

(A) is required by statute to be submitted to the House of Representatives, or the Speaker thereof, or the Senate, or the President or President Pro Tempore thereof, at any time on or after the date of the enactment of this Act; or

(B) is included by the Clerk of the House of Representatives or the Secretary of the Senate (as the case may be) on the list of reports received by the House of Representatives or the Senate (as the case may be) at any time on or after the date of the enactment of this Act.

(2) **TRANSITION RULE FOR PREVIOUSLY SUBMITTED REPORTS.**—To the extent practicable, the Director shall ensure that any congressionally mandated report described in paragraph (1) which was required to be submitted to Congress by a statute enacted before the date of the enactment of this Act is published on the reports online portal under this subtitle.

(b) **REPORTS SUBMITTED TO COMMITTEES.**—In the case of congressionally mandated reports which are required by statute to be submitted to a committee of Congress or a subcommittee thereof, this subtitle shall apply with respect to—

(1) any such report which is first required to be submitted by a statute which is enacted on or after the date of the enactment of this Act; and

(2) to the maximum extent practical, any congressionally mandated report which was required to be submitted by a statute enacted before the date of enactment of this Act unless—

(A) the chair of the committee, or subcommittee thereof, to which the report was required to be submitted notifies the Director in writing that the report is to be withheld from publication; and

(B) the Director publishes the notification on the reports online portal.

(c) **ACCESS FOR CONGRESSIONAL LEADERSHIP.**—Notwithstanding any provision of this subtitle or any other provision of law, congressional leadership shall have access to any congressionally mandated report.

**SEC. 5248. DETERMINATION OF BUDGETARY EFFECTS.**

The budgetary effects of this subtitle, for the purpose of complying with the Statutory Pay-As-You-Go-Act of 2010, shall be determined by reference to the latest statement titled “Budgetary Effects of PAYGO Legislation” for this subtitle, submitted for printing in the Congressional Record by the Chairman of the Senate Budget Committee, provided that such statement has been submitted prior to the vote on passage.

**SA 6465.** Mr. REED (for Mr. RUBIO) submitted an amendment intended to be proposed to amendment SA 5499 proposed by Mr. REED (for himself and Mr. INHOFE) to the bill H.R. 7900, to authorize appropriations for fiscal year 2023 for military activities of the Department of Defense and for military construction, and for defense activities of the Department of Energy, to prescribe military personnel strengths for such fiscal year, and for other purposes; which was ordered to lie on the table; as follows:

At the end of subtitle A of title XII, add the following:

**SEC. 1214. UNITED STATES - ISRAEL ARTIFICIAL INTELLIGENCE CENTER.**

(a) **SHORT TITLE.**—This section may be cited as the “United States - Israel Artificial Intelligence Center Act”.

(b) **DEFINED TERM.**—The term “foreign country of concern” means the People’s Republic of China, the Democratic People’s Republic of Korea, the Russian Federation, the Islamic Republic of Iran, and any other country that the Secretary of State determines to be a country of concern.

(c) **ESTABLISHMENT OF CENTER.**—The Secretary of State, in consultation with the Secretary of Commerce, the Director of the National Science Foundation, and the heads of other relevant Federal agencies, shall establish the United States - Israel Artificial Intelligence Center (referred to in this section as the “Center”) in the United States.

(d) **PURPOSE.**—The purpose of the Center shall be to leverage the experience, knowledge, and expertise of institutions of higher education and private sector entities in the United States and the State of Israel (referred to in this section as “Israel”) to develop more robust research and development cooperation in the areas of—

- (1) machine learning;
- (2) image classification;
- (3) object detection;
- (4) speech recognition;
- (5) natural language processing;
- (6) data labeling;
- (7) computer vision; and
- (8) model explainability and interpretability.

(e) **ARTIFICIAL INTELLIGENCE PRINCIPLES.**—In carrying out the purpose described in subsection (d), the Center shall adhere to the principles for the use of artificial intelligence in the Federal Government set forth in section 3 of Executive Order 13960 (85 Fed. Reg. 78939).

(f) **INTERNATIONAL PARTNERSHIPS.**—

(1) **IN GENERAL.**—The Secretary of State and the heads of other relevant Federal agencies, subject to the availability of appropriations, may enter into agreements supporting and enhancing dialogue and planning involving international partnerships between the Department of State or such agencies and the Government of Israel and its ministries, offices, and institutions.

(2) **FEDERAL SHARE.**—Not more than 50 percent of the costs of implementing the agreements entered into pursuant to paragraph (1) may be paid by the United States Government.

(g) **LIMITATIONS.**—The Center is prohibited from receiving any investment from or contracting with—

(1) any individual or entity with ties to any entity affiliated (officially or unofficially) with the Chinese Communist Party, the People’s Liberation Army, or the government of a foreign country of concern;

(2) any entity owned, controlled by, or affiliated with the Chinese Communist Party or the People’s Republic of China, or in which the government of a foreign country of concern has an ownership interest; or

(3) any entity on the Entity List that is maintained by the Bureau of Industry and Security of the Department of Commerce and set forth in Supplement No. 4 to part 744 of title 15, Code of Federal Regulations.

(h) **COUNTERINTELLIGENCE SCREENING.**—Not later than 180 days after the date of the enactment of this Act, and not later than each December 31 thereafter, Director of National Intelligence, in collaboration with the Director of the National Counterintelligence and Security Center and the Director of the Federal Bureau of Investigation, shall—

(1) assess—  
(A) whether the Center or its participant institutions pose a counterintelligence threat to the United States;

(B) what specific measures the Center has implemented to ensure that intellectual property developed with the assistance of the Center has sufficient protections in place to preclude misuse of United States intellectual property, research and development, and innovation efforts; and

(C) other threats from a foreign country of concern and other entities; and

(2) submit a report to Congress containing the results of the assessment described in paragraph (1).

(i) **AUTHORIZATION OF APPROPRIATIONS.**—There is authorized to be appropriated for the Center \$10,000,000 for each of the fiscal years 2023 through 2027 to carry out this section.

**SA 6466.** Mr. REED (for Ms. CANTWELL (for herself and Mr. WICKER)) submitted an amendment intended to be proposed to amendment SA 5499 proposed by Mr. REED (for himself and Mr. INHOFE) to the bill H.R. 7900, to authorize appropriations for fiscal year 2023 for military activities of the Department of Defense and for military construction, and for defense activities of the Department of Energy, to prescribe military personnel strengths for such fiscal year, and for other purposes; which was ordered to lie on the table; as follows:

At the end, add the following:

**DIVISION E—OCEANS AND ATMOSPHERE**

**SEC. 5001. TABLE OF CONTENTS.**

The table of contents for this division is as follows:

Sec. 5001. Table of contents.

**TITLE LI—CORAL REEF CONSERVATION**

Sec. 5101. Short title.

Subtitle A—Reauthorization of Coral Reef Conservation Act of 2000

Sec. 5111. Reauthorization of Coral Reef Conservation Act of 2000.

Subtitle B—United States Coral Reef Task Force

Sec. 5121. Establishment.

Sec. 5122. Duties.

Sec. 5123. Membership.

Sec. 5124. Responsibilities of Federal agency members.

Sec. 5125. Working groups.

Sec. 5126. Definitions.

Subtitle C—Department of the Interior Coral Reef Authorities

Sec. 5131. Coral reef conservation and restoration assistance.

Subtitle D—Susan L. Williams National Coral Reef Management Fellowship

Sec. 5141. Short title.

Sec. 5142. Definitions.

Sec. 5143. Establishment of fellowship program.

Sec. 5144. Fellowship awards.

Sec. 5145. Matching requirement.

**TITLE LII—BOLSTERING LONG-TERM UNDERSTANDING AND EXPLORATION OF THE GREAT LAKES, OCEANS, BAYS, AND ESTUARIES**

Sec. 5201. Short title.

Sec. 5202. Purpose.

Sec. 5203. Sense of Congress.

Sec. 5204. Definitions.

Sec. 5205. Workforce study.

Sec. 5206. Accelerating innovation at Cooperative Institutes.

Sec. 5207. Blue Economy valuation.

Sec. 5208. No additional funds authorized.

Sec. 5209. No additional funds authorized.

**TITLE LIII—REGIONAL OCEAN PARTNERSHIPS**

Sec. 5301. Short title.

Sec. 5302. Findings; sense of Congress; purposes.

Sec. 5303. Regional Ocean Partnerships.

**TITLE LIV—NATIONAL OCEAN EXPLORATION**

Sec. 5401. Short title.

Sec. 5402. Findings.  
 Sec. 5403. Definitions.  
 Sec. 5404. Ocean Policy Committee.  
 Sec. 5405. National Ocean Mapping, Exploration, and Characterization Council.  
 Sec. 5406. Modifications to the ocean exploration program of the National Oceanic and Atmospheric Administration.  
 Sec. 5407. Repeal.  
 Sec. 5408. Modifications to ocean and coastal mapping program of the National Oceanic and Atmospheric Administration.  
 Sec. 5409. Modifications to Hydrographic Services Improvement Act of 1998.

#### TITLE LV—MARINE MAMMAL RESEARCH AND RESPONSE

Sec. 5501. Short title.  
 Sec. 5502. Data collection and dissemination.  
 Sec. 5503. Stranding or entanglement response agreements.  
 Sec. 5504. Unusual mortality event activity funding.  
 Sec. 5505. Liability.  
 Sec. 5506. National Marine Mammal Tissue Bank and tissue analysis.  
 Sec. 5507. Marine Mammal Rescue and Response Grant Program and Rapid Response Fund.  
 Sec. 5508. Health MAP.  
 Sec. 5509. Reports to Congress.  
 Sec. 5510. Authorization of appropriations.  
 Sec. 5511. Definitions.  
 Sec. 5512. Study on marine mammal mortality.

#### TITLE LVI—VOLCANIC ASH AND FUMES

Sec. 5601. Short title.  
 Sec. 5602. Modifications to National Volcano Early Warning and Monitoring System.

#### TITLE LVII—WILDFIRE AND FIRE WEATHER PREPAREDNESS

Sec. 5701. Short title.  
 Sec. 5702. Definitions.  
 Sec. 5703. Establishment of fire weather services program.  
 Sec. 5704. National Oceanic and Atmospheric Administration data management.  
 Sec. 5705. Digital fire weather services and data management.  
 Sec. 5706. High-performance computing.  
 Sec. 5707. Government Accountability Office report on fire weather services program.  
 Sec. 5708. Fire weather testbed.  
 Sec. 5709. Fire weather surveys and assessments.  
 Sec. 5710. Incident Meteorologist Service.  
 Sec. 5711. Automated surface observing system.  
 Sec. 5712. Emergency response activities.  
 Sec. 5713. Government Accountability Office report on interagency wildfire forecasting, prevention, planning, and management bodies.  
 Sec. 5714. Amendments to Infrastructure Investment and Jobs Act relating to wildfire mitigation.  
 Sec. 5715. Wildfire technology modernization amendments.  
 Sec. 5716. Cooperation; coordination; support to non-Federal entities.  
 Sec. 5717. International coordination.  
 Sec. 5718. Submissions to Congress regarding the fire weather services program, incident meteorologist workforce needs, and National Weather Service workforce support.  
 Sec. 5719. Government Accountability Office report; Fire Science and Technology Working Group; strategic plan.

Sec. 5720. Fire weather rating system.  
 Sec. 5721. Avoidance of duplication.  
 Sec. 5722. Authorization of appropriations.  
 TITLE LVIII—LEARNING EXCELLENCE AND GOOD EXAMPLES FROM NEW DEVELOPERS  
 Sec. 5801. Short title.  
 Sec. 5802. Definitions.  
 Sec. 5803. Purposes.  
 Sec. 5804. Plan and implementation of plan to make certain models and data available to the public.  
 Sec. 5805. Requirement to review models and leverage innovations.  
 Sec. 5806. Report on implementation.  
 Sec. 5807. Protection of national security interests.  
 Sec. 5808. Authorization of appropriations.

#### TITLE LI—CORAL REEF CONSERVATION

##### SEC. 5101. SHORT TITLE.

This title may be cited as the “Restoring Resilient Reefs Act of 2022”.

