
8 effective infrastructure in Tribal communities.

9 (b) GRANTS.—

10 (1) AUTHORITY.—As part of the program es-
11 tablished under subsection (a), the Secretary shall to
12 the extent funds are made available through Acts of
13 appropriation make multiyear grants to Indian
14 Tribes for eligible activities described in this para-
15 graph (2).

16 (2) ELIGIBLE ACTIVITIES.—Grants under this
17 subsection may be used for the following in Indian
18 communities and on Indian land:

19 (A) Development and delivery of adapta-
20 tion training.

21 (B) Adaptation planning, vulnerability as-
22 sessments, emergency preparedness planning,
23 and monitoring.

1 (C) Capacity building through travel sup-
2 port for training, technical sessions, and cooper-
3 ative management forums.

4 (D) Travel support for participation in
5 ocean and coastal planning.

6 (E) Development of science-based informa-
7 tion and tools to enable adaptive resource man-
8 agement and the ability to plan for resilience.

9 (F) Relocation of villages or other commu-
10 nities experiencing or susceptible to coastal or
11 river erosion and flooding.

12 (G) Construction of infrastructure to sup-
13 port emergency evacuations related to climate
14 change.

15 (H) Restoration of ecosystems and con-
16 struction of natural and nature-based features
17 to address risks from coastal and riverine flood-
18 ing and erosion.

19 (I) Restoration, relocation, repair of infra-
20 structure damaged by melting permafrost or
21 coastal or river erosion and flooding.

22 (J) Installation and management of energy
23 systems that reduce energy costs and green-
24 house gas emissions compared to the energy

1 systems in use before that installation and man-
2 agement.

3 (K) Construction and maintenance of so-
4 cial or cultural infrastructure that supports re-
5 silience.

6 (3) APPLICATIONS.—An Indian Tribe desiring a
7 grant under this subsection shall submit to the Sec-
8 retary an application at such time, in such manner,
9 and containing such information as the Secretary
10 may require, including a description of the eligible
11 activities to be undertaken using the grant.

12 (c) INTERAGENCY COOPERATION.—The Secretary,
13 the Secretary of Commerce, and the Administrator of the
14 Environmental Protection Agency shall establish under
15 the White House Council on Native American Affairs an
16 interagency subgroup on Tribal resilience, which shall—

17 (1) work with Indian Tribes to collect and share
18 data and information, including traditional ecological
19 knowledge, about how the effects of a changing cli-
20 mate are relevant to Indian Tribes; and

21 (2) identify opportunities for the Federal Gov-
22 ernment to improve collaboration and assist with ad-
23 aptation and mitigation efforts that promote resil-
24 ience.

1 (d) TRIBAL RESILIENCE LIAISON.—The Secretary
2 shall establish a Tribal resilience liaison—

3 (1) to coordinate with Indian Tribes and rel-
4 evant Federal agencies regarding the program under
5 this section, grant opportunities related to the pro-
6 gram, climate adaptation, and climate resilience
7 planning; and

8 (2) to help ensure Tribal engagement in climate
9 conversations at the Federal level.

10 (e) AUTHORIZATION OF APPROPRIATIONS.—There is
11 authorized to be appropriated to carry out this section,
12 \$200,000,000 for each of fiscal years 2021 through 2025.

13 **TITLE X—COASTAL RESILIENCY**
14 **AND ADAPTATION**

15 **SEC. 1001. LIVING SHORELINE GRANT PROGRAM.**

16 (a) ESTABLISHMENT.—The Administrator shall
17 make grants to eligible entities for purposes of—

18 (1) designing and implementing large- and
19 small-scale, climate-resilient living shoreline projects;
20 and

21 (2) applying innovative uses of natural mate-
22 rials and systems to protect coastal communities,
23 habitats, and natural system functions.

24 (b) PROJECT PROPOSALS.—To be eligible to receive
25 a grant under this section, an eligible entity shall—

1 (1) submit to the Administrator a proposal for
2 a living shoreline project, including monitoring, data
3 collection, and measurable performance criteria with
4 respect to the project;

5 (2) demonstrate to the Administrator that the
6 entity has any permits or other authorizations from
7 local, State, and Federal government agencies nec-
8 essary to carry out the living shoreline project or
9 provide evidence demonstrating general support from
10 such agencies; and

11 (3) include an engagement or education compo-
12 nent that seeks and solicits feedback from the local
13 or regional community most directly affected by the
14 proposal.

15 (c) PROJECT SELECTION.—

16 (1) DEVELOPMENT OF CRITERIA.—The Admin-
17 istrator shall select eligible entities to receive grants
18 under this section based on criteria developed by the
19 Administrator, in consultation with relevant offices
20 of the National Oceanic and Atmospheric Adminis-
21 tration, such as the Office of Habitat Conservation,
22 the Office for Coastal Management, and the Res-
23 toration Center.

24 (2) CONSIDERATIONS.—In developing criteria
25 under paragraph (1) to evaluate a proposed living

1 shoreline project, the Administrator shall take into
2 account—

3 (A) the potential of the project to protect
4 the community and maintain the viability of the
5 environment, such as through protection of eco-
6 system functions, environmental benefits, or
7 habitat types, in the area where the project is
8 to be carried out;

9 (B) the historic and future environmental
10 conditions of the project site, particularly those
11 environmental conditions affected by climate
12 change;

13 (C) the net ecological benefits of the
14 project including the potential of the project to
15 contribute to carbon sequestration;

16 (D) the ability of the entity proposing the
17 project to demonstrate the potential of the
18 project to protect the coastal community where
19 the project is to be carried out, including
20 through—

21 (i) mitigating the effects of erosion;

22 (ii) attenuating the impact of coastal
23 storms and storm surge;

24 (iii) mitigating shoreline flooding;

1 (iv) mitigating the effects of sea level
2 rise, accelerated land loss, and extreme
3 tides;

4 (v) sustaining, protecting, or restoring
5 the functions and habitats of coastal eco-
6 systems;

7 (vi) protecting important cultural sites
8 or values; or

9 (vii) such other forms of coastal pro-
10 tection as the Administrator considers ap-
11 propriate; and

12 (E) the potential of the project to support
13 resiliency at a military installation or commu-
14 nity infrastructure supportive of a military in-
15 stallation (as such terms are defined in section
16 2391 of title 10, United States Code).

17 (3) PRIORITY.—In selecting living shoreline
18 projects to receive grants under this section, the Ad-
19 ministrator shall give priority consideration to a pro-
20 posed project to be conducted in an area—

21 (A) for which the President has declared,
22 during the 10-year period preceding the submis-
23 sion of the proposal for the project under sub-
24 section (b), that a major disaster exists pursu-
25 ant to section 401 of the Robert T. Stafford

1 Disaster Relief and Emergency Assistance Act
2 (42 U.S.C. 5170) because of a hurricane, trop-
3 ical storm, coastal storm, or flooding;

4 (B) that has a documented history of
5 coastal erosion or frequent coastal inundation
6 during that 10-year period; or

7 (C) that includes communities that may
8 not have adequate resources to prepare for or
9 respond to coastal hazards, including low in-
10 come communities, communities of color, Tribal
11 communities, Indigenous communities, and
12 rural communities.

13 (4) MINIMUM STANDARDS.—

14 (A) IN GENERAL.—The Administrator
15 shall develop minimum standards to be used in
16 selecting eligible entities to receive grants under
17 this section, taking into account—

18 (i) the considerations described in
19 paragraph (2);

20 (ii) the need for such standards to be
21 general enough to accommodate concerns
22 relating to specific project sites; and

23 (iii) the consideration of an estab-
24 lished eligible entity program with systems

1 to disburse funding from a single grant to
2 support multiple small-scale projects.

3 (B) CONSULTATIONS.—In developing
4 standards under subparagraph (A), the Admin-
5 istrator—

6 (i) shall consult with relevant offices
7 of the National Oceanic and Atmospheric
8 Administration, such as the Office of Habi-
9 tat Conservation, the Office for Coastal
10 Management, and the Restoration Center;
11 and

12 (ii) may consult with—

13 (I) relevant interagency councils,
14 such as the Estuary Habitat Restora-
15 tion Council;

16 (II) Tribes and Tribal organiza-
17 tions;

18 (III) State coastal management
19 agencies; and

20 (IV) relevant nongovernmental
21 organizations.

22 (d) USE OF FUNDS.—A grant awarded under this
23 section to an eligible entity to carry out a living shoreline
24 project may be used by the eligible entity only—

1 (1) to carry out the project, including adminis-
2 tration, design, permitting, entry into negotiated in-
3 direct cost rate agreements, and construction;

4 (2) to monitor, collect, and report data on the
5 performance (including performance over time) of
6 the project, in accordance with standards issued by
7 the Administrator under subsection (f)(2); or

8 (3) to incentivize landowners to engage in living
9 shoreline projects.

10 (e) COST-SHARING.—

11 (1) IN GENERAL.—Except as provided in para-
12 graph (2), an eligible entity that receives a grant
13 under this section to carry out a living shoreline
14 project shall provide, from non-Federal sources,
15 funds or other resources (such as land or conserva-
16 tion easements or in-kind matching from private en-
17 tities) valued at not less than 50 percent of the total
18 cost, including administrative costs, of the project.

19 (2) REDUCED MATCHING REQUIREMENT FOR
20 CERTAIN COMMUNITIES.—The Administrator may
21 reduce or waive the matching requirement under
22 paragraph (1) for an eligible entity representing a
23 community or nonprofit organization if—

24 (A) the eligible entity submits to the Ad-
25 ministrator in writing—

1 (i) a request for such a reduction and
2 the amount of the reduction; and

3 (ii) a justification for why the entity
4 cannot meet the matching requirement;
5 and

6 (B) the Administrator agrees with the jus-
7 tification.

8 (f) MONITORING AND REPORTING.—

9 (1) IN GENERAL.—The Administrator shall re-
10 quire each eligible entity receiving a grant under this
11 section (or a representative of the entity) to carry
12 out a living shoreline project—

13 (A) to transmit to the Administrator data
14 collected under the project;

15 (B) to monitor the project and to collect
16 data on—

17 (i) the ecological and economic bene-
18 fits of the project and the protection pro-
19 vided by the project for the coastal com-
20 munity where the project is carried out, in-
21 cluding through—

22 (I) mitigating the effects of ero-
23 sion;

24 (II) attenuating the impact of
25 coastal storms and storm surge;

1 (III) mitigating shoreline flood-
2 ing;

3 (IV) mitigating the effects of sea
4 level rise, accelerated land loss, and
5 extreme tides;

6 (V) sustaining, protecting, or re-
7 storing the functions and habitats of
8 coastal ecosystems; or

9 (VI) such other forms of coastal
10 protection as the Administrator con-
11 siders appropriate; and

12 (ii) the performance of the project in
13 providing such protection;

14 (C) to make data collected under the
15 project available on a publicly accessible inter-
16 net website of the National Oceanic and Atmos-
17 pheric Administration; and

18 (D) not later than 1 year after the entity
19 receives the grant, and annually thereafter until
20 the completion of the project, to submit to the
21 Administrator a report on—

22 (i) the measures described in subpara-
23 graph (B); and

24 (ii) the effectiveness of the project in
25 increasing protection of the coastal com-

1 community where the project is carried out
2 through living shorelines techniques, in-
3 cluding—

4 (I) a description of—

5 (aa) the project;

6 (bb) the activities carried
7 out under the project; and

8 (cc) the techniques and ma-
9 terials used in carrying out the
10 project; and

11 (II) data on the performance of
12 the project in providing protection to
13 that coastal community.

14 (2) GUIDELINES.—In developing guidelines re-
15 lating to paragraph (1)(C), the Administrator shall
16 consider how additional data could safely be col-
17 lected before and after major disasters or severe
18 weather events to measure project performance and
19 project recovery.

20 (3) STANDARDS.—

21 (A) IN GENERAL.—Not later than 90 days
22 after the date of the enactment of this Act, the
23 Administrator shall, in consultation with rel-
24 evant offices of the National Oceanic and At-
25 mospheric Administration, relevant interagency

1 councils, and relevant nongovernmental organi-
2 zations, issue standards for the monitoring, col-
3 lection, and reporting under subsection (d)(2)
4 of data regarding the performance of living
5 shoreline projects for which grants are awarded
6 under this section.

7 (B) REPORTING.—The standards issued
8 under subparagraph (A) shall require an eligi-
9 ble entity receiving a grant under this section
10 to report the data described in that subpara-
11 graph to the Administrator on a regular basis.

12 (g) AUTHORIZATION OF APPROPRIATIONS.—There is
13 authorized to be appropriated to the Administrator
14 \$50,000,000 for each of fiscal years 2021 through 2025
15 for purposes of carrying out this section.

16 (h) MINIMUM REQUIRED FUNDS FOR SHORELINE
17 PROJECTS LOCATED WITHIN THE GREAT LAKES.—The
18 Secretary shall use not less than 10 percent of the funds
19 awarded under this section for grants to projects located
20 in the Great Lakes.

21 (i) DEFINITIONS.—In this section:

22 (1) ELIGIBLE ENTITY.—The term “eligible enti-
23 ty” means any of the following:

24 (A) A unit of a State or local government.

1 (B) An organization described in section
2 501(c)(3) of the Internal Revenue Code of 1986
3 that is exempt from taxation under section
4 501(a) of such Code.

5 (C) An Indian Tribe (as defined in section
6 4 of the Indian Self-Determination and Edu-
7 cation Assistance Act (25 U.S.C. 5304)).

8 (2) LIVING SHORELINE PROJECT.—The term
9 “living shoreline project”—

10 (A) means a project that—

11 (i) restores or stabilizes a shoreline,
12 including marshes, wetlands, and other
13 vegetated areas that are part of the shore-
14 line ecosystem, by using natural materials
15 and systems to create buffers to attenuate
16 the impact of coastal storms, currents,
17 flooding, and wave energy and to prevent
18 or minimize shoreline erosion while pro-
19 viding a net ecological benefit to eco-
20 systems and habitats;

21 (ii) incorporates as many natural ele-
22 ments as possible, such as native wetlands,
23 kelp forests, submerged aquatic plants,
24 corals, oyster shells, native grasses, shrubs,
25 or trees;

1 (iii) utilizes techniques that incor-
2 porate ecological and coastal engineering
3 principles in shoreline stabilization; and

4 (iv) to the extent possible, maintains
5 or restores existing natural slopes and con-
6 nections between uplands and adjacent
7 wetlands or surface waters;

8 (B) may include the use of—

9 (i) natural elements, such as sand,
10 wetland plants, logs, oysters or other shell-
11 fish, submerged aquatic vegetation, corals,
12 native grasses, shrubs, trees, or coir fiber
13 logs;

14 (ii) project elements that provide eco-
15 logical benefits to coastal ecosystems and
16 habitats in addition to shoreline protection;
17 and

18 (iii) structural materials, such as
19 stone, concrete, wood, vinyl, oyster domes,
20 or other approved engineered structures in
21 combination with natural materials; and

22 (C) may include a project that expands
23 upon or restores natural living shorelines or ex-
24 isting living shoreline projects.

1 (3) STATE.—The term “State” means each of
2 the several States, the District of Columbia, the
3 Commonwealth of Puerto Rico, the United States
4 Virgin Islands, Guam, American Samoa, and the
5 Commonwealth of the Northern Mariana Islands.

6 **SEC. 1002. NATIONAL OCEANIC AND ATMOSPHERIC ADMIN-**
7 **ISTRATION RESEARCH PROGRAMS.**

8 (a) COASTAL SCIENCE AND ASSESSMENT: COMPETI-
9 TIVE EXTERNAL RESEARCH.—

10 (1) IN GENERAL.—The Administrator shall
11 carry out an extramural competitively awarded
12 grants program (referred to in this section as the
13 “Program”) focused on interdisciplinary coastal re-
14 silience and sustainability in accordance with sub-
15 section (b).

16 (2) OBJECTIVE.—The objective of the Program
17 shall be to develop scalable, best practices—

18 (A) to prepare more resilient, sustainable
19 coastal communities; and

20 (B) to reduce disaster recovery costs.

21 (3) COLLABORATION.—The Secretary shall con-
22 duct the Program in collaboration with business and
23 industry, government agencies, academic institu-
24 tions, and coastal community stakeholders.

1 (4) ELIGIBILITY.—To be eligible for a grant
2 under the Program, an applicant must be an institu-
3 tion of higher education, nonprofit organization,
4 State, local, or Tribal Government, for-profit organi-
5 zation, United States Territory, or Federal agency
6 that has statutory authority to receive transfers of
7 funds.

8 (b) COASTAL RESILIENCE RESEARCH COMPETITIVE
9 GRANTS.—

10 (1) IN GENERAL.—The Administrator shall es-
11 tablish an annual competitive grants program that
12 gives priority to coastal resilience research projects
13 that focus on—

14 (A) protecting life and critical infrastruc-
15 ture;

16 (B) developing decision-support tools use-
17 ful to coastal communities;

18 (C) determining societal, ecological, and re-
19 siliency benefits of coastal restoration and nat-
20 ural, nature-based, and man-made infrastruc-
21 ture, and how these benefits affect the sustain-
22 ability of coastal ecosystems;

23 (D) volunteer and community-science mon-
24 itoring of coastal and marine resources as part

1 of efforts to protect coastal communities from
2 sea level rise;

3 (E) monitoring and developing ecosystem-
4 based approaches to managing coastal eco-
5 systems to promote sustainability;

6 (F) assessing and enhancing the capacity
7 of human communities to adapt to coastal nat-
8 ural disasters;

9 (G) assessing coastal vulnerability and
10 risk;

11 (H) evaluating adaptation and restoration
12 approaches to reduce risk, including through
13 the use of natural, nature-based, and man-made
14 features;

15 (I) minimizing costs associated with dam-
16 ages incurred from natural disasters, flooding,
17 and sea level rise; and

18 (J) developing curriculum for new pro-
19 grams in coastal restoration at public commu-
20 nity colleges and within college Sea Grant pro-
21 grams to train the new coastal restoration
22 workforce.

23 (2) CRITICAL INFRASTRUCTURE.—In this para-
24 graph, the term “critical infrastructure” means in-
25 frastructure, including natural or nature-based in-

1 frastructure, the destruction or damaging of which
2 would have a debilitating impact on national security
3 or economic security, undermine community resil-
4 iency and adaptation, or threaten public health or
5 safety.

6 (3) NATURAL AND NATURE-BASED FEA-
7 TURES.—The term “natural” or “nature-based fea-
8 tures” means coastal wetlands, beaches, dunes,
9 marshes, mangrove forests, municipal green infra-
10 structure, and living shorelines.

11 (c) DONATIONS.—The Administrator may accept and
12 use donations of funds to implement this section.

13 **SEC. 1003. GRANTS FOR RECOVERING OYSTERS.**

14 (a) ESTABLISHMENT.—The Administrator shall es-
15 tablish a grant program (in this section referred to as the
16 “Program”) under which the Administrator shall award
17 grants to eligible entities for the purpose of conducting
18 research on the conservation, restoration, or management
19 of oysters in estuarine ecosystems.

20 (b) APPLICATION.—To be eligible to receive a grant
21 under this section, an eligible entity shall submit to the
22 Administrator an application at such time, in such man-
23 ner, and containing such information as the Administrator
24 may require.

25 (c) ALLOCATION OF GRANT FUNDS.—

1 (1) IN GENERAL.—The Administrator shall
2 award a grant under the Program to eligible entities
3 that submit an application under subsection (b).

4 (2) MATCHING REQUIREMENT.—

5 (A) IN GENERAL.—Except as provided in
6 subparagraph (B), the total amount of Federal
7 funding received under the Program by an eligi-
8 ble entity may not exceed 85 percent of the
9 total cost of the research project for which the
10 funding was awarded. For the purposes of this
11 subparagraph, the non-Federal share of project
12 costs may be provided by in-kind contributions
13 and other noncash support.

14 (B) WAIVER.—The Administrator may
15 waive all or part of the requirement in subpara-
16 graph (A) if the Administrator determines that
17 no reasonable means are available through
18 which an eligible entity applying for a grant
19 under this section can meet such requirement
20 and the probable benefit of such research
21 project outweighs the public interest in such re-
22 quirement.

