116TH CONGRESS 2D SESSION

S. 5056

To require 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 SENATE OF THE UNITED STATES

DECEMBER 17, 2020

Mr. Merkley introduced the following bill; which was read twice and referred to the Committee on Commerce, Science, and Transportation

A BILL

To require 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,

1 SECTION 1. SHORT TITLE; TABLE OF CONTENTS.

- 2 (a) SHORT TITLE.—This Act may be cited as the
- 3 "Ocean Climate Emergency Action Now Act of 2020" or
- 4 the "OCEAN Act of 2020".
- 5 (b) Table of Contents for
- 6 this Act is as follows:
 - 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. Smithsonian Institution blue carbon activities.
- Sec. 109. Authorization of appropriations.
- Sec. 110. Definitions.

TITLE II—CLIMATE-READY FISHERIES AND BUY AMERICAN SEAFOOD

- Sec. 201. Sense of Congress.
- Sec. 202. Caught in the USA.
- Sec. 203. Eliminate fish subsidies in trade agreements.
- Sec. 204. Climate and fisheries research and management program.
- Sec. 205. Climate-ready fisheries innovation program.
- Sec. 206. Shifting Stocks Task Force.
- Sec. 207. Essential fish habitat consultation.
- Sec. 208. Ocean Aquaculture Research and Policy Program.

TITLE III—COASTAL ZONE MANAGEMENT ACT AMENDMENTS

- Sec. 301. Grants to further achievement of Tribal coastal zone objectives.
- Sec. 302. Eligibility of District of Columbia for Federal funding under the Coastal Zone Management Act of 1972.
- Sec. 303. Coastal and Estuarine Land Conservation Program.
- Sec. 304. Coastal Zone Management Fund.
- Sec. 305. Authorization of appropriations.
- Sec. 306. Amendments to National Estuarine Research Reserve System program.

TITLE IV—COASTAL RESILIENCY AND ADAPTATION

Sec. 401. Living Shoreline Grant Program.

- Sec. 402. National Oceanic and Atmospheric Administration coastal resilience research grants.
- Sec. 403. Grants for recovering ovsters.
- Sec. 404. Improvements to the National Oceans and Coastal Security Act.
- Sec. 405. Restoration grants for coastlines and fisheries.
- Sec. 406. Strategic Climate Change Relocation Initiative and Program.

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

Subtitle A—Coastal Communities Ocean Acidification

- Sec. 501. State and United States defined.
- Sec. 502. Coastal community vulnerability assessment.

Subtitle B—Ocean Acidification Prize Competitions

Sec. 511. Prize competitions.

Subtitle C—Coastal and Ocean Acidification Stressors and Threats Research

- Sec. 521. Purposes.
- Sec. 522. Definitions.
- Sec. 523. Interagency working group.
- Sec. 524. Strategic research plan.
- Sec. 525. National Oceanic and Atmospheric Administration ocean acidification activities.
- Sec. 526. National Science Foundation ocean acidification activities.
- Sec. 527. National Aeronautics and Space Administration ocean acidification activities.
- Sec. 528. Authorization of appropriations.

Subtitle D—South Florida Clean Coastal Waters

Sec. 531. South Florida harmful algal blooms and hypoxia assessment and action plan.

Subtitle E—Protecting Local Communities From Harmful Algal Blooms

Sec. 541. Algal blooms.

Subtitle F—Harmful Algal Bloom Essential Forecasting

- Sec. 551. Designating certain harmful algal bloom services as excepted services under the Anti-Deficiency Act.
- Sec. 552. Centers of Excellence in Harmful Algal Bloom Research, Prevention, Response, and Mitigation.

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

Subtitle A—Regional Ocean Partnerships

- Sec. 601. Findings; sense of Congress; purposes.
- Sec. 602. Regional Ocean Partnerships.

Subtitle B—Data and Scientific Coordination

- Sec. 611. Increased coordination among agencies with respect to data and monitoring.
- Sec. 612. Interagency Ocean Exploration Committee.
- Sec. 613. Committee on Ocean Policy.
- Sec. 614. Building data sources.
- Sec. 615. National sea level rise risk analysis.

Subtitle C—Integrated Coastal and Ocean Observation System

- Sec. 621. Staggered terms for National Integrated Coastal and Ocean Observation System Advisory Committee.
- Sec. 622. Integrated coastal and ocean observation system cooperative agreements
- Sec. 623. Reauthorization of Integrated Coastal and Ocean Observation System Act of 2009.
- Sec. 624. Advanced Research Projects Agency-Oceans.

Subtitle D—Centralized Website for Resiliency Grants

Sec. 631. Centralized website for resiliency grants.

TITLE VII—COASTAL WETLANDS

- Sec. 701. Definitions.
- Sec. 702. Coastal and Estuary Resilience Grant Program.
- Sec. 703. Data collection.
- Sec. 704. Outreach and technical assistance.
- Sec. 705. Annual restoration and funding.
- Sec. 706. Prevailing wage requirement.
- Sec. 707. Department of the Interior coastal wetland restoration; funding.

1 SEC. 2. DEFINITIONS.

- 2 In this Act:
- 3 (1) ADMINISTRATOR.—The term "Adminis-
- 4 trator" means the Administrator of the National
- 5 Oceanic and Atmospheric Administration.
- 6 (2) Exclusive economic zone.—The term
- 7 "exclusive economic zone" means the zone estab-
- 8 lished by Presidential Proclamation Number 5030,
- 9 dated March 10, 1983 (16 U.S.C. 1453 note; relat-
- ing to the exclusive economic zone of the United
- 11 States of America).

- 1 (3) Indian Tribe.—The term "Indian Tribe"
 2 has the meaning given such term in section 4 of the
 3 Indian Self-Determination and Education Assistance
 4 Act (25 U.S.C. 5304).
- 5 (4) Institution of Higher Education.—The 6 term "institution of higher education" has the 7 meaning given such term in section 101(a) of the 8 Higher Education Act of 1965 (20 U.S.C. 1001(a)).
 - (5) NATIONAL ACADEMIES.—The term "National Academies" means the National Academies of Sciences, Engineering, and Medicine.
 - (6) Restorative ocean aquaculture" means ocean and coastal propagation of seaweed or shellfish farming that generates positive ecological and social impact.
 - (7) STATE.—The term "State" means each of the several States, the District of Columbia, and the United States Territories of American Samoa, the Commonwealth of the Northern Mariana Islands, Guam, Puerto Rico, and the United States Virgin Islands.
- 23 (8) UNITED STATES.—The term "United States" means the States, collectively.

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1 TITLE I—MARINE AND COASTAL 2 BLUE CARBON

2	SEC	101	DITE	CADDON	PROGRA	A 11/II
. 7	SEC.	-101.	BLUE	CARBON	PRUCIRA	AIVI.

- 4 (a) Establishment.—The Administrator shall es-
- 5 tablish and maintain a program, to be known as the "Blue
- 6 Carbon Program", within the National Oceanic and At-
- 7 mospheric Administration for the purposes of furthering
- 8 conservation objectives for fish and wildlife habitat con-
- 9 servation and restoration and coastal resilience including
- 10 the development of ways to incorporate ecosystem services
- 11 from carbon storage into existing domestic and inter-
- 12 national policies, programs, and activities.
- 13 (b) Additional Authority.—In conducting the
- 14 Program, the Administrator may enter into and perform
- 15 such contracts, leases, grants, or cooperative agreements
- 16 as may be necessary to carry out the purposes of this title
- 17 on such terms as Administrator considers appropriate.
- 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:

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- 3 (1) Collaborate with Federal agencies, the inter-4 agency working group, State agencies, Indian
- 5 Tribes, and non-governmental organizations on re-
- 6 search, restoration, and protection efforts relating to
- 7 blue carbon ecosystems.
- 8 (2) Develop a database of blue carbon stocks 9 and fluxes in the United States.
 - (3) Assist in exploration of the potential for a market for carbon credits for restoration initiatives, including research and development of protocols.
 - (4) Raise awareness of blue carbon ecosystems as a tool to further conservation objectives through education and extension activities.
 - (5) Use existing models or develop new models to assess blue carbon storage potential that include quantification, verifiability, additionality as compared to a historical baseline, and permanence of those benefits.
 - (6) Quantify current total and net ecosystem carbon storage in coastal and marine areas.
- 23 (7) Project future total and net ecosystem car-24 bon storage under different scenarios influenced by

- human population growth, sea level rise, and other
 system-wide changes.
 - (8) Develop and use protocols for inclusion of blue carbon projects in carbon markets.
 - (9) Protect and restore habitats, waters, and organisms that are long-term carbon sinks or will be subject to habitat change as a result of climate change and development.
 - (10) Provide staff and technical expertise to the interagency working group.
 - (11) Quantify co-benefits, including flood risk reduction, habitat restoration for endangered and threatened species, maintenance of biodiversity, water quality improvements, habitat maintenance and creation, cycling of nutrients other than carbon, and commercial and recreational fishing and boating benefits.
 - (12) Assess regional and national ecosystem and socioeconomic impacts of carbon sequestration and storage.
 - (13) Research variability, long-term storage, and innovative techniques for effective, long-term, natural ocean or coastal ecosystem-based carbon sequestration.
- 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, shall—
9	(1) produce, update every 3 years, and main-
10	tain a national map and inventory of coastal blue
11	carbon ecosystems including—
12	(A) with respect to each such ecosystem—
13	(i) the species and types of habitat in
14	the ecosystem;
15	(ii) the condition of such habitats in-
16	cluding whether a habitat is degraded,
17	drained, eutrophic, or tidally restricted;
18	(iii) type of public or private owner-
19	ship and any protected status;
20	(iv) the size of the ecosystem;
21	(v) the salinity boundaries of the eco-
22	system;
23	(vi) the tidal boundaries of the eco-
24	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 the 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 the 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—
21	(i) the Coastal Change Analysis Pro-
22	gram of the National Oceanic and Atmos-
23	pheric Administration;

1	(ii) the National Wetlands Inventory
2	of the United States Fish and Wildlife
3	Service;
4	(iii) the LandCarbon program of the
5	United States Geological Survey;
6	(iv) the LiDAR information coordina-
7	tion and knowledge program of the United
8	States Geological Survey and the Federal
9	Emergency Management Agency;
10	(v) the Biological and Environmental
11	Research program of the Department of
12	Energy; and
13	(vi) the National Coastal Blue Carbon
14	Assessment of the Department of Agri-
15	culture; and
16	(B) engage regional experts for additional
17	peer-reviewed data to ensure best available sci-
18	entific information is incorporated.
19	(b) USE.—The interagency working group shall use
20	the national map and inventory created pursuant to sub-
21	section (a)—
22	(1) to assess the existing and potential carbon
23	sequestration of different coastal blue carbon eco-
24	systems, and account for any regional differences;

- (2) to assess and quantify emissions from degraded and destroyed coastal blue carbon ecosystems;
 - (3) to develop regional assessments and to provide technical assistance to regional, State, Tribal, and local government agencies, regional information coordination entities (as such term is defined in section 12303(6) of the Integrated Coastal and Ocean Observation System Act (33 U.S.C. 3602(6))), and agencies, organizations, and other entities that support communities that may not have adequate resources, including low-income communities, communities of color, Tribal communities, and rural communities;
 - (4) to assess degraded coastal blue carbon ecosystems and the potential of those ecosystems for restoration, including developing scenario modeling to identify vulnerable land areas where management, protection, and restoration efforts should be focused, including the potential for an ecosystem to migrate inland to adapt to sea level rise; and
 - (5) produce predictions of coastal blue carbon ecosystems and carbon sequestration rates in the context of climate change, environmental stressors, and human stressors.

1	SEC. 103. REPORT ON BLUE CARBON IN THE UNITED
2	STATES.
3	Not later than 1 year after the date of the enactment
4	of this Act and every 2 years thereafter, the Adminis-
5	trator, in consultation with the interagency working
6	group, shall submit to the Committee on Commerce,
7	Science, and Transportation of the Senate and the Com-
8	mittee on Natural Resources of the House of Representa-
9	tives a report containing the following:
10	(1) A summary of federally funded coastal and
11	marine blue carbon ecosystem research, monitoring,
12	preservation, and restoration activities, including the
13	budget for each of those activities and a description
14	of the progress made in advancing the national pri-
15	orities established by the interagency working group.
16	(2) With respect to each blue carbon ecosystem,
17	the—
18	(A) type;
19	(B) location; and
20	(C) type of ownership, delineated by pri-
21	vate lands, State lands, Tribal lands, or Fed-
22	eral.
23	(3) An assessment of the vulnerability of coast-
24	al and marine blue carbon ecosystems to climate im-
25	pacts such as sea-level rise, acidification, and salt-
26	water intrusion, and other environmental and human

- stressors, such as development, water pollution, and aquaculture.
 - (4) An assessment of the greatest anthropogenic threats to blue carbon ecosystems, including the Federal agency actions that have historically caused and presently cause great adverse effects on such ecosystems.
 - (5) An assessment of the carbon sequestration potential of blue carbon ecosystems and the probable changes to sequestration under climate change scenarios.
 - (6) An assessment of biophysical, social, and economic impediments, including water storage and flood control structures, to coastal blue carbon ecosystem protection and restoration and opportunities to restore and enhance the resilience and sequestration potential of blue carbon ecosystems.
 - (7) An assessment of aging or outdated artificial structures, including dikes, levees, dams, culverts, water storage structures, shoreline hardening projects, impediments to fish passage, and other infrastructure that impede the ecological or sequestration functions of blue carbon ecosystems and the feasibility of repairing, retrofitting, or removing such structures.

1	(8) An assessment of the economic, social, and
2	environmental co-benefits that those blue carbon
3	ecosystems provide including—
4	(A) coastal protection from storms and
5	flooding;
6	(B) tourism and recreational use;
7	(C) benefits to fisheries;
8	(D) nutrient removal;
9	(E) number of jobs that are directly or in-
10	directly attributable to blue carbon ecosystems;
11	and
12	(F) total economic activity that is attrib-
13	utable to blue carbon ecosystems.
14	(9) An assessment of the social and economic
15	makeup of the communities served by blue carbon
16	ecosystems.
17	SEC. 104. BLUE CARBON PARTNERSHIP GRANT PROGRAM.
18	(a) Establishment.—The Administrator shall es-
19	tablish a competitive grant program, to be known as the
20	"Blue Carbon Partnership Grant Program", to, beginning
21	not later than 2 years after the date of the enactment of
22	this Act, provide funds to eligible recipients for projects
23	that—

1	(1) protect and restore blue carbon stocks, oce-
2	anic blue carbon, and coastal blue carbon ecosystems
3	and increase the long-term carbon storage; and
4	(2) contribute to priorities identified in the
5	most recent strategic plan developed by the inter-
6	agency working group under section 106(e).
7	(b) Eligible Recipients.—A person or entity is eli-
8	gible to receive a grant under the grant program if such
9	person or entity is—
10	(1) a voluntary private landowner or group of
11	landowners;
12	(2) a State agency responsible for managing
13	natural resources or wildlife;
14	(3) an Indian Tribe;
15	(4) a unit of local government;
16	(5) a nonprofit organization or land trust;
17	(6) an institution of higher education; or
18	(7) any group of entities described in para-
19	graphs (1) through (6).
20	(c) REQUIREMENTS.—In administering the grant
21	program under this section, the Administrator shall use
22	the criteria, guidelines, contracts, reporting requirements,
23	and evaluation metrics developed by the interagency work-
24	ing group

1	(d) Selection Criteria.—In evaluating applica-
2	tions for the grant program from eligible recipients, the
3	Administrator shall give priority to proposed eligible res-
4	toration activities that would—
5	(1) result in long-term protection and seques-
6	tration of carbon stored in coastal and marine envi-
7	ronments; and
8	(2)(A) protect key habitats for fish, wildlife,
9	and the maintenance of biodiversity;
10	(B) provide coastal protection from develop-
11	ment, storms, flooding, and land-based pollution;
12	(C) protect coastal resources of national, histor-
13	ical, and cultural significance;
14	(D) benefit communities of color, low-income
15	communities, Tribal or Indigenous communities, or
16	rural communities; or
17	(E) capitalize on existing established public-pri-
18	vate partnerships.
19	(e) Report to Congress.—
20	(1) Report Required.—The Administrator
21	shall submit annually to Congress a report con-
22	taining a State-by-State analysis of—
23	(A) the total number of acres of land or
24	water protected or restored through fee title ac-

1	quisition, easement, restoration or other activi-
2	ties under the grant program;
3	(B) the status of restoration projects
4	under the grant program; and
5	(C) the amount of blue carbon captured or
6	protected over a 100-year time period as a re-
7	sult of the grant program.
8	(2) Public availability of report.—The
9	Administrator shall make available to the public
10	each report required by paragraph (1).
11	(f) AUTHORIZATION OF APPROPRIATIONS.—There is
12	authorized to be appropriated to the Administrator
13	\$200,000,000 for each of fiscal years 2021 to 2025 to
14	carry out this section.
	SEC. 105. INTEGRATED PILOT PROGRAMS TO PROTECT AND
	SEC. 105. INTEGRATED PILOT PROGRAMS TO PROTECT AND RESTORE DEGRADED COASTAL BLUE CAR-
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15 16	RESTORE DEGRADED COASTAL BLUE CAR-
15 16 17	RESTORE DEGRADED COASTAL BLUE CARBON ECOSYSTEMS.
15 16 17 18	RESTORE DEGRADED COASTAL BLUE CARBON ECOSYSTEMS. The Administrator shall—
15 16 17 18	RESTORE DEGRADED COASTAL BLUE CARBON ECOSYSTEMS. The Administrator shall— (1) establish integrated pilot programs that—
15 16 17 18 19 20	RESTORE DEGRADED COASTAL BLUE CARBON ECOSYSTEMS. The Administrator shall— (1) establish integrated pilot programs that— (A) develop best management practices, in-
15 16 17 18 19 20 21	RESTORE DEGRADED COASTAL BLUE CARBON ECOSYSTEMS. The Administrator shall— (1) establish integrated pilot programs that— (A) develop best management practices, including design criteria and performance func-

1	ward progression or migration of coastal blue
2	carbon ecosystems; and
3	(B) identify potential barriers to restora-
4	tion efforts;
5	(2) ensure that the pilot programs—
6	(A) cover geographically, ecologically, cul-
7	turally, and economically representative loca-
8	tions with significant ecological, economic, and
9	social benefits; and
10	(B) maximize potential for long-term car-
11	bon storage;
12	(3) establish a procedure for reviewing applica-
13	tions for the pilot programs, taking into account—
14	(A) quantification;
15	(B) verifiability;
16	(C) additionality, as compared to a histor-
17	ical baseline; and
18	(D) permanence of those benefits;
19	(4) ensure, through consultation with the inter-
20	agency working group, that the goals, metrics, moni-
21	toring, and outcomes of the pilot programs are com-
22	municated to the appropriate State, Tribal, and local
23	governments, and to the general public; and
24	(5) coordinate with relevant Federal agencies
25	on the interagency working group to prevent unnec-

	21
1	essary duplication of effort among Federal agencies
2	and departments with respect to protection and res
3	toration programs.
4	SEC. 106. INTERAGENCY WORKING GROUP.
5	(a) Establishment.—The Subcommittee on Ocean
6	Science and Technology of the National Science and Tech
7	nology Council shall establish an interagency working
8	group to be known as the "Interagency Working Group
9	on Coastal and Marine Blue Carbon".
10	(b) Purposes.—The interagency working group
11	shall—
12	(1) oversee the development of and updates to
13	a national map, including United States Territories
14	of coastal and marine blue carbon ecosystems, in
15	cluding habitat types, with a regional focus in anal
16	ysis that is usable for local level protection planning
17	and restoration;
18	(2) use such map to inform the Administrator
19	of the creation by the Administrator of the Environ
20	mental Protection Agency of the annual Inventory of
21	United States Greenhouse Gas Emissions and Sinks
22	(3) establish national coastal and marine blue
23	carbon ecosystem restoration priorities, including an
24	assessment of current Federal funding being used

for restoration and conservation efforts;

- 1 (4) assess the biophysical, social, statutory, reg-2 ulatory, and economic impediments to coastal and 3 marine blue carbon ecosystem protection and res-4 toration;
 - (5) study the effects of climate change and environmental and human stressors on carbon sequestration rates;
 - (6) identify priority blue carbon ecosystems for protection;
 - (7) develop a national strategy for foundational science necessary to study, synthesize, and evaluate the effects of climate change and environmental and human stressors on sequestration rates and capabilities of marine blue carbon and coastal blue carbon ecosystems protection;
 - (8) develop an assessment of current legal authorities to protect and restore blue carbon ecosystems and make recommendations for additional authorities if current authorities are determined to be insufficient; and
 - (9) ensure the continuity, use, and interoperability of data assets through the Coastal Carbon Data Clearinghouse of the Smithsonian Institution.
- 24 (c) Membership.—The interagency working group 25 shall be comprised of representatives of the following:

1	(1) The Administrator.
2	(2) The Administrator of the Environmental
3	Protection Agency.
4	(3) The Director of the National Science Foun-
5	dation.
6	(4) The Administrator of the National Aero-
7	nautics and Space Administration.
8	(5) The Director of the United States Geologi-
9	cal Survey.
10	(6) The Director of the United States Fish and
11	Wildlife Service.
12	(7) The Director of the National Park Service.
13	(8) The Director of the Bureau of Indian Af-
14	fairs.
15	(9) The Secretary of the Smithsonian Institu-
16	tion.
17	(10) The Chief of Engineers of the Army Corps
18	of Engineers.
19	(11) The Secretary of Agriculture.
20	(12) The Secretary of Defense.
21	(13) The Secretary of Transportation.
22	(14) The Secretary of State.
23	(15) The Secretary of Energy.
24	(16) The Administrator of the United States
25	Agency for International Development.

1	(17) The Administrator of the Federal Emer-
2	gency Management Agency.
3	(18) The Chair of the Council on Environ-
4	mental Quality.
5	(d) Chair.—The interagency working group shall be
6	chaired by the Administrator.
7	(e) Strategic Plan.—
8	(1) In General.—The interagency working
9	group shall create a strategic plan for Federal in-
10	vestments in basic research, development, dem-
11	onstration, long-term monitoring and stewardship,
12	and deployment of coastal blue carbon ecosystem
13	and marine blue carbon projects for the 5-year pe-
14	riod beginning on the date that is 1 year after the
15	date of the enactment of this Act. The plan shall in-
16	clude—
17	(A) an assessment of the use of existing
18	Federal programs to protect, restore, enhance,
19	and preserve coastal blue carbon ecosystems;
20	(B) an analysis of potential sea level rise
21	migration corridors for blue carbon ecosystems;
22	(C) an analysis of anticipated fish and
23	wildlife uses of blue carbon ecosystems; and
24	(D) identification of priority strategies and
25	investments for preserving, restoring, and en-

1	hancing the resilience and carbon sequestration
2	potential of such blue carbon ecosystems.
3	(2) TIMING.—The interagency working group
4	shall—
5	(A) submit the strategic plan under para-
6	graph (1) to the Committee on Commerce
7	Science, and Transportation of the Senate and
8	the Committee on Natural Resources and the
9	Committee on Science, Space, and Technology
10	of the House of Representatives on a date that
11	is not later than 1 year after the date of the
12	enactment of this Act; and
13	(B) submit a revised version of such plan
14	to such committees every 5 years thereafter.
15	(3) Federal register.—Not less than 90
16	days before the strategic plan, or any revision there-
17	of, is submitted under paragraph (2), the inter-
18	agency working group shall publish such plan or re-
19	vision in the Federal Register and solicit public com-
20	ments on such plan or revision for a period of not
21	less than 60 days.
22	SEC. 107. COASTAL CARBON AREAS OF SIGNIFICANCE.
23	(a) Designation.—The Administrator, consistent
24	with this section, shall designate as a coastal carbon area

of significance any area that is—

1	(1) in the coastal zone (as such term is defined
2	in section 304 of the Coastal Zone Management Act
3	of 1972 (16 U.S.C. 1453)), in territorial waters of
4	the United States, or in the exclusive economic zone;
5	and
6	(2) the location of water, a substrate, or an eco-
7	system that—
8	(A) provides for long-term storage and se-
9	questration of significant amounts of ecosystem
10	carbon; and
11	(B)(i) limits erosion and future landward
12	migration;
13	(ii) provides a buffer against storm surge,
14	especially for communities of color, low-income
15	communities, and Tribal and Indigenous com-
16	munities;
17	(iii) provides a spawning, breeding, feed-
18	ing, or nesting habitat for wildlife; or
19	(iv) is estuarine habitat designated as es-
20	sential fish habitat under the Magnuson-Ste-
21	vens Fishery Conservation and Management
22	Act (16 U.S.C. 1801 et seq.).
23	(b) Guidelines.—The Administrator, in consulta-
24	tion with the interagency working group, shall, not later
25	than 1 year after the date of the enactment of this Act.