##### Subtitle A—Reauthorization of Coral Reef Conservation Act of 2000

##### SEC. 5111. REAUTHORIZATION OF CORAL REEF CONSERVATION ACT OF 2000.

(a) IN GENERAL.—The Coral Reef Conservation Act of 2000 (16 U.S.C. 6401 et seq.) is amended—

(1) by redesignating sections 209 and 210 as sections 217 and 218, respectively;

(2) by striking sections 202 through 208 and inserting the following:

##### “SEC. 202. PURPOSES.

“The purposes of this title are—

“(1) to conserve and restore the condition of United States coral reef ecosystems challenged by natural and human-accelerated changes, including increasing ocean temperatures, ocean acidification, coral bleaching, coral diseases, water quality degradation, invasive species, and illegal, unreported, and unregulated fishing;

“(2) to promote the science-based management and sustainable use of coral reef ecosystems to benefit local communities and the Nation, including through improved integration and cooperation among Federal and non-Federal stakeholders with coral reef equities;

“(3) to develop sound scientific information on the condition of coral reef ecosystems, continuing and emerging threats to such ecosystems, and the efficacy of innovative tools, technologies, and strategies to mitigate stressors and restore such ecosystems, including evaluation criteria to determine the effectiveness of management interventions, and accurate mapping for coral reef restoration;

“(4) to assist in the preservation of coral reefs by supporting science-based, consensus-driven, and community-based coral reef management by covered States and covered Native entities, including monitoring, conservation, and restoration projects that empower local communities, small businesses, and nongovernmental organizations;

“(5) to provide financial resources, technical assistance, and scientific expertise to supplement, complement, and strengthen community-based management programs and conservation and restoration projects of non-Federal reefs;

“(6) to establish a formal mechanism for collecting and allocating monetary donations from the private sector to be used for coral reef conservation and restoration projects;

“(7) to support the rapid and effective, science-based assessment and response to exigent circumstances that pose immediate and long-term threats to coral reefs, such as coral disease, invasive or nuisance species, coral bleaching, natural disasters, and industrial or mechanical disasters, such as vessel

groundings, hazardous spills, or coastal construction accidents; and

“(8) to serve as a model for advancing similar international efforts to monitor, conserve, and restore coral reef ecosystems.

##### “SEC. 203. FEDERAL CORAL REEF MANAGEMENT AND RESTORATION ACTIVITIES.

“(a) IN GENERAL.—The Administrator, the Secretary of the Interior, or the Secretary of Commerce may conduct activities described in subsection (b) to conserve and restore coral reefs and coral reef ecosystems that are consistent with—

“(1) all applicable laws governing resource management in Federal and State waters, including this Act;

“(2) the national coral reef resilience strategy in effect under section 204; and

“(3) coral reef action plans in effect under section 205, as applicable.

“(b) ACTIVITIES DESCRIBED.—Activities described in this subsection are activities to conserve, research, monitor, assess, and restore coral reefs and coral reef ecosystems in waters managed under the jurisdiction of a Federal agency specified in subsection (c) or in coordination with a State in waters managed under the jurisdiction of such State, including—

“(1) developing, including through the collection of requisite in situ and remotely sensed data, high-quality and digitized maps reflecting—

“(A) current and historical live coral cover data;

“(B) coral reef habitat quality data;

“(C) priority areas for coral reef conservation to maintain biodiversity and ecosystem structure and function, including the reef matrix, that benefit coastal communities and living marine resources;

“(D) priority areas for coral reef restoration to enhance biodiversity and ecosystem structure and function, including the reef matrix, to benefit coastal communities and living marine resources; and

“(E) areas of concern that may require enhanced monitoring of coral health and cover;

“(2) enhancing compliance with Federal laws that prohibit or regulate—

“(A) the taking of coral products or species associated with coral reefs; or

“(B) the use and management of coral reef ecosystems;

“(3) long-term ecological monitoring of coral reef ecosystems;

“(4) implementing species-specific recovery plans for listed coral species consistent with the Endangered Species Act of 1973 (16 U.S.C. 1531 et seq.);

“(5) restoring degraded coral reef ecosystems;

“(6) promoting ecologically sound navigation and anchorages, including through navigational aids and expansion of reef-safe anchorages and mooring buoy systems, to enhance recreational access while preventing or minimizing the likelihood of vessel impacts or other physical damage to coral reefs;

“(7) monitoring and responding to severe bleaching or mortality events, disease outbreaks, invasive species outbreaks, and significant maritime accidents, including chemical spill cleanup and the removal of grounded vessels;

“(8) conducting scientific research that contributes to the understanding, sustainable use, and long-term conservation of coral reefs;

“(9) enhancing public awareness, understanding, and appreciation of coral reefs and coral reef ecosystems; and

“(10) centrally archiving, managing, and distributing data sets and coral reef ecosystem assessments and publishing such information on publicly available internet websites, by means such as leveraging and

partnering with existing data repositories, of—

“(A) the Coral Reef Conservation Program of the National Oceanic and Atmospheric Administration; and

“(B) the Task Force.

“(C) FEDERAL AGENCIES SPECIFIED.—A Federal agency specified in this subsection is one of the following:

“(1) The National Oceanic and Atmospheric Administration.

“(2) The National Park Service.

“(3) The United States Fish and Wildlife Service.

“(4) The Office of Insular Affairs.

**“SEC. 204. NATIONAL CORAL REEF RESILIENCE STRATEGY.**

“(a) IN GENERAL.—The Administrator shall—

“(1) not later than 2 years after the date of the enactment of the Restoring Resilient Reefs Act of 2022, develop a national coral reef resilience strategy; and

“(2) periodically thereafter, but not less frequently than once every 15 years (and not less frequently than once every 5 years, in the case of guidance on best practices under subsection (b)(4)), review and revise the strategy as appropriate.

“(b) ELEMENTS.—The strategy required by subsection (a) shall include the following:

“(1) A discussion addressing—

“(A) continuing and emerging threats to the resilience of United States coral reef ecosystems;

“(B) remaining gaps in coral reef ecosystem research, monitoring, and assessment;

“(C) the status of management cooperation and integration among Federal reef managers and covered reef managers;

“(D) the status of efforts to manage and disseminate critical information, and enhance interjurisdictional data sharing, related to research, reports, datasets, and maps;

“(E) areas of special focus, which may include—

“(i) improving natural coral recruitment;

“(ii) preventing avoidable losses of corals and their habitat;

“(iii) enhancing the resilience of coral populations;

“(iv) supporting a resilience-based management approach;

“(v) developing, coordinating, and implementing watershed management plans;

“(vi) building and sustaining watershed management capacity at the local level;

“(vii) providing data essential for coral reef fisheries management;

“(viii) building capacity for coral reef fisheries management;

“(ix) increasing understanding of coral reef ecosystem services;

“(x) educating the public on the importance of coral reefs, threats and solutions; and

“(xi) evaluating intervention efficacy;

“(F) the status of conservation efforts, including the use of marine protected areas to serve as replenishment zones developed consistent with local practices and traditions and in cooperation with, and with respect for the scientific, technical, and management expertise and responsibilities of, covered reef managers;

“(G) science-based adaptive management and restoration efforts; and

“(H) management of coral reef emergencies and disasters.

“(2) A statement of national goals and objectives designed to guide—

“(A) future Federal coral reef management and restoration activities authorized under section 203;

“(B) conservation and restoration priorities for grants awarded under section 213

and cooperative agreements under section 208; and

“(C) research priorities for the reef research coordination institutes designated under section 214.

“(3) A designation of priority areas for conservation, and priority areas for restoration, to support the review and approval of grants under section 213(e).

“(4) General templates for use by covered reef managers and Federal reef managers to guide the development of coral reef action plans under section 205, including guidance on the best science-based practices to respond to coral reef emergencies that can be included in coral reef action plans.

“(c) CONSULTATIONS.—In developing all elements of the strategy required by subsection (a), the Administrator shall—

“(1) consult with the Secretary of the Interior, the Task Force, covered States, and covered Native entities;

“(2) consult with the Secretary of Defense, as appropriate;

“(3) engage stakeholders, including covered States, coral reef stewardship partnerships, reef research coordination institutes and research centers designated under section 214, and recipients of grants under section 213; and

“(4) solicit public review and comment regarding scoping and the draft strategy.

“(d) SUBMISSION TO CONGRESS; PUBLICATION.—The Administrator shall—

“(1) submit the strategy required by subsection (a) and any revisions to the strategy to the appropriate congressional committees; and

“(2) publish the strategy and any such revisions on publicly available internet websites of—

“(A) the Coral Reef Conservation Program of the National Oceanic and Atmospheric Administration; and

“(B) the Task Force.

**“SEC. 205. CORAL REEF ACTION PLANS.**

“(a) PLANS PREPARED BY FEDERAL REEF MANAGERS.—

“(1) IN GENERAL.—Not later than 3 years after the date of the enactment of the Restoring Resilient Reefs Act of 2022, each Federal reef manager shall—

“(A) prepare a coral reef action plan to guide management and restoration activities to be undertaken within the responsibilities and jurisdiction of the manager; or

“(B) in the case of a reef under the jurisdiction of a Federal reef manager for which there is a management plan in effect as of such date of enactment, update that plan to comply with the requirements of this subsection.

“(2) ELEMENTS.—A plan prepared under paragraph (1) by a Federal reef manager shall include a discussion of the following:

“(A) Short- and mid-term coral reef conservation and restoration objectives within the jurisdiction of the manager.

“(B) A current adaptive management framework to inform research, monitoring, and assessment needs.

“(C) Tools, strategies, and partnerships necessary to identify, monitor, and address pollution and water quality impacts to coral reef ecosystems within the jurisdiction of the manager.

“(D) The status of efforts to improve coral reef ecosystem management cooperation and integration between Federal reef managers and covered reef managers, including the identification of existing research and monitoring activities that can be leveraged for coral reef status and trends assessments within the jurisdiction of the manager.

“(E) Estimated budgetary and resource considerations necessary to carry out the plan.

“(F) Contingencies for response to and recovery from emergencies and disasters.

“(G) In the case of an updated plan, annual records of significant management and restoration actions taken under the previous plan, cash and non-cash resources used to undertake the actions, and the source of such resources.

“(H) Documentation by the Federal reef manager that the plan is consistent with the national coral reef resilience strategy in effect under section 204.

“(I) A data management plan to ensure data, assessments, and accompanying information are appropriately preserved, curated, publicly accessible, and broadly reusable.

“(3) SUBMISSION TO TASK FORCE.—Each Federal reef manager shall submit a plan prepared under paragraph (1) to the Task Force.

“(4) APPLICATION OF ADMINISTRATIVE PROCEDURE ACT.—Each plan prepared under paragraph (1) shall be subject to the requirements of subchapter II of chapter 5, and chapter 7, of title 5, United States Code (commonly known as the ‘Administrative Procedure Act’).

“(b) PLANS PREPARED BY COVERED REEF MANAGERS.—

“(1) IN GENERAL.—A covered reef manager may elect to prepare, submit to the Task Force, and maintain a coral reef action plan to guide management and restoration activities to be undertaken within the responsibilities and jurisdiction of the manager.

“(2) EFFECTIVE PERIOD.—A plan prepared under this subsection shall remain in effect for 5 years, or until an updated plan is submitted to the Task Force, whichever occurs first.

“(3) ELEMENTS.—A plan prepared under paragraph (1) by a covered reef manager—

“(A) shall contain a discussion of—

“(i) short- and mid-term coral reef conservation and restoration objectives within the jurisdiction of the manager;

“(ii) estimated budgetary and resource considerations necessary to carry out the plan;

“(iii) in the case of an updated plan, annual records of significant management and restoration actions taken under the previous plan, cash and non-cash resources used to undertake the actions, and the source of such resources; and

“(iv) contingencies for response to and recovery from emergencies and disasters; and

“(B) may contain a discussion of—

“(i) the status of efforts to improve coral reef ecosystem management cooperation and integration between Federal reef managers and covered reef managers, including the identification of existing research and monitoring activities that can be leveraged for coral reef status and trends assessments within the jurisdiction of the manager;

“(ii) a current adaptive management framework to inform research, monitoring, and assessment needs;

“(iii) tools, strategies, and partnerships necessary to identify, monitor, and address pollution and water quality impacts to coral reef ecosystems within the jurisdiction of the manager; and

“(iv) a data management plan to ensure data, assessments, and accompanying information are appropriately preserved, curated, publicly accessible, and broadly reusable.

“(c) TECHNICAL ASSISTANCE.—The Administrator and the Task Force shall make all reasonable efforts to provide technical assistance upon request by a Federal reef manager or covered reef manager developing a coral reef action plan under this section.

“(d) PUBLICATION.—The Administrator shall publish each coral reef action plan prepared and submitted to the Task Force under this section on publicly available internet websites of—

“(1) the Coral Reef Conservation Program of the National Oceanic and Atmospheric Administration; and

“(2) the Task Force.

**“SEC. 206. CORAL REEF STEWARDSHIP PARTNERSHIPS.**

“(a) IN GENERAL.—To further the community-based stewardship of coral reefs, coral reef stewardship partnerships for Federal and non-Federal coral reefs may be established in accordance with this section.