23 (3) EQUITABLE DISTRIBUTION.—The Adminis-
24 trator shall ensure, to the maximum extent prac-
25 ticable, that grant funding under this section is ap-

1 portioned according to the historic baseline oyster
2 population of each estuary of the United States.

3 (d) DEFINITIONS.—In this section, the following defi-
4 nitions apply:

5 (1) ACADEMIC COMMUNITY.—The term “aca-
6 demic community” means faculty, researchers, pro-
7 fessors, and representatives of State-accredited col-
8 leges and universities.

9 (2) ELIGIBLE ENTITY.—The term “eligible enti-
10 ty” means a member of the academic community,
11 the seafood industry, a relevant nonprofit organiza-
12 tion, or a relevant State agency, that is proposing or
13 conducting a research project on the conservation,
14 restoration, or management of oysters in an estua-
15 rine ecosystem developed through consultation with
16 a member of the academic community, a member of
17 the seafood industry, a relevant nonprofit organiza-
18 tion, or a relevant State agency.

19 (3) HISTORIC BASELINE.—The term “historic
20 baseline” means the estimated population of oysters
21 in an estuary in 1850.

22 (4) NONPROFIT ORGANIZATION.—The term
23 “nonprofit organization” means an organization de-
24 scribed in section 501(c)(3) of the Internal Revenue

1 Code of 1986 and exempt from tax under section
2 501(a) of such Code.

3 (5) SEAFOOD INDUSTRY.—The term “seafood
4 industry” means shellfish growers, shellfish har-
5 vesters, commercial fishermen, and recreational fish-
6 ermen.

7 (e) AUTHORIZATION OF APPROPRIATIONS.—There is
8 authorized to be appropriated to the Administrator
9 \$6,000,000 for each of the fiscal years 2021 through 2025
10 to carry out this section.

11 **SEC. 1004. IMPROVEMENTS TO THE NATIONAL OCEANS AND**
12 **COASTAL SECURITY ACT.**

13 (a) DEFINITION OF TIDAL SHORELINE REFINED.—
14 Section 902 of the National Oceans and Coastal Security
15 Act (16 U.S.C. 7501) is amended—

16 (1) by amending paragraph (7) to read as fol-
17 lows:

18 “(7) TIDAL SHORELINE.—The term ‘tidal
19 shoreline’ means a ‘tidal shoreline’ or a ‘Great Lake
20 shoreline’ as such terms are used in section
21 923.110(c)(2)(i) of title 15, Code of Federal Regula-
22 tions, or a similar successor regulation.”; and

23 (2) by adding at the end the following:

24 “(8) INDIAN TRIBE.—The term ‘Indian Tribe’
25 has the meaning given the term ‘Indian tribe’ in sec-

1 tion 4 of the Indian Self-Determination and Edu-
2 cation Assistance Act (25 U.S.C. 5304).

3 “(9) BLUE CARBON.—The term ‘blue carbon’
4 means the ability of an ocean or coastal ecosystem,
5 habitat, or other natural resource to absorb, capture,
6 and contain atmospheric carbon dioxide.”.

7 (b) IMPROVEMENTS TO NATIONAL OCEANS AND
8 COASTAL SECURITY FUND.—

9 (1) ESTABLISHMENT OF FUND REQUIRED.—
10 Subsection (a) of section 904 of such Act (16 U.S.C.
11 7503) is amended by inserting “and jointly manage”
12 after “establish”.

13 (2) DEPOSITS.—Paragraph (1) of subsection
14 (b) of section 904 is amended to read as follows:

15 “(1) IN GENERAL.—There shall be deposited
16 into the Fund, which shall constitute the assets of
17 the Fund, amounts as follows:

18 “(A) Amounts transferred to the Fund
19 under section 908.

20 “(B) Such other amounts as may be ap-
21 propriated or otherwise made available to carry
22 out this Act.”.

23 (3) EXPENDITURES.—Section 904 of such Act
24 (16 U.S.C. 7503) is amended by striking subsection
25 (d) and inserting the following:

1 “(d) EXPENDITURE.—

2 “(1) Of the amounts deposited into the Fund
3 for each fiscal year, if those funds are equal to or
4 greater than \$100,000,000—

5 “(A) not more than 80 percent may be
6 used for the award of grants under subsection
7 (b) of section 906;

8 “(B) not more than 20 percent may be
9 used for the award of grants under subsection
10 (c) of such section; and

11 “(C) not more than 4 percent may be used
12 by the Administrator and the National Fish
13 and Wildlife Foundation (Foundation) for ad-
14 ministrative expenses to carry out this chapter,
15 which amount shall be divided between the Ad-
16 ministrator and the Foundation pursuant to an
17 agreement reached and documented by both the
18 Administrator and the Foundation.

19 “(2) Of the amounts deposited into the Fund
20 for each fiscal year, if those funds are less than
21 \$100,000,000, all funds shall be used for the award
22 of grants under subsection (c) of section 906 and no
23 more than 4 percent may be used by the Adminis-
24 trator and the Foundation for administrative ex-
25 penses to carry out this chapter, which amount shall

1 be divided between the Administrator and the Foun-
2 dation pursuant to an agreement reached and docu-
3 mented by both the Administrator and the Founda-
4 tion.”.

5 (c) ELIGIBLE USES OF THE FUND.—Section 905 of
6 such Act (16 U.S.C. 7504) is amended to read as follows:

7 **“SEC. 905. ELIGIBLE USES.**

8 “(a) IN GENERAL.—Amounts in the Fund may be
9 allocated by the Administrator and the Foundation to sup-
10 port programs and activities intended to protect, conserve,
11 restore, better understand, and utilize ocean and coastal
12 resources and coastal infrastructure, including scientific
13 research, resiliency and spatial planning, data-sharing,
14 and other programs and activities carried out in coordina-
15 tion with Federal and State departments or agencies, in-
16 cluding the following:

17 “(1) Ocean, coastal, and Great Lakes restora-
18 tion and protection, including efforts to address po-
19 tential impacts of sea level change, sedimentation,
20 erosion, changes in ocean chemistry, hurricanes and
21 other extreme weather, flooding, and changes in
22 ocean temperature to natural resources, commu-
23 nities, and coastal economies.

24 “(2) Restoration, protection, or maintenance of
25 living ocean, coastal, and Great Lakes resources and

1 their habitats, including habitats and ecosystems
2 that provide blue carbon benefits.

3 “(3) Planning for and managing coastal devel-
4 opment to enhance ecosystem and community integ-
5 rity, or to minimize impacts from sea level change,
6 hurricanes and other extreme weather, flooding, and
7 coastal erosion.

8 “(4) Projects to address management, planning,
9 or resiliency and readiness issues which are regional
10 or interstate in scope, such as regional ocean part-
11 nerships or similar bodies.

12 “(5) Efforts that contribute to the under-
13 standing of ecological, economic, societal, and na-
14 tional security threats driven by changes to the
15 oceans, coasts, and Great Lakes.

16 “(6) Efforts to preserve, protect, and collect
17 data, including but not limited to public ocean and
18 coastal data portals, that would support sustainable
19 water-dependent commercial activities including
20 commercial fishing, recreational fishing businesses,
21 aquaculture, boat building, or other coastal-related
22 businesses.

23 “(7) Efforts to assist coastal States in repo-
24 sitioning, relocating or deploying natural or nature-
25 based features to enhance the resiliency of critical

1 coastal transportation, emergency response, water,
2 electrical, and other infrastructure, that are already
3 subject to or face increased future risks of hurri-
4 canes, coastal flooding, coastal erosion, or sea level
5 change to ensure the economic security, safety, and
6 ecological well-being of the coasts of the United
7 States.

8 “(8) Acquiring property or interests in property
9 if—

10 “(A) the area is located within a coastal
11 county or adjacent county;

12 “(B) the funds made available under this
13 subtitle are used to acquire land or interest in
14 land by purchase, exchange, or donation from a
15 willing seller;

16 “(C) the Governor of the State in which
17 the property or interests in property are ac-
18 quired approves of the acquisition; and

19 “(D) such property or interest is acquired
20 in a manner that will ensure such property or
21 interest will be administered to support the pur-
22 poses of this Act.

23 “(9) Protection and modification of critical
24 coastal public infrastructure affected by erosion,

1 hurricanes or other extreme weather, flooding, or sea
2 level change.

3 “(10) Assistance for small businesses and com-
4 munities that are dependent on coastal tourism as
5 eligible efforts that help coastal economies minimize
6 impacts from sea level rise and disasters.

7 “(11) Projects that use natural and nature-
8 based approaches for enhancing the resiliency of
9 wastewater and stormwater infrastructure as eligible
10 critical infrastructure projects (as compared to just
11 general water infrastructure, which can also include
12 drinking water systems).

13 “(12) Technical assistance to help develop com-
14 prehensive resilience and mitigation plans as an eli-
15 gible funding effort.

16 “(b) MATCHING REQUIREMENT.—The Administrator
17 and the Foundation shall require a non-Federal match for
18 all awards made under section 906(c) from the Fund.

19 “(c) PROHIBITION ON USE OF FUNDS FOR LITIGA-
20 TION.—No funds made available under this Act may be
21 used to fund litigation against the Federal Government.”.

22 (d) GRANTS.—

23 (1) ADMINISTRATION.—Subsection (a)(1) of
24 section 906 of such Act (16 U.S.C. 7505) is amend-
25 ed—

1 (A) by amending subparagraph (B) to read
2 as follows:

3 “(B) Selection procedures and criteria for
4 the awarding of grants under this section that
5 require consultation with the Administrator and
6 the Secretary of the Interior.”;

7 (B) by amending subparagraph (C)(ii) to
8 read as follows:

9 “(ii) under subsection (c) to entities
10 including States, local governments, re-
11 gional and interstate collaboratives, asso-
12 ciations, nonprofit and for-profit private
13 entities, public-private partnerships, aca-
14 demic institutions, and Indian Tribes.”;

15 (C) in subparagraph (F), by striking “year
16 if grants have been awarded in that year” and
17 inserting “5 years”; and

18 (D) by adding at the end the following:

19 “(I) A method to give special consideration
20 in reviewing proposals to projects with either di-
21 rect or indirect coastal or marine blue carbon
22 benefits and an accounting methodology to
23 quantify these benefits for the purposes of the
24 annual report required under section 907.”.

1 (2) GRANTS TO COASTAL STATES.—Subsection
2 (b) of section 906 of such Act (16 U.S.C. 7505) is
3 amended to read as follows:

4 “(b) GRANTS TO COASTAL STATES.—

5 “(1) IN GENERAL.—Subject to section
6 904(d)(1) and paragraphs (3) and (4) of this sub-
7 section, the Administrator and the Foundation shall
8 award grants to eligible coastal States based on the
9 following formula:

10 “(A) 50 of the funds are allocated equally
11 among such coastal States.

12 “(B) 25 percent of the funds are allocated
13 on the basis of the ratio of tidal shoreline miles
14 in a coastal State to the tidal shoreline miles of
15 all coastal States.

16 “(C) 25 percent of the funds are allocated
17 on the basis of the ratio of population density
18 of the coastal counties of a coastal State to the
19 average population density of all coastal coun-
20 ties based on the most recent data available by
21 the U.S. Census Bureau.

22 “(2) ELIGIBLE COASTAL STATES.—For pur-
23 poses of this subsection, an eligible coastal State is
24 any coastal state as defined in section 304 of the

1 Coastal Zone Management Act of 1972 (16 U.S.C.
2 1453).

3 “(3) MAXIMUM ALLOCATION TO STATES.—Not-
4 withstanding paragraph (1), not more than 5 per-
5 cent of the total funds distributed under this sub-
6 section may be allocated to any single State. Any
7 amount exceeding this limit shall be redistributed
8 equally among the remaining eligible coastal States.

9 “(4) REQUIREMENT TO SUBMIT PLANS.—

10 “(A) IN GENERAL.—To be eligible to re-
11 ceive a grant under this subsection, an eligible
12 coastal State shall submit to the Administrator
13 for review and approval, a 5-year plan, which
14 shall include the following:

15 “(i) Criteria to determine eligibility
16 for entities which may receive grants under
17 this subsection.

18 “(ii) A description of the competitive
19 process the coastal State will use in allo-
20 cating funds received from the Fund, ex-
21 cept in the case of allocating funds under
22 paragraph (7), which shall include—

23 “(I) a description of the relative
24 roles of and consistency with the
25 State coastal zone management pro-

1 gram approved under the Coastal
2 Zone Management Act of 1972 (16
3 U.S.C. 1451 et seq.), if the coastal
4 State has such a plan, and any State
5 Sea Grant Program, if the State has
6 such program; and

7 “(II) a demonstration that such
8 competitive process is consistent with
9 the application and review procedures
10 established by the Administrator and
11 Foundation under subsection (a)(1).

12 “(iii) A process to certify that the
13 project or program and the awarding of a
14 contract for the expenditure of amounts re-
15 ceived under this paragraph are consistent
16 with the standard procurement rules and
17 regulations governing a comparable project
18 or program in that State, including all ap-
19 plicable competitive bidding and audit re-
20 quirements.

21 “(iv) Procedures to make publicly
22 available on the internet a list of all
23 projects supported by the Fund, that in-
24 cludes at a minimum the grant recipient,

1 grant amount, project description, and
2 project status.

3 “(B) UPDATES.—As a condition of receiv-
4 ing a grant under this subsection, a coastal
5 State shall submit to the Administrator, not
6 less frequently than once every 5 years, an up-
7 date to the plan submitted by the coastal State
8 under subparagraph (A) for the 5-year period
9 immediately following the most recent submittal
10 under this paragraph.

11 “(5) OPPORTUNITY FOR PUBLIC COMMENT.—In
12 determining whether to approve a plan or an update
13 to a plan described in subparagraph (A) or (B) of
14 paragraph (5), the Administrator or the Foundation
15 shall provide the opportunity for, and take into con-
16 sideration, public input and comment on the plan.

17 “(6) INDIAN TRIBES.—As a condition on receipt
18 of a grant under this subsection, a State that re-
19 ceives a grant under this subsection shall ensure
20 that Indian Tribes in the State are eligible to par-
21 ticipate in the competitive process described in the
22 State’s plan under paragraph (5)(A)(ii).

23 “(7) NONPARTICIPATION BY A STATE.—In any
24 year, if an eligible coastal State or geographic area
25 described in paragraph (4)(B) does not submit the

1 plan required by paragraph (5) or declines the funds
2 distributed under this subsection, the funds that
3 would have been allocated to the State or area shall
4 be redistributed equally among the remaining eligible
5 coastal States and geographic areas.”.

6 (3) NATIONAL GRANTS FOR OCEANS, COASTS,
7 AND GREAT LAKES.—Subsection (c)(2) of such sec-
8 tion is amended—

9 (A) in subparagraph (B)—

10 (i) in clause (ii), by striking “; and”
11 and inserting a semicolon;

12 (ii) by redesignating clause (iii) as
13 clause (iv); and

14 (iii) by inserting after clause (ii) the
15 following:

16 “(iii) nongovernmental organizations;
17 and”; and

18 (B) by adding at the end the following:

19 “(C) CAP ON STATE FUNDING.—The
20 amount of a grant awarded under this sub-
21 section shall not count toward the cap on fund-
22 ing to States through grants awarded under
23 subsection (b).”.

1 (e) ANNUAL REPORT.—Section 907 of the National
2 Oceans and Coastal Security Act (16 U.S.C. 7506) is
3 amended—

4 (1) by amending paragraph (3) of subsection
5 (b) to read as follows:

6 “(3) a description of the expenditures made
7 from the Fund for the fiscal year, including the pur-
8 pose of the expenditures; and”; and

9 (2) by adding at the end the following:

10 “(4) an estimate of blue carbon benefits, in
11 tons of carbon dioxide, expected through grants
12 awarded to projects that received special consider-
13 ation under section 906 due to their blue carbon po-
14 tential.”.

15 (f) FUNDING.—Section 908 of such Act (16 U.S.C.
16 7507) is amended to read as follows:

17 **“SEC. 908. FUNDING.**

18 “There is authorized to be appropriated
19 \$100,000,000 to carry out this title for fiscal year 2020
20 and each fiscal year thereafter.”.

21 **SEC. 1005. SHOVEL-READY RESTORATION GRANTS FOR**
22 **COASTLINES AND FISHERIES.**

23 (a) ESTABLISHMENT.—The Secretary shall establish
24 a grant program to provide funding and technical assist-

1 ance to eligible entities for purposes of carrying out a
2 project described in subsection (d).

3 (b) PROJECT PROPOSAL.—To be considered for a
4 grant under this section, an eligible entity shall submit
5 a grant proposal to the Secretary in a time, place, and
6 manner determined by the Secretary. Such proposal shall
7 include monitoring, data collection, and measurable per-
8 formance criteria with respect to the project.

9 (c) DEVELOPMENT OF CRITERIA.—The Secretary
10 shall select eligible entities to receive grants under this
11 section based on criteria developed by the Secretary, in
12 consultation with relevant offices of the National Oceanic
13 and Atmospheric Administration, such as the Office of
14 Habitat Conservation and the Office for Coastal Manage-
15 ment.

16 (d) ELIGIBLE PROJECTS.—A project is described by
17 this section if—

18 (1) the purpose of the project is to restore a
19 marine, estuarine, coastal, or Great Lake habitat,
20 including—

21 (A) restoration of habitat to protect or re-
22 cover a species that is threatened, endangered,
23 or a species of concern under the Endangered
24 Species Act of 1973 (16 U.S.C. 1531 et seq.);

1 (B) through the removal or remediation of
2 marine debris, including derelict vessels and
3 fishing gear, in coastal and marine habitats; or

4 (C) for the benefit of—

5 (i) shellfish;

6 (ii) fish, including diadromous fish; or

7 (iii) coral reef; or

8 (2) provides adaptation to climate change, in-
9 cluding by constructing or protecting ecological fea-
10 tures or nature-based infrastructure that protects
11 coastal communities from sea level rise, coastal
12 storms, or flooding, and blue carbon projects.

13 (e) PRIORITY.—In determining which projects to
14 fund under this section, the Secretary shall give priority
15 to a proposed project—

16 (1) that would stimulate the economy;

17 (2) for which the applicant can demonstrate
18 that the grant will fund work that will begin not
19 more than 90 days after the date of the award;

20 (3) for which the applicant can demonstrate
21 that the grant will fund work that will employ fish-
22 ermen who have been negatively impacted by the
23 COVID–19 pandemic or pay a fisherman for the use
24 of a fishing vessel;

1 (4) for which the applicant can demonstrate
2 that any preliminary study or permit required before
3 the project can begin has been completed or can be
4 completed shortly after an award is made; or

5 (5) that includes communities that may not
6 have adequate resources including low income com-
7 munities, communities of color, Tribal communities,
8 Indigenous communities, and rural communities.

9 (f) AUTHORIZATION OF APPROPRIATIONS.—There is
10 authorized to be appropriated to the Secretary of Com-
11 merce \$3,000,000,000 for fiscal year 2020 to carry out
12 this section, to remain available until expended.

13 (g) DEFINITIONS.—

14 (1) ELIGIBLE ENTITY.—In this Act, “eligible
15 entity” means a nonprofit, a for-profit business, an
16 institution of higher education, or a State, local,
17 Tribal, or Territorial government.

18 (2) FISHERMEN.—The term “fishermen”
19 means commercial or for-hire fishermen or oyster
20 farmers.

21 (3) SECRETARY.—In this section, the term
22 “Secretary” means the Secretary of Commerce, act-
23 ing through the Administrator of the National Oce-
24 anic and Atmospheric Administration.