- 1 establish by regulation guidelines based on the best avail-
- 2 able science to describe and identify coastal carbon areas
- 3 of significance and measures to ensure the protection of
- 4 coastal carbon areas of significance.
- 5 (c) REVIEW AND UPDATE.—The Administrator, in
- 6 consultation with the interagency working group, shall re-
- 7 view and update guidelines established under subsection
- 8 (b) not less frequently than once every 5 years or when
- 9 new information warrants such an update.
- 10 (d) Schedule.—The Administrator, in consultation
- 11 with the interagency working group, shall—
- (1) establish a schedule for the identification of
- coastal carbon areas of significance under subsection
- 14 (b) and for reviews and updates under subsection
- 15 (c); and
- 16 (2) make initial designations of a coastal carbon
- area of significance in each coastal State not later
- than 1 year after the date of enactment of this Act.
- 19 (e) RECOMMENDATIONS AND INFORMATION.—The
- 20 Administrator, in consultation with the interagency work-
- 21 ing group, shall, with respect to each coastal carbon area
- 22 of significance, provide recommendations and information
- 23 regarding the adverse impacts and threats to the carbon
- 24 storage, ecosystem services, and habitat capacity of the
- 25 area, and the actions that should be considered to avoid

- 1 adverse impacts and ensure the conservation and enhance-
- 2 ment of that area.
- 3 (f) Programs Administered by the Secretary
- 4 OF COMMERCE.—The Administrator, in consultation with
- 5 the interagency working group, shall use programs admin-
- 6 istered by the Secretary of Commerce to carry out this
- 7 section and ensure the conservation and enhancement of
- 8 each coastal carbon area of significance.
- 9 (g) Requirements for Federal Actions.—With
- 10 respect to any proposed agency action that has the poten-
- 11 tial to cause an adverse impact on the carbon storage, eco-
- 12 system services, or habitat capacity of any coastal carbon
- 13 area of significance, each Federal agency shall comply
- 14 with the following requirements:
- 15 (1) NOTIFICATION.—Such Federal agency shall
- notify the Administrator of such proposed agency ac-
- 17 tion.
- 18 (2) Determination of Adverse impact.—
- 19 The Administrator, in consultation with the pro-
- 20 posing agency and subject to public comment, shall
- 21 determine whether the proposed agency action will
- cause an adverse impact on the carbon storage, eco-
- 23 system, or habitat of a coastal carbon area of signifi-
- cance.

- (3) ALTERNATIVE.—With respect to any proposed action the Administrator determines will have an adverse impact under paragraph (2), the proposing agency, in consultation with the Administrator, shall determine whether there is an alternative action that would prevent such adverse impact and fulfill the purpose of the proposed action. The proposing agency shall not take an action that would cause an adverse impact if an alternative that would not cause such adverse impact is available and would fulfill the purpose of such action.
 - (4) CARBON STORAGE OFFSETS.—With respect to a proposed action for which the agency determines no alternative is available under paragraph (3), the proposing agency shall—
 - (A) in consultation with the Administrator, take measures to minimize and mitigate such adverse impact;
 - (B) take such action as the Administrator determines necessary to create a coastal or marine blue carbon ecosystem storage offset that, taken in conjunction with the proposed action, results in a long term net increase in carbon storage, lasting an equivalent time period as the carbon storage lost by the adverse impact;

- 1 (C) demonstrate quantitatively, using the
 2 best available science, that the carbon storage
 3 offset will result in a net increase in ecological
 4 carbon storage and is located in close proximity
 5 to the original site to keep the affected communities whole;
 - (D) maintain such carbon storage offset for a period of time to be determined by the Administrator but not less than 100 years; and
 - (E) publish the agency's proposed course of mitigation in the Federal Register for public notice and comment.
- 13 (h) REQUIREMENT FOR AUTHORIZATION OR APPRO-PRIATION.—Any requests for a new authorization or ap-14 15 propriation from a Federal agency transmitted to the Office of Management and Budget shall include, if such au-16 17 thorization or appropriation may affect a coastal carbon area of significance, a certification that such agency will 18 use such authorization or appropriation in compliance 19 20 with this section.
- 21 (i) REQUIRED RESTRICTIONS.—A Federal agency 22 may not enter into a lease, easement, right-of-way, or sale 23 of any land designated as a coastal carbon area of signifi-24 cance unless such agency attaches appropriate restrictions

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- 1 to the use of the property to protect the coastal carbon
- 2 area of significance.
- 3 (j) Exception.—Preparation, revision, implementa-
- 4 tion, or enforcement of a fishery management plan under
- 5 the Magnuson-Stevens Fishery Conservation and Manage-
- 6 ment Act (16 U.S.C. 1801 et seq.) that applies to an area
- 7 that is subject to a prohibition on all bottom-tending fish-
- 8 ing gear shall not be treated as an action that is subject
- 9 to subsection (g).
- 10 SEC. 108. SMITHSONIAN INSTITUTION BLUE CARBON AC-
- 11 TIVITIES.
- 12 (a) IN GENERAL.—The Secretary of the Smithsonian
- 13 Institution, in coordination with the Administrator and
- 14 the interagency working group, shall provide for the long-
- 15 term stewardship, continuity, use, and interoperability of,
- 16 and access to, data relating to coastal blue carbon eco-
- 17 systems and national mapping, including United States
- 18 Territories and Tribal lands, by supporting the mainte-
- 19 nance of the Coastal Carbon Data Clearinghouse operated
- 20 by the Smithsonian Environmental Research Center.
- 21 (b) Coastal Carbon Data Clearinghouse Du-
- 22 TIES.—Acting through the Coastal Carbon Data Clearing-
- 23 house, the Secretary of the Smithsonian Institution, in co-
- 24 ordination with the Administrator and interagency work-
- 25 ing group, shall process, store, archive, provide access to,

- 1 and incorporate to the extent possible, all coastal and ma-
- 2 rine blue carbon data collected through federally funded
- 3 research by a Federal agency, State, local agency, Indian
- 4 Tribe, academic scientist, or other relevant entity.
- 5 (c) Global and National Data Assets.—The
- 6 Secretary of the Smithsonian Institution, in coordination
- 7 with the Administrator and the interagency working
- 8 group, shall ensure that existing global and national data
- 9 assets are incorporated into the Coastal Carbon Data
- 10 Clearinghouse to the greatest extent possible.
- 11 (d) Establishment of Standards, Protocols,
- 12 AND PROCEDURES.—The Secretary of the Smithsonian
- 13 Institution, in coordination with the Administrator and
- 14 the interagency working group, shall establish standards,
- 15 protocols, and procedures for the processing, storing,
- 16 archiving, and providing access to data in the Coastal Car-
- 17 bon Data Clearinghouse and best practices for sharing
- 18 such data with State, local, and Tribal governments,
- 19 coastal stakeholders, non-Federal resource managers, and
- 20 academia. The Administrator shall publish, update, and
- 21 keep current such data on a publicly available website.
- 22 (e) DIGITAL TOOLS AND RESOURCES.—The Sec-
- 23 retary of the Smithsonian Institution, in coordination with
- 24 the Administrator and the interagency working group,

- 1 shall develop digital tools and resources to support the
- 2 public use of the Coastal Carbon Data Clearinghouse.
- 3 (f) AUTHORIZATION OF APPROPRIATIONS.—There is
- 4 authorized to be appropriated to the Secretary of the
- 5 Smithsonian Institution \$5,000,000 for each of fiscal
- 6 years 2021 through 2025 to carry out this section.

7 SEC. 109. AUTHORIZATION OF APPROPRIATIONS.

- 8 There is authorized to be appropriated to the Admin-
- 9 istrator \$50,000,000 for each of the fiscal years 2021 to
- 10 2025 to carry out this title.

11 SEC. 110. DEFINITIONS.

- 12 In this title:
- 13 (1) Blue carbon stocks.—The term "blue
- carbon stocks" means terrestrial and marine vegeta-
- tion and underlying sediment that has the capacity
- to sequester and store atmospheric carbon.
- 17 (2) Coastal blue carbon ecosystem.—The
- term "coastal blue carbon ecosystem" means vege-
- 19 tated coastal habitats including mangroves, tidal
- 20 marshes, seagrasses, kelp forests, and other tidal or
- 21 salt-water wetlands that have the capacity to seques-
- ter carbon from the atmosphere for a period of not
- less than 100 years.
- 24 (3) Coastal carbon area of signifi-
- 25 CANCE.—The term "coastal carbon area of signifi-

- cance" means any area designated by the Administrator under section 107 as a coastal carbon area of significance.
 - (4) GRANT PROGRAM.—The term "grant program" means the Blue Carbon Partnership Grant Program established under section 104.
 - (5) Interagency working group" means the Interagency Working Group on Coastal and Marine Blue Carbon established under section 106.
 - (6) Marine blue carbon.—The term "marine blue carbon" means the sequestration of carbon in pelagic and deep sea ecosystems, including in sediments and through the ecosystem impacts of increased biomass of large marine wildlife.
 - (7) MARINE BLUE CARBON ECOSYSTEM.—The term "marine blue carbon ecosystem" means habitats that support marine blue carbon.
 - (8) Program.—The term "Program" means the Blue Carbon Program established under section 101(a).

TITLE II—CLIMATE-READY FISH-

ERIES AND BUY AMERICAN 2

3	SEAFOOD
4	SEC. 201. SENSE OF CONGRESS.
5	It is the sense of Congress that—
6	(1) American wild-caught seafood is integral to
7	the Nation's food supply and to American food secu-
8	rity;
9	(2) the seafood supply chain is often long and
10	complex;
11	(3) American caught and American-processed
12	seafood can be a sustainable healthy source of pro-
13	tein and micronutrients;
14	(4) fresh, frozen, dried, and canned domestic
15	seafood can be produced, processed, and transported
16	in a manner that has a low carbon footprint;
17	(5) marine species that are small, at lower
18	trophic levels, and pelagic typically have the smallest
19	carbon footprint; and
20	(6) therefore, any executive agency that pur-
21	chases seafood products should, to the extent prac-
22	ticable, buy local American-caught or American-har-
23	vested and American-processed seafood products
24	from fisheries that are not overfished or experi-

encing overfishing in order to reduce the greenhouse

1	gas emissions associated with the supply chain of
2	seafood products.
3	SEC. 202. CAUGHT IN THE USA.
4	Section $2(c)(1)$ of the Act of August 11, 1939 (15
5	U.S.C. $713c-3(c)(1)$) is amended to read as follows:
6	"(1) The Secretary shall make grants from the
7	fund established under subsection (b) to—
8	"(A) assist persons in carrying out re-
9	search and development projects addressed to
10	any aspect of United States fisheries, including
11	harvesting, processing, marketing, and associ-
12	ated infrastructures; or
13	"(B) assist persons to market and promote
14	the consumption of—
15	"(i) local or domestic fishery products;
16	"(ii) environmentally- and climate-
17	friendly fishery products that minimize by-
18	catch and impacts on marine mammals;
19	"(iii) invasive species; or
20	"(iv) well-managed but less known
21	species.".
22	SEC. 203. ELIMINATE FISH SUBSIDIES IN TRADE AGREE-
23	MENTS.
24	(a) In General.—Section 102(b) of the Bipartisan
25	Congressional Trade Priorities and Accountability Act of

1	2015 (19 U.S.C. 4201(b)) is amended by adding at the
2	end the following:
3	"(23) Fish subsidies.—The principal negoti-
4	ating objectives of the United States with respect to
5	fish subsidies are the following:
6	"(A) To eliminate subsidies that contribute
7	to overcapacity, overfishing, or illegal, unre-
8	ported, and unregulated fishing, such as sub-
9	sidies that—
10	"(i) increase the marine fishing capac-
11	ity of fishing vessels or support the acqui-
12	sition of equipment that increases the abil-
13	ity of fishing vessels to find fish;
14	"(ii) support the construction of fish-
15	ing vessels, importation of fishing vessels,
16	or government repurchase of fishing ves-
17	sels outside of a binding and effective fish-
18	ing capacity reduction program that in-
19	cludes the corresponding elimination of
20	fishing rights and a binding and effective
21	prohibition on the reuse of vessels for fish-
22	ing to increase capacity in any fishery;
23	"(iii) affect fish stocks in any fish-
24	ery—

1	"(I) in an overfished or worse
2	condition;
3	"(II) whose stock levels are de-
4	clining; or
5	"(III) whose stock level status re-
6	mains unknown;
7	"(iv) are provided to fishing enter-
8	prises engaged in long-distance fishing, ei-
9	ther on the high seas or in the exclusive
10	economic zone of a third country;
11	"(v) support the transfer or reflagging
12	of fishing vessels to third countries, includ-
13	ing through the creation of joint ventures
14	with partners of those countries;
15	"(vi) are provided to the fishing enter-
16	prises or to owners or operators of vessels
17	that have been determined to have engaged
18	in illegal, unreported, and unregulated
19	fishing by a coastal State or a regional
20	fisheries management organization; or
21	"(vii) reduce fuel, insurance, or other
22	operating costs solely for fishing enter-
23	prises.
24	"(B) To require parties to trade agree-
25	ments—

1	"(i) to report to an environmental af-
2	fairs committee established under the
3	agreement, on an annual basis, all marine
4	fishing-related subsidies provided by the
5	parties, including fleet capacity and trade
6	data concerning the fisheries that the sub-
7	sidies affect;
8	"(ii) to establish an independent body
9	to make annual assessments of the health
10	of fish stocks in each domestic fishery and
11	report such assessments to such environ-
12	mental affairs committee;
13	"(iii) with respect to shared or inter-
14	national fisheries in which each party is in-
15	volved in fishing activities, to commit to
16	cooperating with third countries, regional
17	fisheries management organizations, and
18	assessment bodies in annual assessments
19	of the health of fish stocks in such fish-
20	eries; and
21	"(iv) to certify to such environmental
22	affairs committee that they have made and
23	continue to make adequate progress to-
24	ward the goal of protecting and conserving,

through well-connected and effective sys-

1	tem of protected areas and other effective
2	area-based conservation measures, at least
3	30 percent of the planet by 2030, with the
4	focus on areas particularly important for
5	biodiversity.
6	"(C) To require parties to trade agree-
7	ments that are also members of the World
8	Trade Organization to work collaboratively at
9	the Organization to establish and maintain ro-
10	bust disciplines on fisheries subsidies.".
11	(b) Effective Date.—The amendments made by
12	subsection (a)—
13	(1) take effect on the date of the enactment of
14	this Act; and
15	(2) apply with respect to negotiations for trade
16	agreements subject to the provisions of section 103
17	of the Bipartisan Congressional Trade Priorities and
18	Accountability Act of 2015 (19 U.S.C. 4202) en-
19	tered into on or after such date of enactment.
20	SEC. 204. CLIMATE AND FISHERIES RESEARCH AND MAN-
21	AGEMENT PROGRAM.
22	Title IV of the Magnuson-Stevens Fishery Conserva-
23	tion and Management Act (16 U.S.C. 1881 et seq.) is
24	amended by adding at the end the following:

1 "SEC. 409. CLIMATE AND FISHERIES RESEARCH AND MAN-2 AGEMENT PROGRAM. 3 "(a) Establishment of the Program.—The Secretary, in consultation with appropriate Regional Fishery 5 Management Councils and in coordination with other Federal agencies and educational institutions, shall establish 6 7 a program to identify, develop, and implement adaptive 8 strategies, consistent with the requirements of this Act, to improve the management of fisheries under current and 9 10 anticipated impacts of climate change. In administering such program, the Secretary shall— 11 12 "(1) expand and improve fisheries science, mon-13 itoring, and data collection in order to support and 14 promote integrated, climate-informed fishery man-15 agement and ensure that the requirements of this 16 Act are met under changing climatic conditions; 17 "(2) prepare and adapt fishery management for 18 climate change by promoting a precautionary ap-19 proach to management and supporting the develop-20 ment and use of relevant science and management 21 tools, including forecasting, risk assessment, sce-22 nario planning, coupled climate and ecosystem modeling, and management strategy evaluation; 23 "(3) improve agency understanding of stock 24

shifts to inform catch advice, resolve jurisdictional

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1	issues, and support achievement of conservation
2	mandates in the face of shifting stocks;
3	"(4) promote the use of climate-informed stock
4	assessments;
5	"(5) provide guidance on the use of climate-re-
6	sponsive control rules in fishery management;
7	"(6) promote management approaches that in-
8	crease resilience to current and anticipated climate
9	impacts in managed species and marine ecosystems,
10	including by coordinating with and advancing pro-
11	grams to protect genetic diversity and age structure,
12	protect marine habitat, minimize and better account
13	for bycatch, and incorporating into management the
14	ecological role of forage fish in the marine food web;
15	"(7) increase understanding of the socio-
16	economic impacts of climate change on fishing par-
17	ticipants and related industries;
18	"(8) coordinate within the National Oceanic
19	and Atmospheric Administration on issues related to
20	climate change and fisheries, including on data
21	needs and availability;
22	"(9) ensure that the research, resource manage-
23	ment, and expenditures to prepare fisheries for cli-

mate change promote racial and socioeconomic eq-

1	uity with respect to environmental and economic
2	outcomes across fisheries and regions;
3	"(10) promote the incorporation of climate
4	change into fisheries management at regional fishery
5	management organizations and other international
6	bodies; and
7	"(11) advance other climate change fishery
8	science and management as appropriate.
9	"(b) EVALUATION.—The Secretary, in consultation
10	with the Councils, shall, not later than 3 years after the
11	date of enactment of the Ocean Climate Emergency Action
12	Now Act of 2020 and every 3 years thereafter, conduct
13	an independent review that will be provided to Congress
14	and the public on the results of the program, including—
15	"(1) steps taken to modify or enhance research
16	and data collection programs to better understand
17	the effects of climate change on fishery resources;
18	"(2) steps taken to evaluate various manage-
19	ment strategies in the context of future climate sce-
20	narios;
21	"(3) how tools and solutions identified by the
22	program have been or will be implemented in fishery
23	science and management; and

1	"(4) the degree to which equity in outcomes of
2	fulfilling programmatic duties was achieved as re-
3	quired by subsection (a)(9).".
4	SEC. 205. CLIMATE-READY FISHERIES INNOVATION PRO-
5	GRAM.
6	(a) Climate-Ready Fisheries Innovation Pro-
7	GRAM.—Not later than 1 year after the date of enactment
8	of this Act, the Administrator shall establish a program,
9	including grants, to develop innovative tools and ap-
10	proaches designed to increase the adaptive capacity of
11	fishery management to the impacts of climate change. In
12	administering such program, the Administrator shall—
13	(1) develop science and management ap-
14	proaches that address regional and national prior-
15	ities to improve the conservation and management of
16	fishery resources under current and anticipated cli-
17	mate impacts;
18	(2) provide for routine consultation with fishery
19	managers and scientists in order to maximize oppor-
20	tunities to incorporate results of the program in
21	fishery management actions;
22	(3) promote adoption of methods developed
23	under the program in fishery management plans de-
24	veloped by the Regional Fishery Management Coun-
25	cils:

1	(4) provide information and outreach to the pri-
2	vate sector and academic sector to encourage devel-
3	opment of tools and approaches to manage the ef-
4	fects of climate change on fisheries; and
5	(5) provide information and outreach to fishery
6	participants to increase understanding of and en-
7	courage adoption and use of tools and approaches
8	developed under the program.
9	(b) Coordination of the Program.—
10	(1) In general.—The Administrator shall es-
11	tablish a process to ensure coordination with and
12	outreach to—
13	(A) regional offices and science centers of
14	the National Marine Fisheries Service;
15	(B) the Regional Fishery Management
16	Councils;
17	(C) the scientific and statistical committees
18	of such Fishery Management Councils; and
19	(D) other relevant programs, including the
20	cooperative research and management program
21	under section 318 of the Magnuson-Stevens
22	Fishery Conservation and Management Act (16
23	U.S.C. 1867), the Integrated Ocean Observing
24	System, and programs within the National Oce-

1	anic and Atmospheric Administration designed
2	to address ocean acidification.
3	(2) Identification.—The coordination de-
4	scribed in paragraph (1) shall include identification
5	of multi-year research priorities to study and under-
6	stand the current and anticipated impacts of climate
7	change on fisheries, fisheries interactions, habitats,
8	fishery participants, fisheries science and moni-
9	toring, or other relevant priority. Such priorities
10	shall be routinely reviewed in a timeframe not to ex-
11	ceed 5 years and updated as necessary.
12	(c) Report.—Every 2 years, beginning 2 years after
13	the date of the enactment of this Act, the Administrator
14	shall transmit a report to the Committee on Commerce,
15	Science, and Transportation of the Senate and the Com-
16	mittee on Natural Resources of the House of Representa-
17	tives 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

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. 206. 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 Shifting
15	Stocks Task Force shall be staggered, shall be 2
16	years in duration, and no member shall serve more
17	than 3 terms.
18	(2) Vacancy.—Any member appointed to fill a
19	vacancy occurring before the expiration of the term
20	for which the member's predecessor was appointed
21	shall be appointed only for the remainder of that
22	term.
23	(3) Criteria for appointment.—Members
24	appointed to the Shifting Stocks Task Force shall be
25	Federal employees, State employees, Tribal and In-

- digenous representatives, academics, or independent
- 2 experts, shall have strong scientific or technical cre-
- dentials and experience, and shall not include mem-
- 4 bers of the Regional Fishery Management Councils.
- 5 (4) Travel expenses.—Each member of the
- 6 Shifting Stocks Task Force shall receive travel ex-
- 7 penses, including per diem in lieu of subsistence, in
- 8 accordance with applicable provisions under sub-
- 9 chapter I of chapter 57 of title 5, United States
- 10 Code.
- 11 (5) CHAIRPERSON.—The chairperson of the
- 12 Shifting Stocks Task Force shall be elected by the
- members.
- 14 (c) Meetings.—The Shifting Stocks Task Force
- 15 shall meet not less than 4 times annually.
- 16 (d) STAFF SUPPORT.—Upon request of the Shifting
- 17 Stocks Task Force, the Administrator may detail on a re-
- 18 imbursable basis personnel to the Shifting Stocks Task
- 19 Force to assist such Task Force.
- 20 (e) Development of Criteria.—Not later than 1
- 21 year after the date of enactment of this Act, the Shifting
- 22 Stocks Task Force shall develop, in consultation with the
- 23 Administrator and the Regional Fishery Management
- 24 Councils, science-based decision-making criteria to make
- 25 jurisdiction, allocation, and fishery management decisions

- 1 that minimize the risk of overfishing and maximize stock
- 2 and ecosystem resilience to the effects of climate change,
- 3 are consistent with the national standards, the other provi-
- 4 sions of the Magnuson-Stevens Fishery Conservation and
- 5 Management Act (16 U.S.C. 1801 et seq.), regulations im-
- 6 plementing recommendations by international organiza-
- 7 tions in which the United States participates (including
- 8 but not limited to closed areas, quotas, and size limits),
- 9 and any other applicable law.
- 10 (f) RECOMMENDATIONS.—The Shifting Stocks Task
- 11 Force shall make recommendations to the Administrator
- 12 and to the Regional Fishery Management Councils rec-
- 13 ommendations for the allocation and distribution of fish-
- 14 ing privileges based on the criteria developed under sub-
- 15 section (e).
- 16 (g) Petitions.—Any member of the public may sub-
- 17 mit a petition to request the review of potentially shifting
- 18 stock. In order to be eligible for consideration, a petition
- 19 shall include sufficiently descriptive information regarding
- 20 the stock or stocks in question, the jurisdiction or alloca-
- 21 tion concerns, and any other relevant information.
- (h) Petition Review and Recommendation.—
- 23 (1) Determination of Sufficient Informa-
- 24 TION.—Upon receipt of a petition under subsection
- 25 (g), the Shifting Stocks Task Force shall, not later

1	than 60 days after the date of such receipt, deter-
2	mine by majority vote whether the petition contains
3	sufficient information to show that a substantial
4	shift in the distribution of a stock has occurred.
5	(2) Review Process.—If the Shifting Stocks
6	Task Force makes a determination under paragraph
7	(1) that a petition contains sufficient information,
8	the Shifting Stocks Task Force shall review such pe-
9	tition. Such review shall include—
10	(A) a public hearing in the affected region;
11	and
12	(B) a public notice and comment period of
13	not less than 90 days.
14	(3) Written recommendation.—Upon com-
15	pletion of a review under paragraph (2), the Shifting
16	Stocks Task Force shall—
17	(A) determine which Regional Fishery
18	Management Council's or Councils' geographic
19	area of authority the fishery is located in; and
20	(B) submit to the Administrator, each af-
21	fected Regional Fishery Management Council,
22	and the petitioner written recommendations for
23	allocation and distribution of fishing privileges
24	within the fishery.

1	(4) Response.—Upon receipt of a rec-
2	ommendation from the Shifting Stocks Task Force
3	under paragraph (3), the Administrator shall—
4	(A) begin consultation with the affected
5	Regional Fishery Management Council regard-
6	ing necessary changes to fishery management
7	plans; and
8	(B) not later than 180 days after the date
9	of receipt of the Shifting Stocks Task Force's
10	recommendation, ensure that a compliant fish-
11	ery management plan that fully accounts for
12	the best available science on shifting stocks and
13	the recommendations of the Shifting Stocks
14	Task Force is created, published, and imple-
15	mented.
16	(5) Publication.—The Shifting Stocks Task
17	Force shall publish on the internet each petition re-
18	ceived under this section, the determination as made
19	under paragraph (1), and any written recommenda-
20	tions produced under paragraph (3).
21	SEC. 207. ESSENTIAL FISH HABITAT CONSULTATION.
22	Section 305(b) of the Magnuson-Stevens Fishery
23	Conservation and Management Act (16 U.S.C. 1855(b))
24	is amended—
25	(1) in paragraph (1)(A)—

1	(A) by inserting "every 5 years" after "up-
2	dating"; and
3	(B) by inserting ", changes to habitat, in
4	part due to climate change," after "evidence";
5	(2) in paragraph (1)(D), by inserting "and such
6	agencies shall take action" after "agencies"; and
7	(3) by striking paragraphs (2) through (4) and
8	inserting after paragraph (1) the following:
9	"(2) Consultations regarding federal
10	AGENCY ACTION WITH ADVERSE EFFECTS ON ES-
11	SENTIAL FISH HABITAT.—
12	"(A) REQUIREMENT TO AVOID OR MITI-
13	GATE ADVERSE EFFECTS.—
14	"(i) Essential fish habitat.—With
15	respect to any Federal agency action that
16	may have an adverse affect on essential
17	fish habitat, each such Federal agency
18	shall, in consultation with the Secretary,
19	ensure that any action authorized, funded,
20	or undertaken by such agency avoids the
21	adverse effect of such action on essential
22	fish habitat or, to the extent that the ad-
23	verse effect cannot be avoided, the agency
24	shall minimize and mitigate the adverse ef-
25	fect.