“(b) STANDARDS AND PROCEDURES.—The Administrator shall develop and adopt—

“(1) standards for identifying individual coral reefs and ecologically significant units of coral reefs; and

“(2) processes for adjudicating multiple applicants for stewardship of the same coral reef or ecologically significant unit of a reef to ensure no geographic overlap in representation among stewardship partnerships authorized by this section.

“(c) MEMBERSHIP FOR FEDERAL CORAL REEFS.—A coral reef stewardship partnership that has identified, as the subject of its stewardship activities, a coral reef or ecologically significant unit of a coral reef that is fully or partially under the management jurisdiction of any Federal agency specified in section 203(c) shall, at a minimum, include the following:

“(1) That Federal agency, a representative of which shall serve as chairperson of the coral reef stewardship partnership.

“(2) A State or county’s resource management agency.

“(3) A coral reef research center designated under section 214(b).

“(4) A nongovernmental organization.

“(5) Such other members as the partnership considers appropriate, such as interested stakeholder groups and covered Native entities.

“(d) MEMBERSHIP FOR NON-FEDERAL CORAL REEFS.—

“(1) IN GENERAL.—A coral reef stewardship partnership that has identified, as the subject of its stewardship activities, a coral reef or ecologically significant component of a coral reef that is not under the management jurisdiction of any Federal agency specified in section 203(c) shall, at a minimum, include the following:

“(A) A State or county’s resource management agency or a covered Native entity, a representative of which shall serve as the chairperson of the coral reef stewardship partnership.

“(B) A coral reef research center designated under section 214(b).

“(C) A nongovernmental organization.

“(D) Such other members as the partnership considers appropriate, such as interested stakeholder groups.

“(2) ADDITIONAL MEMBERS.—

“(A) IN GENERAL.—Subject to subparagraph (B), a coral reef stewardship partnership described in paragraph (1) may also include representatives of one or more Federal agencies.

“(B) REQUESTS; APPROVAL.—A representative of a Federal agency described in subparagraph (A) may become a member of a coral reef stewardship partnership described in paragraph (1) if—

“(i) the representative submits a request to become a member to the chairperson of the partnership referred to in paragraph (1)(A); and

“(ii) the chairperson consents to the request.

“(e) NONAPPLICABILITY OF FEDERAL ADVISORY COMMITTEE ACT.—The Federal Advisory Committee Act (5 U.S.C. App.) shall not apply to coral reef stewardship partnerships under this section.

**“SEC. 207. BLOCK GRANTS.**

“(a) IN GENERAL.—The Administrator shall provide block grants of financial assistance to covered States to support management and restoration activities and further the implementation of coral reef action plans in effect under section 205 by covered States and non-Federal coral reef stewardship partnerships in accordance with this section. The Administrator shall review each covered State’s application for block grant funding to ensure that applications are consistent with applicable action plans and the national coral reef resilience strategy in effect under section 204.

“(b) ELIGIBILITY FOR ADDITIONAL AMOUNTS.—

“(1) IN GENERAL.—A covered State shall qualify for and receive additional grant amounts beyond the base award specified in subsection (c)(1) if there is at least one coral reef action plan in effect within the jurisdiction of the covered State developed by that covered State or a non-Federal coral reef stewardship partnership.

“(2) WAIVER FOR CERTAIN FISCAL YEARS.—The Administrator may waive the requirement under paragraph (1) during fiscal years 2023 and 2024.

“(c) FUNDING FORMULA.—Subject to the availability of appropriations, the amount of each block grant awarded to a covered State under this section shall be the sum of—

“(1) a base award of \$100,000; and

“(2) if the State is eligible under subsection (b)—

“(A) an amount that is equal to non-Federal expenditures of up to \$3,000,000 on coral reef management and restoration activities within the jurisdiction of the State, as reported within the previous fiscal year; and

“(B) an additional amount, from any funds appropriated for block grants under this section that remain after distribution under subparagraph (A) and paragraph (1), based on the proportion of the State’s share of total non-Federal expenditures on coral reef management and restoration activities, as reported within the previous fiscal year, in excess of \$3,000,000, relative to other covered States.

“(d) EXCLUSIONS.—For the purposes of calculating block grant amounts under subsection (c), Federal funds provided to a covered State or non-Federal coral reef stewardship partnership shall not be considered as qualifying non-Federal expenditures, but non-Federal matching funds used to leverage Federal awards may be considered as qualifying non-Federal expenditures.

“(e) RESPONSIBILITIES OF THE ADMINISTRATOR.—The Administrator is responsible for—

“(1) providing guidance on qualifying non-Federal expenditures and the proper documentation of such expenditures;

“(2) issuing annual solicitations to covered States for awards under this section; and

“(3) determining the appropriate allocation of additional amounts among covered States in accordance with this section.

“(f) RESPONSIBILITIES OF COVERED STATES.—Each covered State is responsible for documenting non-Federal expenditures within the jurisdiction of the State and formally reporting those expenditures for review in response to annual solicitations by the Administrator under subsection (e).

**“SEC. 208. COOPERATIVE AGREEMENTS.**

“(a) IN GENERAL.—The Administrator shall seek to enter into cooperative agreements with covered States to fund coral reef conservation and restoration activities in waters managed under the jurisdiction of those covered States that are consistent with the national coral reef resilience strategy in effect under section 204 and any applicable action plans under section 205.

“(b) ALL ISLANDS COMMITTEE.—The Administrator may enter into a cooperative agreement with the All Islands Committee of the Task Force to provide support for its activities.

“(c) FUNDING.—Cooperative agreements under subsection (a) shall provide not less than \$500,000 to each covered State and are not subject to any matching requirement.

**“SEC. 209. CORAL REEF STEWARDSHIP FUND.**

“(a) AGREEMENT.—The Administrator shall seek to enter into an agreement with the National Fish and Wildlife Foundation (in this section referred to as the ‘Foundation’), authorizing the Foundation to receive, hold, and administer funds received under this section.

“(b) FUND.—

“(1) IN GENERAL.—The Foundation shall establish an account, which shall—

“(A) be known as the ‘Coral Reef Stewardship Fund’ (in this section referred to as the ‘Fund’); and

“(B) serve as the successor to the account known before the date of the enactment of the Restoring Resilient Reefs Act of 2022 as the Coral Reef Conservation Fund and administered through a public-private partnership with the Foundation.

“(2) DEPOSITS.—The Foundation shall deposit funds received under this section into the Fund.

“(3) PURPOSES.—The Fund shall be available solely to support coral reef stewardship activities that—

“(A) further the purposes of this title; and

“(B) are consistent with—

“(i) the national coral reef resilience strategy in effect under section 204; and

“(ii) coral reef action plans in effect, if any, under section 205 covering a coral reef or ecologically significant component of a coral reef to be impacted by such activities, if applicable.

“(4) INVESTMENT OF AMOUNTS.—

“(A) INVESTMENT OF AMOUNTS.—The Foundation shall invest such portion of the Fund as is not required to meet current withdrawals in interest-bearing obligations of the United States or in obligations guaranteed as to both principal and interest by the United States.

“(B) INTEREST AND PROCEEDS.—The interest on, and the proceeds from the sale or redemption of, any obligations held in the Fund shall be credited to and form a part of the Fund.

“(5) REVIEW OF PERFORMANCE.—The Administrator shall conduct a continuing review of all deposits into, and disbursements from, the Fund. Each review shall include a written assessment concerning the extent to which the Foundation has implemented the goals and requirements of—

“(A) this section; and

“(B) the national coral reef resilience strategy in effect under section 204.

“(c) AUTHORIZATION TO SOLICIT DONATIONS.—

“(1) IN GENERAL.—Pursuant to an agreement entered into under subsection (a), the Foundation may accept, receive, solicit, hold, administer, and use any gift (including, notwithstanding section 1342 of title 31, United States Code, donations of services) to further the purposes of this title.

“(2) DEPOSITS IN FUND.—Notwithstanding section 3302 of title 31, United States Code, any funds received as a gift shall be deposited and maintained in the Fund.

“(d) ADMINISTRATION.—Under an agreement entered into pursuant to subsection (a), and subject to the availability of appropriations, the Administrator may transfer funds appropriated to carry out this title to the Foundation. Amounts received by the Foundation under this subsection may be used for

matching, in whole or in part, contributions (whether in money, services, or property) made to the Foundation by private persons, State or local government agencies, or covered Native entities.

**“SEC. 210. EMERGENCY ASSISTANCE.**

“(a) IN GENERAL.—Notwithstanding any other provision of law, from funds appropriated pursuant to the authorization of appropriations under section 217, the Administrator may provide emergency assistance to any covered State or coral reef stewardship partnership to respond to immediate harm to coral reefs or coral reef ecosystems arising from any of the exigent circumstances described in subsection (b).

“(b) CORAL REEF EXIGENT CIRCUMSTANCES.—The Administrator shall develop a list of, and criteria for, circumstances that pose an exigent threat to coral reefs, including—

“(1) new and ongoing outbreaks of disease;

“(2) new and ongoing outbreaks of invasive or nuisance species;

“(3) new and ongoing coral bleaching events;

“(4) natural disasters;

“(5) industrial or mechanical incidents, such as vessel groundings, hazardous spills, or coastal construction accidents; and

“(6) other circumstances that pose an urgent threat to coral reefs.

“(c) ANNUAL REPORT ON EXIGENT CIRCUMSTANCES.—On February 1 of each year, the Administrator shall submit to the appropriate congressional committees, the Committee on Appropriations of the Senate, and the Committee on Appropriations of the House of Representatives a report that—

“(1) describes locations with exigent circumstances described in subsection (b) that were considered but declined for emergency assistance, and the rationale for the decision; and

“(2) with respect to each instance in which emergency assistance under this section was provided—

“(A) the location and a description of the exigent circumstances that prompted the emergency assistance, the entity that received the assistance, and the current and expected outcomes from the assistance;

“(B) a description of activities of the National Oceanic and Atmospheric Administration that were curtailed as a result of providing the emergency assistance;

“(C) in the case of an incident described in subsection (b)(5), a statement of whether legal action was commenced under subsection (c), and the rationale for the decision; and

“(D) an assessment of whether further action is needed to restore the affected coral reef, recommendations for such restoration, and a cost estimate to implement such recommendations.

**“SEC. 211. CORAL REEF DISASTER FUND.**

“(a) AGREEMENTS.—The Administrator shall seek to enter into an agreement with the National Fish and Wildlife Foundation (in this section referred to as the ‘Foundation’), authorizing the Foundation to receive, hold, and administer funds received under this section.

“(b) FUND.—

“(1) IN GENERAL.—The Foundation shall establish an account, to be known as the ‘Coral Reef Disaster Fund’ (in this section referred to as the ‘Fund’).

“(2) DEPOSITS.—The Foundation shall deposit funds received under this section into the Fund.

“(3) PURPOSES.—The Fund shall be available solely to support the long-term recovery of coral reefs from exigent circumstances described in section 210—

“(A) in partnership with non-Federal stakeholders; and

“(B) in a manner that is consistent with—

“(i) the national coral reef resilience strategy in effect under section 204; and

“(ii) coral reef action plans in effect, if any, under section 205.

“(4) INVESTMENT OF AMOUNTS.—

“(A) INVESTMENT OF AMOUNTS.—The Foundation shall invest such portion of the Fund as is not required to meet current withdrawals in interest-bearing obligations of the United States or in obligations guaranteed as to both principal and interest by the United States.

“(B) INTEREST AND PROCEEDS.—The interest on, and the proceeds from the sale or redemption of, any obligations held in the Fund shall be credited to and form a part of the Fund.

“(5) REVIEW OF PERFORMANCE.—The Administrator shall conduct continuing reviews of all deposits into, and disbursements from, the Fund. Each such review shall include a written assessment concerning the extent to which the Foundation has implemented the goals and requirements of this section.

“(c) AUTHORIZATION TO SOLICIT DONATIONS.—

“(1) IN GENERAL.—Pursuant to an agreement entered into under subsection (a), the Foundation may accept, receive, solicit, hold, administer, and use any gift (including, notwithstanding section 1342 of title 31, United States Code, donations of services) to further the purposes of this title.

“(2) DEPOSITS IN FUND.—Notwithstanding section 3302 of title 31, United States Code, any funds received as a gift shall be deposited and maintained in the Fund.

“(d) ADMINISTRATION.—Under an agreement entered into under subsection (a), and subject to the availability of appropriations, the Administrator may transfer funds appropriated to carry out this title to the Foundation. Amounts received by the Foundation under this subsection may be used for matching, in whole or in part, contributions (whether in money, services, or property) made to the Foundation by private persons, State or local government agencies, or covered Native entities.