1 **SEC. 1006. STRATEGIC CLIMATE CHANGE RELOCATION INI-**
2 **TIATIVE AND PROGRAM.**

3 (a) ESTABLISHMENT OF INITIATIVE.—The Chairman
4 of the Council on Environmental Quality (in this section
5 referred to as the “Chair”) of the Council on Environ-
6 mental Quality shall establish a Strategic Climate Change
7 Relocation Initiative (in this section referred to as the
8 “Initiative”) for the purposes of coordinating Federal
9 agency activities to identify and assist communities that
10 have expressed affirmative interest in relocation due to
11 health, safety, and environmental impacts from climate
12 change, including hurricanes, flooding, sea level rise, and
13 repeat wildfires.

14 (b) DIRECTOR.—The Chair shall appoint a Strategic
15 Climate Relocation Director to manage the Initiative.

16 (c) CONSULTATION.—The Chair shall coordinate and
17 consult with Federal agencies conducting activities related
18 to this section including the National Oceanic and Atmos-
19 pheric Administration, the Department of the Interior, in-
20 cluding the Bureau of Indian Affairs, the Environmental
21 Protection Agency, the Federal Emergency Management
22 Agency, the Department of Housing and Urban Develop-
23 ment, the Denali Commission, the Corps of Engineers, the
24 Office of Management and Budget, the National Economic
25 Council, the National Security Council, the White House
26 Council on Native American Affairs Interagency Subgroup

1 on Tribal Resilience, and other Federal agencies as appro-
2 priate.

3 (d) EXTERNAL ADVISORY PANEL.—The Chair shall
4 establish an external advisory panel that may include com-
5 munity leaders, non-governmental organizations, State
6 and local government representatives, Tribal leaders, In-
7 digenous community representatives, climate adaptation
8 professionals, and other relevant experts as appropriate.

9 (e) REPORT TO CONGRESS.—Not later than 2 years
10 after the date of enactment of this Act, the Chair shall
11 submit a report to Congress recommending key elements
12 of a Strategic Climate Change Relocation Program to
13 identify and assist communities that have expressed af-
14 firmative interest in relocation due to health, safety, and
15 environmental impacts from climate change. The report
16 shall—

17 (1) identify—

18 (A) areas where climate change impacts
19 make relocation a likely climate change adapta-
20 tion strategy;

21 (B) communities that have expressed af-
22 firmative interest in relocation (in this section
23 referred to as “sending communities”); and

24 (C) potential relocation areas and commu-
25 nities that have expressed interest in attracting

1 climate migrants (in this section referred to as
2 “receiving communities”);

3 (2) propose criteria to qualify for climate relo-
4 cation assistance, with preference given to disadvan-
5 taged communities where community members have
6 indicated a preference for retreat which would other-
7 wise be challenged to relocate;

8 (3) describe the roles and responsibilities of
9 specific Federal agencies in implementing the Stra-
10 tegic Climate Change Relocation Program and how
11 the Program should be coordinated with applicable
12 State and Federal agency plans and programs and
13 identify Federal programs that can be tailored to
14 incentivize self-identification of communities as re-
15 ceiving areas;

16 (4) outline the role that State and local govern-
17 ments should play in implementing the Strategic Cli-
18 mate Change Relocation Program, including identi-
19 fication of areas or communities where people leav-
20 ing areas vulnerable to climate change can consider
21 locating, and the specific resources needed to pre-
22 pare those communities to be receiving communities
23 in terms of Federal investment in infrastructure, af-
24 fordable housing, and social services;

1 (5) summarize existing Federal and State pro-
2 grams for purchase of individual properties vulner-
3 able to the impacts of climate change and propose
4 how these programs might be restructured, im-
5 proved, or expanded to incentivize climate change re-
6 location;

7 (6) describe measures that governments or
8 other organizations can take to reduce the psycho-
9 logical stress associated with relocation to preserve
10 or support the historical and cultural identity of
11 communities being relocated and to restore and con-
12 serve areas that are relocated from as publicly acces-
13 sible natural assets, and how Federal programs will
14 support these efforts;

15 (7) identify and recommend measures to over-
16 come how institutional barriers, such as Federal pro-
17 grams that do not account for Tribal sovereignty,
18 constrain Tribal communities' ability to pursue self-
19 determined management of their resources and built
20 environment;

21 (8) identify measures that Congress, Federal
22 agencies, or State and local governments should take
23 to discourage or restrict new development and hard
24 structural measures in areas vulnerable to such sig-
25 nificant climate change impacts that they are likely

1 to require a solution that includes relocation, in par-
2 ticular, where the Federal Government could estab-
3 lish stricter funding requirements for post-disaster
4 funding that require updated building codes and
5 land use strategies reflecting climate risk;

6 (9) describe existing policies and clarify respon-
7 sibilities of governments in complying with obliga-
8 tions to protect private property, including providing
9 just compensation for any taking of private prop-
10 erty;

11 (10) propose an application process, available
12 online, for States and communities to express af-
13 firmative interest in climate relocation assistance, ei-
14 ther as a leaving community or receiving community;

15 (11) provide guidance on and identify additional
16 funding for operations and maintenance require-
17 ments for vacated land, and identify the resources
18 needed to prioritize public access, recreational
19 spaces, or conservation areas;

20 (12) review efficacy of existing flood mitigation
21 strategies on reducing flood risk to human popu-
22 lations, and identify opportunities to coordinate
23 blue-green infrastructure solutions with buyout pro-
24 grams that increase the resilience of remaining resi-
25 dents; and

1 (13) outline the amount and timing of Federal
2 funding that is expected to be needed to implement
3 the Climate Change Relocation Program.

4 (f) DEVELOPMENT OF REPORT TO CONGRESS.—In
5 developing the report required under subsection (e), the
6 Chair shall—

7 (1) provide for public review and comment of a
8 draft of the report;

9 (2) consult with organizations representing
10 State and local governments;

11 (3) consult with the external advisory panel;
12 and

13 (4) evaluate projects implemented under the
14 National Disaster Resilience Competition adminis-
15 tered by the Department of Housing and Urban De-
16 velopment.

17 (g) CLIMATE CHANGE STRATEGIC RELOCATION PRO-
18 GRAM PILOT PROJECTS.—Within 2 years after the date
19 of the submission of the report under subsection (e), the
20 Chair shall establish and carry out pilot projects based
21 upon the recommendations included in such report.

22 (h) SUBSEQUENT PERIODIC REPORTS TO CON-
23 GRESS.—Within three years after the date of the submis-
24 sion of the report under subsection (e), and every three
25 years thereafter, the Chair shall submit to Congress a re-

1 port evaluating progress in the implementation of the Cli-
2 mate Change Relocation Program and making rec-
3 ommendations for needed changes to the Program.

4 **TITLE XI—OCEAN HEALTH:**
5 **OCEAN ACIDIFICATION AND**
6 **HARMFUL ALGAL BLOOMS**
7 **Subtitle A—Coastal Communities**
8 **Ocean Acidification Act**

9 **SEC. 1101. STATE AND UNITED STATES DEFINED.**

10 Section 12403 of the Federal Ocean Acidification Re-
11 search And Monitoring Act of 2009 (33 U.S.C. 3702) is
12 amended—

13 (1) by redesignating paragraph (3) as para-
14 graph (4);

15 (2) by inserting after paragraph (2) the fol-
16 lowing:

17 “(3) STATE.—The term ‘State’ means each
18 State of the United States, the District of Columbia,
19 the Commonwealth of Puerto Rico, American
20 Samoa, Guam, the Commonwealth of the Northern
21 Mariana Islands, the Virgin Islands of the United
22 States, and any other territory or possession of the
23 United States.”; and

24 (3) by adding at the end the following:

1 “(5) UNITED STATES.—The term ‘United
2 States’ means the States, collectively.”.

3 **SEC. 1102. COASTAL COMMUNITY VULNERABILITY ASSESS-**
4 **MENT.**

5 (a) IN GENERAL.—Section 12406 of the Federal
6 Ocean Acidification Research And Monitoring Act of 2009
7 (33 U.S.C. 3705) is amended—

8 (1) in subsection (a), by inserting “(referred to
9 in this section as the ‘Program’)” after “acidifica-
10 tion program”;

11 (2) by redesignating subsection (b) as sub-
12 section (d); and

13 (3) by inserting after subsection (a) the fol-
14 lowing:

15 “(b) COMMUNITY VULNERABILITY ASSESSMENT.—

16 “(1) IN GENERAL.—Not later than 180 days
17 after the date of enactment of the Ocean-Based Cli-
18 mate Solutions Act of 2020 and every 7 years subse-
19 quent, the Secretary, through the ‘Program’, shall
20 conduct an ocean acidification coastal community
21 vulnerability assessment, and issue a corresponding
22 public report.

23 “(2) REQUIREMENTS.—The assessment con-
24 ducted under paragraph (1) shall—

1 “(A) identify the United States coastal
2 communities, including island communities, low-
3 population rural communities, and subsistence
4 communities, that are most dependent on coast-
5 al and ocean resources that may be impacted by
6 ocean acidification;

7 “(B) assess the nature of the social and
8 economic vulnerabilities of those communities,
9 including the economic effect on local or re-
10 gional commercial fisheries and recreational op-
11 portunities and over what timescales such ef-
12 fects will be felt;

13 “(C) identify the ocean acidification im-
14 pacts that might harm those communities, both
15 in isolation and in conjunction with other
16 changing ocean conditions, including effects
17 from changes in ocean and coastal marine re-
18 sources that are not managed by the Federal
19 Government;

20 “(D) identify key knowledge gaps where
21 research could be devoted to better understand
22 the possible impacts of ocean acidification on
23 those communities, the risks and threats facing
24 those communities, and possible adaptation
25 strategies for those communities; and

1 “(E) be conducted in collaboration with ex-
2 perts, traditional knowledge experts, and indi-
3 viduals who are familiar with the unique eco-
4 nomic, social, ecological, geographic, and re-
5 source concerns of coastal communities in the
6 United States, including representatives from—

7 “(i) the National Marine Fisheries
8 Service and the Office for Coastal Manage-
9 ment of the National Oceanic and Atmos-
10 pheric Administration;

11 “(ii) National Integrated Coastal and
12 Ocean Observation System regional infor-
13 mation coordination entities established
14 under section 12304(c)(4) of the Inte-
15 grated Coastal and Ocean Observation
16 System Act of 2009 (33 U.S.C.
17 3603(c)(4));

18 “(iii) regional ocean acidification net-
19 works; and

20 “(iv) State sea grant programs (as de-
21 fined in section 203 of the National Sea
22 Grant College Program Act (33 U.S.C.
23 1122)).

24 “(c) SUPPORT FOR STATE AND LOCAL VULNER-
25 ABILITY ASSESSMENTS AND STRATEGIC RESEARCH

1 PLANNING.—In carrying out the Program, the Secretary
2 shall collaborate with State, local, and Tribal government
3 entities that are conducting or have completed vulner-
4 ability assessments, strategic research planning, or other
5 similar activities related to ocean acidification and its im-
6 pacts on coastal communities, for the purpose of—

7 “(1) determining whether such activities can be
8 used as a model for other communities; and

9 “(2) identifying opportunities for the National
10 Oceanic and Atmospheric Administration and other
11 relevant Federal agencies to support such activi-
12 ties.”.

13 (b) ONGOING INPUT MECHANISM.—Section
14 12404(b)(5) of the Federal Ocean Acidification Research
15 And Monitoring Act of 2009 (33 U.S.C. 3703(b)(5)) is
16 amended—

17 (1) by striking “including information” and in-
18 serting the following: “including—

19 “(A) information”;

20 (2) by striking the period at the end and insert-
21 ing “; and”; and

22 (3) by adding at the end the following:

23 “(B) an ongoing mechanism that allows af-
24 fected industry members, coastal stakeholders,
25 non-Federal resource managers, community

1 acidification networks, Indigenous knowledge
2 groups, and scientific experts not employed by
3 the Federal Government to provide input on re-
4 search, data, and monitoring that is necessary
5 to support on-the-ground management, deci-
6 sion-making, and adaptation related to ocean
7 acidification and the effects of such acidifica-
8 tion.”.

9 (c) STRATEGIC RESEARCH PLAN.—Section 12405 of
10 the Federal Ocean Acidification Research And Monitoring
11 Act of 2009 (33 U.S.C. 3704) is amended—

12 (1) in subsection (b)—

13 (A) in paragraph (8), by striking “and” at
14 the end;

15 (B) in paragraph (9), by striking the pe-
16 riod at the end and inserting “; and”; and

17 (C) by adding at the end the following:

18 “(10) make recommendations to conduct re-
19 search in areas, including the social sciences and ec-
20 onomics, to address the key knowledge gaps identi-
21 fied in the community vulnerability assessment re-
22 port conducted under section 12406(b).”; and

23 (2) in subsection (e), by inserting “, Tribal gov-
24 ernments, Indigenous and traditional knowledge ex-
25 perts,” after “industry”.

1 (d) AUTHORIZATION OF APPROPRIATIONS.—Section
2 12409(a) of the Federal Ocean Acidification Research
3 And Monitoring Act of 2009 (33 U.S.C. 3708(a)) is
4 amended to read as follows:

5 “(a) NATIONAL OCEANIC AND ATMOSPHERIC ADMIN-
6 ISTRATION.—There are authorized to be appropriated to
7 the National Oceanic and Atmospheric Administration to
8 carry out the purposes of this subtitle \$2,700,000 for each
9 of fiscal years 2021 through 2025.”.

10 (e) REPORT ON SUPPORT FOR STATE AND LOCAL
11 VULNERABILITY ASSESSMENTS AND STRATEGIC RE-
12 SEARCH PLANNING.—Not later than 180 days after the
13 date of the enactment of this Act, the Administrator shall
14 submit to Congress a report detailing the efforts of the
15 National Oceanic and Atmospheric Administration to sup-
16 port State, local, and Tribal community vulnerability as-
17 sessments, strategic research and planning, and moni-
18 toring needs, pursuant to section 12406(c) of the Federal
19 Ocean Acidification Research And Monitoring Act of 2009
20 (as added by subsection (a)).

21 **Subtitle B—Ocean Acidification Act**

22 **SEC. 1111. PRIZE COMPETITIONS.**

23 Section 12404 of the Federal Ocean Acidification Re-
24 search And Monitoring Act of 2009 (33 U.S.C. 3703) is
25 amended by adding at the end the following:

1 “(d) PRIZE COMPETITIONS.—

2 “(1) IN GENERAL.—Any Federal agency with a
3 representative serving on the interagency working
4 group established under this section may, either in-
5 dividualy or in cooperation with 1 or more agencies,
6 carry out a program to award prizes competitively
7 under section 24 of the Stevenson-Wydler Tech-
8 nology Innovation Act of 1980 (15 U.S.C. 3719). An
9 agency seeking to carry out such a program shall
10 carry out such program in coordination with the
11 chair of such interagency working group.

12 “(2) PURPOSES.—Any prize competition carried
13 out under this subsection shall be for the purpose of
14 stimulating innovation to advance our Nation’s abil-
15 ity to understand, research, or monitor ocean acidifi-
16 cation or its impacts, or to develop management or
17 adaptation options for responding to ocean acidifica-
18 tion.

19 “(3) PRIORITY PROGRAMS.—Priority shall be
20 given to establishing programs under this section
21 that address communities, environments, or indus-
22 tries that are in distress due to the impacts of ocean
23 acidification, including—

24 “(A) the development of monitoring or
25 management options for communities or indus-

1 tries that are experiencing significant financial
2 hardship;

3 “(B) the development of adaptation op-
4 tions to alleviate economic harm and job loss
5 caused by ocean acidification;

6 “(C) the development of measures to help
7 vulnerable communities or industries, with an
8 emphasis on rural communities and businesses;
9 and

10 “(D) the development of adaptation and
11 management options for impacted shellfish in-
12 dustries.”.

13 **Subtitle C—COAST Research Act**

14 **SEC. 1121. PURPOSES.**

15 (a) IN GENERAL.—Section 12402(a) of the Federal
16 Ocean Acidification Research and Monitoring Act of 2009
17 (33 U.S.C. 3701(a)) is amended—

18 (1) in paragraph (1)—

19 (A) in the matter preceding subparagraph
20 (A), by striking “development and coordina-
21 tion” and inserting “coordination and imple-
22 mentation”;

23 (B) in subparagraph (A), by striking
24 “acidification on marine organisms” and insert-

1 ing “acidification and coastal acidification on
2 marine organisms”; and

3 (C) in subparagraph (B), by striking “es-
4 tablish” and all that follows through the semi-
5 colon and inserting “maintain and advise an
6 interagency research, monitoring, and public
7 outreach program on ocean acidification and
8 coastal acidification;”;

9 (2) in paragraph (2), by striking “establish-
10 ment” and inserting “maintenance”;

11 (3) in paragraph (3), by inserting “and coastal
12 acidification” after “ocean acidification”; and

13 (4) in paragraph (4), by inserting “and coastal
14 acidification that take into account other environ-
15 mental and anthropogenic stressors” after “ocean
16 acidification”.

17 (b) TECHNICAL AND CONFORMING AMENDMENT.—
18 Section 12402 of the Federal Ocean Acidification Re-
19 search and Monitoring Act of 2009 (33 U.S.C. 3701(a))
20 is amended by striking “(a) PURPOSES.—”.

21 **SEC. 1122. DEFINITIONS.**

22 Section 12403 of the Federal Ocean Acidification Re-
23 search and Monitoring Act of 2009 (33 U.S.C. 3702) is
24 amended—

1 (1) in paragraph (1), by striking “of the
2 Earth’s oceans” and all that follows before the pe-
3 riod at the end and inserting “and changes in the
4 water chemistry of the Earth’s oceans, coastal estu-
5 aries, and waterways caused by carbon dioxide from
6 the atmosphere and the breakdown of organic mat-
7 ter”;

8 (2) in paragraph (3), by striking “Joint Sub-
9 committee on Ocean Science and Technology of the
10 National Science and Technology Council” and in-
11 serting “National Science and Technology Council
12 Subcommittee on Ocean Science and Technology”;

13 (3) by redesignating paragraphs (1), (2), and
14 (3) as paragraphs (2), (3), and (4), respectively;

15 (4) by inserting before paragraph (2), as so re-
16 designated, the following new paragraph:

17 “(1) COASTAL ACIDIFICATION.—The term
18 ‘coastal acidification’ means the combined decrease
19 in pH and changes in the water chemistry of coastal
20 oceans, estuaries, and other bodies of water from
21 chemical inputs (including carbon dioxide from the
22 atmosphere), freshwater inputs, and excess nutrient
23 run-off from land and coastal atmospheric pollution
24 that result in processes that release carbon dioxide,

1 acidic nitrogen, and sulfur compounds as byproducts
2 which end up in coastal waters.”; and

3 (5) by adding at the end the following new
4 paragraph:

5 “(5) STATE.—The term ‘State’ means each
6 State of the United States, the District of Columbia,
7 the Commonwealth of Puerto Rico, American
8 Samoa, Guam, the Commonwealth of the Northern
9 Mariana Islands, the Virgin Islands of the United
10 States, and any other territory or possession of the
11 United States.”.