1	"(ii) Habitat area of particular
2	concern.—No Federal agency may au-
3	thorize, fund, or undertake an action if
4	such agency determines, in consultation
5	with the Secretary, that such action would
6	have an adverse effect on a habitat area of
7	particular concern.
8	"(B) REGULATIONS.—The Secretary shall
9	establish regulations for the consultation proc-
10	ess required by subparagraph (A), including to
11	ensure that recommendations made by the Sec-
12	retary pursuant to such subparagraph would re-
13	sult in the avoidance, if possible, of adverse ef-
14	fects on essential fish habitat and, if avoidance
15	is not possible, the minimization and mitigation
16	of any such adverse effects.
17	"(3) Information to council.—The Sec-
18	retary shall inform each affected Council of any con-
19	sultation carried out under paragraph (2), including
20	information on the proposed action and any poten-
21	tial adverse effects, and each affected Council—
22	"(A) may comment on and make rec-
23	ommendations to the Secretary and any Federal
24	or State agency concerning the underlying ac-

tion if, in the view of the Council, such action

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may affect the habitat of a fishery resource under the authority of such Council; and

> "(B) shall comment on and make recommendations to the Secretary and any Federal or State agency concerning the underlying action if, in the view of the Council, such action is likely to adversely affect the habitat of an anadromous fishery resource under the authority of such Council.

"(4) Information from other sources.—

"(A) RECEIPT OF INFORMATION.—If the Secretary receives information from any source and determines that an action taken, funded, or authorized or proposed to be taken, funded, or authorized by a State or Federal agency may have an adverse effect on an essential fish habitat identified under this Act, the Secretary shall recommend to such agency measures that avoid such adverse effects and minimize or mitigate such adverse effects that cannot be avoided.

"(B) REQUIRED RESPONSE.—Not later than 30 days after receiving a recommendation under subparagraph (A), a Federal, State, or local agency shall provide a detailed response in writing to any Council comment under para-

1	graph (3) and the Secretary regarding the mat-
2	ter. The response shall include a description of
3	measures proposed by the agency for avoiding
4	the adverse effects, or to the extent the adverse
5	effects cannot be avoided, mitigating the ad-
6	verse effects of the action on such essential fish
7	habitat. In the case of a response that is incon-
8	sistent with the recommendations of the Sec-
9	retary, the Federal agency shall explain how the
10	alternative measures proposed will avoid the ad-
11	verse effects of such action on essential fish
12	habitat or, to the extent that adverse effects
13	cannot be avoided, mitigate the adverse effects.
14	"(C) Publication.—The Secretary shall
15	make available to the public—
16	"(i) any recommendation made under
17	subparagraph (A) on the date on which
18	such recommendation is made; and
19	"(ii) any response made by an agency
20	under subparagraph (B) on the date on
21	which such response is received.
22	"(5) Habitat area of particular con-
23	CERN.—In this subsection, the term 'habitat area of
24	particular concern' means a specific type of area

1	that is a part of or within an essential fish habitat
2	that—
3	"(A) provides an important ecological func-
4	tion, including for maintaining and restoring
5	the biomass, demographic, spatial, or genetic
6	characteristics of fish populations;
7	"(B) is sensitive to human-induced envi-
8	ronmental degradation;
9	"(C) is or will be significantly stressed by
10	human activities;
11	"(D) due to prevailing or anticipated fu-
12	ture environmental conditions, is or may be-
13	come important to the health of managed spe-
14	cies; or
15	"(E) is rare.".
16	SEC. 208. OCEAN AQUACULTURE RESEARCH AND POLICY
17	PROGRAM.
18	(a) Establishment.—The Administrator shall es-
19	tablish an Ocean Aquaculture Research and Policy Pro-
20	gram to address opportunities, challenges, and innovation
21	in restorative ocean aquaculture development, siting, and
22	operations in the coastal waters and exclusive economic
23	zone through—
24	(1) investment in research and technical assist-
25	ance to ensure adverse impacts to the marine envi-

- 1 ronment can be fully understood, anticipated, ac-
- 2 counted for, and avoided and impacts to wild-cap-
- 3 ture fisheries and marine wildlife are minimized dur-
- 4 ing the species selection, design, development, siting,
- 5 and operation of aquaculture facilities; and
- 6 (2) the development and application of best
- 7 management practices to ensure the species selec-
- 8 tion, design, development, siting, and operation of
- 9 restorative ocean aquaculture maximizes potential
- 10 benefits while minimizing potential adverse impacts
- to the marine environment and wild-capture fish-
- eries.
- 13 (b) Use of Existing Programs.—The Adminis-
- 14 trator shall use existing grant and research programs to
- 15 support the design, development, siting, and operation of
- 16 restorative ocean aquaculture using best management
- 17 practices to maximize potential benefits and minimize po-
- 18 tential adverse impacts to the marine environment.
- 19 (c) Prioritization in Other Programs.—In car-
- 20 rying out other programs relating to aquaculture research
- 21 and development, the Administrator shall prioritize restor-
- 22 ative ocean aquaculture, including in carrying out—
- 23 (1) the Small Business Innovation Research
- 24 Program of the National Oceanic and Atmospheric
- 25 Administration;

1	(2) the National Sea Grant College Program
2	and
3	(3) section 2 of the Act of August 11, 1939 (15
4	U.S.C. 713c-3).
5	(d) Prioritization Within the Program.—In
6	carrying out this section, the Administrator shall prioritize
7	support for research and technology development that in-
8	cludes—
9	(1) design analyses of restorative aquaculture
10	systems to maximize ecosystem benefits while avoid-
11	ing adverse impacts to the marine environment and
12	wild-capture fisheries and marine wildlife;
13	(2) spatial analyses to understand and evaluate
14	where siting of restorative aquaculture can minimize
15	adverse impacts to migratory birds and waterbirds
16	marine birds and mammals, endangered species, and
17	other aspects of the marine ecosystem;
18	(3) monitoring both the individual and cumu-
19	lative environmental impacts of current and pro-
20	posed small scale aquaculture operations to inform
21	potential impacts of large-scale operations and
22	siting;
23	(4) offshore monitoring, remediation, and miti-
24	gation technology development; and

- 1 (5) understanding and preparing for impacts
- 2 that climate change may have on design develop-
- 3 ment, siting, and operations of restorative aqua-
- 4 culture facilities and the marine environment.
- 5 (e) Report.—Not later than 1 year after the date
- 6 of the enactment of this Act, the National Academies shall
- 7 submit to the Administrator and to Congress a report that
- 8 reviews, compiles, and synthesizes existing technologies
- 9 and assessments of restorative ocean aquaculture to fur-
- 10 ther inform ongoing research and technical assistance
- 11 funded under subsection (c).
- (f) Content.—The report required by subsection (e)
- 13 shall include the following:
- 14 (1) A quantitative assessment of the capacity
- for sequestering and storing significant amounts of
- carbon from the atmosphere and ocean to mitigate
- 17 the impacts of climate change.
- 18 (2) A comprehensive assessment of the blue
- carbon potential for an aquaculture project, includ-
- 20 ing its potential environmental impacts, including
- 21 cumulative impacts, to native marine species and
- marine habitat and the potential adverse wildlife
- 23 interactions likely to result from the use of restora-
- 24 tive aquaculture technologies in use or under devel-
- opment worldwide.

- (3) A comprehensive assessment of the potential impacts, including cumulative impacts, to wild-capture fisheries and marine wildlife and the productivity thereof likely to result from the use of restorative aquaculture technologies in use or under development worldwide.
 - (4) An assessment of any known ecosystems services that have been derived from restorative ocean aquaculture and design, including siting and size parameters that maximize those benefits.
 - (5) A detailed discussion of the mitigation measures available currently to reduce any negative environmental or wild-capture fisheries and marine wildlife impacts identified and their degree of efficacy, as well as the real-time facility monitoring options available.
 - (6) Recommendations of regionally relevant siting, installation, and operations standards necessary to ensure that restorative ocean aquaculture facilities are developed and operated in a manner which minimizes impacts to the marine environment and avoids and minimizes harmful interactions with marine wildlife and habitat or conflict with other existing ocean-user groups.

1	(7) Economic analysis identifying the potential
2	benefits and impacts to commercial and recreational
3	fishing and ocean recreation industries resulting
4	from restorative ocean aquaculture.
5	(8) Recommendations for further research and
6	assessments that should be supported.
7	(9) A sustainability classification system to as-
8	sess the various types of restorative aquaculture on
9	a range of life cycle ecological and social benefits
10	and provides a composite score with which to rank
11	such types of restorative aquaculture.
12	TITLE III—COASTAL ZONE MAN-
13	AGEMENT ACT AMENDMENTS
14	SEC. 301. GRANTS TO FURTHER ACHIEVEMENT OF TRIBAL
	SEC. 301. GRANTS TO FURTHER ACHIEVEMENT OF TRIBAL COASTAL ZONE OBJECTIVES.
14	
14 15	COASTAL ZONE OBJECTIVES.
14 15 16 17	COASTAL ZONE OBJECTIVES. (a) Grants Authorized.—The Coastal Zone Man-
14 15 16 17	COASTAL ZONE OBJECTIVES. (a) Grants Authorized.—The Coastal Zone Management Act of 1972 (16 U.S.C. 1451 et seq.) is amended
14 15 16 17	COASTAL ZONE OBJECTIVES. (a) Grants Authorized.—The Coastal Zone Management Act of 1972 (16 U.S.C. 1451 et seq.) is amended by adding at the end the following:
14 15 16 17 18	COASTAL ZONE OBJECTIVES. (a) Grants Authorized.—The Coastal Zone Management Act of 1972 (16 U.S.C. 1451 et seq.) is amended by adding at the end the following: "Grants to further achievement of tribal
14 15 16 17 18 19	COASTAL ZONE OBJECTIVES. (a) Grants Authorized.—The Coastal Zone Management Act of 1972 (16 U.S.C. 1451 et seq.) is amended by adding at the end the following: "Grants to further achievement of tribal coastal zone objectives
14 15 16 17 18 19 20 21	COASTAL ZONE OBJECTIVES. (a) GRANTS AUTHORIZED.—The Coastal Zone Management Act of 1972 (16 U.S.C. 1451 et seq.) is amended by adding at the end the following: "GRANTS TO FURTHER ACHIEVEMENT OF TRIBAL COASTAL ZONE OBJECTIVES "SEC. 320. (a) GRANTS AUTHORIZED.—The Sec-
14 15 16 17 18 19 20 21	COASTAL ZONE OBJECTIVES. (a) Grants Authorized.—The Coastal Zone Management Act of 1972 (16 U.S.C. 1451 et seq.) is amended by adding at the end the following: "Grants to further achievement of tribal coastal zone objectives "Sec. 320. (a) Grants Authorized.—The Secretary may award competitive grants to Indian Tribes to

1 "(1) IN GENERAL.—The Federal share of the 2 cost of any activity carried out with a grant under 3 this section shall be— "(A) in the case of a grant of less than 4 5 \$200,000, 100 percent of such cost; and 6 "(B) in the case of a grant of \$200,000 or 7 more, 95 percent of such cost, except as pro-8 vided in paragraph (2). 9 "(2) WAIVER.—The Secretary may waive the 10 application of paragraph (1)(B) with respect to a 11 grant to an Indian Tribe, or otherwise reduce the 12 portion of the share of the cost of an activity re-13 quired to be paid by an Indian Tribe under such 14 paragraph, if the Secretary determines that the 15 Tribe does not have sufficient funds to pay such por-16 tion. 17 "(c) Compatibility.—The Secretary may not award a grant under this section unless the Secretary determines 18 19 that the activities to be carried out with the grant are 20 compatible with this title and that the grantee has con-21 sulted with the affected coastal state regarding the grant 22 objectives and purposes. 23 "(d) Authorized Objectives and Purposes.— Amounts awarded as a grant under this section shall be used for 1 or more of the objectives and purposes author-

1	ized under subsections (b) and (c), respectively, of section
2	306A.
3	"(e) Funding.—Of amounts appropriated to carry
4	out this Act, \$5,000,000 is authorized to carry out this
5	section for each of fiscal years 2021 through 2025.
6	"(f) Definitions.—In this section:
7	"(1) Indian Land.—The term 'Indian land
8	has the meaning given such term in section 2601 of
9	the Energy Policy Act of $1992~(25~\mathrm{U.S.C.}~3501).$
10	"(2) Indian Tribe.—The term 'Indian Tribe
11	means an Indian Tribe, as that term is defined in
12	section 4 of the Indian Self-Determination and Edu-
13	cation Assistance Act (25 U.S.C. 5304).
14	"(3) Tribal coastal zone.—The term 'Tribal
15	coastal zone' means any Indian land of an Indian
16	Tribe that is within the coastal zone.
17	"(4) Tribal coastal zone objective.—The
18	term 'Tribal coastal zone objective' means, with re-
19	spect to an Indian Tribe, any of the following objec-
20	tives:
21	"(A) Protection, restoration, or preserva-
22	tion of areas in the Tribal coastal zone of such
23	Tribe that hold—
24	"(i) important ecological, cultural, or
25	sacred significance for such Tribe, or

1	"(ii) traditional, historic, and esthetic
2	values essential to such Tribe.
3	"(B) Preparing and implementing a special
4	area management plan and technical planning
5	for important coastal areas.
6	"(C) Any coastal or shoreline stabilization
7	measure, including any mitigation measure, for
8	the purpose of public safety, public access, or
9	cultural or historical preservation.".
10	(b) Guidance.—Not later than 180 days after the
11	date of the enactment of this Act, the Secretary of Com-
12	merce shall issue guidance for the program established
13	under the amendment made by subsection (a), including
14	the criteria for awarding grants under such program based
15	on consultation with Indian Tribes (as that term is defined
16	in that amendment).
17	(c) USE OF STATE GRANTS TO FULFILL TRIBAL OB-
18	JECTIVES.—Section 306A(c)(2) of the Coastal Zone Man-
19	agement Act of 1972 (16 U.S.C. 1455a(c)(2)) is amend-
20	ed—
21	(1) in subparagraph (D), by striking "; and"
22	and inserting a semicolon;
23	(2) in subparagraph (E), by striking the period
24	at the end and inserting "; and"; and
25	(3) by adding at the end the following:

1	"(F) fulfilling any Tribal coastal zone ob-
2	jective (as that term is defined in section
3	320).".
4	(d) Other Programs Not Affected.—Nothing in
5	this section and the amendments made by this section may
6	be construed to affect the ability of an Indian Tribe to
7	apply for, receive assistance under, or participate in any
8	program authorized by the Coastal Zone Management Act
9	of 1972 (16 U.S.C. 1451 et seq.) or other related Federal
10	laws.
11	SEC. 302. ELIGIBILITY OF DISTRICT OF COLUMBIA FOR
12	FEDERAL FUNDING UNDER THE COASTAL
13	ZONE MANAGEMENT ACT OF 1972.
14	Section 304(4) of the Coastal Zone Management Act
15	of 1972 (16 U.S.C. 1453(4)) is amended by inserting "the
15 16	of 1972 (16 U.S.C. 1453(4)) is amended by inserting "the District of Columbia," after "the term also includes".
16	District of Columbia," after "the term also includes".
16 17	District of Columbia," after "the term also includes". SEC. 303. COASTAL AND ESTUARINE LAND CONSERVATION
16 17 18	District of Columbia," after "the term also includes". SEC. 303. COASTAL AND ESTUARINE LAND CONSERVATION PROGRAM.
16 17 18	District of Columbia," after "the term also includes". SEC. 303. COASTAL AND ESTUARINE LAND CONSERVATION PROGRAM. Section 307A of the Coastal Zone Management Act
16 17 18 19 20	District of Columbia," after "the term also includes". SEC. 303. COASTAL AND ESTUARINE LAND CONSERVATION PROGRAM. Section 307A of the Coastal Zone Management Act of 1972 (16 U.S.C. 1456–1) is amended—
16 17 18 19 20 21	District of Columbia," after "the term also includes". SEC. 303. COASTAL AND ESTUARINE LAND CONSERVATION PROGRAM. Section 307A of the Coastal Zone Management Act of 1972 (16 U.S.C. 1456–1) is amended— (1) by striking the heading and inserting
16 17 18 19 20 21	District of Columbia," after "the term also includes". SEC. 303. COASTAL AND ESTUARINE LAND CONSERVATION PROGRAM. Section 307A of the Coastal Zone Management Act of 1972 (16 U.S.C. 1456–1) is amended— (1) by striking the heading and inserting "COASTAL AND ESTUARINE LAND CONSERVATION"

1	"(a) In General.—The Secretary may conduct a
2	Coastal and Estuarine Land Conservation Program, in co-
3	operation with State, regional, and other units of govern-
4	ment, for the purposes of protecting important coastal and
5	estuarine areas that—
6	"(1) have significant conservation, recreation,
7	coastal access, ecological, historical, or aesthetic
8	value;
9	"(2) are threatened by conversion from their
10	natural, undeveloped, or recreational state to other
11	uses; or
12	"(3) could be managed or restored to effectively
13	conserve, enhance, or restore ecological function or
14	mitigate climate change.";
15	(3) in subsection (e)—
16	(A) by amending paragraph (7) to read as
17	follows:
18	"(7) Priority shall be given to lands that—
19	"(A) can be effectively managed and pro-
20	tected and that have significant ecological
21	value;
22	"(B)(i) are under an imminent threat of
23	conversion to a use that will degrade or other-
24	wise diminish their natural, undeveloped, or rec-
25	reational state;

1	"(ii) serve to mitigate the adverse impacts
2	caused by coastal population growth in the
3	coastal environment;
4	"(iii) are within a national estuarine re-
5	search reserve designated under section 315, a
6	national wildlife refuge, or a national estuary
7	program, or are proposed for designation as
8	such a reserve or other such protected area; or
9	"(iv) are under threat due to climate
10	change or may serve to mitigate the adverse ef-
11	fects of climate change, including through the
12	storage of blue carbon, and to facilitate inland
13	migration of coastal ecosystems in response to
14	sea level rise; and
15	"(C) to the maximum extent practicable,
16	benefit communities that may not have ade-
17	quate resources to prepare for or respond to
18	coastal hazards or to access the coastline, in-
19	cluding low income communities, communities
20	of color, Tribal and Indigenous communities,
21	and rural communities."; and
22	(B) in paragraph (10), by striking "tri-
23	ennially" and inserting "every 5 years";
24	(4) in subsection (f)—

1	(A) in paragraph (2)(B), by inserting "for
2	any territory of the United States that is un-
3	able to provide the match," after "commu-
4	nity,"; and
5	(B) in paragraph (4)—
6	(i) in subparagraph (A)(i), by striking
7	"meets the criteria set forth in section
8	2(b)" and inserting "the goals set forth in
9	subsection (b)"; and
10	(ii) in subparagraph (C), by striking
11	"(A)" and inserting "subparagraph (A)";
12	(5) in subsection (h), by striking the second
13	sentence; and
14	(6) in subsection (l), by striking "fiscal years
15	2009 through 2013" and inserting "2021 through
16	2025".
17	SEC. 304. COASTAL ZONE MANAGEMENT FUND.
18	Section 308 of Coastal Zone Management Act of
19	1972 (16 U.S.C. 1456a) is amended to read as follows:
20	"COASTAL ZONE MANAGEMENT FUND
21	"Sec. 308. (a) Establishment.—There is estab-
22	lished a fund, to be known as the 'Coastal Zone Manage-
23	ment Fund', which shall consist of fees deposited into the
24	Fund under section 307(i)(3) and any other funds appro-
25	priated to the Fund.

1	"(b) Grants for Post-Disaster Response to Se-
2	VERE COASTAL FLOOD EVENTS.—
3	"(1) In general.—In response to a major dis-
4	aster declared under the Robert T. Stafford Disaster
5	Relief and Emergency Assistance Act (42 U.S.C.
6	5121 et seq.) as a result of flood and related dam-
7	ages in the coastal zone of a State, the Secretary
8	may issue a grant to such State for a purpose de-
9	scribed in paragraph (2).
10	"(2) Eligible uses.—A State may use funds
11	provided under this subsection to—
12	"(A) improve resilience to future severe
13	coastal flood hazards including activities and
14	projects related to—
15	"(i) publicly owned infrastructure;
16	"(ii) residential and commercial struc-
17	tures;
18	"(iii) natural infrastructure; or
19	"(iv) waste disposal sites and indus-
20	trial facilities;
21	"(B) assess damages after a major disaster
22	described in paragraph (1);
23	"(C) plan, design, or engineer a project
24	to—

1	"(i) restore, expand, install, or relo-
2	cate natural infrastructure;
3	"(ii) remove damaged assets, restore
4	sites to safe conditions, and select alter-
5	native sites; or
6	"(iii) facilitate the landward migration
7	of coastal ecosystems; or
8	"(D) implement a project described by
9	subparagraph (C).
10	"(3) Federal Share.—The Secretary may
11	issue a grant under this subsection for an amount
12	not to exceed—
13	"(A) 90 percent of the cost of an activity
14	described in subparagraph (A) or (B) of para-
15	graph (2);
16	"(B) except as provided in subparagraph
17	(C), 60 percent of the cost of an activity de-
18	scribed in paragraph (2)(D);
19	"(C) 75 percent of the cost of an activity
20	provided for in a plan approved under sub-
21	section (f); or
22	"(D) 100 percent of the cost of any activ-
23	ity described in subparagraph (A), (B), or (C)
24	of paragraph (2) responding to the effects of a
25	severe coastal flood in a disadvantaged commu-

1	nity that is identified in a plan approved under
2	subsection (f).
3	"(c) Grants for Severe Coastal Flood Hazard
4	Planning.—
5	"(1) In General.—The Secretary, at the re-
6	quest of a Governor of a coastal state, may use
7	amounts in the Fund to issue a grant to a coastal
8	state with an approved coastal zone management
9	program for the timely response to a severe coastal
10	flood hazard.
11	"(2) Proposal.—To be considered for a grant
12	under this section, a State shall submit a grant pro-
13	posal to the Secretary in a time, place, and manner
14	determined by the Secretary. Such proposal shall—
15	"(A) describe the risks that severe coastal
16	flood hazards pose in the State and goals for
17	reducing loss of life and property and sus-
18	taining coastal ecosystems in response to these
19	risks;
20	"(B) include consideration of related plans
21	including the Coastal Zone Management Plan
22	of the State, the Hazard Mitigation Plan of the
23	State, and the severe coastal flood hazard pre-
24	paredness plans, if any, of neighboring States;

1	"(C) be developed in conjunction with local
2	governments in the coastal zone of the State
3	and provided for public review and comment on
4	the plan, including holding a public hearing and
5	engaging disadvantaged communities; and
6	"(D) be substantially consistent with the
7	guidance issued under subsection $(e)(1)(C)$.
8	"(3) Criteria.—In determining the amount of
9	a grant under this subsection, the Secretary shall
10	consider the—
11	"(A) area and population of the coastal
12	zone of the applicant State;
13	"(B) the risks that severe coastal flood
14	hazards pose to the State; and
15	"(C) the reduction of severe coastal flood
16	hazards expected as a result of the proposal.
17	"(4) Limitation on amount of funds to be
18	AWARDED.—Grants made pursuant to this sub-
19	section in any fiscal year shall not exceed 50 percent
20	of the funds in the Fund as a result of appropria-
21	tions pursuant to subsection $(j)(1)$.
22	"(5) Federal share.—
23	"(A) In general.—Except as provided in
24	subparagraph (B), the Federal share of the cost

1	of an activity funded by a grant issued under
2	this subsection shall not exceed—
3	"(i) 75 percent of the cost of the ac-
4	tivity; or
5	"(ii) 85 percent of the cost of the ac-
6	tivity in the case of a State that has en-
7	acted a requirement for the disclosure of
8	severe coastal flood hazards, including sea
9	level rise, that meets criteria for such dis-
10	closure established by the Secretary, to
11	buyers of real estate in the coastal zone.
12	"(B) Exception.—The Secretary may re-
13	duce or waive the matching requirement under
14	paragraph (5) if a coastal state submits a writ-
15	ten request to the Secretary for a waiver with
16	a justification as to why the State cannot meet
17	the match requirement, and the Secretary de-
18	termines such justification sufficient to waive
19	such requirement.
20	"(d) Grants for Severe Coastal Flood Hazard
21	PLAN IMPLEMENTATION.—
22	"(1) IN GENERAL.—The Secretary, at the Sec-
23	retary's discretion or at the request of the Governor
24	of a State, may use amounts in the Fund to issue
25	grants to a coastal state with a severe coastal flood

1	hazard preparedness plan approved under subsection
2	(f) to implement the approved plan.
3	"(2) Eligible activities.—Activities eligible
4	for funding under this subsection include—
5	"(A) conducting a public awareness cam-
6	paign to inform the public and decision-makers
7	about severe coastal flood hazards;
8	"(B) developing, enacting, and admin-
9	istering a state or local law prohibiting new and
10	significantly expanded development in areas at
11	risk of severe coastal flood hazards;
12	"(C) developing, enacting, and admin-
13	istering a state requirement for disclosure of se-
14	vere coastal flood hazards, including sea level
15	rise, to buyers of real estate;
16	"(D) making grants to local governments
17	or regional consortiums of local governments, to
18	implement the state plan, including develop-
19	ment of local or regional plans and site-specific
20	plans or projects; and
21	"(E) planning, designing, and imple-
22	menting projects to—
23	"(i) protect existing public infrastruc-
24	ture and residential and commercial prop-

1	erties, including built structures, natural
2	infrastructure, and living shorelines;
3	"(ii) relocate infrastructure or struc-
4	tures at risk of damage by severe coastal
5	flood hazards, restore such sites to safe
6	conditions, and select alternative sites;
7	"(iii) remove structures damaged by
8	severe coastal flood hazards and restore
9	such site to safe conditions;
10	"(iv) protect waste disposal facilities
11	in areas at risk of severe coastal flood haz-
12	ards or relocate such facilities to alter-
13	native sites; and
14	"(v) facilitate the landward migration
15	of coastal ecosystems.
16	"(3) Considerations.—Grants made pursuant
17	to this subsection shall be in response to an annual
18	request for proposals. In determining the amount of
19	a grant, the Secretary shall consider—
20	"(A) the area and population of the coastal
21	zone of the State;
22	"(B) the risks that severe coastal flood
23	hazards pose in the State and the reduction of
24	coastal flood hazards expected as a result of the
25	proposal;

1	"(C) demonstration of innovative ap-
2	proaches to preparing for severe coastal flood
3	hazards; and
4	"(D) benefits to disadvantaged commu-
5	nities identified in a plan approved under sub-
6	section (f).
7	"(4) Federal share.—A grant under this
8	subsection shall be limited to 75 percent of the cost
9	of the proposal, except that the Secretary may re-
10	duce or waive the such matching requirement if a
11	coastal state submits to the Secretary in writing a
12	request for a waiver with a justification as to why
13	the State cannot meet the match requirement, and
14	the Secretary agrees with the justification and
15	grants the waiver.
16	"(e) Technical Support to States.—
17	"(1) IN GENERAL.—The Secretary shall take
18	such actions as the Secretary determines necessary
19	to support States in carrying out this section, in-
20	cluding at a minimum the following:
21	"(A) Periodic assessment of storm flood
22	risk and relative sea level and lake level changes
23	along the United States coastline, including es-
24	timates of changes in storm intensity and rel-

- ative sea or lake levels by 2040, 2060, 2080,and 2100.
 - "(B) Operation of an online mapping tool to describe areas at risk of temporary flooding from future coastal storms and permanent in-undation as a result of sea or long term lake level changes.
 - "(C) Publication, not later than 1 year after the date of enactment of this section and periodically thereafter, of guidance for the development of State plans approved under subsection (f).
 - "(D) Establishment, not later than 1 year after the date of enactment of the Ocean Climate Emergency Action Now Act of 2020, of minimum criteria for disclosure of severe coastal flood hazards, including sea level rise, to buyers of real estate in the coastal zone.
 - "(E) Creation, not later than 1 year after the date of enactment of the Ocean Climate Emergency Action Now Act of 2020, and periodic updating, of an online dashboard describing the key features of State or local government requirements for disclosure of severe coastal flood hazards to buyers of real estate.