**“SEC. 212. VESSEL GROUNDING INVENTORY.**

“The Administrator, in coordination with the Commandant of the Coast Guard, the Administrator of the Maritime Administration, and the heads of other Federal and State agencies as appropriate, shall establish and maintain an inventory of all vessel grounding incidents involving United States coral reefs, including a description of—

“(1) the location of each such incident;

“(2) vessel and ownership information relating to each such incident, if available;

“(3) the impacts of each such incident to coral reefs, coral reef ecosystems, and related natural resources;

“(4) the estimated cost of removal of the vessel, remediation, or restoration arising from each such incident;

“(5) any response actions taken by the owner of the vessel, the Administrator, the Commandant, or representatives of other Federal or State agencies;

“(6) the status of such response actions, including—

“(A) when the grounded vessel was removed, the costs of removal, and the how the removal was resourced;

“(B) a narrative and timeline of remediation or restoration activities undertaken by a Federal agency or agencies;

“(C) any emergency or disaster assistance provided under section 210 or 211;

“(D) any actions taken to prevent future grounding incidents; and

“(7) recommendations for additional navigational aids or other mechanisms for preventing future grounding incidents.

**“SEC. 213. RUTH D. GATES CORAL REEF CONSERVATION GRANT PROGRAM.**

“(a) IN GENERAL.—Subject to the availability of appropriations, the Administrator shall establish a program (to be known as the ‘Ruth D. Gates Coral Reef Conservation Grant Program’) to provide grants for projects for the conservation and restoration of coral reef ecosystems (in this section referred to as ‘coral reef projects’) pursuant to proposals approved by the Administrator in accordance with this section.

“(b) MATCHING REQUIREMENTS FOR GRANTS.—

“(1) IN GENERAL.—Except as provided in paragraph (3), Federal funds for any coral reef project for which a grant is provided under subsection (a) may not exceed 50 percent of the total cost of the project.

“(2) NON-FEDERAL SHARE.—The non-Federal share of the cost of a coral reef project may be provided by in-kind contributions and other noncash support.

“(3) WAIVER.—The Administrator may waive all or part of the matching requirement under paragraph (1) if the Administrator determines that no reasonable means are available through which an applicant can meet the matching requirement with respect to a coral reef project and the probable benefit of the project outweighs the public interest in the matching requirement.

“(c) ELIGIBILITY.—

“(1) IN GENERAL.—An entity described in paragraph (2) may submit to the Administrator a proposal for a coral reef project.

“(2) ENTITIES DESCRIBED.—An entity described in this paragraph is—

“(A) a covered reef manager or a covered Native entity—

“(i) with responsibility for coral reef management; or

“(ii) the activities of which directly or indirectly affect coral reefs or coral reef ecosystems;

“(B) a regional fishery management council established under the Magnuson-Stevens Fishery Conservation and Management Act (16 U.S.C. 1801 et seq.);

“(C) a coral reef stewardship partnership seeking to implement a coral reef action plan in effect under section 205;

“(D) a coral reef research center designated under section 214(b); or

“(E) another nongovernmental organization or research institution with demonstrated expertise in the conservation or restoration of coral reefs in practice or through significant contributions to the body of existing scientific research on coral reefs.

“(d) PROJECT PROPOSALS.—Each proposal for a grant under this section for a coral reef project shall include the following:

“(1) The name of the individual or entity responsible for conducting the project.

“(2) A description of the qualifications of the individual or entity.

“(3) A succinct statement of the purposes of the project.

“(4) An estimate of the funds and time required to complete the project.

“(5) Evidence of support for the project by appropriate representatives of States or other government jurisdictions in which the project will be conducted.

“(6) Information regarding the source and amount of matching funding available to the applicant.

“(7) A description of how the project meets one or more of the criteria under subsection (f)(2).

“(8) In the case of a proposal submitted by a coral reef stewardship partnership, a description of how the project aligns with the applicable coral reef action plan in effect under section 205.

“(9) Any other information the Administrator considers to be necessary for evaluating the eligibility of the project for a grant under this subsection.

“(e) PROJECT REVIEW AND APPROVAL.—

“(1) IN GENERAL.—The Administrator shall review each coral reef project proposal submitted under this section to determine if the project meets the criteria set forth in subsection (f).

“(2) PRIORITIZATION OF CONSERVATION PROJECTS.—The Administrator shall prioritize the awarding of funding for projects that meet the criteria for approval under subparagraphs (A) through (G) of subsection (f)(2) that are proposed to be conducted within priority areas identified for coral reef conservation by the Administrator under the national coral reef resilience strategy in effect under section 204.

“(3) PRIORITIZATION OF RESTORATION PROJECTS.—The Administrator shall prioritize the awarding of funding for projects that meet the criteria for approval under subparagraphs (E) through (L) of subsection (f)(2) that are proposed to be conducted within priority areas identified for coral reef restoration by the Administrator under the national coral reef resilience strategy in effect under section 204.

“(4) REVIEW; APPROVAL OR DISAPPROVAL.—Not later than 180 days after receiving a proposal for a coral reef project under this section, the Administrator shall—

“(A) request and consider written comments on the proposal from each Federal agency, State government, covered Native entity, or other government jurisdiction, including the relevant regional fishery management councils established under the Magnuson-Stevens Fishery Conservation and Management Act (16 U.S.C. 1801 et seq.), or any National Marine Sanctuary or Marine National Monument, with jurisdiction or management authority over coral reef ecosystems in the area where the project is to be conducted, including the extent to which the project is consistent with locally established priorities, unless such entities were directly involved in the development of the project proposal;

“(B) provide for the merit-based peer review of the proposal and require standardized documentation of that peer review;

“(C) after considering any written comments and recommendations based on the reviews under subparagraphs (A) and (B), approve or disapprove the proposal; and

“(D) provide written notification of that approval or disapproval, with summaries of all written comments, recommendations, and peer reviews, to the entity that submitted the proposal, and each of those States, covered Native entity, and other government jurisdictions that provided comments under subparagraph (A).

“(f) CRITERIA FOR APPROVAL.—The Administrator may not approve a proposal for a coral reef project under this section unless the project—

“(1) is consistent with—

“(A) the national coral reef resilience strategy in effect under section 204; and

“(B) any Federal or non-Federal coral reef action plans in effect under section 205 covering a coral reef or ecologically significant unit of a coral reef to be affected by the project; and

“(2) will enhance the conservation and restoration of coral reefs by—

“(A) addressing conflicts arising from the use of environments near coral reefs or from the use of corals, species associated with coral reefs, and coral products, including supporting consensus-driven, community-based planning and management initiatives for the protection of coral reef ecosystems;

“(B) improving compliance with laws that prohibit or regulate the taking of coral products or species associated with coral reefs or regulate the use and management of coral reef ecosystems;

“(C) designing and implementing networks of real-time water quality monitoring along coral reefs, including data collection related to turbidity, nutrient availability, harmful algal blooms, and plankton assemblages, with an emphasis on coral reefs impacted by agriculture and urban development;

“(D) promoting ecologically sound navigation and anchorages, including mooring buoy systems to promote enhanced recreational access, near coral reefs;

“(E) furthering the goals and objectives of coral reef action plans in effect under section 205;

“(F) mapping the location and distribution of coral reefs and potential coral reef habitat;

“(G) stimulating innovation to advance the ability of the United States to understand, research, or monitor coral reef ecosystems, or to develop management or adaptation options to conserve and restore coral reef ecosystems;

“(H) implementing research to ensure the population viability of listed coral species in United States waters as detailed in the population-based recovery criteria included in species-specific recovery plans consistent with the Endangered Species Act of 1973 (16 U.S.C. 1531 et seq.);

“(I) developing and implementing cost-effective methods to restore degraded coral reef ecosystems or to create geographically appropriate coral reef ecosystems in suitable waters, including by improving habitat or promoting success of keystone species, with an emphasis on novel restoration strategies and techniques to advance coral reef recovery and growth near population centers threatened by rising sea levels and storm surge;

“(J) translating and applying coral genetics research to coral reef ecosystem restoration, including research related to traits that promote resilience to increasing ocean temperatures, ocean acidification, coral bleaching, coral diseases, and invasive species;

“(K) developing and maintaining in situ native coral propagation sites; or

“(L) developing and maintaining ex situ coral propagation nurseries and land-based coral gene banks to—

“(i) conserve or augment genetic diversity of native coral populations;

“(ii) support captive breeding of rare coral species; or

“(iii) enhance resilience of native coral populations to increasing ocean temperatures, ocean acidification, coral bleaching, and coral diseases through selective breeding, conditioning, or other approaches that target genes, gene expression, phenotypic traits, or phenotypic plasticity.

“(g) FUNDING REQUIREMENTS.—To the extent practicable based upon proposals for coral reef projects submitted to the Administrator, the Administrator shall ensure that funding for grants awarded under this section during a fiscal year is distributed as follows:

“(1) Not less than 40 percent of funds available shall be awarded for projects in the Pacific Ocean within the maritime areas and zones subject to the jurisdiction or control of the United States.

“(2) Not less than 40 percent of the funds available shall be awarded for projects in the Atlantic Ocean, the Gulf of Mexico, or the Caribbean Sea within the maritime areas and zones subject to the jurisdiction or control of the United States.

“(3) Not more than 67 percent of funds distributed in each region in accordance with paragraphs (1) and (2) shall be made exclusively available to projects that are—

“(A) submitted by a coral reef stewardship partnership; and

“(B) consistent with the coral reef action plan in effect under section 205 by such a partnership.

“(4) Of the funds distributed to support projects in accordance with paragraph (3), not less than 20 percent and not more than 33 percent shall be awarded for projects submitted by a Federal coral reef stewardship partnership.

“(h) TASK FORCE.—The Administrator may consult with the Secretary of the Interior and the Task Force to obtain guidance in establishing priorities and evaluating proposals for coral reef projects under this section.

“SEC. 214. NON-FEDERAL CORAL REEF RESEARCH.

“(a) REEF RESEARCH COORDINATION INSTITUTES.—

“(1) ESTABLISHMENT.—The Administrator shall designate 2 reef research coordination institutes for the purpose of advancing and sustaining essential capabilities in coral reef research, one each in the Atlantic and Pacific basins, to be known as the ‘Atlantic Reef Research Coordination Institute’ and the ‘Pacific Reef Research Coordination Institute’, respectively.

“(2) MEMBERSHIP.—Each institute designated under paragraph (1) shall be housed within a single coral reef research center designated by the Administrator under subsection (b) and may enter into contracts with other coral reef research centers designated under subsection (b) within the same basin to support the institute’s capacity and reach.

“(3) FUNCTIONS.—The institutes designated under paragraph (1) shall—

“(A) conduct federally directed research to fill national and regional coral reef ecosystem research gaps and improve understanding of, and responses to, continuing and emerging threats to the resilience of United States coral reef ecosystems consistent with the national coral reef resilience strategy in effect under section 204;

“(B) support ecological research and monitoring to study the effects of conservation and restoration activities funded by this title on promoting more effective coral reef management and restoration; and

“(C) through agreements—

“(i) collaborate directly with governmental resource management agencies, coral reef stewardship partnerships, nonprofit organizations, and other coral reef research centers designated under subsection (b);

“(ii) assist in the development and implementation of—

“(I) the national coral reef resilience strategy under section 204; and

“(II) coral reef action plans under section 205;

“(iii) build capacity within non-Federal governmental resource management agencies to establish research priorities and translate and apply research findings to management and restoration practices; and

“(iv) conduct public education and awareness programs for policymakers, resource managers, and the general public on—

“(I) coral reefs and coral reef ecosystems;

“(II) best practices for coral reef ecosystem management and restoration;

“(III) the value of coral reefs; and

“(IV) the threats to the sustainability of coral reef ecosystems.

“(b) CORAL REEF RESEARCH CENTERS.—

“(1) IN GENERAL.—The Administrator shall—

“(A) periodically solicit applications for designation of qualifying institutions in covered States as coral reef research centers; and

“(B) designate all qualifying institutions in covered States as coral reef research centers.

“(2) QUALIFYING INSTITUTIONS.—For purposes of paragraph (1), an institution is a qualifying institution if the Administrator determines that the institution—

“(A) is operated by an institution of higher education or nonprofit marine research organization;

“(B) has established management-driven national or regional coral reef research or restoration programs;

“(C) has demonstrated abilities to coordinate closely with appropriate Federal and State agencies, as well as other academic and nonprofit organizations; and

“(D) maintains significant local community engagement and outreach programs related to coral reef ecosystems.

**“SEC. 215. REPORTS ON ADMINISTRATION.**

“Not later than 3 years after the date of the enactment of the Restoring Resilient Reefs Act of 2022, and every 2 years thereafter, the Administrator shall submit to the appropriate congressional committees, the Committee on Appropriations of the Senate, and the Committee on Appropriations of the House of Representatives a report on the administration of this title during the 2-year period preceding submission of the report, including—

“(1) a description of all activities undertaken to implement the most recent national coral reef resilience strategy under section 204;

“(2) a statement of all funds obligated under the authorities of this title; and

“(3) a summary, disaggregated by State, of Federal and non-Federal contributions toward the costs of each project or activity funded, in full or in part, under the authorities of this title.