12 **SEC. 1123. INTERAGENCY WORKING GROUP.**

13 Section 12404 of the Federal Ocean Acidification Re-
14 search and Monitoring Act of 2009 (33 U.S.C. 3703) is
15 amended—

16 (1) in the heading, by striking “**SUB-**
17 **COMMITTEE**” and inserting “**WORKING GROUP**”;

18 (2) in subsection (a)—

19 (A) in paragraph (1), by striking “Joint
20 Subcommittee on Ocean Science and Tech-
21 nology of the National Science and Technology
22 Council shall coordinate Federal activities on
23 ocean acidification and” and insert “Sub-
24 committee shall”;

1 (B) in paragraph (2), by striking “Wildlife
2 Service,” and inserting “Wildlife Service, the
3 Bureau of Ocean Energy Management, the En-
4 vironmental Protection Agency, the Department
5 of Agriculture, the Department of State, the
6 Department of Energy, the Department of the
7 Navy, the National Park Service, the Bureau of
8 Indian Affairs, the National Institute of Stand-
9 ards and Technology, the Smithsonian Institu-
10 tion,”; and

11 (C) in paragraph (3), in the heading, by
12 striking “CHAIRMAN” and inserting “CHAIR”;
13 (3) in subsection (b)—

14 (A) in paragraph (1), by inserting “, in-
15 cluding the efforts of the National Oceanic and
16 Atmospheric Administration to facilitate such
17 implementation” after “of the plan”;

18 (B) in paragraph (2)—

19 (i) in subparagraph (A), by inserting
20 “and coastal acidification” after “ocean
21 acidification”; and

22 (ii) in subparagraph (B), by inserting
23 “and coastal acidification” after “ocean
24 acidification”;

1 (C) in paragraph (4), by striking “; and”
2 and inserting a semicolon;

3 (D) in paragraph (5)—

4 (i) by striking “developed” and insert-
5 ing “and coastal acidification developed”;
6 and

7 (ii) by striking the period at the end
8 and inserting “and coastal acidification;
9 and”; and

10 (E) by adding at the end the following new
11 paragraph:

12 “(6) ensure that each of the Federal agencies
13 represented on the interagency working group—

14 “(A) participates in the Ocean Acidifica-
15 tion Information Exchange established under
16 paragraph (5); and

17 “(B) delivers data and information to sup-
18 port the data archive system established under
19 section 12406(d).”;

20 (4) in subsection (c), in paragraph (2)—

21 (A) by inserting “, and to the Office of
22 Management and Budget,” after “House of
23 Representatives”; and

1 (B) in subparagraph (B), by striking “the
2 interagency research” and inserting “inter-
3 agency strategic research”;

4 (5) by redesignating subsection (c) as sub-
5 section (d); and

6 (6) by inserting after subsection (b) the fol-
7 lowing:

8 “(c) ADVISORY BOARD.—

9 “(1) ESTABLISHMENT.—The Chair of the Sub-
10 committee shall establish an Ocean Acidification Ad-
11 visory Board.

12 “(2) DUTIES.—The Advisory Board shall—

13 “(A) not later than 180 days before the
14 Subcommittee submits the most recent report
15 under subsection (d)(2)—

16 “(i) review such report;

17 “(ii) submit an analysis of such report
18 to the Subcommittee for consideration in
19 the final report submitted under subsection
20 (d)(2); and

21 “(iii) concurrently with the Sub-
22 committee’s final submission of the report
23 under subsection (d)(2), the Advisory
24 Board shall submit a copy of the analysis
25 provided to the Subcommittee to the Com-

1 mittee on Commerce, Science, and Trans-
2 portation of the Senate, the Committee on
3 Science, Space, and Technology of the
4 House of Representatives, and the Com-
5 mittee on Natural Resources of the House
6 of Representatives;

7 “(B) not later than 180 days before the
8 Subcommittee submits the most recent strategic
9 research plan under subsection (d)(3) to Con-
10 gress—

11 “(i) review such plan;

12 “(ii) submit an analysis of such plan
13 and the implementation thereof to the Sub-
14 committee for consideration in the final
15 strategic research plan submitted under
16 subsection (d)(3); and

17 “(iii) concurrently with the Sub-
18 committee’s final submission of the stra-
19 tegic research plan under subsection
20 (d)(3), the Advisory Board shall submit a
21 copy of the analysis provided to the Sub-
22 committee to the Committee on Commerce,
23 Science, and Transportation of the Senate,
24 the Committee on Science, Space, and
25 Technology of the House of Representa-

1 tives, and the Committee on Natural Re-
2 sources of the House of Representatives;

3 “(C) provide ongoing advice to the Sub-
4 committee and the interagency working group
5 on matters related to Federal activities on
6 ocean acidification and coastal acidification;

7 “(D) advise the Subcommittee and the
8 interagency working group on—

9 “(i) efforts to coordinate research and
10 monitoring activities related to ocean acidi-
11 fication and coastal acidification; and

12 “(ii) the best practices for the stand-
13 ards developed for data archiving under
14 section 12406(e);

15 “(E) publish in the Federal Register a
16 charter;

17 “(F) provide the Library of Congress
18 with—

19 “(i) the charter described in subpara-
20 graph (E);

21 “(ii) any schedules and minutes for
22 meetings of the Advisory Board;

23 “(iii) any documents that are ap-
24 proved by the Advisory Board; and

1 “(iv) any reports and analysis pre-
2 pared by the Advisory Board; and

3 “(G) establish a publicly accessible web
4 page on the website of the National Oceanic
5 and Atmospheric Administration, that contains
6 the information described in clauses (i) through
7 (iv) of subparagraph (F).

8 “(3) MEMBERSHIP.—The Advisory Board shall
9 consist of 24 members as follows:

10 “(A) 2 representatives of the shellfish and
11 crab industry.

12 “(B) 1 representative of the finfish indus-
13 try.

14 “(C) 1 representative of seafood proc-
15 essors.

16 “(D) 3 representatives from academia, in-
17 cluding both natural and social sciences.

18 “(E) 1 representative of recreational fish-
19 ing.

20 “(F) 1 representative of relevant non-
21 governmental organizations.

22 “(G) 6 representatives from relevant State,
23 local, and Tribal governments.

24 “(H) 1 representative from the Alaska
25 Ocean Acidification Network.

1 “(I) 1 representative from the California
2 Current Acidification Network.

3 “(J) 1 representative from the Northeast
4 Coastal Acidification Network.

5 “(K) 1 representative from the Southeast
6 Coastal Acidification Network.

7 “(L) 1 representative from the Gulf of
8 Mexico Coastal Acidification Network.

9 “(M) 1 representative from the Mid-Atlan-
10 tic Coastal Acidification Network.

11 “(N) 1 representative from the Pacific Is-
12 lands Ocean Observing System or similar entity
13 representing the island Territories and posses-
14 sions of the United States in the Pacific Ocean,
15 and the State of Hawaii.

16 “(O) 1 representative from the Caribbean
17 Regional Association for Coastal Ocean Observ-
18 ing or a similar entity representing Puerto Rico
19 and the United States Virgin Islands.

20 “(P) 1 representative from the National
21 Oceanic and Atmospheric Administration shall
22 serve as an ex-officio member of the Advisory
23 Board without a vote.

24 “(4) APPOINTMENT OF MEMBERS.—The Chair
25 of the Subcommittee shall—

1 “(A) appoint members to the Advisory
2 Board (taking into account the geographical in-
3 terests of each individual to be appointed as a
4 member of the Advisory Board to ensure that
5 an appropriate balance of geographical interests
6 are represented by the members of the Advisory
7 Board) who—

8 “(i) represent the interest group for
9 which each seat is designated;

10 “(ii) demonstrate expertise on ocean
11 acidification or coastal acidification and its
12 scientific, economic, industry, cultural, and
13 community impacts; and

14 “(iii) have a record of distinguished
15 service with respect to ocean acidification
16 or coastal acidification, and such impacts;

17 “(B) give consideration to nominations and
18 recommendations from the members of the
19 interagency working group and the public for
20 such appointments; and

21 “(C) ensure that an appropriate balance of
22 scientific, industry, and geographical interests
23 are represented by the members of the Advisory
24 Board.

1 “(5) TERM OF MEMBERSHIP.—Each member of
2 the Advisory Board—

3 “(A) shall be appointed for a 5-year term;
4 and

5 “(B) may be appointed to more than 1
6 term.

7 “(6) CHAIR.—The Chair of the Subcommittee
8 shall appoint 1 member of the Advisory Board to
9 serve as the Chair of the Advisory Board.

10 “(7) MEETINGS.—Not less than once each cal-
11 endar year, the Advisory Board shall meet at such
12 times and places as may be designated by the Chair
13 of the Advisory Board, in consultation with the
14 Chair of the Subcommittee and the Chair of the
15 interagency working group.

16 “(8) BRIEFING.—The Chair of the Advisory
17 Board shall brief the Subcommittee and the inter-
18 agency working group on the progress of the Advi-
19 sory Board as necessary.

20 “(9) FEDERAL ADVISORY COMMITTEE ACT.—
21 Section 14 of the Federal Advisory Committee Act
22 shall not apply to the Advisory Board.”.

1 **SEC. 1124. STRATEGIC RESEARCH PLAN.**

2 Section 12405 of the Federal Ocean Acidification Re-
3 search and Monitoring Act of 2009 (33 U.S.C. 3704) is
4 amended—

5 (1) in subsection (a)—

6 (A) by striking “acidification” each place it
7 appears and inserting “acidification and coastal
8 acidification”;

9 (B) in the first sentence—

10 (i) by inserting “, and not later than
11 every 5 years thereafter” after “the date of
12 enactment of this Act”;

13 (ii) by inserting “address the socio-
14 economic impacts of ocean acidification
15 and coastal acidification and to” after
16 “mitigation strategies to”; and

17 (iii) by striking “marine ecosystems”
18 each place it appears and inserting “eco-
19 systems”; and

20 (C) in the second sentence, by inserting
21 “and recommendations made by the Advisory
22 Board in the review of the plan required under
23 section 12404(c)(2)(B)(i)” after “subsection
24 (d)”;

25 (2) in subsection (b)—

1 (A) in paragraph (1), by inserting “and so-
2 cial sciences” after “among the ocean sciences”;

3 (B) in paragraph (2)—

4 (i) in subparagraph (A), by striking
5 “impacts” and inserting “impacts, includ-
6 ing trends of changes in ocean chemistry,”;

7 (ii) in subparagraph (B)—

8 (I) by striking “improve the abil-
9 ity to assess the” and inserting “as-
10 sess the short-term and long-term”;
11 and

12 (II) by striking “; and” at the
13 end and inserting a semicolon;

14 (iii) by amending subparagraph (C) to
15 read as follows:

16 “(C) provide information for the—

17 “(i) development of adaptation and
18 mitigation strategies to address the socio-
19 economic impacts of ocean acidification
20 and coastal acidification;

21 “(ii) conservation of marine organisms
22 and ecosystems;

23 “(iii) assessment of the effectiveness
24 of such adaptation and mitigation strate-
25 gies; and”; and

1 (iv) by adding at the end the following
2 new subparagraph:

3 “(D) improve research on—

4 “(i) ocean acidification and coastal
5 acidification;

6 “(ii) the interactions between and ef-
7 fects of multiple combined stressors includ-
8 ing changes in water chemistry, changes in
9 sediment delivery, hypoxia, and harmful
10 algal blooms, on ocean acidification and
11 coastal acidification; and

12 “(iii) the effect of environmental
13 stressors on marine resources and eco-
14 systems;”;

15 (C) in paragraph (3)—

16 (i) in subparagraph (F), by striking
17 “database development” and inserting
18 “data management”;

19 (ii) in subparagraph (H) by striking
20 “and” at the end; and

21 (iii) by adding at the end the fol-
22 lowing new subparagraphs:

23 “(J) assessment of adaptation and mitiga-
24 tion strategies; and

25 “(K) education and outreach activities;”;

1 (D) in paragraph (4), by striking “set
2 forth” and inserting “ensure an appropriate
3 balance of contribution in establishing”;

4 (E) in paragraph (5), by striking “reports”
5 and inserting “the best available peer-reviewed
6 scientific reports”;

7 (F) in paragraph (6)—

8 (i) by inserting “and coastal acidifica-
9 tion” after “ocean acidification”; and

10 (ii) by striking “of the United States”
11 and inserting “within the United States”;

12 (G) in paragraph (7), by striking “outline
13 budget requirements” and inserting “estimate
14 costs associated for full implementation of each
15 element of the plan by fiscal year”;

16 (H) in paragraph (8)—

17 (i) by inserting “and coastal acidifica-
18 tion” after “ocean acidification” each place
19 it appears;

20 (ii) by striking “its” and inserting
21 “their”; and

22 (iii) by striking “; and” at the end
23 and inserting a semicolon;

24 (I) in paragraph (9), by striking the period
25 at the end and inserting “; and”; and

1 (J) by adding at the end the following new
2 paragraph:

3 “(10) describe monitoring needs necessary to
4 support potentially affected industry members,
5 coastal stakeholders, fishery management councils
6 and commissions, non-Federal resource managers,
7 and scientific experts on decision-making and adap-
8 tation related to ocean acidification and coastal
9 acidification.”;

10 (3) in subsection (c)—

11 (A) in paragraph (1)(C), by striking “sur-
12 face”;

13 (B) in paragraph (2), by inserting “and
14 coastal acidification” after “ocean acidification”
15 each place it appears;

16 (C) in paragraph (3)—

17 (i) by striking “input, and” and in-
18 serting “inputs,”;

19 (ii) by inserting “, marine food webs,”
20 after “marine ecosystems”; and

21 (iii) by inserting “, and modeling that
22 supports fisheries management” after
23 “marine organisms”;

1 (D) in paragraph (5), by inserting “and
2 coastal acidification” after “ocean acidifica-
3 tion”; and

4 (E) by adding at the end the following new
5 paragraph:

6 “(6) Research to understand related and cumu-
7 lative stressors and other biogeochemical processes
8 occurring in conjunction with ocean acidification and
9 coastal acidification.”; and

10 (4) by striking subsection (e) and inserting the
11 following:

12 “(e) ADVISORY BOARD EVALUATION.—Not later
13 than 180 days before a plan is submitted to Congress, the
14 Subcommittee shall provide the Advisory Board estab-
15 lished under section 12404(c) a copy of the plan for pur-
16 poses of review under paragraph (2)(B)(i) of such section.

17 “(f) PUBLICATION AND PUBLIC COMMENT.—Not
18 later than 90 days before the strategic research plan, or
19 any revision thereof, is submitted to Congress, the Sub-
20 committee shall publish the plan in the Federal Register
21 and provide an opportunity for submission of public com-
22 ments for a period of not less than 60 days.”.

1 **SEC. 1125. NATIONAL OCEANIC AND ATMOSPHERIC ADMIN-**
2 **ISTRATION OCEAN ACIDIFICATION ACTIVI-**
3 **TIES.**

4 Section 12406 of the Federal Ocean Acidification Re-
5 search and Monitoring Act of 2009 (33 U.S.C. 3705) is
6 amended—

7 (1) in subsection (a)—

8 (A) in the matter preceding paragraph (1),
9 by inserting “coordination,” after “research,
10 monitoring,”;

11 (B) in paragraph (1)—

12 (i) in subparagraph (B)—

13 (I) by inserting “including the
14 Integrated Ocean Observing System
15 and the ocean observing assets of
16 other Federal and State agencies,”
17 after “ocean observing assets,”; and

18 (II) by inserting “and agency
19 and department missions, prioritizing
20 the location of monitoring instru-
21 ments, assets, and projects to maxi-
22 mize the efficiency of resources and to
23 optimize understanding of socio-
24 economic impacts and ecosystem
25 health” after “research program”;

26 (ii) in subparagraph (C)—

1 (I) by striking “adaptation” and
2 inserting “adaptation and mitigation”;
3 and

4 (II) by inserting “and supporting
5 socioeconomically vulnerable commu-
6 nities and industries” after “marine
7 ecosystems”;

8 (iii) in subparagraph (E), by striking
9 “its impacts” and inserting “their respec-
10 tive impacts”;

11 (iv) in subparagraph (F), by striking
12 “monitoring and impacts research” and in-
13 serting “research, monitoring, and adapta-
14 tion and mitigation strategies”; and

15 (v) by adding at the end the following
16 new subparagraph:

17 “(G) research to improve understanding of
18 the effect of—

19 “(i) other environmental stressors on
20 ocean acidification and coastal acidifica-
21 tion;

22 “(ii) multiple environmental stressors
23 on living marine resources and coastal eco-
24 systems; and

1 “(iii) adaptation and mitigation strat-
2 egies to address the socioeconomic impacts
3 of ocean acidification and coastal acidifica-
4 tion.”;

5 (C) in paragraph (2), by striking “critical
6 research projects that explore” and inserting
7 “critical research and education projects that
8 explore and communicate”; and

9 (D) in paragraphs (1) and (2), by striking
10 “acidification” each place it appears and insert-
11 ing “acidification and coastal acidification”;
12 and

13 (2) by adding at the end the following new sub-
14 sections:

15 “(c) RELATIONSHIP TO INTERAGENCY WORKING
16 GROUP.—The National Oceanic and Atmospheric Admin-
17 istration shall serve as the lead Federal agency responsible
18 for coordinating the Federal response to ocean acidifica-
19 tion and coastal acidification, by—

20 “(1) leading the interagency working group in
21 implementing the strategic research plan under sec-
22 tion 12405;

23 “(2) coordinating monitoring and research ef-
24 forts among Federal agencies in cooperation with

1 State, local, and Tribal government and inter-
2 national partners;

3 “(3) maintaining an Ocean Acidification Infor-
4 mation Exchange described under section
5 12404(b)(5) to allow for information to be electroni-
6 cally accessible, including information—

7 “(A) on ocean acidification developed
8 through or used by the ocean acidification pro-
9 gram described under section 12406(a); or

10 “(B) that would be useful to State govern-
11 ments, local governments, Tribal governments,
12 resource managers, policymakers, researchers,
13 and other stakeholders in mitigating or adapt-
14 ing to the impacts of ocean acidification and
15 coastal acidification; and

16 “(4) establishing and maintaining the data ar-
17 chive system under subsection (d).

18 “(d) DATA ARCHIVE SYSTEM.—

19 “(1) MANAGEMENT.—The Secretary, in coordi-
20 nation with members of the interagency working
21 group, shall provide for the long-term stewardship
22 of, and access to, data relating to ocean acidification
23 and coastal acidification by establishing and main-
24 taining a data archive system that the National Cen-
25 ter for Environmental Information uses to process,

1 store, archive, provide access to, and incorporate to
2 the extent possible, such data collected—

3 “(A) through relevant federally-funded re-
4 search; and

5 “(B) by a Federal agency, State agency,
6 local agency, Tribe, academic scientist, volun-
7 teer scientist, or industry organization.

8 “(2) EXISTING GLOBAL OR NATIONAL DATA AS-
9 SETS.—In establishing and maintaining the data ar-
10 chive system under paragraph (1), the Secretary
11 shall ensure that existing global or national data as-
12 sets (including the data assets maintained by the
13 National Centers for Environmental Information,
14 the Integrated Ocean Observing System, and other
15 existing data systems within Federal agencies) are
16 incorporated to the greatest extent possible.

17 “(e) STANDARDS, PROTOCOLS, AND PROCEDURES.—
18 With respect to the data described in subsection (d), the
19 Secretary, in coordination with members of the inter-
20 agency working group, shall establish and revise as nec-
21 essary the standards, protocols, or procedures for—

22 “(1) processing, storing, archiving, and pro-
23 viding access to such data;

24 “(2) the interoperability and intercalibration of
25 such data;

1 “(3) the collection of any metadata underlying
2 such data; and

3 “(4) sharing such data with State, local, and
4 Tribal government programs, potentially affected in-
5 dustry members, coastal stakeholders, fishery man-
6 agement councils and commissions, non-Federal re-
7 source managers, and academia.

8 “(f) DISSEMINATION OF OCEAN ACIDIFICATION
9 DATA AND COASTAL ACIDIFICATION DATA.—The Sec-
10 retary, in coordination with members of the interagency
11 working group, shall disseminate the data described under
12 subsection (d) to the greatest extent practicable by sharing
13 such data on full and open access exchanges, including
14 the Ocean Acidification Information Exchange described
15 in section 12404(b)(5).

16 “(g) REQUIREMENT.—Recipients of grants from the
17 National Oceanic and Atmospheric Administration under
18 this subtitle that collect data described under subsection
19 (d) shall—

20 “(1) collect such data in accordance with the
21 standards, protocols, or procedures established pur-
22 suant to subsection (e); and

23 “(2) submit such data to the data archive sys-
24 tem under subsection (d), in accordance with any
25 rules promulgated by the Secretary.”.