1	"(F) Establishment, not later than 1 year
2	after the date of enactment of the Ocean Cli-
3	mate Emergency Action Now Act of 2020, after
4	consultation with the Administrator of the En-
5	vironmental Protection Agency, of standards for
6	restoration to safe conditions of sites from
7	which infrastructure or other structures have
8	been relocated.
9	"(2) The guidance developed by the Secretary
10	pursuant to paragraph (1)(C) shall, at a minimum—
11	"(A) provide information States need to
12	establish State-specific estimates of severe
13	coastal flood hazards, including more severe
14	storms and relative sea and lake levels, and
15	planning targets for such hazards for the years
16	2040, 2060, 2080, and 2100;
17	"(B) describe approaches the State should
18	consider to prohibit new or expanded develop-
19	ment in areas at risk of severe coastal flood
20	hazards;
21	"(C) outline considerations for State
22	grants to support local governments in the
23	coastal zone, or consortiums of such govern-
24	ments acting on a regional basis, in developing

1	or implementing parts of a plan approved under
2	subsection (f);
3	"(D) describe methods for evaluation of re-
4	sponse options including construction of struc-
5	tures to protect assets and relocation to alter-
6	native sites, including cost comparison in the
7	context of available resources, and related con-
8	siderations;
9	"(E) review options for establishing prior-
10	ities for removal of damaged or abandoned
11	structures and restoration of sites to safe condi-
12	tions;
13	"(F) describe social justice policies and
14	practices the State should consider adopting, in-
15	cluding criteria for identifying disadvantaged
16	communities within the coastal zone of the
17	State and the policies and practices the State
18	should consider adopting to assure that inter-
19	ests of such communities are addressed in State
20	plans developed pursuant to this section;
21	"(G) identify areas in coastal communities,
22	or other locations in the State, that have mini-
23	mal severe coastal flood hazards, that are ap-
24	propriate for relocation of people and assets,

- and can sustain the identity and cultural heritage of relocated communities; "(H) provide information and practices for
 - "(H) provide information and practices for identifying coastal areas that are important to the successful landward migration of ecosystems in response to severe coastal flood hazards and measures for protecting these migration pathways;
 - "(I) identify tools to identify waste disposal sites and related sites that pose a risk of water pollution as a result of severe coastal flood hazards and describe practices the State should consider to protect or relocate such facilities or sites; and
 - "(J) describe opportunities to improve public access to the shoreline as a result of improved preparedness for severe coastal flood hazards.
- 19 "(f) APPROVAL OF PLANS.—The Secretary shall es-20 tablish a process for approving plans under this section.
- 21 "(g) ADMINISTRATION.—The Secretary may use 22 amounts in the Fund for expenses incident to the adminis-23 tration of this section, in an amount not to exceed
- 24 \$250,000 or 3 percent of the amount in the Fund, which-
- 25 ever is less, for each year.

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- 1 "(h) Report to Congress.—The Secretary shall,
- 2 not later than 3 years after the date of enactment of the
- 3 Ocean Climate Emergency Action Now Act of 2020, and
- 4 every 3 years thereafter, submit to the Committee on Nat-
- 5 ural Resources of the House of Representatives and the
- 6 Committee on Commerce, Science, and Transportation of
- 7 the Senate a report describing the development of plans
- 8 and projects under this section, changes in severe coastal
- 9 flood hazards, including changes to risks to disadvantaged
- 10 communities, and making recommendations to better re-
- 11 spond to these challenges.
- 12 "(i) Definitions.—In this section:
- 13 "(1) DISADVANTAGED COMMUNITIES.—The
- term 'disadvantaged communities' means areas of
- the coastal state identified in a plan approved under
- subsection (f) that disproportionately suffer from a
- 17 combination of economic, health, and environmental
- burdens including poverty, high unemployment, air
- and water pollution, presence of hazardous wastes as
- well as high incidence of asthma and heart disease.
- 21 "(2) Green infrastructure.—The term
- 22 'green infrastructure' has the meaning provided in
- section 502(27) of the Federal Water Pollution Con-
- 24 trol Act (33 U.S.C. 1362(27)).

- 1 "(3) LIVING SHORELINE.—The term 'living 2 shoreline' means a protected, stabilized coastal edge 3 made of natural materials such as plants designed to 4 provide wildlife habitat, as well as natural resilience 5 to shorelines.
 - "(4) NATURAL INFRASTRUCTURE.—The term 'natural infrastructure' means coastal wetlands, beaches, dunes, marshes, mangrove forests, municipal green infrastructure, and living shorelines.
 - "(5) Publicly owned infrastructure.—
 The term 'publicly owned infrastructure' means buildings, structures, and facilities and appurtenances of drinking water, sewage treatment, natural gas, or electric power utilities owned by a municipal, county, or State government or a combination of such governments.
 - "(6) SAFE CONDITIONS.—The term 'safe conditions' refers to standards for restoration of sites from which infrastructure or structures are relocated established by the Secretary pursuant to subsection (e)(1)(F) and are protective of human health and the environment.
 - "(7) SEVERE COASTAL FLOOD HAZARDS.—The term 'severe coastal flood hazards' means temporary flooding resulting from coastal storms and storm

surge, tsunamis, and changing lake levels and permanent inundation from rising sea levels and land subsidence, including landward migration of shorelines impacting residential and commercial property,

infrastructure, and ecosystems.

"(8) Waste disposal site' means a publicly or privately owned solid waste landfill or disposal site, hazardous waste landfill of disposal site, sites included on the National Priorities List developed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S.C. 9601 et seq.), and sites for the disposal of coal combustion residuals from coal-fired power plants, provided that such sites are identified in a plan approved under subsection (f).

"(j) Authorization of Appropriations.—

- "(1) IN GENERAL.—There is authorized to be appropriated into the Fund for use by the Secretary \$100,000,000 for each of fiscal years 2021 through 2025, which shall remain available until expended without fiscal year limitation.
- "(2) Major disasters.—There is authorized to be appropriated into the Fund for use by the Secretary to respond to a major disaster declared under

- the Robert T. Stafford Disaster Relief and Emer-
- 2 gency Assistance Act (42 U.S.C. 5121 et seq.) such
- 3 sums as may be necessary. Funds appropriated pur-
- 4 suant to this paragraph may only be used to make
- 5 grants to the State or States in which the major dis-
- 6 aster occurred and shall remain available until ex-
- 7 pended without fiscal year limitation.".

8 SEC. 305. AUTHORIZATION OF APPROPRIATIONS.

- 9 Section 318(a) of the Coastal Zone Management Act
- 10 of 1972 (16 U.S.C. 1464(a)) is amended to read as fol-
- 11 lows:
- 12 "(a) In General.—There are authorized to be ap-
- 13 propriated to the Secretary, to remain available until ex-
- 14 pended—
- 15 "(1) for grants under sections 306, 306A, and
- 16 309, \$95,000,000 for each of fiscal years 2021
- through 2025; and
- 18 "(2) for grants under section 315, \$37,000,000
- for each of fiscal years 2021 through 2025.".
- 20 SEC. 306. AMENDMENTS TO NATIONAL ESTUARINE RE-
- 21 SEARCH RESERVE SYSTEM PROGRAM.
- 22 (a) Designation of Additional Reserves.—Not
- 23 later than 5 years after the date of the enactment of this
- 24 Act, the Secretary of Commerce shall designate not less
- 25 than 5 new national estuarine reserves under section 315

- 1 of the Coastal Zone Management Act of 1972 (16 U.S.C.
- 2 1461) that ensure the National Estuarine Research Re-
- 3 serve System includes areas in—
- 4 (1) all biogeographic regions of the United
- 5 States; and
- 6 (2) each coastal state (as that term is defined
- 7 in that Act).
- 8 (b) Guidelines for Tracking and Modeling the
- 9 IMPACTS OF CLIMATE CHANGE.—Section 315(c) of the
- 10 Coastal Zone Management Act of 1972 (16 U.S.C.
- 11 1461(c)) is amended—
- 12 (1) by redesignating paragraphs (3) through
- 13 (5) as paragraphs (4) through (6); and
- 14 (2) by inserting after paragraph (2) the fol-
- lowing:
- 16 "(3) the establishment of coordinated long-term
- data monitoring and methods throughout the Sys-
- tem for tracking and modeling the impacts of cli-
- mate change on estuarine systems, including impacts
- on lake levels and sea levels;".
- 21 (c) Promotion and Coordination of Estuarine
- 22 Research.—Section 315(d) of the Coastal Zone Manage-
- 23 ment Act of 1972 (16 U.S.C. 1461(d)) is amended—
- 24 (1) in paragraph (1), by striking "; and" and
- 25 inserting a semicolon;

1	(2) in paragraph (2), by striking the period at
2	the end and inserting a semicolon; and
3	(3) by adding at the end the following:
4	"(3) establishing and managing the Margaret
5	A. Davidson Graduate Research Fellowship to pro-
6	vide, subject to the availability of appropriations, fi-
7	nancial assistance to graduate research that utilizes
8	the national estuarine research reserves;
9	"(4) establishing a Central Data Management
10	office and System Science Collaborative; and
11	"(5) carrying out monitoring, education, exten-
12	sion, and coastal training programs throughout the
13	System.".
14	(d) Land Acquisition and Construction.—Sec-
15	tion 315 of the Coastal Zone Management Act of 1972
16	(16 U.S.C. 1461) is amended by adding at the end the
17	following:
18	"(h) Land Acquisition and Construction.—The
19	Secretary may use funds authorized under section 318 for
20	land acquisition and the construction and renovations of
21	facilities required to meet delivery of System programs
22	and services, or to meet changing needs of programs under
23	this title. Such construction shall incorporate green design
24	principles, materials, energy efficiency, and adaptive reuse
25	strategies, and the development of innovative coastal tech-

1	nology and management strategies that enhance resilience
2	of System facilities and lands.".
3	TITLE IV—COASTAL RESILIENCY
4	AND ADAPTATION
5	SEC. 401. LIVING SHORELINE GRANT PROGRAM.
6	(a) Establishment.—The Administrator shall
7	make grants to eligible entities for purposes of—
8	(1) designing and implementing large- and
9	small-scale, climate-resilient living shoreline projects
10	and
11	(2) applying innovative uses of natural mate-
12	rials and systems to protect coastal communities,
13	habitats, and natural system functions.
14	(b) Project Proposals.—To be eligible to receive
15	a grant under this section, an eligible entity shall—
16	(1) submit to the Administrator a proposal for
17	a living shoreline project, including monitoring, data
18	collection, and measurable performance criteria with
19	respect to the project;
20	(2) demonstrate to the Administrator that the
21	entity has any permits or other authorizations from
22	local, State, and Federal Government agencies nec-
23	essary to carry out the living shoreline project or
24	provide evidence demonstrating general support from
25	such agencies: and

1 (3) include an engagement or education compo-2 nent that seeks and solicits feedback from the local 3 or regional community most directly affected by the 4 proposal.

(c) Project Selection.—

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- (1) DEVELOPMENT OF CRITERIA.—The Administrator shall select eligible entities to receive grants under this section based on criteria developed by the Administrator, in consultation with relevant offices of the National Oceanic and Atmospheric Administration, such as the Office of Habitat Conservation, the Office for Coastal Management, and the Restoration Center.
- (2) Considerations.—In developing criteria under paragraph (1) to evaluate a proposed living shoreline project, the Administrator shall take into account—
 - (A) the potential of the project to protect the community and maintain the viability of the environment, such as through protection of ecosystem functions, environmental benefits, or habitat types, in the area where the project is to be carried out;
 - (B) the historic and future environmental conditions of the project site, particularly those

1	environmental conditions affected by climate
2	change;
3	(C) the net ecological benefits of the
4	project including the potential of the project to
5	contribute to carbon sequestration;
6	(D) the ability of the entity proposing the
7	project to demonstrate the potential of the
8	project to protect the coastal community where
9	the project is to be carried out, including
10	through—
11	(i) mitigating the effects of erosion;
12	(ii) attenuating the impact of coastal
13	storms and storm surge;
14	(iii) mitigating shoreline flooding;
15	(iv) mitigating the effects of sea level
16	rise, accelerated land loss, and extreme
17	tides;
18	(v) sustaining, protecting, or restoring
19	the functions and habitats of coastal eco-
20	systems;
21	(vi) protecting important cultural sites
22	or values; or
23	(vii) such other forms of coastal pro-
24	tection as the Administrator considers ap-
25	propriate; and

1	(E) the potential of the project to support
2	resiliency at a military installation or commu-
3	nity infrastructure supportive of a military in-
4	stallation (as such terms are defined in section
5	2391 of title 10, United States Code).
6	(3) Priority.—In selecting living shoreline
7	projects to receive grants under this section, the Ad-
8	ministrator shall give priority consideration to a pro-
9	posed project to be conducted in an area—
10	(A) for which the President has declared,
11	during the 10-year period preceding the submis-
12	sion of the proposal for the project under sub-
13	section (b), that a major disaster exists pursu-
14	ant to section 401 of the Robert T. Stafford
15	Disaster Relief and Emergency Assistance Act
16	(42 U.S.C. 5170) because of a hurricane, trop-
17	ical storm, coastal storm, or flooding;
18	(B) that has a documented history of
19	coastal erosion or frequent coastal inundation
20	during that 10-year period; or
21	(C) that includes communities that may
22	not have adequate resources to prepare for or
23	respond to coastal hazards, including low in-

come communities, communities of color, Tribal

1	communities, Indigenous communities, and
2	rural communities.
3	(4) Minimum standards.—
4	(A) IN GENERAL.—The Administrator
5	shall develop minimum standards to be used in
6	selecting eligible entities to receive grants under
7	this section, taking into account—
8	(i) the considerations described in
9	paragraph (2);
10	(ii) the need for such standards to be
11	general enough to accommodate concerns
12	relating to specific project sites; and
13	(iii) the consideration of an estab-
14	lished eligible entity program with systems
15	to disburse funding from a single grant to
16	support multiple small-scale projects.
17	(B) Consultations.—In developing
18	standards under subparagraph (A), the Admin-
19	istrator—
20	(i) shall consult with relevant offices
21	of the National Oceanic and Atmospheric
22	Administration, such as the Office of Habi-
23	tat Conservation, the Office for Coastal
24	Management, and the Restoration Center;
25	and

1	(ii) may consult with—
2	(I) relevant interagency councils,
3	such as the Estuary Habitat Restora-
4	tion Council;
5	(II) Indian Tribes and Tribal or-
6	ganizations;
7	(III) State coastal management
8	agencies; and
9	(IV) relevant nongovernmental
10	organizations.
11	(d) Use of Funds.—A grant awarded under this
12	section to an eligible entity to carry out a living shoreline
13	project may be used by the eligible entity only—
14	(1) to carry out the project, including adminis-
15	tration, design, permitting, entry into negotiated in-
16	direct cost rate agreements, and construction;
17	(2) to monitor, collect, and report data on the
18	performance (including performance over time) of
19	the project, in accordance with standards issued by
20	the Administrator under subsection (f)(3); or
21	(3) to incentivize landowners to engage in living
22	shoreline projects.
23	(e) Cost Sharing.—
24	(1) In general.—Except as provided in para-
25	graph (2), an eligible entity that receives a grant

1	under this section to carry out a living shoreline
2	project shall provide, from non-Federal sources,
3	funds or other resources (such as land or conserva-
4	tion easements or in-kind matching from private en-
5	tities) valued at not less than 50 percent of the total
6	cost, including administrative costs, of the project.
7	(2) Reduced matching requirement for
8	CERTAIN COMMUNITIES.—The Administrator may
9	reduce or waive the matching requirement under
10	paragraph (1) for an eligible entity representing a
11	community or nonprofit organization if—
12	(A) the eligible entity submits to the Ad-
13	ministrator in writing—
14	(i) a request for such a reduction or
15	waiver and, in the case of a request for a
16	reduction, the amount of the reduction;
17	and
18	(ii) a justification for why the entity
19	cannot meet the matching requirement;
20	and
21	(B) the Administrator agrees with the jus-
22	tification.
23	(f) Monitoring and Reporting.—
24	(1) In general.—The Administrator shall re-
25	quire each eligible entity receiving a grant under this

1	section (or a representative of the entity) to carry
2	out a living shoreline project—
3	(A) to transmit to the Administrator data
4	collected under the project;
5	(B) to monitor the project and to collect
6	data on—
7	(i) the ecological and economic bene-
8	fits of the project and the protection pro-
9	vided by the project for the coastal com-
10	munity where the project is carried out, in-
11	cluding through—
12	(I) mitigating the effects of ero-
13	sion;
14	(II) attenuating the impact of
15	coastal storms and storm surge;
16	(III) mitigating shoreline flood-
17	ing;
18	(IV) mitigating the effects of sea
19	level rise, accelerated land loss, and
20	extreme tides;
21	(V) sustaining, protecting, or re-
22	storing the functions and habitats of
23	coastal ecosystems; or

1	(VI) such other forms of coastal
2	protection as the Administrator con-
3	siders appropriate; and
4	(ii) the performance of the project in
5	providing such protection;
6	(C) to make data collected under the
7	project available on a publicly accessible inter-
8	net website of the National Oceanic and Atmos-
9	pheric Administration; and
10	(D) not later than 1 year after the entity
11	receives the grant, and annually thereafter until
12	the completion of the project, to submit to the
13	Administrator a report on—
14	(i) the data described in subparagraph
15	(B); and
16	(ii) the effectiveness of the project in
17	increasing protection of the coastal com-
18	munity where the project is carried out
19	through living shorelines techniques, in-
20	cluding—
21	(I) a description of—
22	(aa) the project;
23	(bb) the activities carried
24	out under the project; and

1 (cc) the techniques and ma-2 terials used in carrying out the 3 project.

(2) Guidelines.—In developing guidelines relating to the data collected under paragraph (1)(B), the Administrator shall consider how additional data could safely be collected before and after major disasters or severe weather events to measure project performance and project recovery.

(3) Standards.—

- (A) IN GENERAL.—Not later than 90 days after the date of the enactment of this Act, the Administrator shall, in consultation with relevant offices of the National Oceanic and Atmospheric Administration, relevant interagency councils, and relevant nongovernmental organizations, issue standards for the monitoring, collection, and reporting under subsection (d)(2) of data regarding the performance of living shoreline projects for which grants are awarded under this section.
- (B) Reporting.—The standards issued under subparagraph (A) shall require an eligible entity receiving a grant under this section

1	to report the data described in that subpara-
2	graph to the Administrator on a regular basis.
3	(g) AUTHORIZATION OF APPROPRIATIONS.—There is
4	authorized to be appropriated to the Administrator
5	\$50,000,000 for each of fiscal years 2021 through 2025
6	for purposes of carrying out this section.
7	(h) Minimum Required Funds for Shoreline
8	PROJECTS LOCATED WITHIN THE GREAT LAKES.—The
9	Secretary shall use not less than 10 percent of the funds
10	awarded under this section for grants to projects located
11	in the Great Lakes.
12	(i) DEFINITIONS.—In this section:
13	(1) ELIGIBLE ENTITY.—The term "eligible enti-
14	ty" means any of the following:
15	(A) A unit of a State or local government.
16	(B) An organization described in section
17	501(c)(3) of the Internal Revenue Code of 1986
18	that is exempt from taxation under section
19	501(a) of such Code.
20	(C) An Indian Tribe.
21	(2) LIVING SHORELINE PROJECT.—The term
22	"living shoreline project"—
23	(A) means a project that—
24	(i) restores or stabilizes a shoreline,
25	including marshes, wetlands, and other

1	vegetated areas that are part of the shore-
2	line ecosystem, by using natural materials
3	and systems to create buffers to attenuate
4	the impact of coastal storms, currents,
5	flooding, and wave energy and to prevent
6	or minimize shoreline erosion while pro-
7	viding a net ecological benefit to eco-
8	systems and habitats;
9	(ii) incorporates as many natural ele-
10	ments as possible, such as native wetlands,
11	kelp forests, submerged aquatic plants,
12	corals, oyster shells, native grasses, shrubs,
13	or trees;
14	(iii) utilizes techniques that incor-
15	porate ecological and coastal engineering
16	principles in shoreline stabilization; and
17	(iv) to the extent possible, maintains
18	or restores existing natural slopes and con-
19	nections between uplands and adjacent
20	wetlands or surface waters;
21	(B) may include the use of—
22	(i) natural elements, such as sand,
23	wetland plants, logs, oysters or other shell-
24	fish, submerged aquatic vegetation, corals,

1	native grasses, shrubs, trees, or coir fiber
2	$\log s;$
3	(ii) project elements that provide eco-
4	logical benefits to coastal ecosystems and
5	habitats in addition to shoreline protection;
6	and
7	(iii) structural materials, such as
8	stone, concrete, wood, vinyl, oyster domes,
9	or other approved engineered structures in
10	combination with natural materials; and
11	(C) may include a project that expands
12	upon or restores natural living shorelines or ex-
13	isting living shoreline projects.
14	(3) STATE.—The term "State" means each of
15	the several States, the District of Columbia, the
16	Commonwealth of Puerto Rico, the United States
17	Virgin Islands, Guam, American Samoa, and the
18	Commonwealth of the Northern Mariana Islands.
19	SEC. 402. NATIONAL OCEANIC AND ATMOSPHERIC ADMIN-
20	ISTRATION COASTAL RESILIENCE RESEARCH
21	GRANTS.
22	(a) In General.—The Administrator shall annually
23	carry out a competitively awarded grant program (referred
24	to in this section as the "Program") focused on inter-
25	disciplinary coastal resilience and sustainability.

1	(b) Objective.—The objective of the Program shall
2	be to develop scalable, best practices—
3	(1) to prepare more resilient, sustainable coast-
4	al communities; and
5	(2) to reduce disaster recovery costs.
6	(c) Collaboration.—The Administrator shall con-
7	duct the Program in collaboration with business and in-
8	dustry, government agencies, academic institutions, and
9	coastal community stakeholders.
10	(d) Eligibility.—To be eligible for a grant under
11	the Program, an applicant shall be an institution of higher
12	education, nonprofit organization, State, local, or Tribal
13	government, for-profit organization, United States terri-
14	tory, or Federal agency that has statutory authority to
15	receive transfers of funds.
16	(e) Coastal Resilience Research Competitive
17	Grants.—
18	(1) In general.—In awarding grants under
19	the Program, the Administrator shall give priority to
20	coastal resilience research projects that focus on—
21	(A) protecting life and critical infrastruc-
22	ture;
23	(B) developing decision-support tools use-
24	ful to coastal communities;

1	(C) determining societal, ecological, and re-
2	siliency benefits of coastal restoration and nat-
3	ural, nature-based, and man-made infrastruc-
4	ture, and how those benefits affect the sustain-
5	ability of coastal ecosystems;
6	(D) volunteer and community-science mon-
7	itoring of coastal and marine resources as part
8	of efforts to protect coastal communities from
9	sea level rise;
10	(E) monitoring and developing ecosystem-
11	based approaches to managing coastal eco-
12	systems to promote sustainability;
13	(F) assessing and enhancing the capacity
14	of human communities to adapt to coastal nat-
15	ural disasters;
16	(G) assessing coastal vulnerability and
17	risk;
18	(H) evaluating adaptation and restoration
19	approaches to reduce risk, including through
20	the use of natural, nature-based, and man-made
21	features;
22	(I) minimizing costs associated with dam-
23	ages incurred from natural disasters, flooding,
24	and sea level rise; and

1	(J) developing curriculum for new pro-
2	grams in coastal restoration at public commu-
3	nity colleges and within college Sea Grant pro-
4	grams to train the new coastal restoration
5	workforce.