**“SEC. 216. CORAL REEF PRIZE COMPETITIONS.**

“(a) IN GENERAL.—The head of any Federal agency with a representative serving on the United States Coral Reef Task Force established by Executive Order 13089 (16 U.S.C. 6401 note; relating to coral reef protection), may, individually or in cooperation with one or more agencies, carry out a program to award prizes competitively under section 24 of the Stevenson-Wylder Technology Innovation Act of 1980 (15 U.S.C. 3719).

“(b) PURPOSES.—Any program carried out under this section shall be for the purpose of stimulating innovation to advance the ability of the United States to understand, research, or monitor coral reef ecosystems, or to develop management or adaptation options to preserve, sustain, and restore coral reef ecosystems.

“(c) PRIORITY PROGRAMS.—Priority shall be given to establishing programs under this section that address communities, environments, or industries that are in distress as a result of the decline or degradation of coral reef ecosystems, including—

“(1) scientific research and monitoring that furthers the understanding of causes behind coral reef decline and degradation and the generally slow recovery following disturbances, including ocean acidification, temperature-related bleaching, disease, and their associated impacts on coral physiology;

“(2) the development of monitoring or management options for communities or industries that are experiencing significant financial hardship;

“(3) the development of adaptation options to alleviate economic harm and job loss caused by damage to coral reef ecosystems;

“(4) the development of measures to help vulnerable communities or industries, with

an emphasis on rural communities and businesses; and

“(5) the development of adaptation and management options for impacted tourism industries.”;

(3) in section 217, as redesignated by paragraph (1)—

(A) in subsection (c), by striking “section 204” and inserting “section 213”;

(B) in subsection (d), by striking “under section 207” and inserting “authorized under this title”; and

(C) by adding at the end the following:

“(e) BLOCK GRANTS.—There is authorized to be appropriated to the Administrator \$10,000,000 for each of fiscal years 2023 through 2027 to carry out section 207.

“(f) COOPERATIVE AGREEMENTS.—There is authorized to be appropriated to the Administrator \$10,000,000 for each of fiscal years 2023 through 2027 to carry out section 208.

“(g) NON-FEDERAL CORAL REEF RESEARCH.—There is authorized to be appropriated to the Administrator \$4,500,000 for each of fiscal years 2023 through 2027 for agreements with the reef research coordination institutes designated under section 214.”; and

(4) by amending section 218, as redesignated by paragraph (1), to read as follows:

**“SEC. 218. DEFINITIONS.**

“In this title:

“(1) ADMINISTRATOR.—The term ‘Administrator’ means the Administrator of the National Oceanic and Atmospheric Administration.

“(2) ALASKA NATIVE CORPORATION.—The term ‘Alaska Native Corporation’ has the meaning given the term ‘Native Corporation’ in section 3 of the Alaska Native Claims Settlement Act (43 U.S.C. 1602).

“(3) APPROPRIATE CONGRESSIONAL COMMITTEES.—The term ‘appropriate congressional committees’ means the Committee on Commerce, Science, and Transportation of the Senate and the Committee on Natural Resources of the House of Representatives.

“(4) CONSERVATION.—The term ‘conservation’ means the use of methods and procedures necessary to preserve or sustain native corals and associated species as diverse, viable, and self-perpetuating coral reef ecosystems with minimal impacts from invasive species, including—

“(A) all activities associated with resource management, such as monitoring, assessment, protection, restoration, sustainable use, management of habitat, and maintenance or augmentation of genetic diversity;

“(B) mapping;

“(C) scientific expertise and technical assistance in the development and implementation of management strategies for marine protected areas and marine resources consistent with the National Marine Sanctuaries Act (16 U.S.C. 1431 et seq.) and the Magnuson-Stevens Fishery Conservation and Management Act (16 U.S.C. 1801 et seq.);

“(D) law enforcement;

“(E) conflict resolution initiatives;

“(F) community outreach and education; and

“(G) promotion of safe and ecologically sound navigation and anchoring.

“(5) CORAL.—The term ‘coral’ means species of the phylum Cnidaria, including—

“(A) all species of the orders Antipatharia (black corals), Scleractinia (stony corals), Alcyonacea (soft corals, organ pipe corals, gorgonians), and Helioporacea (blue coral), of the class Anthozoa; and

“(B) all species of the order Anthoathecata (fire corals and other hydrocorals) of the class Hydrozoa.

“(6) CORAL PRODUCTS.—The term ‘coral products’ means any living or dead specimens, parts, or derivatives, or any product

containing specimens, parts, or derivatives, of any species referred to in paragraph (5).

“(7) CORAL REEF.—The term ‘coral reef’ means calcium carbonate structures in the form of a reef or shoal, composed in whole or in part by living coral, skeletal remains of coral, crustose coralline algae, and other associated sessile marine plants and animals.

“(8) CORAL REEF ECOSYSTEM.—The term ‘coral reef ecosystem’ means—

“(A) corals and other geographically and ecologically associated marine communities of other reef organisms (including reef plants and animals) associated with coral reef habitat; and

“(B) the biotic and abiotic factors and processes that control or affect coral calcification rates, tissue growth, reproduction, recruitment, abundance, coral-algal symbiosis, and biodiversity in such habitat.

“(9) COVERED NATIVE ENTITY.—The term ‘covered Native entity’ means a Native entity of a covered State with interests in a coral reef ecosystem.

“(10) COVERED REEF MANAGER.—The term ‘covered reef manager’ means—

“(A) a management unit of a covered State with jurisdiction over a coral reef ecosystem;

“(B) a covered State; or

“(C) a coral reef stewardship partnership under section 206(d).

“(11) COVERED STATE.—The term ‘covered State’ means Florida, Hawaii, and the territories of American Samoa, the Commonwealth of the Northern Mariana Islands, Guam, Puerto Rico, and the United States Virgin Islands.

“(12) FEDERAL REEF MANAGER.—

“(A) IN GENERAL.—The term ‘Federal reef manager’ means—

“(i) a management unit of a Federal agency specified in subparagraph (B) with lead management jurisdiction over a coral reef ecosystem; or

“(ii) a coral reef stewardship partnership under section 206(c).

“(B) FEDERAL AGENCIES SPECIFIED.—A Federal agency specified in this subparagraph is one of the following:

“(i) The National Oceanic and Atmospheric Administration.

“(ii) The National Park Service.

“(iii) The United States Fish and Wildlife Service.

“(iv) The Office of Insular Affairs.

“(C) AGENCY JURISDICTION.—Nothing in this Act shall be construed to expand the management authority of a Federal agency specified in subparagraph (B) or a coral reef stewardship partnership under section 206(c) to coral reefs or coral reef ecosystems outside the boundaries of the jurisdiction of the agency or partnership.

“(13) INSTITUTION OF HIGHER EDUCATION.—The term ‘institution of higher education’ has the meaning given that term in section 101 of the Higher Education Act of 1965 (20 U.S.C. 1001).

“(14) INTERESTED STAKEHOLDER GROUPS.—The term ‘interested stakeholder groups’ includes community members such as businesses, commercial and recreational fishermen, other recreationalists, covered Native entities, Federal, State, and local government units with related jurisdiction, institutional organizations of higher education, and nongovernmental organizations.

“(15) NATIVE ENTITY.—The term ‘Native entity’ means any of the following:

“(A) An Indian Tribe (as defined in section 4 of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 5304)).

“(B) An Alaska Native Corporation.

“(C) The Department of Hawaiian Home Lands.

“(D) The Office of Hawaiian Affairs.

“(E) A Native Hawaiian organization (as defined in section 6207 of the Elementary and



Secondary Education Act of 1965 (20 U.S.C. 7517)).

“(16) NONPROFIT ORGANIZATION.—The term ‘nonprofit organization’ means any corporation, trust, association, cooperative, or other organization, not including an institutions of higher education, that—

“(A) is operated primarily for scientific, educational, service, charitable, or similar purposes in the public interest;

“(B) is not organized primarily for profit; and

“(C) uses net proceeds to maintain, improve, or expand the operations of the organization.

“(17) RESTORATION.—The term ‘restoration’ means the use of methods and procedures necessary to enhance, rehabilitate, recreate, or create a functioning coral reef or coral reef ecosystem, in whole or in part, within suitable waters of the historical geographic range of such ecosystems, to provide ecological, economic, cultural, or coastal resiliency services associated with healthy coral reefs and benefit native populations of coral reef organisms.

“(18) RESILIENCE.—The term ‘resilience’ means the capacity for corals within their native range, coral reefs, or coral reef ecosystems to resist and recover from natural and human disturbances, and maintain structure and function to provide ecosystem services, as determined by clearly identifiable, measurable, and science-based standards.

“(19) SECRETARY.—The term ‘Secretary’ means the Secretary of Commerce.

“(20) STATE.—The term ‘State’ means—

“(A) any State of the United States that contains a coral reef ecosystem within its seaward boundaries;

“(B) American Samoa, the Commonwealth of the Northern Mariana Islands, Guam, Puerto Rico, or the United States Virgin Islands; or

“(C) any other territory or possession of the United States or separate sovereign in free association with the United States that contains a coral reef ecosystem within its seaward boundaries.

“(21) STEWARDSHIP.—The term ‘stewardship’, with respect to a coral reef, includes conservation, restoration, and public outreach and education.

“(22) TASK FORCE.—The term ‘Task Force’ means the United States Coral Reef Task Force established under section 201 of the Restoring Resilient Reefs Act of 2022.”

(b) CONFORMING AMENDMENT TO NATIONAL OCEANS AND COASTAL SECURITY ACT.—Section 905(a) of the National Oceans and Coastal Security Act (16 U.S.C. 7504(a)) is amended by striking “and coastal infrastructure” and inserting “, coastal infrastructure, and ecosystem services provided by natural systems such as coral reefs”.

#### Subtitle B—United States Coral Reef Task Force

##### SEC. 5121. ESTABLISHMENT.

There is established a task force to lead, coordinate, and strengthen Federal Government actions to better preserve, conserve, and restore coral reef ecosystems, to be known as the “United States Coral Reef Task Force” (in this subtitle referred to as the “Task Force”).

##### SEC. 5122. DUTIES.

The duties of the Task Force shall be—

(1) to coordinate, in cooperation with covered States, covered Native entities, Federal reef managers, covered reef managers, coral reef research centers designated under section 214(b) of the Coral Reef Conservation Act of 2000 (as amended by section 5111), and other nongovernmental and academic partners as appropriate, activities regarding the mapping, monitoring, research, conserva-

tion, mitigation, and restoration of coral reefs and coral reef ecosystems;

(2) to monitor and advise regarding implementation of the policy and Federal agency responsibilities set forth in—

(A) Executive Order 13089 (63 Fed. Reg. 32701; relating to coral reef protection); and

(B) the national coral reef resilience strategy developed under section 204 of the Coral Reef Conservation Act of 2000, as amended by section 5111;

(3) to work, in coordination with the other members of the Task Force—

(A) to assess the United States role in international trade and protection of coral species;

(B) to encourage implementation of appropriate strategies and actions to promote conservation and sustainable use of coral reef resources worldwide; and

(C) to collaborate with international communities successful in managing coral reefs;

(4) to provide technical assistance for the development and implementation, as appropriate, of—

(A) the national coral reef resilience strategy under section 204 of the Coral Reef Conservation Act of 2000, as amended by section 5111; and

(B) coral reef action plans under section 205 of that Act; and

(5) to produce a report each year, for submission to the appropriate congressional committees and publication on a publicly available internet website of the Task Force, highlighting the status of the coral reef equities of a covered State on a rotating basis, including—

(A) a summary of recent coral reef management and restoration activities undertaken in that State; and

(B) updated estimates of the direct and indirect economic activity supported by, and other benefits associated with, those coral reef equities.

##### SEC. 5123. MEMBERSHIP.

(a) VOTING MEMBERSHIP.—The voting members of the Task Force shall be—

(1) the Under Secretary of Commerce for Oceans and Atmosphere and the Secretary of Interior, who shall be co-chairpersons of the Task Force;

(2) such representatives from other Federal agencies as the President, in consultation with the Under Secretary, determines appropriate; and

(3) the Governor, or a representative of the Governor, of each covered State.

(b) NONVOTING MEMBERS.—The Task Force shall have the following nonvoting members:

(1) A member of the South Atlantic Fishery Management Council who is designated by the Governor of Florida under section 302(b)(1) of the Magnuson-Stevens Fishery Conservation and Management Act (16 U.S.C. 1852(b)(1)).