1 **SEC. 1126. NATIONAL SCIENCE FOUNDATION OCEAN ACIDI-**
2 **FICATION ACTIVITIES.**

3 Section 12407 of the Federal Ocean Acidification Re-
4 search and Monitoring Act of 2009 (33 U.S.C. 3706) is
5 amended—

6 (1) by striking “ocean acidification” each place
7 it appears and inserting “ocean acidification and
8 coastal acidification”;

9 (2) in subsection (a)—

10 (A) in the matter preceding paragraph
11 (1)—

12 (i) by striking “continue” and all that
13 follows through “which shall”;

14 (ii) by striking “proposals for re-
15 search” and inserting “proposals for the
16 researching”; and

17 (iii) by striking “its impacts” and in-
18 serting “their respective impacts”;

19 (B) in paragraph (1), by striking “marine
20 ecosystems” and inserting “ecosystems”;

21 (C) in paragraph (2), by striking “; and”
22 at the end and inserting a semicolon;

23 (D) in paragraph (3)—

24 (i) by striking “and its impacts” and
25 inserting “and their respective impacts”;

26 and

1 (ii) by striking the period at the end
2 and inserting “; and”; and

3 (E) by adding at the end the following new
4 paragraph:

5 “(4) adaptation and mitigation strategies to ad-
6 dress socioeconomic effects of ocean acidification and
7 coastal acidification.”; and

8 (3) by adding at the end the following:

9 “(d) REQUIREMENT.—Recipients of grants from the
10 National Science Foundation under this subtitle that col-
11 lect data described under section 12406(d) shall—

12 “(1) collect data in accordance with the stand-
13 ards, protocols, or procedures established pursuant
14 to section 12406(e); and

15 “(2) submit such data to the Director and the
16 Secretary, in accordance with any rules promulgated
17 by the Director or the Secretary.”.

18 **SEC. 1127. NATIONAL AERONAUTICS AND SPACE ADMINIS-**
19 **TRATION OCEAN ACIDIFICATION ACTIVITIES.**

20 Section 12408 of the Federal Ocean Acidification Re-
21 search and Monitoring Act of 2009 (33 U.S.C. 3707) is
22 amended—

23 (1) by striking “ocean acidification” each place
24 it appears and inserting “ocean acidification and
25 coastal acidification”;

1 (2) in subsection (a), by striking “its impacts”
2 and inserting “their respective impacts”; and

3 (3) by adding at the end the following new sub-
4 section:

5 “(d) REQUIREMENT.—Researchers from the National
6 Aeronautics and Space Administration under this subtitle
7 that collect data described under section 12406(d) shall—

8 “(1) collect such data in accordance with the
9 standards, protocols, or procedures established pur-
10 suant to section 12406(e); and

11 “(2) submit such data to the Administrator and
12 the Secretary, in accordance with any rules promul-
13 gated by the Administrator or the Secretary.”.

14 **SEC. 1128. AUTHORIZATION OF APPROPRIATIONS.**

15 Section 12409 of the Federal Ocean Acidification Re-
16 search and Monitoring Act of 2009 (33 U.S.C. 3708) is
17 amended—

18 (1) in subsection (a), by striking “subtitle—”
19 and all that follows through paragraph (4) and in-
20 serting the following: “subtitle \$30.5 million for
21 each of the fiscal years 2021 through 2025.”; and

22 (2) in subsection (b), by striking “subtitle—”
23 and all that follows through paragraph (4) and in-
24 serting the following: “subtitle \$20 million for each
25 of the fiscal years 2021 through 2025.”.

1 **Subtitle D—South Florida Clean**
2 **Coastal Waters**

3 **SEC. 1131. SOUTH FLORIDA HARMFUL ALGAL BLOOMS AND**
4 **HYPOXIA ASSESSMENT AND ACTION PLAN.**

5 (a) IN GENERAL.—The Harmful Algal Bloom and
6 Hypoxia Research and Control Act of 1998 (33 U.S.C.
7 4001 et seq.) is amended—

8 (1) by redesignating sections 605 (33 U.S.C.
9 4005) through 609 (33 U.S.C. 4009) as sections
10 606 through 610, respectively; and

11 (2) by inserting after section 604 (33 U.S.C.
12 4004) the following:

13 **“SEC. 605. SOUTH FLORIDA HARMFUL ALGAL BLOOMS AND**
14 **HYPOXIA.**

15 “(a) SOUTH FLORIDA.—In this section, the term
16 ‘South Florida’ means—

17 “(1) all lands and waters within the administra-
18 tive boundaries of the South Florida Water Manage-
19 ment District;

20 “(2) regional coastal waters, including Biscayne
21 Bay, the Caloosahatchee Estuary, St. Lucie Estuary,
22 Florida Bay, and Indian River Lagoon; and

23 “(3) the Florida Reef Tract.

24 “(b) INTEGRATED ASSESSMENT.—

1 “(1) INTERIM INTEGRATED ASSESSMENT.—Not
2 later than 540 days after the date of enactment of
3 the Ocean-Based Climate Solutions Act of 2020, the
4 Task Force, in accordance with the authority under
5 section 603, shall complete and submit to Congress
6 and the President an interim integrated assessment.

7 “(2) FINAL INTEGRATED ASSESSMENT.—Not
8 later than 3 years after the date of the enactment
9 of the Ocean-Based Climate Solutions Act of 2020,
10 the Task Force shall finalize, and submit to Con-
11 gress and the President, the interim integrated as-
12 sessment required under paragraph (1).

13 “(3) CONTENTS OF THE INTEGRATED ASSESS-
14 MENT.—The integrated assessment required under
15 paragraphs (1) and (2) shall examine the causes,
16 consequences, and potential approaches to reduction
17 of harmful algal blooms and hypoxia in South Flor-
18 ida, and the status of, and gaps within, current
19 harmful algal bloom and hypoxia research, moni-
20 toring, management, prevention, response, and con-
21 trol activities that directly affect the region by—

22 “(A) Federal agencies;

23 “(B) State agencies;

24 “(C) regional research consortia;

25 “(D) academia;

1 “(E) private industry;

2 “(F) nongovernmental organizations; and

3 “(G) Indian Tribes (as defined in section
4 4 of the Indian Self-Determination and Edu-
5 cation Assistance Act (25 U.S.C. 5304)).

6 “(c) ACTION PLAN.—

7 “(1) IN GENERAL.—Not later than 3 years and
8 6 months after the date of the enactment of the
9 Ocean-Based Climate Solutions Act of 2020, the
10 Task Force shall develop and submit to Congress an
11 action plan, based on the integrated assessment
12 under subsection (b), for reducing, mitigating, and
13 controlling harmful algal blooms and hypoxia in
14 South Florida.

15 “(2) CONTENTS.—The action plan submitted
16 under paragraph (1) shall—

17 “(A) address the monitoring needs identi-
18 fied in the integrated assessment under sub-
19 section (b);

20 “(B) include a timeline and budgetary re-
21 quirements for deployment of future assets;

22 “(C) identify requirements for the develop-
23 ment and verification of South Florida harmful
24 algal bloom and hypoxia models, including—

1 “(i) all assumptions built into the
2 models; and

3 “(ii) data quality methods used to en-
4 sure the best available data are utilized;
5 and

6 “(D) include a plan to implement a remote
7 monitoring network and early warning system
8 for alerting local communities in the region to
9 harmful algal bloom risks that may impact
10 human health.

11 “(3) REQUIREMENTS.—In developing the action
12 plan submitted under paragraph (1), the Task Force
13 shall—

14 “(A) consult with the State of Florida, and
15 affected local and Tribal governments;

16 “(B) consult with representatives from re-
17 gional academic, agricultural, industry, and
18 other stakeholder groups;

19 “(C) ensure that such plan complements
20 and does not duplicate activities conducted by
21 other Federal or State agencies, including the
22 South Florida Ecosystem Restoration Task
23 Force;

1 “(D) identify critical research for reducing,
2 mitigating, and controlling harmful algal bloom
3 events and their effects;

4 “(E) evaluate cost-effective, incentive-
5 based partnership approaches;

6 “(F) ensure that such plan is technically
7 sound and cost-effective;

8 “(G) use existing research, assessments,
9 reports, and program activities;

10 “(H) publish a draft summary of the ac-
11 tion plan required by paragraph (1) in the Fed-
12 eral Register not less than 180 days before sub-
13 mitting such plan to Congress; and

14 “(4) The Task Force shall submit, beginning 2
15 years after the date on which the action plan re-
16 quired by paragraph (1) is submitted to Congress,
17 biennial progress reports on steps taken to meet the
18 objectives of such action plan to Congress.”.

19 (b) CLERICAL AMENDMENT AND CORRECTION.—The
20 table of contents in section 2 of the Coast Guard Author-
21 ization Act of 1998 (Public Law 105–383) is amended by
22 striking the items relating to title VI and inserting the
23 following new items:

“TITLE VI—HARMFUL ALGAL BLOOMS AND HYPOXIA

“Sec. 601. Short title.

“Sec. 602. Findings.

“Sec. 603. Assessments.

“Sec. 603A. National Harmful Algal Bloom and Hypoxia Program.
“Sec. 603B. Comprehensive research plan and action strategy.
“Sec. 604. Northern Gulf of Mexico hypoxia.
“Sec. 605. South Florida harmful algal blooms and hypoxia.
“Sec. 606. Great Lakes hypoxia and harmful algal blooms.
“Sec. 607. Protection of States’ Rights.
“Sec. 608. Effect on other Federal authority.
“Sec. 609. Definitions.
“Sec. 610. Authorization of appropriations.”.

1 Subtitle E—Protecting Local Com- 2 munities From Harmful Algal 3 Blooms

4 SEC. 1141. ALGAL BLOOMS.

5 Section 102(2) of the Robert T. Stafford Disaster
6 Relief and Emergency Assistance Act (42 U.S.C. 5122)
7 is amended by striking “or drought” and inserting
8 “drought, or algal blooms”.

9 Subtitle F—Harmful Algal Bloom 10 Essential Forecasting

11 SEC. 1151. DESIGNATING CERTAIN HARMFUL ALGAL 12 BLOOM SERVICES AS EXCEPTED SERVICES 13 UNDER THE ANTI-DEFICIENCY ACT.

14 (a) IN GENERAL.—Section 603A of the Harmful
15 Algal Bloom and Hypoxia Research and Control Act of
16 1998 (33 U.S.C. 4002) is amended by adding at the end
17 the following subsection:

18 “(j) ANTI-DEFICIENCY ACT APPLIED TO HARMFUL
19 ALGAL BLOOM SERVICES.—Any services by an officer or
20 employee under this chapter, including web services and
21 server processing, for the Harmful Algal Bloom forecast

1 system of the National Oceanic and Atmospheric Adminis-
2 tration shall be deemed, for purposes of section 1342 of
3 title 31, United States Code, services for emergencies in-
4 volving the safety of human life or the protection of prop-
5 erty.”.

6 (b) APPLICATION.—The amendment made by sub-
7 section (a) shall apply to any lapse in appropriations be-
8 ginning on or after the date of enactment of this Act.

9 **SEC. 1152. CENTERS OF EXCELLENCE IN HARMFUL ALGAL**
10 **BLOOM RESEARCH, PREVENTION, RESPONSE,**
11 **AND MITIGATION.**

12 (a) ESTABLISHMENT.—Not later than one year after
13 the date of the enactment of this Act, the Secretary of
14 Commerce, acting through the Administrator of the Na-
15 tional Oceanic and Atmospheric Administration, shall des-
16 ignate organizations as National Centers of Excellence in
17 Harmful Algal Bloom Research, Prevention, Response,
18 and Mitigation.

19 (b) PURPOSE.—The purpose of the Centers is—

20 (1) to further understanding of harmful algal
21 blooms;

22 (2) to further understanding of the impacts of
23 harmful algal blooms on public health, including the
24 health of at-risk populations;

1 (3) to further the ability to research, forecast,
2 and monitor harmful algal blooms;

3 (4) to formalize and enhance existing partner-
4 ships and collaborations among institutions of higher
5 education, research entities, local, State, Territorial,
6 and Tribal agencies, and the Federal Government;

7 (5) to further the prevention, control, and miti-
8 gation of harmful algal blooms;

9 (6) to transition harmful algal bloom research
10 and forecasting from observational to operational
11 use; and

12 (7) to address existing and emerging harmful
13 algal bloom issues as the Administrator considers
14 appropriate.

15 (c) ELIGIBILITY FOR DESIGNATIONS.—To be eligible
16 for designation under this section, an organization must—

17 (1) be an institution of higher education, as
18 that term is defined in section 101(a) of the Higher
19 Education Act of 1965 (20 U.S.C. 1001(a)); a
20 State, Territorial, or Tribal research agency; a non-
21 profit laboratory or other research entity; or a con-
22 sortium of such eligible institutions;

23 (2) have demonstrated expertise and success in
24 harmful algal bloom research, monitoring, fore-
25 casting, prevention, or response efforts;

1 (3) have demonstrated ability to collaborate
2 with local, State, Territorial, and Tribal govern-
3 ments and Federal agencies on harmful algal
4 blooms; and

5 (4) be located in an area that is economically
6 and environmentally impacted by harmful algal
7 blooms.

8 (d) REQUIREMENTS FOR DESIGNATIONS.—In desig-
9 nating National Centers of Excellence under this section
10 the Administrator shall—

11 (1) consult with the Inter-Agency Task Force
12 on Harmful Algal Blooms and Hypoxia;

13 (2) ensure regional balance by designating Na-
14 tional Centers in a variety of locations throughout
15 the United States, including the District of Colum-
16 bia, the Commonwealth of Puerto Rico, American
17 Samoa, Guam, the Commonwealth of the Northern
18 Mariana Islands, the United States Virgin Islands,
19 and other Territories and possessions of the United
20 States; and

21 (3) avoid duplication of other harmful algal
22 bloom research.

23 (e) EFFECTIVE PERIOD, REVIEW, AND RENEWAL.—
24 Each designation of an organization as a National Center
25 of Excellence under this section—

1 (1) shall be effective for 5 years;

2 (2) shall be reviewed by the Secretary, acting
3 through the Administrator of the National Oceanic
4 and Atmospheric Administration, in the fourth year
5 of such effective period;

6 (3) following such review, may be renewed for
7 an additional 5-year period.

8 (f) ANNUAL REPORTS.—The Secretary shall require
9 and publish an annual activity report from each National
10 Center of Excellence.

11 (g) AUTHORIZATION OF APPROPRIATIONS.—To carry
12 out this section, including for providing funding to Na-
13 tional Centers of Excellence designated under this section,
14 there is authorized to be appropriated to the National Oce-
15 anic and Atmospheric Administration \$12,500,000 for
16 each of fiscal years 2021 through 2025, of which not more
17 than 5 percent may be available each fiscal year for ad-
18 ministrative expenses.

1 **TITLE XII—NATIONAL OCEAN**
2 **POLICY, DATA, AND COORDI-**
3 **NATED WEBSITE FOR GRANT**
4 **PROGRAMS**

5 **Subtitle A—Regional Ocean**
6 **Partnerships**

7 **SEC. 1201. FINDINGS; SENSE OF CONGRESS; PURPOSES.**

8 (a) FINDINGS.—Congress makes the following find-
9 ings:

10 (1) The ocean and coastal waters of the United
11 States are foundational to the economy, security,
12 global competitiveness, and well-being of the United
13 States and continuously serve the people of the
14 United States and other countries as an important
15 source of food, energy, economic productivity, recre-
16 ation, culture, beauty, and enjoyment.

17 (2) Over many years, the resource productivity
18 and water quality of the ocean and coastal areas of
19 the United States have been diminished by pollution,
20 increasing population demands, economic develop-
21 ment, and natural and man-made hazard events,
22 both acute and chronic.

23 (3) Ocean and coastal areas of the United
24 States are managed by State and Federal resource
25 agencies and regulated on an interstate and regional

1 scale by various overlapping Federal authorities,
2 thereby creating a significant need for interstate co-
3 ordination to enhance regional priorities, including
4 the ecological and economic health of those areas.

5 (4) Regional Ocean Partnerships, established by
6 coastal states working in close coordination with
7 Federal agencies, regional fisheries managers, and
8 Tribal governments, help coordinate interstate re-
9 sponses to critical ocean issues that extend beyond
10 individual State boundaries.

11 (5) Regional Ocean Partnerships have improved
12 understanding of climate change's impact on fish
13 and shellfish populations, have invested in identi-
14 fying indicators of ocean health and addressing
15 coastal mitigation, and have played leading roles in
16 the creation and upkeep of regional ocean data por-
17 tals that allow for improved understanding of ocean
18 use synergies and trade-offs.

19 (6) Regional Ocean Partnerships engage in co-
20 ordinated efforts to protect and enhance the health
21 of living resources and engage the public in steward-
22 ship of ocean and coastal areas.

23 (7) The coordination offered by Regional Ocean
24 Partnerships is particularly critical in the era of cli-
25 mate change, with coastal and ocean resources under

1 threat and as demand for offshore resources in-
2 creases.

3 (b) PURPOSES.—The purposes of this subtitle are as
4 follows:

5 (1) To complement and expand cooperative vol-
6 untary efforts intended to manage and restore ocean
7 and coastal areas spanning across multiple State
8 boundaries.

9 (2) To expand Federal support for monitoring,
10 data management, and restoration activities in ocean
11 and coastal areas.

12 (3) To commit the United States to a com-
13 prehensive cooperative program to achieve improved
14 water quality in, and improvements in the produc-
15 tivity of living resources of, all coastal ecosystems.

16 (4) To authorize Regional Ocean Partnerships
17 as intergovernmental coordinators for shared inter-
18 state and regional priorities relating to the collabo-
19 rative management of the large marine ecosystems,
20 thereby reducing duplication of efforts and maxi-
21 mizing opportunities to leverage support in the
22 ocean and coastal regions.

23 (5) To enable Regional Ocean Partnerships, or
24 designated fiscal management entities of such part-
25 nerships, to receive Federal funding to conduct the

1 scientific research, conservation and restoration ac-
2 tivities, and priority coordination on shared regional
3 priorities necessary to achieve the purposes described
4 in paragraphs (1) through (4).

5 **SEC. 1202. REGIONAL OCEAN PARTNERSHIPS.**

6 (a) DEFINITIONS.—In this subtitle:

7 (1) COASTAL STATE.—The term “coastal state”
8 has the meaning given that term in section 304 of
9 the Coastal Zone Management Act of 1972 (16
10 U.S.C. 1453).

11 (2) INDIAN TRIBE.—The term “Indian Tribe”
12 has the meaning given to the term “Indian tribe” in
13 section 4 of the Indian Self-Determination and Edu-
14 cation Assistance Act (25 U.S.C. 5304).

15 (b) REGIONAL OCEAN PARTNERSHIPS.—

16 (1) IN GENERAL.—A coastal state may partici-
17 pate in a Regional Ocean Partnership with 1 or
18 more other coastal states that share a common
19 ocean or coastal area with the coastal state, without
20 regard to whether the coastal states are contiguous.

21 (2) APPLICATION.—The Governor of a coastal
22 state or the Governors of a group of coastal states
23 may apply to the Secretary of Commerce, on behalf
24 of a partnership, for the partnership to receive des-

1 ignation as a Regional Ocean Partnership if the
2 partnership—

3 (A) meets the requirements under para-
4 graph (3); and

5 (B) submits an application for such des-
6 ignation in such manner, in such form, and
7 containing such information as the Secretary
8 may require.

9 (3) REQUIREMENTS.—A partnership is eligible
10 for designation as a Regional Ocean Partnership by
11 the Secretary under paragraph (2) if the partner-
12 ship—

13 (A) is established to coordinate the inter-
14 state management of coastal resources;

15 (B) focuses on the environmental issues af-
16 fecting the ocean and coastal areas of the mem-
17 bers participating in the partnership;

18 (C) complements existing State coastal and
19 ocean management efforts on an interstate
20 scale, focusing on shared regional priorities;

21 (D) does not have a regulatory function;
22 and

23 (E) is not duplicative of an existing Re-
24 gional Ocean Partnership designated under
25 paragraph (4), as determined by the Secretary.

1 (4) DESIGNATION OF CERTAIN ENTITIES AS RE-
2 GIONAL OCEAN PARTNERSHIPS.—Notwithstanding
3 paragraph (2) or (3), the following entities are des-
4 ignated as Regional Ocean Partnerships:

5 (A) The Gulf of Mexico Alliance, comprised
6 of the States of Alabama, Florida, Louisiana,
7 Mississippi, and Texas.