- 6 (f) Donations.—The Administrator may accept and
 7 use donations of funds to implement this section.
- 8 (g) Definitions.—In this section:
- 9 (1) CRITICAL INFRASTRUCTURE.—The term
 10 "critical infrastructure" means infrastructure, in11 cluding natural or nature-based infrastructure, the
 12 destruction or damaging of which would have a de13 bilitating impact on national security or economic se14 curity, undermine community resiliency and adapta15 tion, or threaten public health or safety.
- 16 (2) NATURAL AND NATURE-BASED FEA17 TURES.—The term "natural" or "nature-based fea18 tures" means coastal wetlands, beaches, dunes,
 19 marshes, mangrove forests, municipal green infra20 structure, and living shorelines.

21 SEC. 403. GRANTS FOR RECOVERING OYSTERS.

22 (a) ESTABLISHMENT.—The Administrator shall es-23 tablish a grant program (in this section referred to as the 24 "Program") under which the Administrator shall award 25 grants to eligible entities for the purpose of conducting

1	research on the conservation, restoration, or management
2	of oysters in estuarine ecosystems.
3	(b) APPLICATION.—To be eligible to receive a grant
4	under this section, an eligible entity shall submit to the
5	Administrator an application at such time, in such man-
6	ner, and containing such information as the Administrator
7	may require.
8	(c) Allocation of Grant Funds.—
9	(1) In General.—The Administrator shall
10	award a grant under the Program to eligible entities
11	that submit an application under subsection (b).
12	(2) Matching requirement.—
13	(A) In general.—Except as provided in
14	subparagraph (B), the total amount of Federal
15	funding received under the Program by an eligi-
16	ble entity may not exceed 85 percent of the
17	total cost of the research project for which the
18	funding was awarded. For the purposes of this
19	subparagraph, the non-Federal share of project
20	costs may be provided by in-kind contributions
21	and other noncash support.
22	(B) Waiver.—The Administrator may
23	waive all or part of the requirement in subpara-
24	graph (A) if the Administrator determines that

no reasonable means are available through

which an eligible entity applying for a grant under this section can meet such requirement and the probable benefit of such research project outweighs the public interest in such requirement.

- (3) Equitable distribution.—The Administrator shall ensure, to the maximum extent practicable, that grant funding under this section is apportioned according to the historic baseline oyster population of each estuary of the United States.
- (d) Definitions.—In this section:
- (1) Academic community.—The term "academic community" means faculty, researchers, professors, and representatives of State-accredited colleges and universities.
- (2) ELIGIBLE ENTITY.—The term "eligible entity" means a member of the academic community, a member of the seafood industry, a relevant nonprofit organization, or a relevant State agency, that is proposing or conducting a research project on the conservation, restoration, or management of oysters in an estuarine ecosystem developed through consultation with a member of the academic community, a member of the seafood industry, a relevant nonprofit organization, or a relevant State agency.

1	(3) Historic baseline.—The term "historic
2	baseline" means the estimated population of oysters
3	in an estuary in 1850.
4	(4) Nonprofit organization.—The term
5	"nonprofit organization" means an organization de-
6	scribed in section $501(c)(3)$ of the Internal Revenue
7	Code of 1986 and exempt from tax under section
8	501(a) of such Code.
9	(5) Seafood industry.—The term "seafood
10	industry" means shellfish growers, shellfish har-
11	vesters, commercial fishermen, and recreational fish-
12	ermen.
13	(e) AUTHORIZATION OF APPROPRIATIONS.—There is
14	authorized to be appropriated to the Administrator
15	\$6,000,000 for each of fiscal years 2021 through 2025
16	to carry out this section.
17	SEC. 404. IMPROVEMENTS TO THE NATIONAL OCEANS AND
18	COASTAL SECURITY ACT.
19	(a) Definitions.—Section 902 of the National
20	Oceans and Coastal Security Act (16 U.S.C. 7501) is
21	amended—
22	(1) by amending paragraph (5) to read as fol-
23	lows:
24	"(5) Indian Tribe.—The term 'Indian Tribe'
25	has the meaning given such term in section 4 of the

1	Indian Self-Determination and Education Assistance
2	Act (25 U.S.C. 5304).";
3	(2) by amending paragraph (7) to read as fol-
4	lows:
5	"(7) TIDAL SHORELINE.—The term 'tidal
6	shoreline' means a 'tidal shoreline' or a 'Great Lake
7	shoreline' as such terms are used in section
8	923.110(c)(2)(i) of title 15, Code of Federal Regula-
9	tions, or a similar successor regulation."; and
10	(3) by adding at the end the following:
11	"(8) Blue carbon.—The term 'blue carbon
12	means the ability of an ocean or coastal ecosystem
13	habitat, or other natural resource to absorb, capture
14	and contain atmospheric carbon dioxide.".
15	(b) Improvements to National Oceans and
16	COASTAL SECURITY FUND.—
17	(1) Establishment of fund required.—
18	Subsection (a) of section 904 of such Act (16 U.S.C
19	7503) is amended by inserting "and jointly manage"
20	after "establish".
21	(2) Deposits.—Paragraph (1) of section
22	904(b) of such Act (16 U.S.C. 7503(b)) is amended
23	to read as follows:

1	"(1) In general.—There shall be deposited
2	into the Fund, which shall constitute the assets of
3	the Fund, amounts as follows:
4	"(A) Amounts appropriated for the Fund.
5	"(B) Such other amounts as may be ap-
6	propriated or otherwise made available to carry
7	out this title.".
8	(3) Expenditures.—Section 904 of such Act
9	(16 U.S.C. 7503) is amended by striking subsection
10	(d) and inserting the following:
11	"(d) Expenditure.—
12	"(1) Amounts deposited equaling or ex-
13	CEEDING \$100,000,000.—If amounts deposited into
14	the Fund in a fiscal year equal or exceed
15	\$100,000,000—
16	"(A) not more than 80 percent of such
17	amounts may be used in that fiscal year for the
18	award of grants under subsection (b) of section
19	906;
20	"(B) not more than 20 percent of such
21	amounts may be used in that fiscal year for the
22	award of grants under subsection (c) of such
23	section; and
24	"(C) not more than 4 percent of such
25	amounts may be used in that fiscal year by the

1	Administrator and the Foundation for adminis-
2	trative expenses to carry out this title, which
3	amount shall be divided between the Adminis-
4	trator and the Foundation pursuant to an
5	agreement reached and documented by both the
6	Administrator and the Foundation.
7	"(2) Amounts deposited of less than
8	\$100,000,000.—If amounts deposited into the Fund in
9	a fiscal year are less than \$100,000,000—
10	"(A) all of such amounts shall be used in
11	that fiscal year for the award of grants under
12	subsection (c) of section 906; and
13	"(B) not more than 4 percent may be used
14	by the Administrator and the Foundation for
15	administrative expenses to carry out this title,
16	which amount shall be divided between the Ad-
17	ministrator and the Foundation pursuant to an
18	agreement reached and documented by both the
19	Administrator and the Foundation.".
20	(e) Eligible Uses of the Fund.—Section 905 of
21	such Act (16 U.S.C. 7504) is amended to read as follows:
22	"SEC. 905. ELIGIBLE USES.
23	"(a) In General.—Amounts in the Fund may be
24	allocated by the Administrator and the Foundation to sup-
25	port programs and activities intended to protect, conserve,

- 1 restore, better understand, and utilize ocean and coastal
- 2 resources and coastal infrastructure, including scientific
- 3 research, resiliency and spatial planning, data-sharing,
- 4 and other programs and activities carried out in coordina-
- 5 tion with Federal and State departments or agencies, in-
- 6 cluding the following:
- 7 "(1) Ocean, coastal, and Great Lakes restora-
- 8 tion and protection, including efforts to address po-
- 9 tential impacts of sea level change, sedimentation,
- 10 erosion, changes in ocean chemistry, hurricanes and
- other extreme weather, flooding, and changes in
- ocean temperature to natural resources, commu-
- 13 nities, and coastal economies.
- "(2) Restoration, protection, or maintenance of
- living ocean, coastal, and Great Lakes resources and
- their habitats, including habitats and ecosystems
- that provide blue carbon benefits.
- 18 "(3) Planning for and managing coastal devel-
- opment to enhance ecosystem and community integ-
- 20 rity, or to minimize impacts from sea level change,
- 21 hurricanes and other extreme weather, flooding, and
- coastal erosion.
- 23 "(4) Projects to address management, planning,
- or resiliency and readiness issues which are regional

- or interstate in scope, such as regional ocean partnerships or similar bodies.
- "(5) Efforts that contribute to the understanding of ecological, economic, societal, and national security threats driven by changes to the oceans, coasts, and Great Lakes.
 - "(6) Efforts to preserve, protect, and collect data, including through public ocean and coastal data portals, that would support sustainable water-dependent commercial activities, including commercial fishing, recreational fishing businesses, aquaculture, boat building, or other coastal-related businesses.
 - "(7) Efforts to assist coastal States in repositioning, relocating, or deploying natural or nature-based features to enhance the resiliency of critical coastal transportation and emergency response, water, electrical, and other infrastructure that are already subject to or face increased future risks of hurricanes, coastal flooding, coastal erosion, or sea level change to ensure the economic security, safety, and ecological well-being of the coasts of the United States.
- 24 "(8) Acquiring property or interests in property 25 if—

1	"(A) the property is located within a coast-
2	al county or adjacent county;
3	"(B) the property or interests in property
4	are acquired through the voluntary sale, ex-
5	change, or donation of the property or interests
6	in property by the previous owner;
7	"(C) the Governor of the State in which
8	the property or interests in property are located
9	approves of the acquisition; and
10	"(D) the property or interests in property
11	are acquired in a manner that will ensure that
12	the property or interests in property will be ad-
13	ministered to support the purposes of this title.
14	"(9) Protection and modification of critical
15	coastal public infrastructure affected by erosion,
16	hurricanes or other extreme weather, flooding, or sea
17	level change.
18	"(10) Assistance for small businesses and com-
19	munities that are dependent on coastal tourism to
20	help coastal economies minimize impacts from sea
21	level rise and disasters.
22	"(11) Projects that use natural and nature-
23	based approaches for enhancing the resiliency of
24	wastewater and stormwater infrastructure (as com-

1	pared to general water infrastructure, which may in-
2	clude drinking water systems).
3	"(12) Technical assistance to help develop com-
4	prehensive resilience and mitigation plans.
5	"(b) Prohibition on Use of Funds for Litiga-
6	TION.—No funds made available under this title may be
7	used to fund litigation against the Federal Government.".
8	(d) Grants.—
9	(1) Administration.—Subsection (a)(1) of
10	section 906 of such Act (16 U.S.C. 7505) is amend-
11	ed —
12	(A) by amending subparagraph (B) to read
13	as follows:
14	"(B) Selection procedures and criteria for
15	the awarding of grants under this section that
16	require consultation with the Administrator and
17	the Secretary of the Interior.";
18	(B) by amending subparagraph (C)(ii) to
19	read as follows:
20	"(ii) under subsection (c) to entities
21	including States, local governments, re-
22	gional and interstate collaboratives, asso-
23	ciations, nonprofit and for-profit private
24	entities, public-private partnerships, aca-
25	demic institutions, and Indian Tribes.";

1	(C) in subparagraph (F), by striking "year
2	if grants have been awarded in that year" and
3	inserting "5 years"; and
4	(D) by adding at the end the following:
5	"(I) A method to give special consideration
6	in reviewing proposals to projects with either di-
7	rect or indirect coastal or marine blue carbon
8	benefits and an accounting methodology to
9	quantify those benefits for the purposes of the
10	annual report required under section 907.".
11	(2) Grants to coastal states.—Subsection
12	(b) of section 906 of such Act (16 U.S.C. 7505) is
13	amended to read as follows:
14	"(b) Grants to Coastal States.—
15	"(1) In General.—Subject to section
16	904(d)(1) and paragraphs (2) and (3) of this sub-
17	section, the Administrator and the Foundation shall
18	award grants to coastal States as follows:
19	"(A) 50 percent of the funds provided
20	through such grants shall be allocated equally
21	among such coastal States.
22	"(B) 25 percent of such funds shall be al-
23	located on the basis of the ratio of tidal shore-
24	line miles in a coastal State to the tidal shore-
25	line miles of all coastal States.

1	"(C) 25 percent of such funds shall be al-
2	located on the basis of the ratio of population
3	density of the coastal counties of a coastal
4	State to the average population density of all
5	coastal counties based on the most recent data
6	available from the Bureau of the Census.
7	"(2) MAXIMUM ALLOCATION TO STATES.—
8	"(A) In general.—Not more than 5 per-
9	cent of the total funds distributed under this
10	subsection may be allocated to any one coastal
11	State.
12	"(B) Redistribution.—Any amount ex-
13	ceeding the limitation under subparagraph (A)
14	that would by reason of paragraph (1) be allo-
15	cated to a coastal State shall be redistributed
16	equally among the remaining coastal States.
17	"(3) Requirement to submit plans.—
18	"(A) In general.—To be eligible to re-
19	ceive a grant under this subsection, a coastal
20	State shall submit to the Administrator for re-
21	view and approval a 5-year plan, which shall in-
22	clude the following:
23	"(i) Criteria pursuant to which the
24	coastal State will determine the eligibility

1	of entities to receive funds provided to the
2	coastal State pursuant to the grant.
3	"(ii) A description of the competitive
4	process the coastal State will use in allo-
5	cating such funds, except in the case of al-
6	locating funds under paragraph (6), which
7	shall include—
8	"(I) a description of the relative
9	roles in the process of, and the con-
10	sistency with process with, the State
11	coastal zone management program ap-
12	proved under the Coastal Zone Man-
13	agement Act of 1972 (16 U.S.C. 1451
14	et seq.), if the coastal State has such
15	a plan, and any State Sea Grant Pro-
16	gram, if the State has such program;
17	and
18	"(II) a demonstration that such
19	competitive process is consistent with
20	the application and review procedures
21	established under subsection (a)(1).
22	"(iii) A description of the process the
23	coastal State will use to certify that any
24	project or program, and the award of any
25	contract for the expenditure of such funds,

1	is consistent with the standard procure-
2	ment rules and regulations governing com-
3	parable projects, programs, and contracts
4	in the coastal State, including all applica-
5	ble competitive bidding and audit require-
6	ments.
7	"(iv) A description of the procedures
8	the coastal State will use to make publicly
9	available on the internet—
10	"(I) a list of all activities sup-
11	ported using such funds; and
12	"(II) with respect to each such
13	activity, an identification of, at a min-
14	imum, the recipient of such funds, the
15	amount of such funds provided, a de-
16	scription of the activity, and the sta-
17	tus of the activity.
18	"(B) UPDATES.—A coastal State that re-
19	ceives a grant under this subsection shall sub-
20	mit to the Administrator, not less frequently
21	than once every 5 years after first receiving
22	such a grant, an update to the plan submitted
23	by the coastal State under subparagraph (A)
24	that covers the 5-year period immediately fol-

lowing the most recent plan or update sub-
mitted under this paragraph.
"(4) Opportunity for public comment.—In
determining whether to approve a plan or an update
to a plan described in subparagraph (A) or (B) of
paragraph (3), the Administrator or the Foundation
shall provide the opportunity for, and take into con-
sideration, public input and comment on the plan.
"(5) Indian tribes.—A coastal State that re-
ceives a grant under this subsection shall ensure
that Indian Tribes in the coastal State are eligible
to participate in the competitive process described in
the plan of the coastal State under paragraph
(3)(A)(ii).
"(6) Nonparticipation by a state.—In any
year, if a coastal State does not submit the plan re-
quired by paragraph (3) or declines the award of a
grant under this subsection, the funds that would
have been allocated to the coastal State shall be re-
distributed equally among the remaining coastal
States.".
(3) National grants for oceans, coasts,
AND GREAT LAKES.—Subsection (c) of such section
is amended—

(A) in paragraph (2)—

1	(i) in subparagraph (B)—
2	(I) in clause (ii), by striking ";
3	and" and inserting a semicolon;
4	(II) by redesignating clause (iii)
5	as clause (iv); and
6	(III) by inserting after clause (ii)
7	the following:
8	"(iii) nongovernmental organizations;
9	and"; and
10	(ii) by adding at the end the fol-
11	lowing:
12	"(C) CAP ON STATE FUNDING.—The
13	amount of a grant awarded under this sub-
14	section shall not count toward the maximum
15	amount that may be allocated to a coastal State
16	under subsection (b)(2)."; and
17	(B) by adding at the end the following:
18	"(3) Matching requirement.—The Adminis-
19	trator and the Foundation shall require that non-
20	Federal funds be available for a percentage of the
21	costs (as determined by the Administrator or the
22	Foundation, as applicable) of the activities for which
23	any grant is awarded under this subsection.".

1	(e) Annual Report.—Section 907(b) of the Na-
2	tional Oceans and Coastal Security Act (16 U.S.C.
3	7506(b)) is amended—
4	(1) in paragraph (2), by striking "; and and
5	inserting a semicolon;
6	(2) in paragraph (3), by striking the period at
7	the end and inserting "; and; and
8	(3) by adding at the end the following:
9	"(4) an estimate of blue carbon benefits, in
10	tons of carbon dioxide, expected through grants
11	awarded to projects that received special consider-
12	ation under section 906 due to the potential blue
13	carbon benefits of the projects.".
14	(f) Funding.—Section 908 of such Act (16 U.S.C.
15	7507) is amended to read as follows:
16	"SEC. 908. FUNDING.
17	"There is authorized to be appropriated to carry out
18	this title $\$100,000,000$ for fiscal year 2021 and each fiscal
19	year thereafter.".
20	SEC. 405. RESTORATION GRANTS FOR COASTLINES AND
21	FISHERIES.
22	(a) Establishment.—The Secretary shall establish
23	a grant program to provide funding and technical assist-

24 ance to eligible entities for purposes of carrying out a

1	(b) Project Proposal.—To be considered for a
2	grant under this section, an eligible entity shall submit
3	a grant proposal to the Secretary in a time, place, and
4	manner determined by the Secretary. Such proposal shall
5	include monitoring, data collection, and measurable per-
6	formance criteria with respect to the project.
7	(c) Development of Criteria.—The Secretary
8	shall select eligible entities to receive grants under this
9	section based on criteria developed by the Secretary, in
10	consultation with relevant offices of the National Oceanic
11	and Atmospheric Administration, such as the Office of
12	Habitat Conservation and the Office for Coastal Manage-
13	ment.
14	(d) Eligible Projects.—A project is described in
15	this subsection if—
16	(1) the purpose of the project is to restore a
17	marine, estuarine, coastal, or Great Lake habitat,
18	including—
19	(A) restoration of habitat to protect or re-
20	cover a species that is threatened, endangered,
21	or a species of concern under the Endangered
22	Species Act of 1973 (16 U.S.C. 1531 et seq.);
23	(B) through the removal or remediation of
24	marine debris, including derelict vessels and
25	fishing gear in coastal and marine habitats, or

1	(C) for the benefit of—
2	(i) shellfish;
3	(ii) fish, including diadromous fish; or
4	(iii) coral reef; or
5	(2) provides adaptation to climate change, in-
6	cluding by constructing or protecting ecological fea-
7	tures or nature-based infrastructure that protects
8	coastal communities from sea level rise, coastal
9	storms, or flooding, and blue carbon projects.
10	(e) Priority.—In determining which projects to
11	fund under this section, the Secretary shall give priority
12	to a proposed project—
13	(1) that would stimulate the economy;
14	(2) for which the applicant can demonstrate
15	that the grant will fund work that will begin not
16	more than 90 days after the date of the award;
17	(3) for which the applicant can demonstrate
18	that the grant will fund work that will employ fish-
19	ermen who have been negatively impacted by the
20	COVID-19 pandemic or pay a fisherman for the use
21	of a fishing vessel;
22	(4) for which the applicant can demonstrate
23	that any preliminary study or permit required before
24	the project can begin has been completed or can be
25	completed shortly after an award is made: or

1	(5) that includes communities that may not
2	have adequate resources including low income com-
3	munities, communities of color, Tribal communities,
4	Indigenous communities, and rural communities.
5	(f) Authorization of Appropriations.—There is
6	authorized to be appropriated to the Secretary
7	\$3,000,000,000 for fiscal year 2021 to carry out this sec-
8	tion, to remain available until expended.
9	(g) DEFINITIONS.—In this section:
10	(1) ELIGIBLE ENTITY.—The term "eligible enti-
11	ty" means a nonprofit, a for-profit business, an in-
12	stitution of higher education, or a State, local, Trib-
13	al, or Territorial government.
14	(2) FISHERMEN.—The term "fishermen"
15	means commercial or for-hire fishermen or oyster
16	farmers.
17	(3) Secretary.—In this section, the term
18	"Secretary" means the Secretary of Commerce, act-
19	ing through the Administrator of the National Oce-
20	anic and Atmospheric Administration.
21	SEC. 406. STRATEGIC CLIMATE CHANGE RELOCATION INI-
22	TIATIVE AND PROGRAM.
23	(a) Establishment of Initiative.—The Chairman
24	of the Council on Environmental Quality (in this section
25	referred to as the "Chair") shall establish an initiative

- 1 to be known as the "Strategic Climate Change Relocation
- 2 Initiative" (in this section referred to as the "Initiative"),
- 3 for the purposes of coordinating Federal agency activities
- 4 to identify and assist communities that have expressed af-
- 5 firmative interest in relocation due to health, safety, and
- 6 environmental impacts from climate change, including
- 7 hurricanes, flooding, sea level rise, and repeat wildfires.
- 8 (b) DIRECTOR.—The Chair shall appoint a Strategic
- 9 Climate Relocation Director to manage the Initiative.
- 10 (c) CONSULTATION.—The Chair shall coordinate and
- 11 consult with Federal agencies conducting activities related
- 12 to this section including the National Oceanic and Atmos-
- 13 pheric Administration, the Department of the Interior, in-
- 14 cluding the Bureau of Indian Affairs, the Environmental
- 15 Protection Agency, the Federal Emergency Management
- 16 Agency, the Department of Housing and Urban Develop-
- 17 ment, the Denali Commission, the Corps of Engineers, the
- 18 Office of Management and Budget, the National Economic
- 19 Council, the National Security Council, the interagency
- 20 subgroup on Tribal resilience of the White House Council
- 21 on Native American Affairs, and other Federal agencies
- 22 as appropriate.
- 23 (d) External Advisory Panel.—The Chair shall
- 24 establish an external advisory panel that may include com-
- 25 munity leaders, non-governmental organizations, State

1	and local government representatives, Tribal leaders, In-
2	digenous community representatives, climate adaptation
3	professionals, and other relevant experts as appropriate.
4	(e) Report to Congress.—Not later than 2 years
5	after the date of enactment of this Act, the Chair shall
6	submit to Congress a report recommending key elements
7	of a program, to be known as the "Strategic Climate
8	Change Relocation Program" (in this section referred to
9	as the "Program") 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. The report shall—
13	(1) identify—
14	(A) areas where climate change impacts
15	make relocation a likely climate change adapta-
16	tion strategy;
17	(B) communities that have expressed af-
18	firmative interest in relocation (in this section
19	referred to as "sending communities"); and
20	(C) potential relocation areas and commu-
21	nities that have expressed interest in attracting
22	climate migrants (in this section referred to as
23	"receiving communities");
24	(2) propose criteria to qualify for climate relo-
25	cation assistance, with preference given to disadvan-

- taged communities where community members have indicated a preference for retreat and would otherwise be challenged to relocate;
 - (3) describe the roles and responsibilities of specific Federal agencies in implementing the Program and how the Program should be coordinated with applicable State and Federal agency plans and programs and identify Federal programs that can be tailored to incentivize self-identification of communities as receiving areas;
 - (4) outline the role that State and local governments should play in implementing the Program, including identification of areas or communities where people leaving areas vulnerable to climate change can consider locating, and the specific resources needed to prepare those communities to be receiving communities in terms of Federal investment in infrastructure, affordable housing, and social services;
 - (5) summarize existing Federal and State programs for purchase of individual properties vulnerable to the impacts of climate change and propose how those programs might be restructured, improved, or expanded to incentivize climate change relocation;

- (6) describe measures that governments or other organizations can take to reduce the psychological stress associated with relocation to preserve or support the historical and cultural identity of communities being relocated and to restore and conserve areas that communities are relocated from as publicly accessible natural assets, and how Federal programs will support those efforts;
 - (7) identify and recommend measures to overcome how institutional barriers, such as Federal programs that do not account for Tribal sovereignty, constrain Tribal communities' ability to pursue selfdetermined management of their resources and built environment;
 - (8) identify measures that Congress, Federal agencies, or State and local governments should take to discourage or restrict new development and hard structural measures in areas vulnerable to such significant climate change impacts that they are likely to require a solution that includes relocation, in particular, where the Federal Government could establish stricter funding requirements for post-disaster funding that require updated building codes and land use strategies reflecting climate risk;

- 1 (9) describe existing policies and clarify respon-2 sibilities of governments in complying with obliga-3 tions to protect private property, including providing 4 just compensation for any taking of private prop-5 erty;
 - (10) propose an application process, available online, for States and communities to express affirmative interest in climate relocation assistance, either as a leaving community or receiving community;
 - (11) provide guidance on and identify additional funding for operations and maintenance requirements for vacated land, and identify the resources needed to prioritize public access, recreational spaces, or conservation areas;
 - (12) review efficacy of existing flood mitigation strategies on reducing flood risk to human populations, and identify opportunities to coordinate blue-green infrastructure solutions with buyout programs that increase the resilience of remaining residents; and
 - (13) outline the amount and timing of Federal funding that is expected to be needed to implement the Program.