(2) A member of the Gulf of Mexico Fishery Management Council who is designated by the Governor of Florida under such section.

(3) A member of the Western Pacific Fishery Management Council who is designated under such section and selected as follows:

(A) For the period beginning on the date of the enactment of this Act and ending on December 31 of the calendar year during which such date of enactment occurs, the member shall be selected jointly by the governors of Hawaii, American Samoa, Guam, and the Commonwealth of the Northern Mariana Islands.

(B) For each calendar year thereafter, the governors of Hawaii, American Samoa, Guam, and the Commonwealth of the Northern Mariana Islands shall, on a rotating basis, take turns selecting the member.

(4) A member of the Caribbean Fishery Management Council who is designated under such section and selected as follows:

(A) For the period beginning on the date of the enactment of this Act and ending on December 31 of the calendar year during which such date of enactment occurs, the member shall be selected jointly by the governors of Puerto Rico and the United States Virgin Islands.

(B) For each calendar year thereafter, the governors of Puerto Rico and the United States Virgin Islands shall, on an alternating basis, take turns selecting the member.

(5) A member appointed by the President of the Federated States of Micronesia.

(6) A member appointed by the President of the Republic of the Marshall Islands.

(7) A member appointed by the President of the Republic of Palau.

##### SEC. 5124. RESPONSIBILITIES OF FEDERAL AGENCY MEMBERS.

(a) IN GENERAL.—A member of the Task Force described in section 5123(a) shall—

(1) identify the actions of the agency that member represents that may affect coral reef ecosystems;

(2) utilize the programs and authorities of that agency to protect and enhance the conditions of such ecosystems, including through the promotion of basic and applied scientific research;

(3) collaborate with the Task Force to appropriately reflect budgetary needs for coral reef conservation and restoration activities in all agency budget planning and justification documents and processes; and

(4) engage in any other coordinated efforts approved by the Task Force.

(b) CO-CHAIRPERSONS.—In addition to their responsibilities under subsection (a), the co-chairpersons of the Task Force shall administer performance of the functions of the Task Force and facilitate the coordination of the members of the Task Force described in section 5123(a).

##### SEC. 5125. WORKING GROUPS.

(a) IN GENERAL.—The co-chairpersons of the Task Force may establish working groups as necessary to meet the goals and carry out the duties of the Task Force.

(b) REQUESTS FROM MEMBERS.—The members of the Task Force may request that the co-chairpersons establish a working group under subsection (a).

(c) PARTICIPATION BY NONGOVERNMENTAL ORGANIZATIONS.—The co-chairpersons may allow nongovernmental organizations as appropriate, including academic institutions, conservation groups, and commercial and recreational fishing associations, to participate in a working group established under subsection (a).

(d) NONAPPLICABILITY OF FEDERAL ADVISORY COMMITTEE ACT.—The Federal Advisory Committee Act (5 U.S.C. App.) shall not apply to working groups established under this section.

##### SEC. 5126. DEFINITIONS.

In this subtitle:

(1) APPROPRIATE CONGRESSIONAL COMMITTEES.—The term “appropriate congressional committees” means—

(A) the Committee on Commerce, Science, and Transportation of the Senate; and

(B) the Committee on Natural Resources of the House of Representatives.

(2) CONSERVATION, CORAL, CORAL REEF, ETC.—The terms “conservation”, “coral”, “coral reef”, “coral reef ecosystem”, “covered Native entity”, “covered reef manager”, “covered State”, “Federal reef manager”, “Native entity”, “restoration”, “resilience”, and “State” have the meanings given those terms in section 218 of the Coral Reef Conservation Act of 2000, as amended by section 5111.



**Subtitle C—Department of the Interior Coral Reef Authorities****SEC. 5131. CORAL REEF CONSERVATION AND RESTORATION ASSISTANCE.**

(a) IN GENERAL.—The Secretary of the Interior may provide scientific expertise and technical assistance, and subject to the availability of appropriations, financial assistance for the conservation and restoration of coral reefs consistent with all applicable laws governing resource management in Federal, State, and Tribal waters, including—

(1) the national coral reef resilience strategy in effect under section 204 of the Coral Reef Conservation Act of 2000, as amended by section 5111; and

(2) coral reef action plans in effect under section 205 of that Act, as applicable.

(b) CORAL REEF INITIATIVE.—The Secretary may establish a Coral Reef Initiative Program—

(1) to provide grant funding to support local management, conservation, and protection of coral reef ecosystems in—

(A) coastal areas of covered States; and

(B) Freely Associated States;

(2) to enhance resource availability of National Park Service and National Wildlife Refuge System management units to implement coral reef conservation and restoration activities;

(3) to complement the other conservation and assistance activities conducted under this Act or the Coral Reef Conservation Act of 2000, as amended by section 5111; and

(4) to provide other technical, scientific, and financial assistance and conduct conservation and restoration activities that advance the purposes of this title and the Coral Reef Conservation Act of 2000, as amended by section 5111.

(c) CONSULTATION WITH THE DEPARTMENT OF COMMERCE.—

(1) CORAL REEF CONSERVATION AND RESTORATION ACTIVITIES.—The Secretary of the Interior may consult with the Secretary of Commerce regarding the conduct of any activities to conserve and restore coral reefs and coral reef ecosystems in waters managed under the jurisdiction of the Federal agencies specified in paragraphs (2) and (3) of section 203(c) of the Coral Reef Conservation Act of 2000, as amended by section 5111.

(2) AWARD OF CORAL REEF MANAGEMENT FELLOWSHIP.—The Secretary of the Interior shall consult with the Secretary of Commerce to award the Susan L. Williams Coral Reef Management Fellowship under subtitle D.

(d) COOPERATIVE AGREEMENTS.—Subject to the availability of appropriations, the Secretary of the Interior may enter into cooperative agreements with covered reef managers to fund coral reef conservation and restoration activities in waters managed under the jurisdiction of such managers that—

(1) are consistent with the national coral reef resilience strategy in effect under section 204 of the Coral Reef Conservation Act of 2000, as amended by section 5111; and

(2) support and enhance the success of coral reef action plans in effect under section 205 of that Act.

(e) DEFINITIONS.—In this section:

(1) CONSERVATION, CORAL, CORAL REEF, ETC.—The terms “conservation”, “coral reef”, “covered reef manager”, “covered State”, “restoration”, and “State” have the meanings given those terms in section 218 of the Coral Reef Conservation Act of 2000, as amended by section 5111.

(2) TRIBE, TRIBAL.—The terms “Tribe” and “Tribal” refer to Indian Tribes (as defined in section 102 of the Federally Recognized Indian Tribe List Act of 1994 (25 U.S.C. 5130)).

**Subtitle D—Susan L. Williams National Coral Reef Management Fellowship****SEC. 5141. SHORT TITLE.**

This subtitle may be cited as the “Susan L. Williams National Coral Reef Management Fellowship Act of 2022”.

**SEC. 5142. DEFINITIONS.**

In this subtitle:

(1) ALASKA NATIVE CORPORATION.—The term “Alaska Native Corporation” has the meaning given the term “Native Corporation” in section 3 of the Alaska Native Claims Settlement Act (43 U.S.C. 1602).

(2) FELLOW.—The term “fellow” means a National Coral Reef Management Fellow.

(3) FELLOWSHIP.—The term “fellowship” means the National Coral Reef Management Fellowship established in section 5143.

(4) COVERED NATIVE ENTITY.—The term “covered Native entity” means a Native entity of a covered State with interests in a coral reef ecosystem.

(5) COVERED STATE.—The term “covered State” means Florida, Hawaii, and the territories of American Samoa, the Commonwealth of the Northern Mariana Islands, Guam, Puerto Rico, and the United States Virgin Islands.

(6) NATIVE ENTITY.—The term “Native entity” means any of the following:

(A) An Indian Tribe (as defined in section 4 of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 5304)).

(B) An Alaska Native Corporation.

(C) The Department of Hawaiian Home Lands.

(D) The Office of Hawaiian Affairs.

(E) A Native Hawaiian organization (as defined in section 6207 of the Elementary and Secondary Education Act of 1965 (20 U.S.C. 7517)).

(7) SECRETARY.—The term “Secretary” means the Secretary of Commerce.

**SEC. 5143. ESTABLISHMENT OF FELLOWSHIP PROGRAM.**

(a) IN GENERAL.—There is established a National Coral Reef Management Fellowship Program.

(b) PURPOSES.—The purposes of the fellowship are—

(1) to encourage future leaders of the United States to develop additional coral reef management capacity in States and local communities with coral reefs;

(2) to provide management agencies of covered States or covered Native entities with highly qualified candidates whose education and work experience meet the specific needs of each covered State or covered Native entity; and

(3) to provide fellows with professional experience in management of coastal and coral reef resources.

**SEC. 5144. FELLOWSHIP AWARDS.**

(a) IN GENERAL.—The Secretary, in partnership with the Secretary of the Interior, shall award the fellowship in accordance with this section.

(b) TERM OF FELLOWSHIP.—A fellowship awarded under this section shall be for a term of not more than 24 months.

(c) QUALIFICATIONS.—The Secretary shall award the fellowship to individuals who have demonstrated—

(1) an intent to pursue a career in marine services and outstanding potential for such a career;

(2) leadership potential, actual leadership experience, or both;

(3) a college or graduate degree in biological science, a resource management college or graduate degree with experience that correlates with aptitude and interest for marine management, or both;

(4) proficient writing and speaking skills; and

(5) such other attributes as the Secretary considers appropriate.

**SEC. 5145. MATCHING REQUIREMENT.**

(a) IN GENERAL.—Except as provided in subsection (b), the non-Federal share of the costs of a fellowship under this section shall be 25 percent of such costs.

(b) WAIVER OF REQUIREMENTS.—The Secretary may waive the application of subsection (a) if the Secretary finds that such waiver is necessary to support a project that the Secretary has identified as a high priority.

**TITLE LII—BOLSTERING LONG-TERM UNDERSTANDING AND EXPLORATION OF THE GREAT LAKES, OCEANS, BAYS, AND ESTUARIES****SEC. 5201. SHORT TITLE.**

This title may be cited as the “Bolstering Long-term Understanding and Exploration of the Great Lakes, Oceans, Bays, and Estuaries Act” or the “BLUE GLOBE Act”.

**SEC. 5202. PURPOSE.**

The purpose of this title is to promote and support—

(1) the monitoring, understanding, and exploration of the Great Lakes, oceans, bays, estuaries, and coasts; and

(2) the collection, analysis, synthesis, and sharing of data related to the Great Lakes, oceans, bays, estuaries, and coasts to facilitate science and operational decision making.

**SEC. 5203. SENSE OF CONGRESS.**

It is the sense of Congress that Federal agencies should optimize data collection, management, and dissemination, to the extent practicable, to maximize their impact for research, conservation, commercial, regulatory, national security, and educational benefits and to foster innovation, scientific discoveries, the development of commercial products, and the development of sound policy with respect to the Great Lakes, oceans, bays, estuaries, and coasts.

**SEC. 5204. DEFINITIONS.**

In this title:

(1) ADMINISTRATOR.—The term “Administrator” means the Under Secretary of Commerce for Oceans and Atmosphere in the Under Secretary’s capacity as Administrator of the National Oceanic and Atmospheric Administration.

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

**SEC. 5205. WORKFORCE STUDY.**

(a) IN GENERAL.—Section 303(a) of the America COMPETES (A) Reauthorization Act of 2010 (33 U.S.C. 893c(a)) is amended—

(1) in the matter preceding paragraph (1), by striking “Secretary of Commerce” and inserting “Under Secretary of Commerce for Oceans and Atmosphere”;

(2) in paragraph (2), by inserting “, skillsets, or credentials” after “degrees”;

(3) in paragraph (3), by inserting “or highly qualified technical professionals and tradespeople” after “atmospheric scientists”;

(4) in paragraph (4), by inserting “, skillsets, or credentials” after “degrees”;

(5) in paragraph (5)—

(A) by striking “scientist”; and

(B) by striking “; and” and inserting “, observations, and monitoring”;

(6) in paragraph (6), by striking “into Federal” and all that follows and inserting “, technical professionals, and tradespeople into Federal career positions”;

(7) by redesignating paragraphs (2) through (6) as paragraphs (3) through (7), respectively;

(8) by inserting after paragraph (1) the following:

“(2) whether there is a shortage in the number of individuals with technical or

trade-based skillsets or credentials suited to a career in oceanic and atmospheric data collection, processing, satellite production, or satellite operations;"; and

(9) by adding at the end the following:

"(8) workforce diversity and actions the Federal Government can take to increase diversity in the scientific workforce; and

"(9) actions the Federal Government can take to shorten the hiring backlog for such workforce."