8 (B) The Northeast Regional Ocean Coun-
9 cil, comprised of the States of Maine, Vermont,
10 New Hampshire, Massachusetts, Connecticut,
11 and Rhode Island.

12 (C) The Mid-Atlantic Regional Council on
13 the Ocean, comprised of the States of New
14 York, New Jersey, Delaware, Maryland, and
15 Virginia.

16 (D) The West Coast Ocean Alliance, com-
17 prised of the States of California, Oregon, and
18 Washington and the coastal Indian Tribes
19 therein.

20 (c) GOVERNING BODIES OF REGIONAL OCEAN PART-
21 NERSHIPS.—

22 (1) IN GENERAL.—A Regional Ocean Partner-
23 ship designated under subsection (b) shall be gov-
24 erned by a governing body.

1 (2) MEMBERSHIP.—A governing body described
2 in paragraph (1)—

3 (A) shall be comprised, at a minimum, of
4 voting members from each coastal state partici-
5 pating in the Regional Ocean Partnership, des-
6 ignated by the Governor of the coastal state;
7 and

8 (B) may include such other members as
9 the partnership considers appropriate.

10 (d) FUNCTIONS.—A Regional Ocean Partnership des-
11 ignated under subsection (b) may perform the following
12 functions:

13 (1) Promote coordination of the actions of the
14 agencies of coastal states participating in the part-
15 nership with the actions of the appropriate officials
16 of Federal agencies and State and Tribal govern-
17 ments in developing strategies—

18 (A) to conserve living resources, expand
19 and protect valuable habitats, enhance coastal
20 resilience, and address such other issues related
21 to the shared ocean or coastal area as are de-
22 termined to be a shared, regional priority by
23 those states; and

1 (B) to manage regional data portals and
2 develop associated data products for purposes
3 that support the priorities of the partnership.

4 (2) In cooperation with appropriate Federal and
5 State agencies, Tribal governments, and local au-
6 thorities, develop and implement specific action
7 plans to carry out coordination goals.

8 (3) Coordinate and implement priority plans
9 and projects, and facilitate science, research, mod-
10 eling, monitoring, data collection, and other activi-
11 ties that support the goals of the partnership
12 through the provision of grants and contracts under
13 subsection (e).

14 (4) Engage, coordinate, and collaborate with
15 relevant governmental entities and stakeholders to
16 address ocean and coastal related matters that re-
17 quire interagency or intergovernmental solutions.

18 (5) Implement engagement programs for public
19 information, education, and participation to foster
20 stewardship of the resources of the ocean and coast-
21 al areas, as relevant.

22 (6) Develop and make available, through publi-
23 cations, technical assistance, and other appropriate
24 means, information pertaining to cross-jurisdictional

1 issues being addressed through the coordinated ac-
2 tivities of the partnership.

3 (7) Serve as a liaison with, and provide infor-
4 mation to, international counterparts, as appropriate
5 on priority issues for the partnership.

6 (e) GRANTS AND CONTRACTS.—

7 (1) IN GENERAL.—A Regional Ocean Partner-
8 ship designated under subsection (b) may, in coordi-
9 nation with existing Federal and State management
10 programs, from amounts made available to the part-
11 nership by the Administrator or the head of another
12 Federal agency—

13 (A) provide grants to eligible persons de-
14 scribed in paragraph (2) for the purposes de-
15 scribed in paragraph (3); and

16 (B) enter into contracts with such persons
17 for such purposes.

18 (2) ELIGIBLE PERSONS.—The eligible persons
19 described in this paragraph are the following:

20 (A) Indian Tribes.

21 (B) State and local governments.

22 (C) Nongovernmental organizations.

23 (D) Institutions of higher education.

24 (E) Individuals.

25 (F) Private entities.

1 (3) PURPOSES.—The purposes described in this
2 paragraph include any of the following:

3 (A) Monitoring the water quality and living
4 resources of multi-State ocean and coastal eco-
5 systems and to coastal communities.

6 (B) Researching and addressing the effects
7 of natural and human-induced environmental
8 changes to—

9 (i) ocean and coastal ecosystems; and
10 (ii) coastal communities.

11 (C) Developing and executing cooperative
12 strategies that—

13 (i) address regional data issues identi-
14 fied by the partnership; and

15 (ii) will result in more effective man-
16 agement of common ocean and coastal
17 areas.

18 (f) REPORTS AND ASSESSMENTS.—

19 (1) IN GENERAL.—Not later than 5 years after
20 the date of the enactment of this Act, and every 5
21 years thereafter until 2040, the Administrator, in
22 coordination with the Regional Ocean Partnerships
23 designated under subsection (b), shall—

24 (A) assess the effectiveness of the partner-
25 ships in supporting regional priorities relating

1 to the management of common ocean and coast-
2 al areas; and

3 (B) submit to Congress a report on that
4 assessment.

5 (2) REPORT REQUIREMENTS.—The report re-
6 quired under paragraph (1)(B) shall include the fol-
7 lowing:

8 (A) An assessment of the overall status of
9 the work of the Regional Ocean Partnerships
10 designated under subsection (b).

11 (B) An assessment of the effectiveness of
12 the strategies that the Regional Ocean Partner-
13 ships are supporting or implementing and the
14 extent to which the priority needs of the regions
15 covered by such partnerships are being met
16 through such strategies.

17 (C) Such recommendations as the Admin-
18 istrator may have for the improvement of ef-
19 forts of the Regional Ocean Partnerships to
20 support the purposes of this Act.

21 (D) An assessment of how the efforts of
22 the Regional Ocean Partnerships support or en-
23 hance Federal and State efforts in line with the
24 purposes of this Act.

1 (E) Recommendations for improvements to
2 the collective strategies that support the pur-
3 poses of this Act in coordination and consulta-
4 tion with all relevant Federal, State, and Tribal
5 entities.

6 (g) AVAILABILITY OF FEDERAL FUNDS.—In addition
7 to amounts made available to Regional Ocean Partner-
8 ships designated under subsection (b) by the Adminis-
9 trator under this section, the head of any other Federal
10 agency may provide grants to, enter into contracts with,
11 or otherwise provide funding to such partnerships.

12 (h) AUTHORITIES.—Nothing in this section estab-
13 lishes any new legal or regulatory authority of the Na-
14 tional Oceanic and Atmospheric Administration or of the
15 Regional Ocean Partnerships designated under subsection
16 (b), other than—

17 (1) the authority of the Administrator to pro-
18 vide amounts to the partnerships; and

19 (2) the authority of the partnerships to provide
20 grants and enter into contracts under subsection (e).

21 (i) FUNDING.—

22 (1) IN GENERAL.—Of amounts authorized to be
23 appropriated to the National Oceanic and Atmos-
24 pheric Administration, the Administrator may make
25 the following amounts available to Regional Ocean

1 Partnerships designated under subsection (b) or des-
2 ignated fiscal management entities of such partner-
3 ships to carry out activities of the partnerships
4 under this Act:

5 (A) \$10,000,000 for fiscal year 2021.

6 (B) \$10,100,000 for fiscal year 2022.

7 (C) \$10,202,000 for fiscal year 2023.

8 (D) \$10,306,040 for fiscal year 2024.

9 (E) \$10,412,160 for fiscal year 2025.

10 (F) \$10,520,404 for fiscal year 2026.

11 (2) DISTRIBUTION OF AMOUNTS.—Amounts
12 made available under paragraph (1) shall be divided
13 evenly among the Regional Ocean Partnerships des-
14 ignated under subsection (b).

15 (3) AVAILABILITY OF AMOUNTS.—Amounts
16 made available under paragraph (1) shall remain
17 available until expended.

18 **Subtitle B—Data and Scientific** 19 **Coordination**

20 **SEC. 1211. INCREASED COORDINATION AMONG AGENCIES** 21 **WITH RESPECT TO DATA AND MONITORING.**

22 (a) INTERAGENCY OCEAN OBSERVATION COM-
23 MITTEE.—In addition to its responsibilities as of the date
24 of the enactment of this Act, and in consultation with the
25 associated advisory committee authorized by section

1 12304(d) of the Integrated Coastal and Ocean Observa-
2 tion System Act of 2009 (33 U.S.C. 3603(d)), the Inter-
3 agency Ocean Observation Committee shall—

4 (1) work with international coordinating bodies,
5 as necessary, to ensure robust, direct measurements
6 of the Great Lakes, oceans, bays, estuaries, and
7 coasts, including oceanographic data;

8 (2) coordinate supercomputing capacity, data
9 storage capacity, and public access across agencies;
10 and

11 (3) support cross-agency and multi-platform
12 synergy, by coordinating overlapping data collection
13 by satellites, buoys, submarines, gliders, vessels, and
14 other data collection vehicles and technologies.

15 (b) FEDERAL GEOGRAPHIC DATA COMMITTEE.—In
16 addition to its responsibilities as of the date of the enact-
17 ment of this Act, and in consultation with the National
18 Geospatial Advisory Committee, the Federal Geographic
19 Data Committee shall—

20 (1) work with international coordinating bodies,
21 as necessary, to ensure robust, continuous measure-
22 ments of the Great Lakes, oceans, bays, estuaries,
23 and coasts, including satellite and geospatial data;

24 (2) coordinate supercomputing capacity, data
25 storage capacity, and public access across agencies;

1 (3) develop and deploy cross-agency, real-time,
2 standardized, centralized, archived, open-source, and
3 publicly available databases (using declassified infor-
4 mation to the extent possible) for all federally fund-
5 ed observational and model data, using the example
6 of the World Ocean Database; and

7 (4) support new and old data and metadata cer-
8 tification, quality assurance, quality control, integra-
9 tion, and archiving.

10 (c) INTERAGENCY COMMITTEE ON OCEAN AND
11 COASTAL MAPPING.—In addition to its responsibilities as
12 of the date of the enactment of this Act, and in consulta-
13 tion with its associated advisory panel authorized by sec-
14 tion 12203(g) of the Ocean and Coastal Mapping Integra-
15 tion Act (33 U.S.C. 3502(g)), the Interagency Committee
16 on Ocean and Coastal Mapping shall—

17 (1) work with international coordinating bodies,
18 as necessary, to ensure robust, continuous satellite
19 and direct measurements of the Great Lakes,
20 oceans, bays, estuaries, and coasts, including bathy-
21 metric data;

22 (2) coordinate supercomputing capacity, data
23 storage capacity, and public access across agencies;

24 (3) make recommendations on how to make
25 data, metadata, and model output accessible to a

1 broader public audience, including through geo-
2 graphic information system layers, graphics, and
3 other visuals; and

4 (4) develop and initiate a research agenda to
5 improve understanding of inundation risks to coastal
6 areas as a result of the climate crisis and to meet
7 the information needs of decision-makers as such de-
8 cision-makers consider how to appropriately adapt
9 and increase resilience to such effects.

10 **SEC. 1212. INTERAGENCY OCEAN EXPLORATION COM-**
11 **MITTEE.**

12 (a) ESTABLISHMENT.—The President shall establish
13 a committee to promote the exploration and improved un-
14 derstanding of the oceans, to be known as the “Inter-
15 agency Ocean Exploration Committee”.

16 (b) MEMBERSHIP.—The Interagency Ocean Explo-
17 ration Committee shall be composed of not fewer than 1
18 senior-level representative from each of the following Fed-
19 eral agencies:

20 (1) The Department of the Navy.

21 (2) The Department of the Interior.

22 (3) The Department of Commerce.

23 (4) The Coast Guard.

24 (5) The Office of Management and Budget.

25 (6) The Council on Environmental Quality.

1 (7) The Office of Science and Technology Pol-
2 icy.

3 (8) The Department of State.

4 (9) The National Science Foundation.

5 (10) The National Aeronautics and Space Ad-
6 ministration.

7 (11) The Subcommittee on Ocean Science and
8 Technology of the National Science and Technology
9 Council.

10 (12) The elements of the intelligence commu-
11 nity (as defined in section 3 of the National Security
12 Act of 1947 (50 U.S.C. 3003)), as the President
13 considers appropriate.

14 (c) DUTIES.—The Interagency Ocean Exploration
15 Committee shall—

16 (1) cultivate public-private partnerships, includ-
17 ing with Federal agencies, academic institutions,
18 nongovernmental organizations, technology compa-
19 nies, and international partners, to develop and de-
20 ploy advanced technologies to explore and charac-
21 terize the oceans; and

22 (2) coordinate the application of existing inno-
23 vative technologies and development of emerging
24 technologies to promote the understanding, mapping,
25 and collection of data describing the oceans and the

1 changes the oceans are experiencing and are antici-
2 pated to experience in the future, such as changes
3 in temperature, salinity, oxygenation, and acidity,
4 and the biological consequences of those changes.

5 **SEC. 1213. COMMITTEE ON OCEAN POLICY.**

6 (a) ESTABLISHMENT.—There is established in the
7 Executive Office of the President a Committee on Ocean
8 Policy, which—

9 (1) succeeds the Ocean Policy Committee estab-
10 lished on June 19, 2018, by Executive Order 13840
11 (83 Fed. Reg. 29431; relating to ocean policy);

12 (2) shall continue the activities of that com-
13 mittee as it was in existence on the day before the
14 date of the enactment of this Act; and

15 (3) shall carry out the functions described in
16 subsection (b).

17 (b) FUNCTIONS.—The Committee on Ocean Policy
18 shall—

19 (1) facilitate coordination and integration of
20 Federal activities in ocean and coastal waters to in-
21 form ocean policy and identify priority ocean re-
22 search, technology, and data needs;

23 (2) engage and collaborate with stakeholders,
24 including Regional Ocean Partnerships, to address

1 ocean-related matters that may require interagency
2 or intergovernmental solutions;

3 (3) evaluate threats to coastal communities
4 from storm and sea level rise and define, implement,
5 and coordinate needed policies and programs to ad-
6 vance national preparedness for and resilience to
7 more severe storms and rising sea levels; and

8 (4) coordinate Federal agencies to ensure Fed-
9 eral activities in ocean and coastal waters promote
10 healthy ecosystems for fisheries and wildlife con-
11 servation that are resilient to the impacts of climate
12 change and provide for climate benefits.

13 **SEC. 1214. BUILDING DATA SOURCES.**

14 (a) ENGAGING INDIGENOUS, SUBSISTENCE, AND
15 FISHING COMMUNITIES.—

16 (1) IN GENERAL.—The Administrator shall es-
17 tablish opportunities to engage Indigenous, subsist-
18 ence, and fishing communities to understand the
19 needs of those communities and to provide improved
20 products and services that are practical and useful
21 to those communities, including collecting and inte-
22 grating traditional ecological data and narrative
23 records into national and regional datasets.

24 (2) DATA RIGHTS.—In carrying out paragraph
25 (1), the Administrator shall—

1 (A) consider issues relating to data owner-
2 ship; and

3 (B) ensure that Indigenous, subsistence,
4 and fishing communities retain any specific
5 rights or ownership of data provided to Federal
6 agencies.

7 (b) REPORT TO CONGRESS.—

8 (1) REPORT REQUIRED.—Not later than 1 year
9 after the date of the enactment of this Act, the Ad-
10 ministrator shall submit to Congress a report identi-
11 fying potential opportunities to encourage voluntary
12 actions and partnerships between the National Oce-
13 anic and Atmospheric Administration and non-Fed-
14 eral partners to increase and enhance data collec-
15 tion.

16 (2) OPPORTUNITIES FOR PARTNERSHIP.—The
17 opportunities described in paragraph (1) may in-
18 clude opportunities that can be pursued in conjunc-
19 tion with Federal permits, leases, and other actions
20 requiring Federal approval or funding, such as
21 partnering with companies to acquire and share
22 bathymetric data or supplying fishermen with sen-
23 sors that can collect data through fishing gear.

1 **SEC. 1215. NATIONAL SEA LEVEL RISE RISK ANALYSIS.**

2 (a) PURPOSES.—The Administrator shall establish a
3 National Coastal Data Information System to—

4 (1) combine existing observations, modeling,
5 predictions, products and services into an integrated
6 framework for producing and maintaining authori-
7 tative and timely data, maps and information serv-
8 ices which quantify and communicate coastal flood
9 risk to the States;

10 (2) develop and strengthen partnerships with
11 organizations that represent end users within coastal
12 communities, including other Federal agencies, to
13 better assess information gaps and needs relating to
14 the risk posed by the rising sea level; and

15 (3) produce new information products and serv-
16 ices, targeted to end-user needs, that allow coastal
17 communities across the United States to plan for
18 present and future coastal flood risk.

19 (b) REPORT.—The Administrator shall, not less than
20 180 days after the date of enactment of this section and
21 every 3 years thereafter, provide the Committee on Nat-
22 ural Resources of the House of Representatives with a re-
23 port containing holistic analysis of the need to expand ob-
24 servations, modeling, predictions, products and services
25 to—

1 (1) improve the understanding of changing
2 coastal flood risk, including the impacts of sea level
3 rise; and

4 (2) track and report how observed rates of sea
5 level rise compare to the sea level rise predictions
6 published within the National Climate Assessments.

7 **Subtitle C—Digital Coast**

8 **SEC. 1221. DEFINITIONS.**

9 In this subtitle:

10 (1) COASTAL REGION.—The term “coastal re-
11 gion” means the area of United States waters ex-
12 tending inland from the shoreline to include coastal
13 watersheds and seaward to the territorial sea.

14 (2) COASTAL STATE.—The term “coastal
15 State” has the meaning given the term “coastal
16 state” in section 304 of the Coastal Zone Manage-
17 ment Act of 1972 (16 U.S.C. 1453).

18 (3) FEDERAL GEOGRAPHIC DATA COM-
19 MITTEE.—The term “Federal Geographic Data
20 Committee” means the interagency committee that
21 promotes the coordinated development, use, sharing,
22 and dissemination of geospatial data on a national
23 basis.

24 (4) REMOTE SENSING AND OTHER
25 GEOSPATIAL.—The term “remote sensing and other

1 geospatial” means collecting, storing, retrieving, or
2 disseminating graphical or digital data depicting
3 natural or manmade physical features, phenomena,
4 or boundaries of the Earth and any information re-
5 lated thereto, including surveys, maps, charts, sat-
6 ellite and airborne remote sensing data, images,
7 LiDAR, and services performed by professionals
8 such as surveyors, photogrammetrists, hydrog-
9 raphers, geodesists, cartographers, and other such
10 services.

11 **SEC. 1222. ESTABLISHMENT OF THE DIGITAL COAST.**

12 (a) ESTABLISHMENT.—

13 (1) IN GENERAL.—The Administrator shall es-
14 tablish a program for the provision of an enabling
15 platform that integrates geospatial data, decision-
16 support tools, training, and best practices to address
17 coastal management issues and needs. Under the
18 program, the Administrator shall strive to enhance
19 resilient communities, ecosystem values, and coastal
20 economic growth and development by helping com-
21 munities address their issues, needs, and challenges
22 through cost-effective and participatory solutions.

23 (2) DESIGNATION.—The program established
24 under paragraph (1) shall be known as the “Digital

1 Coast” (in this section referred to as the “pro-
2 gram”).

3 (b) PROGRAM REQUIREMENTS.—In carrying out the
4 program, the Administrator shall ensure that the program
5 provides data integration, tool development, training, doc-
6 umentation, dissemination, and archiving by—

7 (1) making data and resulting integrated prod-
8 ucts developed under this section readily accessible
9 via the Digital Coast Internet website of the Na-
10 tional Oceanic and Atmospheric Administration, the
11 GeoPlatform.gov and data.gov Internet websites, and
12 such other information distribution technologies as
13 the Administrator considers appropriate;

14 (2) developing decision-support tools that use
15 and display resulting integrated data and provide
16 training on use of such tools;

17 (3) documenting such data to Federal Geo-
18 graphic Data Committee standards; and

19 (4) archiving all raw data acquired under this
20 title at the appropriate National Oceanic and Atmos-
21 pheric Administration data center or such other
22 Federal data center as the Administrator considers
23 appropriate.