1	(f) Development of Report to Congress.—In
2	developing the report required by subsection (e), the Chair
3	shall—
4	(1) provide for public review of and public com-
5	ment on a draft of the report;
6	(2) consult with organizations representing
7	State and local governments;
8	(3) consult with the external advisory panel es-
9	tablished under subsection (d); and
10	(4) evaluate projects implemented under the
11	National Disaster Resilience Competition adminis-
12	tered by the Secretary of Housing and Urban Devel-
13	opment.
14	(g) CLIMATE CHANGE STRATEGIC RELOCATION PRO-
15	GRAM PILOT PROJECTS.—Not later than 2 years after the
16	date on which the report required by subsection (e) is sub-
17	mitted, the Chair shall establish and carry out pilot
18	projects based upon the recommendations included in such
19	report.
20	(h) Subsequent Periodic Reports to Con-
21	GRESS.—Not later than 3 years after the date on which
22	the report required by subsection (e) is submitted, and
23	every 3 years thereafter, the Chair shall submit to Con-
24	gress a report evaluating progress in the implementation

1	of the Program and making recommendations for needed
2	changes to the Program.
3	TITLE V—OCEAN HEALTH:
4	OCEAN ACIDIFICATION AND
5	HARMFUL ALGAL BLOOMS
6	Subtitle A—Coastal Communities
7	Ocean Acidification
8	SEC. 501. STATE AND UNITED STATES DEFINED.
9	Section 12403 of the Federal Ocean Acidification Re-
10	search And Monitoring Act of 2009 (33 U.S.C. 3702) is
11	amended—
12	(1) by redesignating paragraph (3) as para-
13	graph (4);
14	(2) by inserting after paragraph (2) the fol-
15	lowing:
16	"(3) State.—The term 'State' means each
17	State of the United States, the District of Columbia,
18	the Commonwealth of Puerto Rico, American
19	Samoa, Guam, the Commonwealth of the Northern
20	Mariana Islands, the Virgin Islands of the United
21	States, and any other territory or possession of the
22	United States."; and
23	(3) by adding at the end the following:
24	"(5) United states.—The term 'United
25	States' means the States, collectively.".

1	SEC. 502. COASTAL COMMUNITY VULNERABILITY ASSESS-
2	MENT.
3	(a) In General.—Section 12406 of the Federal
4	Ocean Acidification Research And Monitoring Act of 2009
5	(33 U.S.C. 3705) is amended—
6	(1) in subsection (a), by inserting "(referred to
7	in this section as the 'Program')" after "acidifica-
8	tion program";
9	(2) by redesignating subsection (b) as sub-
10	section (d); and
11	(3) by inserting after subsection (a) the fol-
12	lowing:
13	"(b) Community Vulnerability Assessment.—
14	"(1) In general.—Not later than 180 days
15	after the date of the enactment of the Ocean Cli-
16	mate Emergency Action Now Act of 2020 and every
17	7 years thereafter, the Secretary, through the 'Pro-
18	gram', shall conduct an ocean acidification coastal
19	community vulnerability assessment, and issue a cor-
20	responding public report.
21	"(2) Requirements.—The assessment con-
22	ducted under paragraph (1) shall—
23	"(A) identify the United States coastal
24	communities, including island communities, low-
25	population rural communities, and subsistence
26	communities, that are most dependent on coast-

1	al and ocean resources that may be impacted by
2	ocean acidification;
3	"(B) assess the nature of the social and
4	economic vulnerabilities of those communities,
5	including the economic effect on local or re-
6	gional commercial fisheries and recreational op-
7	portunities and over what timescales such ef-
8	fects will be felt;
9	"(C) identify the ocean acidification im-
10	pacts that might harm those communities, both
11	in isolation and in conjunction with other
12	changing ocean conditions, including effects
13	from changes in ocean and coastal marine re-
14	sources that are not managed by the Federal
15	Government;
16	"(D) identify key knowledge gaps where
17	research could be devoted to better understand
18	the possible impacts of ocean acidification on
19	those communities, the risks and threats facing
20	those communities, and possible adaptation
21	strategies for those communities; and
22	"(E) be conducted in collaboration with ex-
23	perts, including traditional knowledge experts,
24	and individuals who are familiar with the
25	unique economic, social, ecological, geographic,

1	and resource concerns of coastal communities in
2	the United States, including representatives
3	from—
4	"(i) the National Marine Fisheries
5	Service and the Office for Coastal Manage-
6	ment of the National Oceanic and Atmos-
7	pheric Administration;
8	"(ii) National Integrated Coastal and
9	Ocean Observation System regional infor-
10	mation coordination entities established
11	under section $12304(c)(4)$ of the Inte-
12	grated Coastal and Ocean Observation
13	System Act of 2009 (33 U.S.C.
14	3603(e)(4));
15	"(iii) regional ocean acidification net-
16	works; and
17	"(iv) State sea grant programs (as de-
18	fined in section 203 of the National Sea
19	Grant College Program Act (33 U.S.C.
20	1122)).
21	"(c) Support for State and Local Vulner-
22	ABILITY ASSESSMENTS AND STRATEGIC RESEARCH
23	Planning.—In carrying out the Program, the Secretary
24	shall collaborate with State, local, and Tribal government
25	entities that are conducting or have completed vulner-

1	ability assessments, strategic research planning, or other
2	similar activities related to ocean acidification and its im-
3	pacts on coastal communities, for the purpose of—
4	"(1) determining whether such activities can be
5	used as a model for other communities; and
6	"(2) identifying opportunities for the National
7	Oceanic and Atmospheric Administration and other
8	relevant Federal agencies to support such activi-
9	ties.".
10	(b) Ongoing Input Mechanism.—Section
11	12404(b)(5) of the Federal Ocean Acidification Research
12	And Monitoring Act of 2009 (33 U.S.C. 3703(b)(5)) is
13	amended—
14	(1) by striking "including information" and in-
15	serting the following: "including—
16	"(A) information";
17	(2) by striking the period at the end and insert-
18	ing "; and; and
19	(3) by adding at the end the following:
20	"(B) an ongoing mechanism that allows af-
21	fected industry members, coastal stakeholders,
22	non-Federal resource managers, community
23	acidification networks, Indigenous knowledge
24	groups, and scientific experts not employed by
25	the Federal Government to provide input on re-

1	search, data, and monitoring that is necessary
2	to support on-the-ground management, decision
3	making, and adaptation related to ocean acidifi-
4	cation and the effects of such acidification
5	and".
6	(c) Strategic Research Plan.—Section 12405 of
7	the Federal Ocean Acidification Research And Monitoring
8	Act of 2009 (33 U.S.C. 3704) is amended—
9	(1) in subsection (b)—
10	(A) in paragraph (8), by striking "and" at
11	the end;
12	(B) in paragraph (9), by striking the pe-
13	riod at the end and inserting a semicolon; and
14	(C) by adding at the end the following:
15	"(10) make recommendations to conduct re-
16	search in areas, including the social sciences and ec-
17	onomics, to address the key knowledge gaps identi-
18	fied in the community vulnerability assessment re-
19	port conducted under section 12406(b); and"; and
20	(2) in subsection (e), by inserting ", Tribal gove
21	ernment, Indigenous and traditional knowledge ex-
22	pert," after "industry".
23	(d) Report on Support for State and Local
24	VULNERABILITY ASSESSMENTS AND STRATEGIC RE-
25	SEARCH PLANNING.—Not later than 180 days after the

- 1 date of the enactment of this Act, the Administrator shall
- 2 submit to Congress a report detailing the efforts of the
- 3 National Oceanic and Atmospheric Administration to sup-
- 4 port State, local, and Tribal community vulnerability as-
- 5 sessments, strategic research and planning, and moni-
- 6 toring needs, pursuant to section 12406(c) of the Federal
- 7 Ocean Acidification Research And Monitoring Act of 2009
- 8 (as added by subsection (a)).

9 Subtitle B—Ocean Acidification

10 **Prize Competitions**

- 11 SEC. 511. PRIZE COMPETITIONS.
- 12 Section 12404 of the Federal Ocean Acidification Re-
- 13 search And Monitoring Act of 2009 (33 U.S.C. 3703) is
- 14 amended by adding at the end the following:
- 15 "(d) Prize Competitions.—
- 16 "(1) IN GENERAL.—Any Federal agency with a
- 17 representative serving on the interagency working
- group established under this section may, either in-
- dividually or in cooperation with 1 or more agencies,
- 20 carry out a program to award prizes competitively
- 21 under section 24 of the Stevenson-Wydler Tech-
- 22 nology Innovation Act of 1980 (15 U.S.C. 3719). An
- agency seeking to carry out such a program shall
- carry out such program in coordination with the
- chair of such interagency working group.

1	"(2) Purposes.—Any prize competition carried
2	out under this subsection shall be for the purpose of
3	stimulating innovation to advance our Nation's abil-
4	ity to understand, research, or monitor ocean acidifi-
5	cation or its impacts, or to develop management or
6	adaptation options for responding to ocean acidifica-
7	tion.
8	"(3) Priority Programs.—Priority shall be
9	given to establishing programs under this section
10	that address communities, environments, or indus-
11	tries that are in distress due to the impacts of ocean
12	acidification, including—
13	"(A) the development of monitoring or
14	management options for communities or indus-
15	tries that are experiencing significant financial
16	hardship;
17	"(B) the development of adaptation op-
18	tions to alleviate economic harm and job loss
19	caused by ocean acidification;
20	"(C) the development of measures to help
21	vulnerable communities or industries, with an
22	emphasis on rural communities and businesses
23	and

1	"(D) the development of adaptation and
2	management options for impacted shellfish in-
3	dustries.".
4	Subtitle C—Coastal and Ocean
5	Acidification Stressors and
6	Threats Research
7	SEC. 521. PURPOSES.
8	(a) In General.—Section 12402(a) of the Federal
9	Ocean Acidification Research And Monitoring Act of 2009
10	(33 U.S.C. 3701(a)) is amended—
11	(1) in paragraph (1)—
12	(A) in the matter preceding subparagraph
13	(A), by striking "development and coordina-
14	tion" and inserting "coordination and imple-
15	mentation";
16	(B) in subparagraph (A), by striking
17	"acidification on marine organisms" and insert-
18	ing "acidification and coastal acidification on
19	marine organisms"; and
20	(C) in subparagraph (B), by striking "es-
21	tablish" and all that follows through the semi-
22	colon and inserting "maintain and advise an
23	interagency research, monitoring, and public
24	outreach program on ocean acidification and
25	coastal acidification:":

1	(2) in paragraph (2), by striking "establish-
2	ment" and inserting "maintenance";
3	(3) in paragraph (3), by inserting "and coastal
4	acidification" after "ocean acidification"; and
5	(4) in paragraph (4), by inserting "and coastal
6	acidification that take into account other environ-
7	mental and anthropogenic stressors" after "ocean
8	acidification".
9	(b) Technical and Conforming Amendment.—
10	Section 12402 of the Federal Ocean Acidification Re-
11	search And Monitoring Act of 2009 (33 U.S.C. 3701(a))
12	is amended by striking "(a) Purposes.—".
13	SEC. 522. DEFINITIONS.
14	Section 12403 of the Federal Ocean Acidification Re-
15	search And Monitoring Act of 2009 (33 U.S.C. 3702), as
16	amended by section 501 of this Act, is further amended—
17	(1) in paragraph (1), by striking "of the
18	Earth's oceans" and all that follows before the pe-
19	riod at the end and inserting "and changes in the
20	water chemistry of the Earth's oceans, coastal estu-
21	aries, and waterways caused by carbon dioxide from
22	the atmosphere and the breakdown of organic mat-
23	ter'';
24	(2) in paragraph (4), as redesignated by section
25	501(a) of this Act, by striking "Joint Subcommittee

1	on Ocean Science and Technology" and inserting
2	"Subcommittee on Ocean Science and Technology";
3	(3) by redesignating paragraphs (1) through
4	(5) as paragraphs (2) through (6), respectively; and
5	(4) by inserting before paragraph (2), as so re-
6	designated, the following new paragraph:
7	"(1) Coastal acidification.—The term
8	'coastal acidification' means the combined decrease
9	in pH and changes in the water chemistry of coastal
10	oceans, estuaries, and other bodies of water from
11	chemical inputs (including carbon dioxide from the
12	atmosphere), freshwater inputs, and excess nutrient
13	run-off from land and coastal atmospheric pollution
14	that result in processes that release carbon dioxide,
15	acidic nitrogen, and sulfur compounds as byproducts
16	which end up in coastal waters.".
17	SEC. 523. INTERAGENCY WORKING GROUP.
18	Section 12404 of the Federal Ocean Acidification Re-
19	search And Monitoring Act of 2009 (33 U.S.C. 3703) is
20	amended—
21	(1) in the heading, by striking " SUB-
22	COMMITTEE" and inserting "WORKING GROUP";
23	(2) in subsection (a)—
24	(A) in paragraph (1), by striking "Joint
25	Subcommittee on Ocean Science and Tech-

1	nology of the National Science and Technology
2	Council shall coordinate Federal activities on
3	ocean acidification and" and inserting "Sub-
4	committee shall";
5	(B) in paragraph (2), by striking "Wildlife
6	Service," and inserting "Wildlife Service, the
7	Bureau of Ocean Energy Management, the En-
8	vironmental Protection Agency, the Department
9	of Agriculture, the Department of State, the
10	Department of Energy, the Department of the
11	Navy, the National Park Service, the Bureau of
12	Indian Affairs, the National Institute of Stand-
13	ards and Technology, the Smithsonian Institu-
14	tion,"; and
15	(C) in paragraph (3), in the heading, by
16	striking "Chairman" and inserting "Chair";
17	(3) in subsection (b)—
18	(A) in paragraph (1), by inserting ", in-
19	cluding the efforts of the National Oceanic and
20	Atmospheric Administration to facilitate such
21	implementation" after "of the plan";
22	(B) in paragraph (2)—
23	(i) in subparagraph (A), by inserting
24	"and coastal acidification" after "ocean
25	acidification"; and

1	(ii) in subparagraph (B), by inserting
2	"and coastal acidification" after "ocean
3	acidification";
4	(C) in paragraph (4), by striking "; and"
5	and inserting a semicolon;
6	(D) in paragraph (5), as amended by sec-
7	tion 502(b) of this Act—
8	(i) by striking "developed" and insert-
9	ing "and coastal acidification developed";
10	and
11	(ii) by striking "impacts of ocean
12	acidification" and inserting "impacts of
13	ocean acidification and coastal acidifica-
14	tion"; and
15	(E) by adding at the end the following new
16	paragraph:
17	"(6) ensure that each of the Federal agencies
18	represented on the interagency working group—
19	"(A) participates in the Ocean Acidifica-
20	tion Information Exchange established under
21	paragraph (5); and
22	"(B) delivers data and information to sup-
23	port the data archive system established under
24	section 12406(f).";
25	(4) in subsection (c), in paragraph (2)—

1	(A) by inserting ", and to the Office of
2	Management and Budget," after "House of
3	Representatives"; and
4	(B) in subparagraph (B), by striking "the
5	interagency research" and inserting "inter-
6	agency strategic research";
7	(5) by redesignating subsection (c) as sub-
8	section (d); and
9	(6) by inserting after subsection (b) the fol-
10	lowing:
11	"(c) Advisory Board.—
12	"(1) Establishment.—The Chair of the Sub-
13	committee shall establish an Ocean Acidification Ad-
14	visory Board.
15	"(2) Duties.—The Advisory Board shall—
16	"(A) not later than 180 days before the
17	Subcommittee submits the most recent report
18	under subsection (d)(2)—
19	"(i) review such report; and
20	"(ii) submit an analysis of such report
21	to the Subcommittee for consideration in
22	the final report submitted under subsection
23	(d)(2);
24	"(B) concurrently with the Subcommittee's
25	final submission of the report under subsection

1	(d)(2), submit a copy of the analysis provided
2	to the Subcommittee to the Committee on Com-
3	merce, Science, and Transportation of the Sen-
4	ate, the Committee on Science, Space, and
5	Technology of the House of Representatives,
6	and the Committee on Natural Resources of the
7	House of Representatives;
8	"(C) not later than 180 days before the
9	Subcommittee submits the most recent strategic
10	research plan under subsection (d)(3) to Con-
11	gress—
12	"(i) review such plan; and
13	"(ii) submit an analysis of such plan
14	and the implementation thereof to the Sub-
15	committee for consideration in the final
16	strategic research plan submitted under
17	subsection (d)(3);
18	"(D) concurrently with the Subcommittee's
19	final submission of the strategic research plan
20	under subsection (d)(3), submit a copy of the
21	analysis provided to the Subcommittee to the
22	Committee on Commerce, Science, and Trans-
23	portation of the Senate, the Committee on
24	Science, Space, and Technology of the House of

1	Representatives, and the Committee on Natural
2	Resources of the House of Representatives;
3	"(E) 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	"(F) 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(g);
15	"(G) publish in the Federal Register a
16	charter;
17	"(H) provide the Library of Congress
18	with—
19	"(i) the charter described in subpara-
20	graph (G);
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	"(I) 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 (H).
8	"(3) Membership.—The Advisory Board shall
9	consist of 24 members as follows:
10	"(A) Two representatives of the shellfish
11	and crab industry.
12	"(B) One representative of the finfish in-
13	dustry.
14	"(C) One representative of seafood proc-
15	essors.
16	"(D) Three representatives from academia,
17	including both natural and social sciences.
18	"(E) One representative of recreational
19	fishing.
20	"(F) One representative of relevant non-
21	governmental organizations.
22	"(G) Six representatives from relevant
23	State, local, and Tribal governments.
24	"(H) One representative from the Alaska
25	Ocean Acidification Network.

1	"(I) One representative from the California
2	Current Acidification Network.
3	"(J) One representative from the North-
4	east Coastal Acidification Network.
5	"(K) One representative from the South-
6	east Coastal Acidification Network.
7	"(L) One representative from the Gulf of
8	Mexico Coastal Acidification Network.
9	"(M) One representative from the Mid-At-
10	lantic Coastal Acidification Network.
11	"(N) One representative from the Pacific
12	Islands Ocean Observing System or similar en-
13	tity representing the island Territories and pos-
14	sessions of the United States in the Pacific
15	Ocean, and the State of Hawaii.
16	"(O) One representative from the Carib-
17	bean Regional Association for Coastal Ocean
18	Observing or a similar entity representing Puer-
19	to Rico and the United States Virgin Islands.
20	"(P) One 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. 524. 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 $12404(c)(2)(C)(i)$ " after "subsection
24	(d)";
25	(2) in subsection (b), as amended by section
26	502(c) of this Act—

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; and
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; and
20	(ii) by striking "its" and inserting
21	"their"; and
22	(I) by adding at the end the following new
23	paragraph:
24	"(11) describe monitoring needs necessary to
25	support potentially affected industry members,

1	coastal stakeholders, fishery management councils
2	and commissions, non-Federal resource managers,
3	and scientific experts on decision making and adap-
4	tation related to ocean acidification and coastal
5	acidification.";
6	(3) in subsection (c)—
7	(A) in paragraph (1)(C), by striking "sur-
8	face'';
9	(B) in paragraph (2), by inserting "and
10	coastal acidification" after "ocean acidification"
11	each place it appears;
12	(C) in paragraph (3)—
13	(i) by striking "input, and" and in-
14	serting "inputs,";
15	(ii) by inserting ", marine food webs,"
16	after "marine ecosystems"; and
17	(iii) by inserting ", and modeling that
18	supports fisheries management" after
19	"marine organisms";
20	(D) in paragraph (5), by inserting "and
21	coastal acidification" after "ocean acidifica-
22	tion"; and
23	(E) by adding at the end the following new
24	paragraph:

1	"(6) Research to understand related and cumu-
2	lative stressors and other biogeochemical processes
3	occurring in conjunction with ocean acidification and
4	coastal acidification."; and
5	(4) by redesignating subsection (e), as amended
6	by section 502(c) of this Act, as subsection (f); and
7	(5) by inserting after subsection (d) the fol-
8	lowing new subsection (e):
9	"(e) Advisory Board Evaluation.—Not later
10	than 180 days before a plan is submitted to Congress, the
11	Subcommittee shall provide the Advisory Board estab-
12	lished under section 12404(c) a copy of the plan for pur-
13	poses of review under paragraph (2)(C)(i) of such sec-
14	tion.".
15	SEC. 525. NATIONAL OCEANIC AND ATMOSPHERIC ADMIN-
16	ISTRATION OCEAN ACIDIFICATION ACTIVI-
17	TIES.
18	Section 12406 of the Federal Ocean Acidification Re-
19	search And Monitoring Act of 2009 (33 U.S.C. 3705), as
20	amended by section 502 of this Act, is further amended—
21	(1) in subsection (a)—
22	(A) in the matter preceding paragraph (1),
23	by inserting "coordination," after "research,
24	monitoring,";

1	(i) in subparagraph (B)—
2	(I) by inserting "including the
3	Integrated Ocean Observing System
4	and the ocean observing assets of
5	other Federal and State agencies,"
6	after "ocean observing assets,"; and
7	(II) by inserting "and agency
8	and department missions, prioritizing
9	the location of monitoring instru-
10	ments, assets, and projects to maxi-
11	mize the efficiency of resources and to
12	optimize understanding of socio-
13	economic impacts and ecosystem
14	health" after "research program";
15	(ii) in subparagraph (C)—
16	(I) by striking "adaptation" and
17	inserting "adaptation and mitigation";
18	and
19	(II) by inserting "and supporting
20	socioeconomically vulnerable commu-
21	nities and industries" after "marine
22	ecosystems";
23	(iii) in subparagraph (E)—

1	(I) by striking "its impacts" and
2	inserting "their respective impacts";
3	and
4	(II) by striking "; and" and in-
5	serting a semicolon;
6	(iv) in subparagraph (F)—
7	(I) by striking "monitoring and
8	impacts research" and inserting "re-
9	search, monitoring, and adaptation
10	and mitigation strategies"; and
11	(II) by adding "and" at the end;
12	and
13	(v) by adding at the end the following
14	new subparagraph:
15	"(G) research to improve understanding of
16	the effect of—
17	"(i) other environmental stressors on
18	ocean acidification and coastal acidifica-
19	tion;
20	"(ii) multiple environmental stressors
21	on living marine resources and coastal eco-
22	systems; and
23	"(iii) adaptation and mitigation strat-
24	egies to address the socioeconomic impacts

1	of ocean acidification and coastal acidifica-
2	tion.";
3	(C) in paragraph (2), by striking "critical
4	research projects that explore" and inserting
5	"critical research and education projects that
6	explore and communicate"; and
7	(D) in paragraphs (1) and (2), by striking
8	"acidification" each place it appears and insert-
9	ing "acidification and coastal acidification";
10	and
11	(2) by adding at the end the following new sub-
12	sections:
13	"(e) Relationship to Interagency Working
14	GROUP.—The National Oceanic and Atmospheric Admin-
15	istration shall serve as the lead Federal agency responsible
16	for coordinating the Federal response to ocean acidifica-
17	tion and coastal acidification, by—
18	"(1) leading the interagency working group in
19	implementing the strategic research plan under sec-
20	tion 12405;
21	"(2) coordinating monitoring and research ef-
22	forts among Federal agencies in cooperation with
23	State, local, and Tribal government and inter-
24	national partners;

1	"(3) maintaining an Ocean Acidification Infor-
2	mation Exchange described under section
3	12404(b)(5) to allow for information to be electroni-
4	cally accessible, including information—
5	"(A) on ocean acidification developed
6	through or used by the ocean acidification pro-
7	gram described under section 12406(a); or
8	"(B) that would be useful to State govern-
9	ments, local governments, Tribal governments,
10	resource managers, policymakers, researchers,
11	and other stakeholders in mitigating or adapt-
12	ing to the impacts of ocean acidification and
13	coastal acidification; and
14	"(4) establishing and maintaining the data ar-
15	chive system under subsection (f).
16	"(f) Data Archive System.—
17	"(1) Management.—The Secretary, in coordi-
18	nation with members of the interagency working
19	group, shall provide for the long-term stewardship
20	of, and access to, data relating to ocean acidification
21	and coastal acidification by establishing and main-
22	taining a data archive system that the National Cen-
23	ter for Environmental Information uses to process,
24	store, archive, provide access to, and incorporate to
25	the extent possible, such data collected—

1	"(A) through relevant federally funded re-
2	search; and
3	"(B) by a Federal agency, State agency,
4	local agency, Tribe, academic scientist, volun-
5	teer scientist, or industry organization.
6	"(2) Existing global or national data as-
7	SETS.—In establishing and maintaining the data ar-
8	chive system under paragraph (1), the Secretary
9	shall ensure that existing global or national data as-
10	sets (including the data assets maintained by the
11	National Centers for Environmental Information,
12	the Integrated Ocean Observing System, and other
13	existing data systems within Federal agencies) are
14	incorporated to the greatest extent possible.
15	"(g) Standards, Protocols, and Procedures.—
16	With respect to the data described in subsection (d), the
17	Secretary, in coordination with members of the inter-
18	agency working group, shall establish and revise as nec-
19	essary the standards, protocols, or procedures for—
20	"(1) processing, storing, archiving, and pro-
21	viding access to such data;
22	"(2) the interoperability and intercalibration of
23	such data;
24	"(3) the collection of any metadata underlying
25	such data; and

1	"(4) sharing such data with State, local, and
2	Tribal government programs, potentially affected in-
3	dustry members, coastal stakeholders, fishery man-
4	agement councils and commissions, non-Federal re-
5	source managers, and academia.
6	"(h) DISSEMINATION OF OCEAN ACIDIFICATION
7	DATA AND COASTAL ACIDIFICATION DATA.—The Sec-
8	retary, in coordination with members of the interagency
9	working group, shall disseminate the data described under
10	subsection (d) to the greatest extent practicable by sharing
11	such data on full and open access exchanges, including
12	the Ocean Acidification Information Exchange described
13	in section $12404(b)(5)$.
14	"(i) Requirement.—Recipients of grants from the
15	National Oceanic and Atmospheric Administration under
16	this subtitle that collect data described under subsection
17	(f) shall—
18	"(1) collect such data in accordance with the
19	standards, protocols, or procedures established pur-
20	suant to subsection (g); and
21	"(2) submit such data to the data archive sys-
22	tem under subsection (f), in accordance with any
23	rules promulgated by the Secretary.".