(b) COORDINATION.—Section 303(b) of such Act (33 U.S.C. 893c(b)) is amended by striking "Secretary of Commerce" and inserting "Under Secretary of Commerce for Oceans and Atmosphere".

(c) REPORT.—Section 303(c) of such Act (33 U.S.C. 893c(c)) is amended—

(1) by striking "the date of enactment of this Act" and inserting "the date of the enactment of the Bolstering Long-term Understanding and Exploration of the Great Lakes, Oceans, Bays, and Estuaries Act";

(2) by striking "Secretary of Commerce" and inserting "Under Secretary of Commerce for Oceans and Atmosphere"; and

(3) by striking "to each committee" and all that follows through "section 302 of this Act" and inserting "to the Committee on Commerce, Science, and Transportation of the Senate and the Committee on Natural Resources and the Committee on Science, Space, and Technology of the House of Representatives".

(d) PROGRAM AND PLAN.—Section 303(d) of such Act (33 U.S.C. 893c(d)) is amended—

(1) by striking "Administrator of the National Oceanic and Atmospheric Administration" and inserting "Under Secretary of Commerce for Oceans and Atmosphere"; and

(2) by striking "academic partners" and all that follows and inserting "academic partners".

#### SEC. 5206. ACCELERATING INNOVATION AT COOPERATIVE INSTITUTES.

(a) FOCUS ON EMERGING TECHNOLOGIES.—The Administrator shall consider evaluating the goals of one or more Cooperative Institutes of the National Oceanic and Atmospheric Administration to include focusing on advancing or applying emerging technologies, which may include—

(1) applied uses and development of real-time and other advanced genetic technologies and applications, including such technologies and applications that derive genetic material directly from environmental samples without any obvious signs of biological source material;

(2) deployment of, and improvements to, the durability, maintenance, and other lifecycle concerns of advanced unmanned vehicles, regional small research vessels, and other research vessels that support and launch unmanned vehicles and sensors; and

(3) supercomputing and big data management, including data collected through model outputs, electronic monitoring, and remote sensing.

(b) COORDINATION WITH OTHER PROGRAMS.—If appropriate, the Cooperative Institutes shall work with the Interagency Ocean Observation Committee, the regional associations of the Integrated Ocean Observing System, and other ocean observing programs to coordinate technology needs and the transition of new technologies from research to operations.

#### SEC. 5207. BLUE ECONOMY VALUATION.

(a) MEASUREMENT OF BLUE ECONOMY INDUSTRIES.—The Administrator, in consultation with the heads of other relevant Federal agencies, shall establish a program to improve the collection, aggregation, and analysis of data to measure the value and impact of industries related to the Great Lakes, oceans, bays, estuaries, and coasts on the

economy of the United States, including military uses, living resources, marine construction, marine transportation, offshore energy development and siting including for renewable energy, offshore mineral production, ship and boat building, tourism, recreation, subsistence, commercial, recreational, and charter fishing, seafood processing, and other fishery-related businesses, aquaculture such as kelp and shellfish, and other industries the Administrator considers appropriate (known as "Blue Economy" industries).

(b) COLLABORATION.—In carrying out subsection (a), the Administrator shall—

(1) work with the Director of the Bureau of Economic Analysis and the heads of other relevant Federal agencies to develop a Coastal and Ocean Economy Satellite Account that includes national, Tribal, and State-level statistics to measure the contribution of the Great Lakes, oceans, bays, estuaries, and coasts to the overall economy of the United States; and

(2) collaborate with national and international organizations and governments to promote consistency of methods, measurements, and definitions to ensure comparability of results between countries.

(c) REPORT.—Not less frequently than once every 2 years until the date that is 20 years after the date of the enactment of this Act, the Administrator, in consultation with the heads of other relevant Federal agencies, shall publish a report that—

(1) defines the Blue Economy, in coordination with Indian Tribes, academia, the private sector, nongovernmental organizations, and other relevant experts;

(2) makes recommendations for updating North American Industry Classification System (NAICS) reporting codes to reflect the Blue Economy; and

(3) provides a comprehensive estimate of the value and impact of the Blue Economy with respect to each State and territory of the United States, including—

(A) the value and impact of—

(i) economic activities that are dependent upon the resources of the Great Lakes, oceans, bays, estuaries, and coasts;

(ii) the population and demographic characteristics of the population along the coasts;

(iii) port and shoreline infrastructure;

(iv) the volume and value of cargo shipped by sea or across the Great Lakes;

(v) data collected from the Great Lakes, oceans, bays, estuaries, and coasts, including such data collected by businesses that purchase and commodify the data, including weather prediction and seasonal agricultural forecasting; and

(vi) military uses; and

(B) to the extent possible, the qualified value and impact of the natural capital of the Great Lakes, oceans, bays, estuaries, and coasts with respect to tourism, recreation, natural resources, and cultural heritage, including other indirect values.

#### SEC. 5208. NO ADDITIONAL FUNDS AUTHORIZED.

No additional funds are to be authorized to carry out this title.

#### SEC. 5209. NO ADDITIONAL FUNDS AUTHORIZED.

No additional funds are authorized to be appropriated to carry out this title.

### TITLE LIII—REGIONAL OCEAN PARTNERSHIPS

#### SEC. 5301. SHORT TITLE.

This title may be cited as the "Regional Ocean Partnership Act".

#### SEC. 5302. FINDINGS; SENSE OF CONGRESS; PURPOSES.

(a) FINDINGS.—Congress makes the following findings:

(1) The ocean and coastal waters and the Great Lakes of the United States are

foundational to the economy, security, 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, beauty, and enjoyment.

(2) Over many years, the resource productivity and water quality of the ocean, coastal, and Great Lakes 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) The ocean, coastal, and Great Lakes areas of the United States are managed by State and Federal resource agencies and Indian Tribes 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) Indian Tribes have unique expertise and knowledge important for the stewardship of the ocean and coastal waters and the Great Lakes of the United States.

(b) SENSE OF CONGRESS.—It is the sense of Congress that—

(1) the United States should seek to support interstate coordination of shared regional priorities relating to the management, conservation, resilience, and restoration of ocean, coastal, and Great Lakes areas to maximize efficiencies through collaborative regional efforts by Regional Ocean Partnerships, in coordination with Federal and State agencies, Indian Tribes, and local authorities;

(2) such efforts would enhance existing and effective ocean, coastal, and Great Lakes management efforts of States and Indian Tribes based on shared regional priorities; and

(3) Regional Ocean Partnerships should coordinate with Indian Tribes.

(c) PURPOSES.—The purposes of this title are as follows:

(1) To complement and expand cooperative voluntary efforts intended to manage, conserve, and restore ocean, coastal, and Great Lakes areas spanning across multiple State and Indian Tribe jurisdictions.

(2) To expand Federal support for monitoring, data management, restoration, research, and conservation activities in ocean, coastal, and Great Lakes areas.

(3) To commit the United States to a comprehensive cooperative program to achieve improved water quality in, and improvements in the productivity of living resources of, oceans, coastal, and Great Lakes ecosystems.

(4) To authorize Regional Ocean Partnerships as intergovernmental coordinators for shared regional priorities among States and Indian Tribes 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 empower States to take a lead role in managing oceans, coastal, and Great Lakes areas.

(6) To incorporate rights of Indian Tribes in the management of oceans, coasts, and Great Lakes resources and provide resources to support Indian Tribe participation in and engagement with Regional Ocean Partnerships.

(7) 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 (6).

**SEC. 5303. REGIONAL OCEAN PARTNERSHIPS.**

(a) **DEFINITIONS.**—In this section:

(1) **ADMINISTRATOR.**—The term “Administrator” means the Administrator of the National Oceanic and Atmospheric Administration.

(2) **COASTAL STATE.**—The term “coastal state” has the meaning given that term in section 304 of the Coastal Zone Management Act of 1972 (16 U.S.C. 1453).

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

(4) **REGIONAL OCEAN PARTNERSHIP.**—The term “Regional Ocean Partnership” means a Regional Ocean Partnership, a Regional Coastal Partnership, or a Regional Great Lakes Partnership.

(b) **REGIONAL OCEAN PARTNERSHIPS.**—

(1) **IN GENERAL.**—A coastal state may participate in a Regional Ocean Partnership with one or more—

(A) coastal states that share a common ocean or coastal area with the coastal state, without regard to whether the coastal states are contiguous; and

(B) States—

(i) with which the coastal state shares a common watershed; or

(ii) that would contribute to the priorities of the partnership.

(2) **GREAT LAKES.**—A partnership consisting of one or more coastal states bordering one or more of the Great Lakes may be known as a “Regional Coastal Partnership” or a “Regional Great Lakes Partnership”.

(3) **APPLICATION.**—The Governor of a coastal state or the Governors of a group of coastal states may apply to the Secretary of Commerce, on behalf of a partnership, for the partnership to receive designation as a Regional Ocean Partnership if the partnership—

(A) meets the requirements under paragraph (4); and

(B) submits an application for such designation in such manner, in such form, and containing such information as the Secretary may require.

(4) **REQUIREMENTS.**—A partnership is eligible for designation as a Regional Ocean Partnership by the Secretary under paragraph (3) if the partnership—

(A) is established to coordinate the management of ocean, coastal, and Great Lakes resources among State governments and Indian Tribes;

(B) focuses on the environmental issues affecting the ocean, coastal, and Great Lakes areas of the members participating in the partnership;

(C) complements existing coastal and ocean management efforts of States and Indian Tribes on an interstate scale, focusing on shared regional priorities;

(D) does not have a regulatory function; and

(E) is not duplicative of an existing Regional Ocean Partnership designated under paragraph (5), as determined by the Secretary.

(5) **DESIGNATION OF CERTAIN ENTITIES AS REGIONAL OCEAN PARTNERSHIPS.**—Notwithstanding paragraph (3) or (4), the following entities are designated as Regional Ocean Partnerships:

(A) The Gulf of Mexico Alliance, comprised of the States of Alabama, Florida, Louisiana, Mississippi, and Texas.

(B) The Northeast Regional Ocean Council, comprised of the States of Maine, Vermont, New Hampshire, Massachusetts, Connecticut, and Rhode Island.

(C) The Mid-Atlantic Regional Council on the Ocean, comprised of the States of New York, New Jersey, Delaware, Maryland, and Virginia.

(D) The West Coast Ocean Alliance, comprised of the States of California, Oregon, and Washington and the coastal Indian Tribes therein.

(c) **GOVERNING BODIES OF REGIONAL OCEAN PARTNERSHIPS.**—

(1) **IN GENERAL.**—A Regional Ocean Partnership designated under subsection (b) shall have a governing body.

(2) **MEMBERSHIP.**—A governing body described in paragraph (1)—

(A) shall be comprised, at a minimum, of voting members from each coastal state participating in the Regional Ocean Partnership, designated by the Governor of the coastal state; and

(B) may include such other members as the partnership considers appropriate.

(d) **FUNCTIONS.**—A Regional Ocean Partnership designated under subsection (b) may perform the following functions:

(1) Promote coordination of the actions of the agencies of coastal states participating in the partnership with the actions of the appropriate officials of Federal agencies, State governments, and Indian Tribes in developing strategies—

(A) to conserve living resources, increase valuable habitats, enhance coastal resilience and ocean management, promote ecological and economic health, and address such other issues related to the shared ocean, coastal, or Great Lakes areas as are determined to be a shared, regional priority by those states; and

(B) to manage regional data portals and develop associated data products for purposes that support the priorities of the partnership.

(2) In cooperation with appropriate Federal and State agencies, Indian Tribes, and local authorities, develop and implement specific action plans to carry out coordination goals.

(3) Coordinate and implement priority plans and projects, and facilitate science, research, modeling, monitoring, data collection, and other activities that support the goals of the partnership through the provision of grants and contracts under subsection (f).

(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 outreach programs for public information, education, and participation to foster stewardship of the resources of the ocean, coastal, and Great Lakes 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) **COORDINATION, CONSULTATION, AND ENGAGEMENT.**—

(1) **IN GENERAL.**—A Regional Ocean Partnership designated under subsection (b) shall maintain mechanisms for coordination, consultation, and engagement with the following:

(A) The Federal Government.

(B) Indian Tribes.

(C) Nongovernmental entities, including academic organizations, nonprofit organizations, and private sector entities.

(D) Other federally mandated regional entities, including the Regional Fishery Management Councils, the regional associations of the National Integrated Coastal and Ocean Observation System, and relevant Marine Fisheries Commissions.

(2) **RULE OF CONSTRUCTION.**—Nothing in paragraph (1)(B) may be construed as affecting any requirement to consult with Indian Tribes under Executive Order 13175 (25 U.S.C. 5301 note); relating to consultation and coordination with Indian tribal governments) or any other applicable law or policy.