24 (c) COORDINATION.—The Administrator shall coordi-
25 nate the activities carried out under the program to opti-

1 mize data collection, sharing and integration, and to mini-
2 mize duplication by—

3 (1) consulting with coastal managers and deci-
4 sion makers concerning coastal issues, and sharing
5 information and best practices, as the Administrator
6 considers appropriate, with—

7 (A) coastal States;

8 (B) local and Tribal governments; and

9 (C) representatives of academia, the pri-
10 vate sector, and nongovernmental organizations;

11 (2) consulting with other Federal agencies, in-
12 cluding interagency committees, on relevant Federal
13 activities, including activities carried out under the
14 Ocean and Coastal Mapping Integration Act (33
15 U.S.C. 3501 et seq.), the Coastal Zone Management
16 Act of 1972 (16 U.S.C. 1451 et seq.), the Integrated
17 Coastal and Ocean Observation System Act of 2009
18 (33 U.S.C. 3601 et seq.), and the Hydrographic
19 Services Improvement Act of 1998 (33 U.S.C. 892
20 et seq.);

21 (3) participating, pursuant to section 216 of the
22 E-Government Act of 2002 (Public Law 107–347;
23 44 U.S.C. 3501 note), in the establishment of such
24 standards and common protocols as the Adminis-
25 trator considers necessary to assure the interoper-

1 ability of remote sensing and other geospatial data
2 with all users of such information within—

3 (A) the National Oceanic and Atmospheric
4 Administration;

5 (B) other Federal agencies;

6 (C) State, Tribal, and local governments;

7 and

8 (D) the private sector;

9 (4) coordinating with, seeking assistance and
10 cooperation of, and providing liaison to the Federal
11 Geographic Data Committee pursuant to Office of
12 Management and Budget Circular A-16 and Execu-
13 tive Order No. 12906 of April 11, 1994 (59 Fed.
14 Reg. 17671), as amended by Executive Order No.
15 13286 of February 28, 2003 (68 Fed. Reg. 10619);
16 and

17 (5) developing and maintaining a best practices
18 document that sets out the best practices used by
19 the Administrator in carrying out the program and
20 providing such document to the United States Geo-
21 logical Survey, the Corps of Engineers, and other
22 relevant Federal agencies.

23 (d) FILLING NEEDS AND GAPS.—In carrying out the
24 program, the Administrator shall—

1 (1) maximize the use of remote sensing and
2 other geospatial data collection activities conducted
3 for other purposes and under other authorities;

4 (2) focus on filling data needs and gaps nec-
5 essary to improve coastal management, increase re-
6 silience, and enhance decision-making for coastal
7 communities, including with respect to areas that, as
8 of the date of enactment of this Act, were under-
9 served by coastal data and the areas of the Arctic
10 that are under the jurisdiction of the United States;

11 (3) pursuant to the Ocean and Coastal Map-
12 ping Integration Act (33 U.S.C. 3501 et seq.), sup-
13 port continued improvement in existing efforts to co-
14 ordinate the acquisition and integration of key data
15 sets needed for coastal management and other pur-
16 poses, including—

- 17 (A) coastal elevation data;
18 (B) land use and land cover data;
19 (C) socioeconomic and human use data;
20 (D) critical infrastructure data;
21 (E) structures data;
22 (F) living resources and habitat data;
23 (G) cadastral data; and
24 (H) aerial imagery; and

1 (4) integrate the priority supporting data set
2 forth under paragraph (3) with other available data
3 for the benefit of the broadest measure of coastal re-
4 source management constituents and applications.

5 (e) FINANCIAL AGREEMENTS AND CONTRACTS.—

6 (1) IN GENERAL.—In carrying out the program,
7 the Administrator—

8 (A) may enter into financial agreements to
9 carry out the program, including—

10 (i) support to non-Federal entities
11 that participate in implementing the pro-
12 gram; and

13 (ii) grants, cooperative agreements,
14 interagency agreements, contracts, or any
15 other agreement on a reimbursable or non-
16 reimbursable basis, with other Federal,
17 Tribal, State, and local governmental and
18 nongovernmental entities; and

19 (B) may, to the maximum extent prac-
20 ticable, enter into such contracts with private
21 sector entities for such products and services as
22 the Administrator determines may be necessary
23 to collect, process, and provide remote sensing
24 and other geospatial data and products for pur-
25 poses of the program.

1 (2) FEES.—

2 (A) ASSESSMENT AND COLLECTION.—The
3 Administrator may assess and collect fees to
4 conduct any planned training, workshop, or
5 conference that advances the purposes of the
6 program.

7 (B) AMOUNTS.—The amount of a fee
8 under this paragraph may not exceed the sum
9 of costs incurred, or expected to be incurred, by
10 the Administrator as a direct result of the con-
11 duct of the training, workshop, or conference,
12 including for subsistence expenses incidental to
13 the training, workshop, or conference, as appli-
14 cable.

15 (C) USE OF FEES.—Amounts collected by
16 the Administrator in the form of fees under this
17 paragraph may be used to pay for—

18 (i) the costs incurred for conducting
19 an activity described in subparagraph (A);
20 or

21 (ii) the expenses described in subpara-
22 graph (B).

23 (3) SURVEY AND MAPPING.—Contracts entered
24 into under paragraph (1)(B) shall be considered
25 “surveying and mapping” services as such term is

1 used in and as such contracts are awarded by the
2 Administrator in accordance with the selection pro-
3 cedures in chapter 11 of title 40, United States
4 Code.

5 (f) OCEAN ECONOMY.—The Administrator may es-
6 tablish publicly available tools that track ocean and Great
7 Lakes economy data for each coastal State.

8 **Subtitle D—Integrated Coastal and** 9 **Ocean Observation System**

10 **SEC. 1241. STAGGERED TERMS FOR NATIONAL INTE-** 11 **GRATED COASTAL AND OCEAN OBSERVATION** 12 **SYSTEM ADVISORY COMMITTEE.**

13 Section 12304(d)(3)(B) of the Integrated Coastal
14 and Ocean Observation System Act of 2009 (33 U.S.C.
15 3603(d)(3)(B)) is amended—

16 (1) by striking “Members” and inserting the
17 following:

18 “(i) IN GENERAL.—Except as pro-
19 vided in clause (ii), members”; and

20 (2) by adding at the end the following:

21 “(ii) STAGGERED TERMS.—The Ad-
22 ministrator may appoint or reappoint a
23 member for a partial term of 1 or 2 years
24 in order to establish a system of staggered
25 terms. The Administrator may appoint or

1 reappoint a member under this clause only
2 once. A member appointed or reappointed
3 to a partial term under this clause may not
4 serve more than 1 full term.”.

5 **SEC. 1242. INTEGRATED COASTAL AND OCEAN OBSERVA-**
6 **TION SYSTEM COOPERATIVE AGREEMENTS.**

7 Section 12305(a) of the Integrated Coastal and
8 Ocean Observation System Act of 2009 (33 U.S.C.
9 3604(a)) is amended by inserting “disburse appropriated
10 funds to,” after “agreements, with,”.

11 **SEC. 1243. REAUTHORIZATION OF INTEGRATED COASTAL**
12 **AND OCEAN OBSERVATION SYSTEM ACT OF**
13 **2009.**

14 Section 12311 of the Integrated Coastal and Ocean
15 Observation System Act of 2009 (33 U.S.C. 3610) is
16 amended by striking “for fiscal years 2009 through 2013
17 such sums as are necessary” and inserting “\$47,500,000
18 for each of fiscal years 2021 through 2025”.

19 **SEC. 1244. ADVANCED RESEARCH PROJECTS AGENCY-**
20 **OCEANS.**

21 (a) AGREEMENT.—Not later than 45 days after the
22 date of the enactment of this section, the Administrator
23 shall seek to enter into an agreement with the National
24 Academy of Sciences to conduct the comprehensive assess-
25 ment under subsection (b).

1 (b) COMPREHENSIVE ASSESSMENT.—

2 (1) IN GENERAL.—Under an agreement be-
3 tween the Administrator and the National Academy
4 of Sciences under this section, the National Acad-
5 emy of Sciences shall conduct a comprehensive as-
6 sessment of the need for and feasibility of estab-
7 lishing an Advanced Research Projects Agency—
8 Oceans (ARPA–O).

9 (2) ELEMENTS.—The comprehensive assess-
10 ment carried out pursuant to paragraph (1) shall in-
11 clude—

12 (A) an assessment of how an ARPA–O
13 could help overcome the long-term and high-risk
14 technological barriers in the development of
15 ocean technologies, with the goal of enhancing
16 the economic, ecological, and national security
17 of the United States through the rapid develop-
18 ment of technologies that result in—

19 (i) improved data collection, moni-
20 toring, and prediction of the ocean environ-
21 ment, including sea ice conditions;

22 (ii) overcoming barriers to the appli-
23 cation of new and improved technologies,
24 such as high costs and scale of operational
25 missions;

- 1 (iii) improved management practices
- 2 for protecting ecological sustainability;
- 3 (iv) improved national security capac-
- 4 ity;
- 5 (v) improved technology for fishery
- 6 population assessments;
- 7 (vi) expedited processes between and
- 8 among Federal agencies to successfully
- 9 identify, transition, and coordinate re-
- 10 search and development output to oper-
- 11 ations, applications, commercialization, and
- 12 other uses; and
- 13 (vii) ensuring that the United States
- 14 maintains a technological lead in devel-
- 15 oping and deploying advanced ocean tech-
- 16 nologies;
- 17 (B) an evaluation of the organizational
- 18 structures under which an ARPA-O could be
- 19 organized, which takes into account—
- 20 (i) best practices for new research
- 21 programs;
- 22 (ii) metrics and approaches for peri-
- 23 odic program evaluation;
- 24 (iii) capacity to fund and manage ex-
- 25 ternal research awards; and

1 (iv) options for oversight of the activ-
2 ity through a Federal agency, an inter-
3 agency organization, nongovernmental or-
4 ganization, or other institutional arrange-
5 ment; and

6 (C) an estimation of the scale of invest-
7 ment necessary to pursue high priority ocean
8 technology projects.

9 (c) REPORT.—Not later than 18 months after the
10 date of enactment of this section, the Administrator shall
11 submit to Congress a report on the comprehensive assess-
12 ment conducted under subsection (b).

13 **Subtitle E—Centralized Website for** 14 **Resiliency Grants**

15 **SEC. 1251. CENTRALIZED WEBSITE FOR RESILIENCY** 16 **GRANTS.**

17 (a) CENTRALIZED WEBSITE.—Not later than 6
18 months after the date of enactment of this subsection, the
19 Administrator shall maintain a publicly available website
20 that includes—

21 (1) hyperlinks to all grants administered by the
22 National Oceanic and Atmospheric Administration
23 and hyperlinks to other Federal agencies that offer
24 similar grants to assist States and local communities

1 with resiliency, adaptation, and mitigation of climate
2 change and sea level rise; and

3 (2) with respect to each such grant, the contact
4 information for an individual who can offer assist-
5 ance to States and local government.

6 (b) OUTREACH.—The Administrator shall conduct
7 outreach activities to inform State, Tribal, and local gov-
8 ernments of the resiliency, adaptation, and mitigation
9 grants.

10 **TITLE XIII—WETLANDS**

11 **Subtitle A—Coastal Wetlands**

12 **SEC. 1301. DEFINITIONS.**

13 In this subtitle:

14 (1) COASTAL WETLAND.—The term “coastal
15 wetland” means estuarine vegetated coastal habitat,
16 including salt marsh, seagrass, mangrove, and other
17 vegetated marine habitats.

18 (2) INDIAN TRIBE.—The term “Indian Tribe”
19 has the meaning given the term “Indian tribe” in
20 section 4 of the Indian Self-Determination and Edu-
21 cation Assistance Act (25 U.S.C. 5304).

22 (3) NATURAL INFRASTRUCTURE.—The term
23 “natural infrastructure” means infrastructure
24 that—

1 (A) uses, restores, or emulates natural eco-
2 logical processes; and

3 (B)(i) is created through the action of nat-
4 ural physical, geological, biological, and chem-
5 ical processes over time;

6 (ii) is created by human design, engineer-
7 ing, and construction to emulate or act in con-
8 cert with natural processes; or

9 (iii) involves the use of plants, soils, and
10 other natural features, including through the
11 creation, restoration, or preservation of vege-
12 tated areas using materials appropriate to the
13 region to manage stormwater and runoff, to at-
14 tenuate flooding and storm surges, and for
15 other related purposes.

16 (4) NONPROFIT ORGANIZATION.—The term
17 “nonprofit organization” means an organization that
18 is described in section 501(c) of the Internal Rev-
19 enue Code of 1986 and exempt from tax under sec-
20 tion 501(a) of such Code.

21 (5) PROGRAM.—The term “Program” means
22 the Coastal and Estuary Resilience Grant Program
23 as established by section 1302.

24 (6) RESTORATION.—The term “restoration”
25 means renewing, enhancing, or replacing degraded,

1 damaged, vulnerable, or destroyed wetlands to im-
2 prove the long-term ecosystem function and resil-
3 ience through active human intervention and action,
4 such as—

5 (A) improving hydrological conditions
6 (such as by removing tidal barriers, improving
7 connectivity, or changing water levels);

8 (B) altering sediment supply (such as
9 through the beneficial use of dredge material,
10 thin-layer spraying, or reconnecting river sedi-
11 ment);

12 (C) changing salinity characteristics;

13 (D) improving water quality (such as by
14 reducing excess nutrients, sedimentation, or
15 contaminants);

16 (E) planting of native plants, removal of
17 invasive species, and other improved manage-
18 ment practices;

19 (F) controlling erosion of wetland edges;
20 and

21 (G) enabling future inland migration as
22 sea levels rise, including through the enhance-
23 ment of adjacent fresh-water wetlands.

1 **SEC. 1302. COASTAL AND ESTUARY RESILIENCE GRANT**
2 **PROGRAM.**

3 (a) ESTABLISHMENT.—The Administrator shall es-
4 tablish a program, to be known as the “Coastal and Estu-
5 ary Resilience Grant Program”, under which the Sec-
6 retary awards grants to entities that are eligible under
7 subsection (b) to fund coastal wetland restoration and nat-
8 ural infrastructure projects that are eligible under sub-
9 section (c).

10 (b) ELIGIBLE ENTITIES.—An entity is eligible to
11 apply for a grant under the Program if the entity is an
12 institution of higher education, a nonprofit organization,
13 a State or local government, or an Indian Tribe.

14 (c) ELIGIBLE PROJECTS.—A project is eligible for a
15 grant under the Program if the project is designed to—

16 (1) reduce net greenhouse gases through—

17 (A) the long-term sequestration of addi-
18 tional carbon dioxide through—

19 (i) the active restoration of degraded
20 coastal wetland; and

21 (ii) the protection of threatened coast-
22 al wetland;

23 (B) the halting of ongoing carbon dioxide
24 emissions, and the resumption of the natural
25 rate of carbon capture, through the restoration
26 of drained coastal wetland; or

1 (C) the halting of ongoing methane emis-
2 sions, and the resumption of the natural rate of
3 carbon storage, through the restoration of for-
4 merly tidal wetland that has lost tidal
5 connectivity and become fresh wetland (com-
6 monly known as “impounded wetland”); or

7 (2) provide for ecosystem adaptation to the ef-
8 fects of sea level rise and other climate effects
9 through—

10 (A) facilitating landward migration of wet-
11 lands in response to rising sea levels; or

12 (B) enhancing ecosystem resilience to
13 flooding, ocean acidification, or coastal storms.

14 (d) GRANT EVALUATION CRITERIA.—In reviewing
15 applications for grants under the Program, the Adminis-
16 trator shall give priority to projects that exhibit the high-
17 est potential to—

18 (1) mitigate greenhouse gas emissions long-
19 term by—

20 (A) reducing greenhouse gas emissions; or

21 (B) capturing and storing greenhouse
22 gases;

23 (2) reinforce ecosystem resilience and adapta-
24 tion by—

1 (A) preparing for sea level rise in order to
2 reduce vulnerability to sea level rise and ero-
3 sion;

4 (B) supporting resilience against flooding
5 and sea level rise; or

6 (C) restoring or enhancing ecosystem func-
7 tion; or

8 (3) provide economic and social co-benefits by—

9 (A) reducing the potential impact and
10 damage of storms on the built environment;

11 (B) advancing environmental justice by re-
12 ducing the disproportionate impacts of environ-
13 mental hazards on communities of color, Indige-
14 nous communities, and low-income commu-
15 nities;

16 (C) providing jobs in coastal communities;

17 (D) prioritizing natural infrastructure;

18 (E) incorporating collaborative partner-
19 ships; or

20 (F) involving local communities in project
21 planning and implementation.

22 (e) ELIGIBLE COSTS.—A grant awarded under the
23 Program shall be available for all phases of the develop-
24 ment, implementation, and monitoring of projects that are
25 eligible under subsection (c), including—

1 (1) preliminary community engagement, plan-
2 ning, and prioritization;

3 (2) preliminary design and site assessment, in-
4 cluding—

5 (A) assessments of feasibility;

6 (B) planning; and

7 (C) community engagement;

8 (3) final design and permitting;

9 (4) restoration and project implementation; and

10 (5) monitoring, reporting, and stewardship.

11 (f) REPORTING.—

12 (1) IN GENERAL.—An entity that receives a
13 grant under the Program for a project shall—

14 (A) collect data on the development and
15 implementation of the project and stewardship
16 following completion of the project; and

17 (B) submit that data to the Administrator
18 for inclusion in the database required by section
19 1303(a).

20 (2) REPORT AFTER PROJECT COMPLETION.—

21 Not later than 1 year after the completion of a
22 project for which a grant is provided under the Pro-
23 gram, the entity that received the grant shall submit
24 to the Administrator a report on the outputs, out-

1 comes, and impacts of the project, including with re-
2 spect to—

3 (A) the amount of area restored;

4 (B) the estimated net climate benefit;

5 (C) benefits to nearby communities; and

6 (D) involvement of partners and commu-
7 nities.

8 (g) MONITORING.—The Administrator shall establish
9 guidelines providing for monitoring a project for which a
10 grant is provided under the Program for the 10-year pe-
11 riod after the grant is awarded.

12 (h) ROLE OF NATIONAL FISH AND WILDLIFE FOUN-
13 DATION.—In carrying out the Program, the Administrator
14 may consult, partner, or otherwise coordinate with the Na-
15 tional Fish and Wildlife Foundation established by section
16 2(a) of the National Fish and Wildlife Foundation Estab-
17 lishment Act (16 U.S.C. 3701(a)).

18 **SEC. 1303. DATA COLLECTION.**

19 (a) DATABASE.—

20 (1) IN GENERAL.—The Administrator shall
21 maintain a coastal wetland restoration database to
22 collect information about projects that receive grants
23 under the Program.

24 (2) DESIGN.—The Administrator shall design
25 the database required by paragraph (1) to collect

1 performance metrics on the development and imple-
2 mentation of projects that receive grants under the
3 Program and stewardship following completion of
4 such projects to evaluate the success of those
5 projects and inform the design of future projects in
6 an adaptive manner.

7 (3) INCLUDED METRICS.—The database re-
8 quired by paragraph (1) shall include standardized
9 metrics for reporting such as—

- 10 (A) acres restored, protected, or created;
- 11 (B) habitat type;
- 12 (C) restoration technique;
- 13 (D) estimated net greenhouse gas reduc-
14 tion effect;
- 15 (E) jobs created;
- 16 (F) quantified ecosystem services;
- 17 (G) the economic benefits of wetlands; and
- 18 (H) other metrics selected by the Adminis-
19 trator.

20 (4) PUBLIC AVAILABILITY.—The Administrator
21 shall make products of the database publicly avail-
22 able and disseminate important findings to the pub-
23 lic.

24 (b) INVENTORY OF COASTAL WETLAND.—The Ad-
25 ministrator shall compile an inventory of coastal wetland.

1 **SEC. 1304. OUTREACH AND TECHNICAL ASSISTANCE.**

2 The Administrator shall establish a technical assist-
3 ance program to help entities outside of the National Oce-
4 anic and Atmospheric Administration in all phases of
5 coastal wetland restoration project work, including out-
6 reach to potential applicants for grants under section
7 1302.