1	SEC. 526. 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(f) shall—
12	"(1) collect data in accordance with the stand-
13	ards, protocols, or procedures established pursuant
14	to section 12406(g); 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. 527. 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(f) shall—
8	"(1) collect such data in accordance with the
9	standards, protocols, or procedures established pur-
10	suant to section 12406(g); 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. 528. 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 \$30,500,000 for each
21	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 \$20,000,000 for each
25	of the fiscal years 2021 through 2025.".

1	Subtitle D—South Florida Clean
2	Coastal Waters
3	SEC. 531. 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 through 609
9	as sections 606 through 610, respectively; and
10	(2) by inserting after section 604 the following:
11	"SEC. 605. SOUTH FLORIDA HARMFUL ALGAL BLOOMS AND
12	нурохіа.
13	"(a) South Florida.—In this section, the term
14	'South Florida' means—
15	"(1) all lands and waters within the administra-
16	tive boundaries of the South Florida Water Manage-
17	ment District;
18	"(2) regional coastal waters, including Biscayne
19	Bay, the Caloosahatchee Estuary, St. Lucie Estuary,
20	Florida Bay, and Indian River Lagoon; and
21	"(3) the Florida Reef Tract.
22	"(b) Integrated Assessment.—
23	"(1) Interim integrated assessment.—Not
24	later than 540 days after the date of the enactment
25	of the Ocean Climate Emergency Action Now Act of

2020, the Task Force, in accordance with the au-
thority under section 603, shall complete and submit
to Congress and the President an interim integrated
assessment.
"(2) Final integrated assessment.—Not
later than 3 years after the date of the enactment
of the Ocean Climate Emergency Action Now Act of
2020, the Task Force shall finalize, and submit to
Congress and the President, the interim integrated
assessment required under paragraph (1).
"(3) Contents of the integrated assess-
MENT.—The integrated assessments required under
paragraphs (1) and (2) shall examine the causes
consequences, and potential approaches to reduction
of harmful algal blooms and hypoxia in South Flor-
ida, and the status of, and gaps within, current
harmful algal bloom and hypoxia research, moni-
toring, management, prevention, response, and con-
trol activities that directly affect the region by—
"(A) Federal agencies;
"(B) State agencies;
"(C) regional research consortia;
"(D) academia;
"(E) private industry;

``(F) nongovernmental organizations; and

1	"(G) Indian Tribes (as defined in section
2	4 of the Indian Self-Determination and Edu-
3	cation Assistance Act (25 U.S.C. 5304)).
4	"(c) ACTION PLAN.—
5	"(1) In general.—Not later than 3 years and
6	180 days after the date of the enactment of the
7	Ocean Climate Emergency Action Now Act of 2020,
8	the Task Force shall develop and submit to Con-
9	gress an action plan, based on the integrated assess-
10	ments under subsection (b), for reducing, mitigating,
11	and controlling harmful algal blooms and hypoxia in
12	South Florida.
13	"(2) Contents.—The action plan submitted
14	under paragraph (1) shall—
15	"(A) address the monitoring needs identi-
16	fied in the integrated assessments under sub-
17	section (b);
18	"(B) include a timeline and budgetary re-
19	quirements for deployment of future assets;
20	"(C) identify requirements for the develop-
21	ment and verification of South Florida harmful
22	algal bloom and hypoxia models, including—
23	"(i) all assumptions built into the
24	models; and

1	"(ii) data quality methods used to en-
2	sure the best available data are utilized
3	and
4	"(D) include a plan to implement a remote
5	monitoring network and early warning system
6	for alerting local communities in the region to
7	harmful algal bloom risks that may impact
8	human health.
9	"(3) REQUIREMENTS.—In developing the action
10	plan submitted under paragraph (1), the Task Force
11	shall—
12	"(A) consult with the State of Florida and
13	affected local and Tribal governments;
14	"(B) consult with representatives from re-
15	gional academic, agricultural, industry, and
16	other stakeholder groups;
17	"(C) ensure that such plan complements
18	and does not duplicate activities conducted by
19	other Federal or State agencies, including the
20	South Florida Ecosystem Restoration Task
21	Force;
22	"(D) identify critical research for reducing
23	mitigating, and controlling harmful algal bloom
24	events and their effects;

1	"(E) evaluate cost-effective, incentive-
2	based partnership approaches;
3	"(F) ensure that such plan is technically
4	sound and cost-effective;
5	"(G) use existing research, assessments,
6	reports, and program activities; and
7	"(H) publish a draft summary of the ac-
8	tion plan required by paragraph (1) in the Fed-
9	eral Register not less than 180 days before sub-
10	mitting such plan to Congress.
11	"(4) Progress reports.—The Task Force
12	shall submit, beginning 2 years after the date on
13	which the action plan required by paragraph (1) is
14	submitted to Congress, biennial progress reports on
15	steps taken to meet the objectives of such action
16	plan to Congress.".
17	(b) CLERICAL AMENDMENT AND CORRECTION.—The
18	table of contents in section 2 of the Coast Guard Author-
19	ization Act of 1998 (Public Law 105–383) is amended by
20	striking the items relating to title VI and inserting the
21	following new items:
	"TOTAL TILLIADMENTI ALCAL DI COMO AND HYDOYIA

TITLE VI—HARMFUL ALGAL BLOOMS AND HYPOXIA

[&]quot;Sec. 601. Short title.

[&]quot;Sec. 602. Findings.

[&]quot;Sec. 603. Assessments.

[&]quot;Sec. 603A. National Harmful Algal Bloom and Hypoxia Program.

[&]quot;Sec. 603B. Comprehensive research plan and action strategy.

[&]quot;Sec. 604. Northern Gulf of Mexico hypoxia.

[&]quot;Sec. 605. South Florida harmful algal blooms and hypoxia.

[&]quot;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.".

Subtitle E—Protecting Local Com-

2 munities From Harmful Algal

3 Blooms

- 4 SEC. 541. 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. 551. DESIGNATING CERTAIN HARMFUL ALGAL BLOOM
- 12 SERVICES AS EXCEPTED SERVICES UNDER
- 13 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 accepted by an
- 20 officer or employee under this chapter, including web serv-
- 21 ices and server processing, for the Harmful Algal Bloom
- 22 forecast system of the National Oceanic and Atmospheric
- 23 Administration shall be deemed, for purposes of section

1	1342 of title 31, United States Code, services for emer-
2	gencies involving the safety of human life or the protection
3	of property.".
4	(b) APPLICATION.—The amendment made by sub-
5	section (a) shall apply to any lapse in appropriations be-
6	ginning on or after the date of enactment of this Act.
7	SEC. 552. CENTERS OF EXCELLENCE IN HARMFUL ALGAI
8	BLOOM RESEARCH, PREVENTION, RESPONSE
9	AND MITIGATION.
10	(a) Establishment.—Not later than one year after
11	the date of the enactment of this Act, the Secretary of
12	Commerce, acting through the Administrator, shall des-
13	ignate organizations as National Centers of Excellence in
14	Harmful Algal Bloom Research, Prevention, Response
15	and Mitigation (in this section referred to as "National
16	Centers of Excellence").
17	(b) Purpose.—The purpose of the National Centers
18	of Excellence is—
19	(1) to further understanding of harmful algal
20	blooms;
21	(2) to further understanding of the impacts of
22	harmful algal blooms on public health, including the
23	health of at-risk populations;
24	(3) to further the ability to research, forecast
25	and monitor harmful algal blooms;

1	(4) to formalize and enhance existing partner-
2	ships and collaborations among institutions of higher
3	education, research entities, local, State, Territorial,
4	and Tribal agencies, and the Federal Government;
5	(5) to further the prevention, control, and miti-
6	gation of harmful algal blooms;
7	(6) to transition harmful algal bloom research
8	and forecasting from observational to operational
9	use; and
10	(7) to address existing and emerging harmful
11	algal bloom issues as the Administrator considers
12	appropriate.
13	(c) Eligibility for Designations.—To be eligible
14	for designation under this section, an organization shall—
15	(1) be an institution of higher education, a
16	State, Territorial, or Tribal research agency, a non-
17	profit laboratory or other research entity, or a con-
18	sortium of such eligible entities;
19	(2) have demonstrated expertise and success in
20	harmful algal bloom research, monitoring, fore-
21	casting, prevention, or response efforts;
22	(3) have demonstrated ability to collaborate
23	with local, State, Territorial, and Tribal govern-
24	ments and Federal agencies on harmful algal
25	blooms; and

1	(4) be located in an area that is economically
2	and environmentally impacted by harmful algal
3	blooms.
4	(d) Requirements for Designations.—In desig-
5	nating National Centers of Excellence under this section,
6	the Administrator shall—
7	(1) consult with the Inter-Agency Task Force
8	on Harmful Algal Blooms and Hypoxia;
9	(2) ensure regional balance by designating Na-
10	tional Centers of Excellence in a variety of locations
11	throughout the United States, including the District
12	of Columbia, the Commonwealth of Puerto Rico,
13	American Samoa, Guam, the Commonwealth of the
14	Northern Mariana Islands, the United States Virgin
15	Islands, and other Territories and possessions of the
16	United States; and
17	(3) avoid duplication of other harmful algal
18	bloom research.
19	(e) Effective Period, Review, and Renewal.—
20	Each designation of an organization as a National Center
21	under this section—
22	(1) shall be effective for 5 years;
23	(2) shall be reviewed by the Secretary, acting
24	through the Administrator, in the fourth year of
25	such effective period; and

1	(3) following such review, may be renewed for
2	an additional 5-year period.
3	(f) Annual Reports.—The Secretary shall require
4	and publish an annual activity report from each National
5	Center.
6	(g) Authorization of Appropriations.—To carry
7	out this section, including for providing funding to Na-
8	tional Centers of Excellence designated under this section,
9	there is authorized to be appropriated to the National Oce-
10	anic and Atmospheric Administration \$12,500,000 for
11	each of fiscal years 2021 through 2025, of which not more
12	than 5 percent may be available each fiscal year for ad-
13	ministrative expenses.
14	TITLE VI—NATIONAL OCEAN
15	POLICY, DATA, AND COORDI-
16	NATED WEBSITE FOR GRANT
17	PROGRAMS
18	Subtitle A—Regional Ocean
19	Partnerships
20	SEC. 601. FINDINGS; SENSE OF CONGRESS; PURPOSES.
21	(a) FINDINGS.—Congress makes the following find-
22	ings:
23	(1) The ocean and coastal waters of the United
24	States are foundational to the economy, security,
25	global competitiveness, and well-being of the United

- States and continuously serve the people of the United States and other countries as an important source of food, energy, economic productivity, recreation, culture, beauty, and enjoyment.
 - (2) Over many years, the resource productivity and water quality of the ocean and coastal areas of the United States have been diminished by pollution, increasing population demands, economic development, and natural and man-made hazard events, both acute and chronic.
 - (3) Ocean and coastal areas of the United States are managed by State and Federal resource agencies and regulated on an interstate and regional scale by various overlapping Federal authorities, thereby creating a significant need for interstate coordination to enhance regional priorities, including the ecological and economic health of those areas.
 - (4) Regional Ocean Partnerships, established by coastal states working in close coordination with Federal agencies, regional fisheries managers, and Tribal governments, help coordinate interstate responses to critical ocean issues that extend beyond individual State boundaries.
 - (5) Regional Ocean Partnerships have improved understanding of climate change's impact on fish

- 1 and shellfish populations, have invested in identi-2 fying indicators of ocean health and addressing 3 coastal mitigation, and have played leading roles in the creation and upkeep of regional ocean data por-5 tals that allow for improved understanding of ocean 6 use synergies and trade-offs.
 - (6) Regional Ocean Partnerships engage in coordinated efforts to protect and enhance the health of living resources and engage the public in stewardship of ocean and coastal areas.
 - (7) The coordination offered by Regional Ocean Partnerships is particularly critical in the era of climate change, with coastal and ocean resources under threat and as demand for offshore resources increases.
- (b) Purposes.—The purposes of this subtitle are as 16 17 follows:
- 18 (1) To complement and expand cooperative vol-19 untary efforts intended to manage and restore ocean 20 and coastal areas spanning across multiple State boundaries.
- 22 (2) To expand Federal support for monitoring, 23 data management, and restoration activities in ocean 24 and coastal areas.

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- 1 (3) To commit the United States to a com-2 prehensive cooperative program to achieve improved 3 water quality in, and improvements in the produc-4 tivity of living resources of, all coastal ecosystems.
 - (4) To authorize Regional Ocean Partnerships as intergovernmental coordinators for shared interstate and regional priorities relating to the collaborative management of the large marine ecosystems, thereby reducing duplication of efforts and maximizing opportunities to leverage support in the ocean and coastal regions.
 - (5) To enable Regional Ocean Partnerships, or designated fiscal management entities of such partnerships, to receive Federal funding to conduct the scientific research, conservation and restoration activities, and priority coordination on shared regional priorities necessary to achieve the purposes described in paragraphs (1) through (4).

19 SEC. 602. REGIONAL OCEAN PARTNERSHIPS.

- 20 (a) Definitions.—In this section:
- 21 (1) COASTAL STATE.—The term "coastal state"
 22 has the meaning given that term in section 304 of
 23 the Coastal Zone Management Act of 1972 (16
 24 U.S.C. 1453).

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1	(2) Indian Tribe.—The term "Indian Tribe"
2	has the meaning given to the term "Indian tribe" in
3	section 4 of the Indian Self-Determination and Edu
4	cation Assistance Act (25 U.S.C. 5304).
5	(b) REGIONAL OCEAN PARTNERSHIPS.—
6	(1) In general.—A coastal state may partici
7	pate in a Regional Ocean Partnership with 1 or
8	more other coastal states that share a common
9	ocean or coastal area with the coastal state, withou
10	regard to whether the coastal states are contiguous
11	(2) APPLICATION.—The Governor of a coasta
12	state or the Governors of a group of coastal states
13	may apply to the Secretary of Commerce, on behal
14	of a partnership, for the partnership to receive des
15	ignation as a Regional Ocean Partnership if the
16	partnership—
17	(A) meets the requirements under para
18	graph (3); and
19	(B) submits an application for such des
20	ignation in such manner, in such form, and
21	containing such information as the Secretary
22	may require.
23	(3) REQUIREMENTS.—A partnership is eligible
24	for designation as a Regional Ocean Partnership by

1	the Secretary under paragraph (2) if the partner-
2	ship—
3	(A) is established to coordinate the inter-
4	state management of coastal resources;
5	(B) focuses on the environmental issues af-
6	feeting the ocean and coastal areas of the mem-
7	bers participating in the partnership;
8	(C) complements existing State coastal and
9	ocean management efforts on an interstate
10	scale, focusing on shared regional priorities;
11	(D) does not have a regulatory function;
12	and
13	(E) is not duplicative of an existing Re-
14	gional Ocean Partnership designated under
15	paragraph (4), as determined by the Secretary.
16	(4) Designation of Certain entities as re-
17	GIONAL OCEAN PARTNERSHIPS.—Notwithstanding
18	paragraph (2) or (3), the following entities are des-
19	ignated as Regional Ocean Partnerships:
20	(A) The Gulf of Mexico Alliance, comprised
21	of the States of Alabama, Florida, Louisiana,
22	Mississippi, and Texas.
23	(B) The Northeast Regional Ocean Coun-
24	cil. comprised of the States of Maine. Vermont.

1	New Hampshire, Massachusetts, Connecticut,
2	and Rhode Island.
3	(C) The Mid-Atlantic Regional Council on
4	the Ocean, comprised of the States of New
5	York, New Jersey, Delaware, Maryland, and
6	Virginia.
7	(D) The West Coast Ocean Alliance, com-
8	prised of the States of California, Oregon, and
9	Washington and the coastal Indian Tribes in
10	those States.
11	(c) Governing Bodies of Regional Ocean Part-
12	NERSHIPS.—
13	(1) In General.—A Regional Ocean Partner-
14	ship designated under subsection (b) shall be gov-
15	erned by a governing body.
16	(2) Membership.—A governing body described
17	in paragraph (1)—
18	(A) shall be comprised, at a minimum, of
19	voting members from each coastal state partici-
20	pating in the Regional Ocean Partnership, des-
21	ignated by the Governor of the coastal state;
22	and
23	(B) may include such other members as
24	the partnership considers appropriate.

1	(d) Functions.—A Regional Ocean Partnership des-
2	ignated under subsection (b) may perform the following
3	functions:
4	(1) Promote coordination of the actions of the
5	agencies of coastal states participating in the part-
6	nership with the actions of the appropriate officials
7	of Federal agencies and State and Tribal govern-
8	ments in developing strategies—
9	(A) to conserve living resources, expand
10	and protect valuable habitats, enhance coasta
11	resilience, and address such other issues related
12	to the shared ocean or coastal area as are de-
13	termined to be a shared, regional priority by
14	those States; and
15	(B) to manage regional data portals and
16	develop associated data products for purposes
17	that support the priorities of the partnership.
18	(2) In cooperation with appropriate Federal and
19	State agencies, Tribal governments, and local au-
20	thorities, develop and implement specific action
21	plans to carry out coordination goals.
22	(3) Coordinate and implement priority plans
23	and projects, and facilitate science, research, mod-
24	eling, monitoring, data collection, and other activi-

ties that support the goals of the partnership

- through the provision of grants and contracts under subsection (e).
 - (4) Engage, coordinate, and collaborate with relevant governmental entities and stakeholders to address ocean and coastal related matters that require interagency or intergovernmental solutions.
 - (5) Implement engagement programs for public information, education, and participation to foster stewardship of the resources of the ocean and coastal areas, as relevant.
 - (6) Develop and make available, through publications, technical assistance, and other appropriate means, information pertaining to cross-jurisdictional issues being addressed through the coordinated activities of the partnership.
 - (7) Serve as a liaison with, and provide information to, international counterparts, as appropriate on priority issues for the partnership.

(e) Grants and Contracts.—

(1) In General.—A Regional Ocean Partnership designated under subsection (b) may, in coordination with existing Federal and State management programs, from amounts made available to the partnership by the Administrator or the head of another Federal agency—

1	(A) provide grants to eligible persons de-
2	scribed in paragraph (2) for the purposes de-
3	scribed in paragraph (3); and
4	(B) enter into contracts with such persons
5	for such purposes.
6	(2) Eligible persons.—The eligible persons
7	described in this paragraph are the following:
8	(A) Indian Tribes.
9	(B) State and local governments.
10	(C) Nongovernmental organizations.
11	(D) Institutions of higher education.
12	(E) Individuals.
13	(F) Private entities.
14	(3) Purposes.—The purposes described in this
15	paragraph include any of the following:
16	(A) Monitoring the water quality and living
17	resources of multi-State ocean and coastal eco-
18	systems and to coastal communities.
19	(B) Researching and addressing the effects
20	of natural and human-induced environmental
21	changes to—
22	(i) ocean and coastal ecosystems; and
23	(ii) coastal communities.
24	(C) Developing and executing cooperative
25	strategies that—

1	(i) address regional data issues identi-
2	fied by the partnership; and
3	(ii) will result in more effective man-
4	agement of common ocean and coastal
5	areas.
6	(f) Reports and Assessments.—
7	(1) IN GENERAL.—Not later than 5 years after
8	the date of the enactment of this Act, and every 5
9	years thereafter until 2040, the Administrator, in
10	coordination with the Regional Ocean Partnerships
11	designated under subsection (b), shall—
12	(A) assess the effectiveness of the partner-
13	ships in supporting regional priorities relating
14	to the management of common ocean and coast-
15	al areas; and
16	(B) submit to Congress a report on that
17	assessment.
18	(2) REPORT REQUIREMENTS.—The report re-
19	quired under paragraph (1)(B) shall include the fol-
20	lowing:
21	(A) An assessment of the overall status of
22	the work of the Regional Ocean Partnerships
23	designated under subsection (b).
24	(B) An assessment of the effectiveness of
25	the strategies that the Regional Ocean Partner-

- ships are supporting or implementing and the extent to which the priority needs of the regions covered by such partnerships are being met through such strategies.
 - (C) Such recommendations as the Administrator may have for the improvement of efforts of the Regional Ocean Partnerships to support the purposes of this subtitle.
 - (D) An assessment of how the efforts of the Regional Ocean Partnerships support or enhance Federal and State efforts in line with the purposes of this subtitle.
 - (E) Recommendations for improvements to the collective strategies that support the purposes of this subtitle in coordination and consultation with all relevant Federal, State, and Tribal entities.
- 18 (g) AVAILABILITY OF FEDERAL FUNDS.—In addition 19 to amounts made available to Regional Ocean Partner-20 ships designated under subsection (b) by the Adminis-21 trator under this section, the head of any other Federal 22 agency may provide grants to, enter into contracts with, 23 or otherwise provide funding to such partnerships.
- 24 (h) Authorities.—Nothing in this section estab-25 lishes any new legal or regulatory authority of the Na-

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1	tional Oceanic and Atmospheric Administration or of the
2	Regional Ocean Partnerships designated under subsection
3	(b), other than—
4	(1) the authority of the Administrator to pro-
5	vide amounts to the partnerships; and
6	(2) the authority of the partnerships to provide
7	grants and enter into contracts under subsection (e).
8	(i) Funding.—
9	(1) In general.—Of amounts authorized to be
10	appropriated to the National Oceanic and Atmos-
11	pheric Administration, the Administrator may make
12	the following amounts available to Regional Ocean
13	Partnerships designated under subsection (b) or des-
14	ignated fiscal management entities of such partner-
15	ships to carry out activities of the partnerships
16	under this subtitle:
17	(A) $$10,000,000$ for fiscal year 2021.
18	(B) \$10,100,000 for fiscal year 2022.
19	(C) \$10,202,000 for fiscal year 2023.
20	(D) \$10,306,040 for fiscal year 2024.
21	(E) $$10,412,160$ for fiscal year 2025 .
22	(F) $$10,520,404$ for fiscal year 2026.
23	(2) DISTRIBUTION OF AMOUNTS.—Amounts
24	made available under paragraph (1) shall be divided

1	evenly among the Regional Ocean Partnerships des-
2	ignated under subsection (b).
3	(3) Availability of amounts.—Amounts
4	made available under paragraph (1) shall remain
5	available until expended.
6	Subtitle B—Data and Scientific
7	Coordination
8	SEC. 611. INCREASED COORDINATION AMONG AGENCIES
9	WITH RESPECT TO DATA AND MONITORING.
10	(a) Interagency Ocean Observation Com-
11	MITTEE.—In addition to its responsibilities as of the date
12	of the enactment of this Act, and in consultation with the
13	advisory committee authorized by section 12304(d) of the
14	Integrated Coastal and Ocean Observation System Act of
15	2009 (33 U.S.C. 3603(d)), the Interagency Ocean Obser-
16	vation Committee shall—
17	(1) work with international coordinating bodies,
18	as necessary, to ensure robust, direct measurements
19	of the Great Lakes, oceans, bays, estuaries, and
20	coasts, including oceanographic data;
21	(2) coordinate supercomputing capacity, data
22	storage capacity, and public access across agencies;
23	and
24	(3) support cross-agency and multi-platform
25	synergy, by coordinating overlapping data collection

- by satellites, buoys, submarines, gliders, vessels, and
 other data collection vehicles and technologies.
- 3 (b) Federal Geographic Data Committee.—In
- 4 addition to its responsibilities as of the date of the enact-
- 5 ment of this Act, and in consultation with the National
- 6 Geospatial Advisory Committee, the Federal Geographic
- 7 Data Committee shall—

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- 8 (1) work with international coordinating bodies, 9 as necessary, to ensure robust, continuous measure-10 ments of the Great Lakes, oceans, bays, estuaries, 11 and coasts, including satellite and geospatial data;
 - (2) coordinate supercomputing capacity, data storage capacity, and public access across agencies;
 - (3) develop and deploy cross-agency, real-time, standardized, centralized, archived, open-source, and publicly available databases (using declassified information to the extent possible) for all federally funded observational and model data, using the example of the World Ocean Database; and
- 20 (4) support new and old data and metadata cer-21 tification, quality assurance, quality control, integra-22 tion, and archiving.
- 23 (c) Interagency Committee on Ocean and 24 Coastal Mapping.—In addition to its responsibilities as
- 25 of the date of the enactment of this Act, and in consulta-

- 1 tion with the advisory panel authorized by section
- 2 12203(g) of the Ocean and Coastal Mapping Integration
- 3 Act (33 U.S.C. 3502(g)), the Interagency Committee on
- 4 Ocean and Coastal Mapping shall—
- 5 (1) work with international coordinating bodies, 6 as necessary, to ensure robust, continuous satellite 7 and direct measurements of the Great Lakes, 8 oceans, bays, estuaries, and coasts, including bathy-9 metric data;
 - (2) coordinate supercomputing capacity, data storage capacity, and public access across agencies;
 - (3) make recommendations on how to make data, metadata, and model output accessible to a broader public audience, including through geographic information system layers, graphics, and other visuals; and
 - (4) develop and initiate a research agenda to improve understanding of inundation risks to coastal areas as a result of the climate crisis and to meet the information needs of decision-makers as such decision-makers consider how to appropriately adapt and increase resilience to such effects.

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1	SEC. 612. INTERAGENCY OCEAN EXPLORATION COM
2	MITTEE.
3	(a) Establishment.—The President shall establish
4	a committee to promote the exploration and improved un-
5	derstanding of the oceans, to be known as the "Inter-
6	agency Ocean Exploration Committee".
7	(b) Membership.—The Interagency Ocean Explo-
8	ration Committee shall be composed of not fewer than 1
9	senior-level representative from each of the following Fed-
10	eral agencies:
11	(1) The Department of the Navy.
12	(2) The Department of the Interior.
13	(3) The Department of Commerce.
14	(4) The Coast Guard.
15	(5) The Office of Management and Budget.
16	(6) The Council on Environmental Quality.
17	(7) The Office of Science and Technology Pol-
18	iey.
19	(8) The Department of State.
20	(9) The National Science Foundation.
21	(10) The National Aeronautics and Space Ad-
22	ministration.
23	(11) The Subcommittee on Ocean Science and
24	Technology of the National Science and Technology
25	Council.

1	(12) Such elements of the intelligence commu-
2	nity (as defined in section 3 of the National Security
3	Act of 1947 (50 U.S.C. 3003)) as the President con-
4	siders appropriate.
5	(c) Duties.—The Interagency Ocean Exploration
6	Committee shall—
7	(1) cultivate public-private partnerships, includ-
8	ing with Federal agencies, institutions of higher edu-
9	cation, nongovernmental organizations, technology
10	companies, and international partners, to develop
11	and deploy advanced technologies to explore and
12	characterize the oceans; and
13	(2) coordinate the application of existing inno-
14	vative technologies and development of emerging
15	technologies to promote the understanding, mapping,
16	and collection of data describing the oceans and the
17	changes the oceans are experiencing and are antici-
18	pated to experience in the future, such as changes
19	in temperature, salinity, oxygenation, and acidity,
20	and the biological consequences of those changes.
21	SEC. 613. COMMITTEE ON OCEAN POLICY.
22	(a) Establishment.—There is established in the
23	Executive Office of the President a Committee on Ocean

24 Policy, which—

1	(1) succeeds the Ocean Policy Committee estab-
2	lished on June 19, 2018, by Executive Order 13840
3	(83 Fed. Reg. 29431; relating to ocean policy);
4	(2) shall continue the activities of that com-
5	mittee as it was in existence on the day before the
6	date of the enactment of this Act; and
7	(3) shall carry out the functions described in
8	subsection (b).
9	(b) Functions.—The Committee on Ocean Policy
10	shall—
11	(1) facilitate coordination and integration of
12	Federal activities in ocean and coastal waters to in-
13	form ocean policy and identify priority ocean re-
14	search, technology, and data needs;
15	(2) engage and collaborate with stakeholders,
16	including Regional Ocean Partnerships, to address
17	ocean-related matters that may require interagency
18	or intergovernmental solutions;
19	(3) evaluate threats to coastal communities
20	from storm and sea level rise and define, implement,
21	and coordinate needed policies and programs to ad-
22	vance national preparedness for and resilience to
23	more severe storms and rising sea levels; and
24	(4) coordinate Federal agencies to ensure Fed-
25	eral activities in ocean and coastal waters promote

1	healthy ecosystems for fisheries and wildlife con-
2	servation that are resilient to the impacts of climate
3	change and provide for climate benefits.
4	SEC. 614. BUILDING DATA SOURCES.
5	(a) Engaging Indigenous, Subsistence, and
6	FISHING COMMUNITIES.—
7	(1) In general.—The Administrator shall es-
8	tablish opportunities to engage Indigenous, subsist-
9	ence, and fishing communities to understand the
10	needs of those communities and to provide improved
11	products and services that are practical and useful
12	to those communities, including collecting and inte-
13	grating traditional ecological data and narrative
14	records into national and regional datasets.
15	(2) Data rights.—In carrying out paragraph
16	(1), the Administrator shall—
17	(A) consider issues relating to data owner-
18	ship; and
19	(B) ensure that Indigenous, subsistence
20	and fishing communities retain any specific
21	rights or ownership of data provided to Federal
22	agencies.
23	(b) Report to Congress.—
24	(1) Report required.—Not later than 1 year
25	after the date of the enactment of this Act the Ad.

- ministrator shall submit to Congress a report identifying potential opportunities to encourage voluntary
 actions and partnerships between the National Oceanic and Atmospheric Administration and non-Federal partners to increase and enhance data collection.
- 7 (2) Opportunities for partnership.—The 8 opportunities described in paragraph (1) may in-9 clude opportunities that can be pursued in conjunc-10 tion with Federal permits, leases, and other actions 11 requiring Federal approval or funding, such as 12 partnering with companies to acquire and share 13 bathymetric data or supplying fishermen with sen-14 sors that can collect data through fishing gear.

15 SEC. 615. NATIONAL SEA LEVEL RISE RISK ANALYSIS.

- (a) Purposes.—The Administrator shall establish aNational Coastal Data Information System to—
- 18 (1) combine existing observations, modeling, 19 predictions, products, and services into an integrated 20 framework for producing and maintaining authori-21 tative and timely data, maps, and information serv-22 ices that quantify and communicate coastal flood 23 risk to the States;
- 24 (2) develop and strengthen partnerships with 25 organizations that represent end-users within coastal

1	communities, including other Federal agencies, to
2	better assess information gaps and needs relating to
3	the risk posed by the rising sea level; and
4	(3) produce new information, products, and
5	services, targeted to end-user needs, that allow
6	coastal communities across the United States to
7	plan for present and future coastal flood risk.
8	(b) Report.—The Administrator shall, not later
9	than 180 days after the date of enactment of this Act,
10	and every 3 years thereafter, submit to the Committee on
11	Natural Resources of the House of Representatives and
12	the Committee on Commerce, Science, and Transportation
13	of the Senate a report containing a holistic analysis of the
14	need to expand observations, modeling, predictions, prod-
15	ucts, and services to—
16	(1) improve the understanding of changing
17	coastal flood risk, including the impacts of sea level
18	rise; and
19	(2) track and report how observed rates of sea

level rise compare to the sea level rise predictions

published within the National Climate Assessments.

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1 Subtitle C—Integrated Coastal and

2	Ocean Observation System
3	SEC. 621. STAGGERED TERMS FOR NATIONAL INTEGRATED
4	COASTAL AND OCEAN OBSERVATION SYSTEM
5	ADVISORY COMMITTEE.
6	Section 12304(d)(3)(B) of the Integrated Coastal
7	and Ocean Observation System Act of 2009 (33 U.S.C.
8	3603(d)(3)(B)) is amended—
9	(1) by striking "Members" and inserting the
10	following:
11	"(i) In general.—Except as pro-
12	vided in clause (ii), members"; and
13	(2) by adding at the end the following:
14	"(ii) Staggered terms.—The Ad-
15	ministrator may appoint or reappoint a
16	member for a partial term of 1 or 2 years
17	in order to establish a system of staggered
18	terms. The Administrator may appoint or
19	reappoint a member under this clause only
20	once. A member appointed or reappointed
21	to a partial term under this clause may not
22	serve more than 1 full term.".

1	SEC. 622. INTEGRATED COASTAL AND OCEAN OBSERVA-
2	TION SYSTEM COOPERATIVE AGREEMENTS.
3	Section 12305(a) of the Integrated Coastal and
4	Ocean Observation System Act of 2009 (33 U.S.C.
5	3604(a)) is amended by inserting "disburse appropriated
6	funds to," after "agreements, with,".
7	SEC. 623. REAUTHORIZATION OF INTEGRATED COASTAL
8	AND OCEAN OBSERVATION SYSTEM ACT OF
9	2009.
10	Section 12311 of the Integrated Coastal and Ocean
11	Observation System Act of 2009 (33 U.S.C. 3610) is
12	amended by striking "for fiscal years 2009 through 2013
13	such sums as are necessary" and inserting " $\$47,500,000$
14	for each of fiscal years 2021 through 2025".
15	SEC. 624. ADVANCED RESEARCH PROJECTS AGENCY-
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15	SEC. 624. ADVANCED RESEARCH PROJECTS AGENCY-
15 16 17	SEC. 624. ADVANCED RESEARCH PROJECTS AGENCY-OCEANS.
15 16 17	SEC. 624. ADVANCED RESEARCH PROJECTS AGENCY-OCEANS. (a) AGREEMENT.—Not later than 45 days after the
15 16 17 18	SEC. 624. ADVANCED RESEARCH PROJECTS AGENCY-OCEANS. (a) AGREEMENT.—Not later than 45 days after the date of the enactment of this Act, the Administrator shall
15 16 17 18 19	SEC. 624. ADVANCED RESEARCH PROJECTS AGENCY-OCEANS. (a) AGREEMENT.—Not later than 45 days after the date of the enactment of this Act, the Administrator shall seek to enter into an agreement with the National Acad-
15 16 17 18 19 20	SEC. 624. ADVANCED RESEARCH PROJECTS AGENCY-OCEANS. (a) AGREEMENT.—Not later than 45 days after the date of the enactment of this Act, the Administrator shall seek to enter into an agreement with the National Academy of Sciences to conduct the comprehensive assessment
15 16 17 18 19 20 21	SEC. 624. ADVANCED RESEARCH PROJECTS AGENCY-OCEANS. (a) AGREEMENT.—Not later than 45 days after the date of the enactment of this Act, the Administrator shall seek to enter into an agreement with the National Academy of Sciences to conduct the comprehensive assessment under subsection (b).
15 16 17 18 19 20 21 22	SEC. 624. ADVANCED RESEARCH PROJECTS AGENCY- OCEANS. (a) AGREEMENT.—Not later than 45 days after the date of the enactment of this Act, the Administrator shall seek to enter into an agreement with the National Academy of Sciences to conduct the comprehensive assessment under subsection (b). (b) Comprehensive Assessment.—
15 16 17 18 19 20 21 22 23	SEC. 624. ADVANCED RESEARCH PROJECTS AGENCY-OCEANS. (a) AGREEMENT.—Not later than 45 days after the date of the enactment of this Act, the Administrator shall seek to enter into an agreement with the National Academy of Sciences to conduct the comprehensive assessment under subsection (b). (b) Comprehensive Assessment.— (1) In General.—Under an agreement be-

1	sessment of the need for and feasibility of estab-
2	lishing an Advanced Research Projects Agency-
3	Oceans (in this section referred to as "ARPA-O").
4	(2) Elements.—The comprehensive assess-
5	ment carried out pursuant to paragraph (1) shall in-
6	clude—
7	(A) an assessment of how an ARPA-O
8	could help overcome the long-term and high-risk
9	technological barriers in the development of
10	ocean technologies, with the goal of enhancing
11	the economic, ecological, and national security
12	of the United States through the rapid develop-
13	ment of technologies that result in—
14	(i) improved data collection, moni-
15	toring, and prediction of the ocean environ-
16	ment, including sea ice conditions;
17	(ii) overcoming barriers to the appli-
18	cation of new and improved technologies,
19	such as high costs and scale of operational
20	missions;
21	(iii) improved management practices
22	for protecting ecological sustainability;
23	(iv) improved national security capac-
24	ity:

1	(v) improved technology for fishery
2	population assessments;
3	(vi) expedited processes between and
4	among Federal agencies to successfully
5	identify, transition, and coordinate re-
6	search and development output to oper-
7	ations, applications, commercialization, and
8	other uses; and
9	(vii) ensuring that the United States
10	maintains a technological lead in devel-
11	oping and deploying advanced ocean tech-
12	nologies;
13	(B) an evaluation of the organizational
14	structures under which an ARPA-O could be
15	organized, which takes into account—
16	(i) best practices for new research
17	programs;
18	(ii) metrics and approaches for peri-
19	odic program evaluation;
20	(iii) capacity to fund and manage ex-
21	ternal research awards; and
22	(iv) options for oversight of the activ-
23	ity through a Federal agency, an inter-
24	agency organization, nongovernmental or-

1	ganization, or other institutional arrange-
2	ment; and
3	(C) an estimation of the scale of invest-
4	ment necessary to pursue high priority ocean
5	technology projects.
6	(c) Report.—Not later than 18 months after the
7	date of enactment of this Act, the Administrator shall sub-
8	mit to Congress a report on the comprehensive assessment
9	conducted under subsection (b).
10	Subtitle D—Centralized Website for
11	Resiliency Grants
12	SEC. 631. CENTRALIZED WEBSITE FOR RESILIENCY
13	GRANTS.
13 14	GRANTS. (a) CENTRALIZED WEBSITE.—Not later than 180
14	(a) Centralized Website.—Not later than 180
141516	(a) CENTRALIZED WEBSITE.—Not later than 180 days after the date of the enactment of this Act, the Ad-
141516	(a) CENTRALIZED WEBSITE.—Not later than 180 days after the date of the enactment of this Act, the Administrator shall establish a publicly available website that
14 15 16 17	(a) CENTRALIZED WEBSITE.—Not later than 180 days after the date of the enactment of this Act, the Administrator shall establish a publicly available website that includes—
14 15 16 17 18	(a) Centralized Website.—Not later than 180 days after the date of the enactment of this Act, the Administrator shall establish a publicly available website that includes— (1) hyperlinks to all grant programs adminis-
14 15 16 17 18	(a) CENTRALIZED WEBSITE.—Not later than 180 days after the date of the enactment of this Act, the Administrator shall establish a publicly available website that includes— (1) hyperlinks to all grant programs administered by the National Oceanic and Atmospheric Administrator by the National Oceanic and Oceanic and Oceanic and Oceanic and Oceanic and Oceanic and Oceanic
14 15 16 17 18 19 20	(a) CENTRALIZED WEBSITE.—Not later than 180 days after the date of the enactment of this Act, the Administrator shall establish a publicly available website that includes— (1) hyperlinks to all grant programs administered by the National Oceanic and Atmospheric Administration and hyperlinks to other Federal agen-
14 15 16 17 18 19 20 21	(a) Centralized Website.—Not later than 180 days after the date of the enactment of this Act, the Administrator shall establish a publicly available website that includes— (1) hyperlinks to all grant programs administered by the National Oceanic and Atmospheric Administration and hyperlinks to other Federal agencies that offer similar grant programs to assist

1	(2) with respect to each such grant program,
2	the contact information for an individual who can
3	offer assistance to State, Tribal, and local govern-
4	ments.
5	(b) Outreach.—The Administrator shall conduct
6	outreach activities to inform State, Tribal, and local gov-
7	ernments of the resiliency, adaptation, and mitigation
8	grants.
9	TITLE VII—COASTAL WETLANDS
10	SEC. 701. DEFINITIONS.
11	In this title:
12	(1) Coastal wetland.—The term "coastal
13	wetland" means estuarine vegetated coastal habitat,
14	including salt marsh, seagrass, mangrove, and other
15	vegetated marine habitats.
16	(2) Natural infrastructure.—The term
17	"natural infrastructure" means infrastructure
18	that—
19	(A) uses, restores, or emulates natural eco-
20	logical processes; and
21	(B)(i) is created through the action of nat-
22	ural physical, geological, biological, and chem-
23	ical processes over time;

1	(ii) is created by human design, engineer-
2	ing, and construction to emulate or act in con-
3	cert with natural processes; or

- (iii) involves the use of plants, soils, and other natural features, including through the creation, restoration, or preservation of vegetated areas using materials appropriate to the region to manage stormwater and runoff, to attenuate flooding and storm surges, and for other related purposes.
- (3) Nonprofit organization" means an organization that "nonprofit organization" means an organization that is described in section 501(c) of the Internal Revenue Code of 1986 and exempt from tax under section 501(a) of such Code.
- (4) Program.—The term "Program" means the Coastal and Estuary Resilience Grant Program as established by section 702.
- (5) Restoration.—The term "restoration" means renewing, enhancing, or replacing degraded, damaged, vulnerable, or destroyed wetlands to improve the long-term ecosystem function and resilience through active human intervention and action, such as—

1	(A) improving hydrological conditions
2	(such as by removing tidal barriers, improving
3	connectivity, or changing water levels);
4	(B) altering sediment supply (such as
5	through the beneficial use of dredge material,
6	thin-layer spraying, or reconnecting river sedi-
7	ment);
8	(C) changing salinity characteristics;
9	(D) improving water quality (such as by
10	reducing excess nutrients, sedimentation, or
11	contaminants);
12	(E) planting of native plants, removal of
13	invasive species, and other improved manage-
14	ment practices;
15	(F) controlling erosion of wetland edges;
16	and
17	(G) enabling future inland migration as
18	sea levels rise, including through the enhance-
19	ment of adjacent fresh-water wetlands.
20	SEC. 702. COASTAL AND ESTUARY RESILIENCE GRANT PRO-
21	GRAM.
22	(a) Establishment.—The Administrator shall es-
23	tablish a program, to be known as the "Coastal and Estu-
24	ary Resilience Grant Program", under which the Sec-
25	retary awards grants to entities that are eligible under

1	subsection (b) to fund coastal wetland restoration and nat-
2	ural infrastructure projects that are eligible under sub-
3	section (c).
4	(b) Eligible Entities.—An entity is eligible to
5	apply for a grant under the Program if the entity is an
6	institution of higher education, a nonprofit organization
7	a State or local government, or an Indian Tribe.
8	(c) Eligible Projects.—A project is eligible for a
9	grant under the Program if the project is designed to—
10	(1) reduce net greenhouse gases through—
11	(A) the long-term sequestration of addi-
12	tional carbon dioxide through—
13	(i) the active restoration of degraded
14	coastal wetland; and
15	(ii) the protection of threatened coast-
16	al wetland;
17	(B) the halting of ongoing carbon dioxide
18	emissions, and the resumption of the natural
19	rate of carbon capture, through the restoration
20	of drained coastal wetland; or
21	(C) the halting of ongoing methane emis-
22	sions, and the resumption of the natural rate of
23	carbon storage, through the restoration of for-
24	merly tidal wetland that has lost tidal

1	connectivity and become fresh wetland (com-
2	monly known as "impounded wetland"); or
3	(2) provide for ecosystem adaptation to the ef-
4	fects of sea level rise and other climate effects
5	through—
6	(A) facilitating landward migration of wet-
7	lands in response to rising sea levels; or
8	(B) enhancing ecosystem resilience to
9	flooding, ocean acidification, or coastal storms.
10	(d) Grant Evaluation Criteria.—In reviewing
11	applications for grants under the Program, the Adminis-
12	trator shall give priority to projects that exhibit the high-
13	est potential to—
14	(1) mitigate greenhouse gas emissions in the
15	long term by—
16	(A) reducing greenhouse gas emissions; or
17	(B) capturing and storing greenhouse
18	gases;
19	(2) reinforce ecosystem resilience and adapta-
20	tion by—
21	(A) preparing for sea level rise in order to
22	reduce vulnerability to sea level rise and ero-
23	sion;
24	(B) supporting resilience against flooding
25	and sea level rise; or

1	(C) restoring or enhancing ecosystem func-
2	tion; or
3	(3) provide economic and social co-benefits by—
4	(A) reducing the potential impact and
5	damage of storms on the built environment;
6	(B) advancing environmental justice by re-
7	ducing the disproportionate impacts of environ-
8	mental hazards on communities of color, Indige-
9	nous communities, and low-income commu-
10	nities;
11	(C) providing jobs in coastal communities;
12	(D) prioritizing natural infrastructure;
13	(E) incorporating collaborative partner-
14	ships; or
15	(F) involving local communities in project
16	planning and implementation.
17	(e) ELIGIBLE COSTS.—A grant awarded under the
18	Program shall be available for all phases of the develop-
19	ment, implementation, and monitoring of projects that are
20	eligible under subsection (c), including—
21	(1) preliminary community engagement, plan-
22	ning, and prioritization;
23	(2) preliminary design and site assessment, in-
24	cluding—
25	(A) assessments of feasibility;

1	(B) planning; and
2	(C) community engagement;
3	(3) final design and permitting;
4	(4) restoration and project implementation; and
5	(5) monitoring, reporting, and stewardship.
6	(f) Reporting.—
7	(1) In general.—An entity that receives a
8	grant under the Program for a project shall—
9	(A) collect data on the development and
10	implementation of the project and stewardship
11	following completion of the project; and
12	(B) submit that data to the Administrator
13	for inclusion in the database required by section
14	703(a).
15	(2) Report after project completion.—
16	Not later than 1 year after the completion of a
17	project for which a grant is provided under the Pro-
18	gram, the entity that received the grant shall submit
19	to the Administrator a report on the outputs, out-
20	comes, and impacts of the project, including with re-
21	spect to—
22	(A) the amount of area restored;
23	(B) the estimated net climate benefit;
24	(C) benefits to nearby communities; and

1	(D) involvement of partners and commu-
2	nities.
3	(g) Monitoring.—The Administrator shall establish
4	guidelines providing for monitoring a project for which a
5	grant is provided under the Program for the 10-year pe-
6	riod after the grant is awarded.
7	(h) Role of National Fish and Wildlife Foun-
8	DATION.—In carrying out the Program, the Administrator
9	may consult, partner, or otherwise coordinate with the Na-
10	tional Fish and Wildlife Foundation established by section
11	2(a) of the National Fish and Wildlife Foundation Estab-
12	lishment Act (16 U.S.C. 3701(a)).
13	SEC. 703. DATA COLLECTION.
14	(a) Database.—
15	(1) In General.—The Administrator shall
16	maintain a coastal wetland restoration database to
17	collect information about projects that receive grants
18	under the Program.
19	(2) Design.—The Administrator shall design
20	the database required by paragraph (1) to collect
21	performance metrics on the development and imple-
22	mentation of projects that receive grants under the
23	Program and stewardship following completion of

1	projects and inform the design of future projects in
2	an adaptive manner.
3	(3) Included metrics.—The database re-
4	quired by paragraph (1) shall include standardized
5	metrics for reporting such as—
6	(A) acres restored, protected, or created;
7	(B) habitat type;
8	(C) restoration technique;
9	(D) estimated net greenhouse gas reduc-
10	tion effect;
11	(E) jobs created;
12	(F) quantified ecosystem services;
13	(G) the economic benefits of wetlands; and
14	(H) other metrics selected by the Adminis-
15	trator.
16	(4) Public availability.—The Administrator
17	shall make products of the database publicly avail-
18	able and disseminate important findings to the pub-
19	lie.
20	(b) INVENTORY OF COASTAL WETLAND.—The Ad-
21	ministrator shall compile an inventory of coastal wetland.
22	SEC. 704. OUTREACH AND TECHNICAL ASSISTANCE.
23	The Administrator shall establish a technical assist-
24	ance program to help entities outside of the National Oce-
25	anic and Atmospheric Administration in all phases of

- 1 coastal wetland restoration project work, including out-
- 2 reach to potential applicants for grants under section 702.
- 3 SEC. 705. ANNUAL RESTORATION AND FUNDING.
- 4 (a) Acreage Requirements.—To the maximum ex-
- 5 tent practicable, the Secretary of Commerce shall award
- 6 grants under the Program to conduct coastal wetland res-
- 7 toration on 1,500,000 acres over 10 years.
- 8 (b) Funding.—For each of fiscal years 2021
- 9 through 2025, there is authorized to be appropriated
- 10 \$200,000,000 to remain available until expended for the
- 11 Administrator to carry out this title.
- 12 SEC. 706. PREVAILING WAGE REQUIREMENT.
- Any contractor or subcontractor entering into a serv-
- 14 ice contract in connection with a project under the Pro-
- 15 gram shall—
- 16 (1) be treated as a Federal contractor or sub-
- 17 contractor for purposes of chapter 67 of title 41,
- 18 United States Code (commonly known as the
- 19 "McNamara-O'Hara Service Contract Act of
- 20 1965"); and
- 21 (2) pay each class of employee employed by the
- contractor or subcontractor wages and fringe bene-
- fits at rates in accordance with prevailing rates for
- the class in the locality, or, where a collective-bar-
- 25 gaining agreement covers the employee, in accord-

1	ance with the rates provided for in the agreement,
2	including prospective wage increases provided for in
3	the agreement.
4	SEC. 707. DEPARTMENT OF THE INTERIOR COASTAL WET-
5	LAND RESTORATION; FUNDING.
6	(a) In General.—The Secretary of the Interior shall
7	conduct coastal wetland restoration on land managed by
8	the Director of the United States Fish and Wildlife Serv-
9	ice or the Director of the National Park Service to achieve
10	at least 1 of the following:
11	(1) The sequestration of additional carbon diox-
12	ide through—
13	(A) the active restoration of degraded
14	coastal wetland; and
15	(B) the protection of threatened coastal
16	wetland.
17	(2) The halting of ongoing carbon dioxide emis-
18	sions, and the resumption of the natural rate of car-
19	bon capture, through the restoration of drained
20	coastal wetland.
21	(3) The halting of ongoing methane emissions,
22	and the resumption of the natural rate of carbon
23	storage, through the restoration of formerly tidal
24	wetland that has lost tidal connectivity and become

1	fresh wetland (commonly known as "impounded wet-
2	land'').
3	(b) Authorization of Appropriations.—For each
4	of fiscal years 2021 through 2025, there is authorized to
5	be appropriated to the Secretary of the Interior—
6	(1) for coastal wetland restoration on land man-
7	aged by the Director of the United States Fish and
8	Wildlife Service, \$200,000,000; and
9	(2) for coastal wetland restoration on land man-
10	aged by the Director of the National Park Service,
11	\$200,000,000.

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