8 **SEC. 1305. ANNUAL RESTORATION AND FUNDING.**

9 (a) ACREAGE REQUIREMENTS.—To the maximum ex-
10 tent practicable, the Secretary of Commerce shall award
11 grants under the Program to conduct coastal wetland res-
12 toration on 1,500,000 acres over 10 years.

13 (b) FUNDING.—For each of fiscal years 2021-2025,
14 there is authorized to be appropriated \$200,000,000 to re-
15 main available until expended for the Administrator to
16 carry out this subtitle.

17 **SEC. 1306. PREVAILING WAGE REQUIREMENT.**

18 Any contractor or subcontractor entering into a serv-
19 ice contract in connection with a project under the Pro-
20 gram shall—

21 (1) be treated as a Federal contractor or sub-
22 contractor for purposes of chapter 67 of title 41,
23 United States Code (commonly known as the
24 “McNamara-O’Hara Service Contract Act of
25 1965”); and

1 (2) pay each class of employee employed by the
2 contractor or subcontractor wages and fringe bene-
3 fits at rates in accordance with prevailing rates for
4 the class in the locality, or, where a collective-bar-
5 gaining agreement covers the employee, in accord-
6 ance with the rates provided for in the agreement,
7 including prospective wage increases provided for in
8 the agreement.

9 **SEC. 1307. DEPARTMENT OF THE INTERIOR COASTAL WET-**
10 **LAND RESTORATION; FUNDING.**

11 (a) IN GENERAL.—The Secretary of the Interior shall
12 conduct coastal wetland restoration on land managed by
13 the Director of the United States Fish and Wildlife Serv-
14 ice or the Director of the National Park Service to achieve
15 at least 1 of the following:

16 (1) The sequestration of additional carbon diox-
17 ide through—

18 (A) the active restoration of degraded
19 coastal wetland; and

20 (B) the protection of threatened coastal
21 wetland.

22 (2) The halting of ongoing carbon dioxide emis-
23 sions, and the resumption of the natural rate of car-
24 bon capture, through the restoration of drained
25 coastal wetland.

1 (3) The halting of ongoing methane emissions,
2 and the resumption of the natural rate of carbon
3 storage, through the restoration of formerly tidal
4 wetland that has lost tidal connectivity and become
5 fresh wetland (commonly known as “impounded wet-
6 land”).

7 (b) FUNDING.—

8 (1) IN GENERAL.—For each fiscal year, there is
9 authorized to be appropriated—

10 (A) for coastal wetland restoration on land
11 managed by the Director of the United States
12 Fish and Wildlife Service \$200,000,000; and

13 (B) for coastal wetland restoration on land
14 managed by the Director of the National Park
15 Service \$200,000,000.

16 (2) RECEIPT AND ACCEPTANCE.—The Sec-
17 retary of the Interior shall be entitled to receive,
18 shall accept, and shall use to carry out this section
19 in accordance with paragraph (1) the funds trans-
20 ferred under that paragraph, without further appro-
21 priation.

1 **TITLE XIV—MEASURES TO AD-**
2 **DRESS GREENHOUSE GAS**
3 **POLLUTION FROM SHIPPING**
4 **VESSELS**

5 **SEC. 1401. GREENHOUSE GAS EMISSIONS FROM SHIPPING.**

6 (a) APPLICATION.—The monitoring, reporting, and
7 verification requirements of this section shall apply to all
8 vessels of 5,000 gross tons or more calling at, leaving, or
9 transiting between, or at berth at, ports in the United
10 States, regardless of flag.

11 (b) VESSEL REPORTING.—A vessel shall measure and
12 monitor on a per-voyage basis, and report to the Adminis-
13 trator and to the vessel's flag-State on an annual basis,
14 the following metrics:

15 (1) Total CO₂ emitted by the vessel inside the
16 United States exclusive economic zone.

17 (2) Average CO₂ emissions per transport work,
18 defined as gCO₂/tonne-nautical mile, and average
19 CO₂ emissions per distance, defined as gCO₂/nau-
20 tical-mile.

21 (c) ACCEPTABLE METHODS FOR MEASURING, MONI-
22 TORING, AND REPORTING.—

23 (1) The Secretary shall develop a list of accept-
24 able methods for measuring, monitoring, and report-
25 ing metrics listed in subsection (b).

1 (2) The Secretary, to the maximum extent
2 practicable, shall ensure consistency of such methods
3 with similar reporting schemes developed by the Eu-
4 ropean Union and the International Maritime Orga-
5 nization to reduce any duplicative burden on ship-
6 pers.

7 (3) Acceptable methods included in the list
8 could include the following:

9 (A) Bunker Delivery Note (BDN) and
10 periodic stocktakes of fuel tanks.

11 (B) Bunker fuel tank monitoring on board.

12 (C) Flowmeters for applicable combustion
13 processes.

14 (D) Direct CO₂ emissions measurements.

15 (d) ANNUAL REPORT BY SECRETARY.—The Sec-
16 retary shall publish an annual report on emissions from
17 vessels covered under this section, accompanied by an ex-
18 planation intended to facilitate public understanding of
19 the vessel shipping sector's CO₂ emissions and energy effi-
20 ciency.

21 (e) REGULATIONS.—Before promulgation of regula-
22 tions under this section, reports issued under this section
23 shall be reviewed to ensure that regulatory changes will
24 not create the risk of increased CO₂ emissions.

1 **SEC. 1402. QUIET SEAS AND CLEAR SKIES VESSEL SPEED**
2 **REDUCTION AWARD PROGRAM.**

3 (a) FINDINGS.—The Congress finds the following:

4 (1) 49 marine mammal species are considered
5 depleted under the Marine Mammal Protection Act
6 of 1972, and of those species, 42 are listed as
7 threatened or endangered under the Endangered
8 Species Act of 1973.

9 (2) Climate change is altering marine mammal
10 migration routes and timing.

11 (3) Hundreds of threatened and endangered
12 marine mammals, including North Atlantic right
13 whales and blue whales, die from vessel strikes each
14 year.

15 (4) Underwater noise generated by vessels has
16 increased significantly since 1950, impeding for-
17 aging, breeding, communication, and other behaviors
18 of marine animals, including of threatened species
19 and endangered species.

20 (5) Slower ship speeds reduce the lethality of
21 vessel strikes on marine life, moderate underwater
22 noise, and provide climate benefits through reduced
23 fuel consumption and lower particulate emissions.

24 (6) In 2019, the Vessel Speed Reduction Pro-
25 gram in the Santa Barbara Channel region and the
26 San Francisco Bay region saved over 17,000 metric

1 tons of greenhouse gas emissions, with 349 vessels
2 from 15 different companies slowing their speeds for
3 over 99,000 nautical miles.

4 (b) IN GENERAL.—Not later than 12 months after
5 the date of enactment of this Act, the Administrator shall
6 establish the Quiet Seas and Clear Skies Program (in this
7 section referred to as the “Program”) to—

8 (1) reduce air pollution, harmful underwater
9 vessel noise, and the risk of fatal marine mammal
10 ship strikes by encouraging voluntary reduction in
11 the speed of eligible vessels operating within the Ex-
12 clusive Economic Zone of the United States; and

13 (2) annually award Quiet Seas and Clear Skies
14 Excellence Awards under subsection (d) for verified
15 successful participation in, and compliance with, the
16 Program by shipping companies.

17 (c) PROGRAM REQUIREMENTS.—The Administrator
18 shall develop and publish in the Federal Register require-
19 ments for voluntary participation in the Program by eligi-
20 ble shipping companies, including the following:

21 (1) PROGRAM AREA.—Geographic areas covered
22 by the Program shall include all waters of the
23 United States Exclusive Economic Zone, except for
24 areas specified in section 802 of this Act.

1 (2) FLEET REQUIREMENT.—At least 75 percent
2 of eligible vessels owned by a shipping company
3 must participate and be in compliance with para-
4 graph (3) in order to be eligible for an Award under
5 subsection (d).

6 (3) SPEED LIMITS.—The Administrator shall,
7 based upon the best available scientific information
8 and meaningful consultation with the Commandant
9 of the Coast Guard, shipping companies, and experts
10 in air quality and marine mammal conservation, pre-
11 scribe maximum speeds by engine tier for eligible
12 vessels participating in the Program, except when di-
13 rected by the Coast Guard to proceed in excess of
14 the speed requirements of the Program for safety
15 purposes, that would—

16 (A) obtain a significant reduction in green-
17 house gas and particulate pollution emissions
18 from shipping vessels;

19 (B) protect marine life; and

20 (C) reduce ocean noise.

21 (4) CERTIFICATION.—The Administrator shall
22 establish protocols for shipping companies to certify
23 compliance with the Program requirement to be eli-
24 gible for an Award under subsection (d).

1 (d) ANNUAL AWARDS.—Under the Program, the Di-
2 rector shall annually award Quiet Seas and Clear Skies
3 Excellence Awards to shipping companies whose fleets
4 that have participated in, and complied with the require-
5 ments of, the Program during the preceding year.

6 (e) OFFICIAL SEAL.—The Administrator shall create
7 an official seal to be recognized as the symbol of excellence
8 in compliance with the Program, that—

9 (1) may be used by shipping companies with eli-
10 gible vessels for which a Quiet Seas and Clear Skies
11 Excellence Award is awarded under this section;

12 (2) includes the name of the shipping company;
13 and

14 (3) includes the year for which such Award was
15 made.

16 (f) LIMITATIONS.—Nothing in this section shall be
17 construed to—

18 (1) require participation in the Program; or

19 (2) authorize any action that affects navigation
20 safety.

21 (g) DEFINITION OF ELIGIBLE VESSEL.—In this sec-
22 tion, the term “eligible vessel” means a vessel greater than
23 or equal to 65 feet in overall length.

24 (h) AUTHORIZATION OF APPROPRIATIONS.—To carry
25 out this section there is authorized to be appropriated to

1 the Administrator to carry out this section \$4,000,000 for
2 each of fiscal years 2021 through 2025.

3 **TITLE XV—STUDIES AND**
4 **REPORTS**

5 **SEC. 1501. DEEP SEA MINING.**

6 Not later than 90 days after the date of enactment
7 of this Act, the Administrator shall seek to enter into an
8 agreement with the National Academies to conduct a com-
9 prehensive assessment and approximate quantification of
10 the greenhouse gas emissions associated with deep seabed
11 mining, including emissions possible from the release of
12 greenhouse gases sequestered in the seabed.

13 **SEC. 1502. NATIONAL ACADEMIES ASSESSMENT OF OCE-**
14 **ANIC BLUE CARBON.**

15 Not later than 90 days after the date of the enact-
16 ment of this Act, the Administrator shall seek to enter
17 into an agreement with the National Academies to conduct
18 a comprehensive assessment of oceanic blue carbon, in-
19 cluding—

20 (1) The impacts of marine species decline on
21 carbon sequestration potential in ocean ecosystems,
22 an estimate of the global carbon dioxide mitigation
23 potential of protecting or recovering populations of
24 fish and marine mammals, and the ecological consid-
25 erations of such conservation strategies;

1 (2) an analysis of the geologic stores of carbon
2 in the deep seafloor environment, including current
3 and potential natural long-term carbon storage,
4 identification of gaps in scientific understanding re-
5 garding such geologic carbon storage; and

6 (3) the potential impacts to oceanic blue carbon
7 storage by human activities including energy devel-
8 opment activities, deep sea mining, deep sea carbon
9 capture technology, and other disturbances to the
10 sea floor.

11 **SEC. 1503. OCEAN CLIMATE IMPACTS AND ACTION REPORT.**

12 (a) REPORT.—Not later than 1 year after the date
13 of enactment of this Act, and annually thereafter, the Na-
14 tional Oceanic and Atmospheric Administration, in coordi-
15 nation with all other relevant agencies, shall submit to
16 Congress a report on the impacts of climate change on
17 the ocean and on coastal ecosystems and the steps the
18 United States is taking to minimize such impacts. Such
19 report shall include consolidated data from all line offices
20 in the National Oceanic and Atmospheric Administration,
21 and from other relevant Federal agencies and sources.

22 (b) IMPACTS.—The report required by subsection (a)
23 shall include baseline information as well as trends, in a
24 format that can be compared from year to year, on ocean
25 and coastal impacts including—

1 (1) changes and the rate of change of pH levels
2 and acidity in the coastal and ocean waters of the
3 United States;

4 (2) average sea surface temperatures in the
5 United States exclusive economic zone;

6 (3) average sea floor temperatures in the
7 United States exclusive economic zone;

8 (4) average sea level rise;

9 (5) number and duration of marine heat waves
10 occurring in the United States exclusive economic
11 zone;

12 (6) number, duration, location, and the attrib-
13 utable cause of harmful algal blooms occurring in
14 the coastal and ocean waters of the United States;

15 (7) number, duration, size and location of
16 hypoxic zones occurring in the coastal and ocean
17 waters of the United States;

18 (8) number and location of coral bleaching
19 events in the United States exclusive economic zone;

20 (9) estimates of coral cover loss in the United
21 States exclusive economic zone;

22 (10) number, location and severity of hurri-
23 canes impacting the United States,

24 (11) number, location, and duration of coastal
25 flooding events;

1 (12) changes in coastal land cover and other
2 ecosystem changes as a result of inundation, erosion,
3 storms, and sea level rise; and

4 (13) changes in marine species abundance and
5 distribution as a result of ocean warming, acidifica-
6 tion and other impacts of climate change.

7 **SEC. 1504. REPORT ON THE ECOLOGICAL AND ECONOMIC**
8 **EFFECTS OF HIGH SEAS FISHING IN THE**
9 **OCEAN AREAS BEYOND NATIONAL JURISDIC-**
10 **TION (“ABNJ”).**

11 (a) IN GENERAL.—Not later than 1 year after the
12 date of enactment of this Act, the Administrator, in co-
13 ordination with the Secretary of State, shall seek to enter
14 into an agreement with the National Academies under
15 which the National Academies shall—

16 (1) study the challenges and opportunities asso-
17 ciated with implementing a global moratorium on
18 high seas commercial fishing;

19 (2) evaluate the ecological, social, and economic
20 effects of a global moratorium on high seas commer-
21 cial fishing;

22 (3) estimate the scope and volume of illegal, un-
23 regulated, and unreported (IUU) fishing occurring
24 on the high seas fishing;

1 (4) evaluate the percentage of United States
2 seafood imports originating from High Seas fishing,
3 from both legally reported and IUU fishing; and

4 (5) evaluate the greenhouse gas emissions asso-
5 ciated with the high seas fishing and high seas fish-
6 ing fleets.

7 (b) ELEMENTS.—The study and evaluation con-
8 ducted pursuant to the agreement entered into under sub-
9 section (a) shall address—

10 (1) the feasibility of implementing a global mor-
11 atorium on high seas commercial fishing, includ-
12 ing—

13 (A) legal authorities that exist under the
14 United Nations Convention on the Law of the
15 Sea and other implementation instruments to
16 implement a moratorium on high seas commer-
17 cial fishing;

18 (B) the nations and vessels likely to refuse
19 or otherwise fail to comply with such a morato-
20 rium, including estimates of catch levels by
21 those nations and vessels relative to overall
22 international catch; and

23 (C) available enforcement mechanisms and
24 surveillance technology that could be used to
25 enforce such a moratorium; and

1 (2) the range of effects that would be expected
2 to result from a moratorium on high seas commer-
3 cial fishing, including—

4 (A) identification of fish stocks that would
5 be affected, changes in exploitation of those
6 stocks, and net effect on the biomass of those
7 stocks;

8 (B) ecosystem effects on non-target spe-
9 cies, including marketable and non-marketable
10 bycatch, forage species, corals, other inverte-
11 brates, marine mammals, and sea turtles;

12 (C) changes in global carbon emissions
13 from reduced fishing vessel transits and from
14 increased fish carbon capture and improved
15 high seas ecosystem functioning;

16 (D) amounts of subsidies that support high
17 seas commercial fishing by the top 12 nations
18 that currently conduct high seas fishing by vol-
19 ume;

20 (E) effects on global fisheries revenues and
21 profits overall and the effects on fisheries reve-
22 nues and profits for developing nations;

23 (F) effects on seafood availability for
24 United States consumers;

1 (G) effects on revenues and profits for do-
2 mestic fishermen; and

3 (H) effects on the scope and volume of
4 IUU fishing occurring on the high seas.

5 (c) REPORT.—

6 (1) IN GENERAL.—The agreement entered into
7 under subsection (a) shall require the National
8 Academies to submit to the Secretary of Commerce,
9 not later than 2 years after entering into the agree-
10 ment, a report that describes the results of the study
11 and evaluation conducted pursuant to the agree-
12 ment.

13 (2) PUBLIC AVAILABILITY.—The Secretary of
14 commerce shall publish the report received under
15 paragraph (1) on a public website.

16 **SEC. 1505. NATIONAL ACADEMIES ASSESSMENT OF PUBLIC**
17 **ACCESS TO THE COASTS.**

18 Not later than 90 days after the date of enactment
19 of this Act, the Administrator shall seek to enter into an
20 agreement with the National Academies to conduct a com-
21 prehensive assessment on public access to the nation's
22 coasts, including the Great Lakes' coasts. The assessment
23 shall include—

24 (1) an analysis of the existing quantity and
25 quality of public access points to the coasts by state,

1 including both recreational and commercial (“work-
2 ing waterfront”) access;

3 (2) opportunities and barriers faced by low in-
4 come communities, communities of color, Tribal
5 communities, Indigenous communities, and rural
6 communities for access to the coasts;

7 (3) the likely impact of sea level rise and ex-
8 treme weather on public access points to and access
9 along the coasts; and

10 (4) Federal mechanisms for preventing the loss
11 of access, for mitigating such loss when it occurs,
12 and for increasing the quantity, quality, and afford-
13 ability of public access to the coasts for both rec-
14 reational and commercial activities.

15 **SEC. 1506. STUDY EXAMINING THE IMPACT OF OCEAN**
16 **ACIDIFICATION AND OTHER ENVIRON-**
17 **MENTAL STRESSORS ON ESTUARINE ENVI-**
18 **RONMENTS.**

19 (a) IN GENERAL.—Not later than 90 days after the
20 date of enactment of this Act, the Administrator shall
21 make appropriate arrangements with the National Acad-
22 emies under which the National Academies shall conduct
23 a study that—

24 (1) examines the existing science of ocean acidi-
25 fication in coastal environments;

1 (2) examines the challenges to studying ocean
2 acidification and the combined effect of ocean acidi-
3 fication and other environment stressors in coastal
4 environments;

5 (3) provides recommendations for improving fu-
6 ture research with respect to ocean acidification in
7 coastal environments; and

8 (4) identifies pathways for applying science in
9 management and mitigation decisions relating to
10 ocean acidification in coastal environments.

11 (b) CONTENTS OF STUDY.—The study conducted
12 under subsection (a) shall include—

13 (1) the behavior of the carbonate system within
14 coastal environments;

15 (2) the interactions of the carbonate system
16 with other biotic and abiotic characteristics of coast-
17 al ecosystems;

18 (3) how environmental and anthropogenic
19 changes or disturbances, such as nutrient runoff and
20 water pollution, could affect abiotic and biotic proc-
21 esses within coastal ecosystems;

22 (4) how coastal biotic and abiotic processes will
23 be affected under predicted environmental changes;

24 (5) the current state of data collection, inter-
25 pretation, storage, and retrieval and observational

1 infrastructure of abiotic and biotic parameters in
2 coastal ecosystems;

3 (6) the gaps that exist in understanding the
4 socio-economic and health impacts of ocean acidifica-
5 tion in coastal ecosystems;

6 (7) future directions for scientific research; and

7 (8) pathways for applying science in manage-
8 ment and mitigation decisions.

9 (c) REPORT.—Not later than 24 months after the
10 date of enactment of this Act, in entering into an arrange-
11 ment under subsection (a), the Secretary shall request
12 that the National Academies submit to Congress a report
13 detailing the findings of the study.