(f) **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, provide grants and enter into contracts for the purposes described in paragraph (2).

(2) **PURPOSES.**—The purposes described in this paragraph include any of the following:

(A) Monitoring the water quality and living resources of multi-State ocean and coastal ecosystems and coastal communities.

(B) Researching and addressing the effects of natural and human-induced environmental changes on—

(i) ocean and coastal ecosystems; and

(ii) coastal communities.

(C) Developing and executing cooperative strategies that—

(i) address regional data issues identified by the partnership; and

(ii) will result in more effective management of common ocean and coastal areas.

(g) **REPORT REQUIRED.**—

(1) **IN GENERAL.**—Not later than 5 years after the date of the enactment of this Act, the Administrator, in coordination with the Regional Ocean Partnerships designated under subsection (b), shall submit to Congress a report on the partnerships.

(2) **REPORT REQUIREMENTS.**—The report required by paragraph (1) shall include the following:

(A) An assessment of the overall status of the work of the Regional Ocean Partnerships designated under subsection (b).

(B) An assessment of the effectiveness of the partnerships in supporting regional priorities relating to the management of common ocean, coastal, and Great Lakes areas.

(C) An assessment of the effectiveness of the strategies that the partnerships are supporting or implementing and the extent to which the priority needs of the regions covered by the partnerships are being met through such strategies.

(D) An assessment of how the efforts of the partnerships support or enhance Federal and State efforts consistent with the purposes of this title.

(E) Such recommendations as the Administrator may have for improving—

(i) efforts of the partnerships to support the purposes of this title; and

(ii) collective strategies that support the purposes of this title in coordination with all relevant Federal and State entities and Indian Tribes.

(F) The distribution of funds from each partnership for each fiscal year covered by the report.

(h) **AVAILABILITY OF FEDERAL FUNDS.**—In addition to amounts made available to the Regional Ocean Partnerships designated under subsection (b) by the Administrator under this section, the head of any other Federal agency may provide grants to, enter into contracts with, or otherwise provide funding to such partnerships.

(i) **AUTHORITIES.**—Nothing in this section establishes any new legal or regulatory authority of the National Oceanic and Atmospheric Administration or of the Regional Ocean Partnerships designated under subsection (b), other than—

(1) the authority of the Administrator to provide amounts to the partnerships; and

(2) the authority of the partnerships to provide grants and enter into contracts under subsection (f).

#### TITLE LIV—NATIONAL OCEAN EXPLORATION

##### SEC. 5401. SHORT TITLE.

This title may be cited as the “National Ocean Exploration Act”.

##### SEC. 5402. FINDINGS.

Congress makes the following findings:

(1) The health and resilience of the ocean are vital to the security and economy of the United States and to the lives of the people of the United States.

(2) The United States depends on the ocean to regulate weather and climate, to sustain and protect the diversity of life, for maritime shipping, for national defense, and for food, energy, medicine, recreation, and other services essential to the people of the United States and all humankind.

(3) The prosperity, security, and well-being of the United States depend on successful understanding and stewardship of the ocean.

(4) Interdisciplinary cooperation and engagement among government agencies, research institutions, nongovernmental organizations, States, Indian Tribes, and the private sector are essential for successful stewardship of ocean and coastal environments, national economic growth, national security, and development of agile strategies that develop, promote, and use new technologies.

(5) Ocean exploration can help the people of the United States understand how to be effective stewards of the ocean and serve as catalysts and enablers for other sectors of the economy.

(6) Mapping, exploration, and characterization of the ocean provides basic, essential information to protect and restore the marine environment, stimulate economic activity, and provide security for the United States.

(7) A robust national ocean exploration program engaging multiple Federal agencies, Indian Tribes, the private sector, nongovernmental organizations, and academia is—

(A) essential to the interests of the United States and vital to its security and economy and the health and well-being of all people of the United States; and

(B) critical to reestablish the United States at the forefront of global ocean exploration and stewardship.

##### SEC. 5403. DEFINITIONS.

In this title:

(1) **CHARACTERIZATION.**—The term “characterization” refers to activities that provide comprehensive data and interpretations for a specific area of interest of the seafloor, sub-bottom, water column, or hydrologic features, such as water masses and currents, in direct support of specific research, environmental protection, resource management, policymaking, or applied mission objectives.

(2) **EXPLORATION.**—The term “exploration” refers to activities that provide—

(A) a multidisciplinary view of an unknown or poorly understood area of the seafloor, sub-bottom, or water column; and

(B) an initial assessment of the physical, chemical, geological, biological, archeological, or other characteristics of such an area.

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

(4) **MAPPING.**—The term “mapping” refers to activities that provide comprehensive data and information needed to understand seafloor characteristics, such as depth, topography, bottom type, sediment composition and distribution, underlying geologic structure, and benthic flora and fauna.

##### SEC. 5404. OCEAN POLICY COMMITTEE.

(a) **SUBCOMMITTEES.**—Section 8932(c) of title 10, United States Code, is amended to read as follows:

“(c) **SUBCOMMITTEES.**—(1) The Committee shall include—

“(A) a subcommittee to be known as the ‘Ocean Science and Technology Subcommittee’; and

“(B) a subcommittee to be known as the ‘Ocean Resource Management Subcommittee’.

“(2) In discharging its responsibilities in support of agreed-upon scientific needs, and to assist in the execution of the responsibilities described in subsection (b), the Committee may delegate responsibilities to the Ocean Science and Technology Subcommittee, the Ocean Resource Management Subcommittee, or another subcommittee of the Committee, as the Committee determines appropriate.”

(b) **INCREASED ACCESS TO GEOSPATIAL DATA FOR MORE EFFICIENT AND INFORMED DECISION MAKING.**—

(1) **ESTABLISHMENT OF DOCUMENT SYSTEM.**—Section 8932(b) of title 10, United States Code, is amended—

(A) in paragraph (3), by striking “and” at the end;

(B) in paragraph (4)(F), by striking the period at the end and inserting “; and”; and

(C) by adding at the end the following new paragraph:

“(5) for projects under the purview of the Committee, establish or designate one or more systems for ocean-related and ocean-mapping related documents prepared under the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.), in accordance with subsection (h).”

(2) **ELEMENTS.**—Section 8932 of such title is amended—

(A) by redesignating subsection (h) as subsection (i); and

(B) by inserting after subsection (g) the following new subsection (h):

“(h) **ELEMENTS OF DOCUMENT SYSTEM.**—The systems established or designated under subsection (b)(5) may include the following:

“(1) A publicly accessible, centralized digital archive of documents described in subsection (b)(5) that are finalized after the date of the enactment of the National Ocean Exploration Act, including—

“(A) environmental impact statements;

“(B) environmental assessments;

“(C) records of decision; and

“(D) other relevant documents as determined by the lead agency on a project.

“(2) Geospatially referenced data, if any, contained in the documents under paragraph (1).

“(3) A mechanism to retrieve information through geo-information tools that can map and integrate relevant geospatial information, such as—

“(A) Ocean Report Tools;

“(B) the Environmental Studies Program Information System;

“(C) Regional Ocean Partnerships; and

“(D) the Integrated Ocean Observing System.”

##### SEC. 5405. NATIONAL OCEAN MAPPING, EXPLORATION, AND CHARACTERIZATION COUNCIL.

(a) **ESTABLISHMENT.**—The President shall establish a council, to be known as the “National Ocean Mapping, Exploration, and Characterization Council” (in this section referred to as the “Council”).

(b) **PURPOSE.**—The Council shall—

(1) update national priorities for ocean mapping, exploration, and characterization; and

(2) coordinate and facilitate activities to advance those priorities.

(c) **REPORTING.**—The Council shall report to the Ocean Science and Technology Sub-

committee of the Ocean Policy Committee established under section 8932(c) of title 10, United States Code.

(d) **MEMBERSHIP.**—The Council shall be composed of senior-level representatives from the appropriate Federal agencies.

(e) **CO-CHAIRS.**—The Council shall be co-chaired by—

(1) two senior-level representatives from the National Oceanic and Atmospheric Administration; and

(2) one senior-level representative from the Department of the Interior.

(f) **DUTIES.**—The Council shall—

(1) set national ocean mapping, exploration, and characterization priorities and strategies;

(2) cultivate and facilitate transparent and sustained partnerships among Federal and State agencies, Indian Tribes, private industry, academia, and nongovernmental organizations to conduct ocean mapping, exploration, and characterization activities and related technology development;

(3) coordinate improved processes for data compilation, management, access, synthesis, and visualization with respect to ocean mapping, exploration, and characterization, with a focus on building on existing ocean data management systems and with appropriate safeguards on the public accessibility of data to protect national security equities, as appropriate;

(4) encourage education, workforce training, and public engagement activities that—

(A) advance interdisciplinary principles that contribute to ocean mapping, exploration, research, and characterization;

(B) improve public engagement with and understanding of ocean science; and

(C) provide opportunities for underserved populations;

(5) coordinate activities as appropriate with domestic and international ocean mapping, exploration, and characterization initiatives or programs; and

(6) establish and monitor metrics to track progress in achieving the priorities set under paragraph (1).

(g) **INTERAGENCY WORKING GROUP ON OCEAN EXPLORATION AND CHARACTERIZATION.**—

(1) **ESTABLISHMENT.**—The President shall establish a new interagency working group to be known as the “Interagency Working Group on Ocean Exploration and Characterization”.

(2) **MEMBERSHIP.**—The Interagency Working Group on Ocean Exploration and Characterization shall be comprised of senior representatives from Federal agencies with ocean exploration and characterization responsibilities.

(3) **FUNCTIONS.**—The Interagency Working Group on Ocean Exploration and Characterization shall support the Council and the Ocean Science and Technology Subcommittee of the Ocean Policy Committee established under section 8932(c) of title 10, United States Code, on ocean exploration and characterization activities and associated technology development across the Federal Government, State governments, Indian Tribes, private industry, nongovernmental organizations, and academia.

(h) **OVERSIGHT.**—The Council shall oversee—

(1) the Interagency Working Group on Ocean Exploration and Characterization established under subsection (g)(1); and

(2) the Interagency Working Group on Ocean and Coastal Mapping under section 12203 of the Ocean and Coastal Mapping Integration Act (33 U.S.C. 3502).

(i) **PLAN.**—

(1) **IN GENERAL.**—Not later than 1 year after the date of the enactment of this Act, the Council shall develop or update and submit to the appropriate committees of Congress a

plan for an integrated cross-sectoral ocean mapping, exploration, and characterization initiative.

(2) ELEMENTS.—The plan required by paragraph (1) shall—

(A) discuss the utility and benefits of ocean exploration and characterization;

(B) identify and describe national ocean mapping, exploration, and characterization priorities;

(C) identify and describe Federal and federally funded ocean mapping, exploration, and characterization programs;

(D) facilitate and incorporate non-Federal input into national ocean mapping, exploration, and characterization priorities;

(E) ensure effective coordination of ocean mapping, exploration, and characterization activities among programs described in subparagraph (C);

(F) identify opportunities for combining overlapping or complementary needs, activities, and resources of Federal agencies and non-Federal organizations relating to ocean mapping, exploration, and characterization while not reducing benefits from existing mapping, explorations, and characterization activities;

(G) promote new and existing partnerships among Federal and State agencies, Indian Tribes, private industry, academia, and nongovernmental organizations to conduct or support ocean mapping, exploration, and characterization activities and technology development needs, including through coordination under section 3 of the Commercial Engagement Through Ocean Technology Act of 2018 (33 U.S.C. 4102) and the National Oceanographic Partnership Program under section 8931 of title 10, United States Code;

(H) develop a transparent and sustained mechanism for non-Federal partnerships and stakeholder engagement in strategic planning and mission execution to be implemented not later than December 31, 2023;

(I) establish standardized collection and data management protocols, such as with respect to metadata, for ocean mapping, exploration, and characterization with appropriate safeguards on the public accessibility of data to protect national security equities;

(J) encourage the development, testing, demonstration, and adoption of innovative ocean mapping, exploration, and characterization technologies and applications;

(K) promote protocols for accepting data, equipment, approaches, or other resources that support national ocean mapping, exploration, and characterization priorities;

(L) identify best practices for the protection of marine life during mapping, exploration, and characterization activities;

(M) identify training, technology, and other resource requirements for enabling the National Oceanic and Atmospheric Administration and other appropriate Federal agencies to support a coordinated national ocean mapping, exploration, and characterization effort;

(N) identify and facilitate a centralized mechanism or office for coordinating data collection, compilation, processing, archiving, and dissemination activities relating to ocean mapping, exploration, and characterization that meets Federal mandates for data accuracy and accessibility;

(O) designate repositories responsible for archiving and managing ocean mapping, exploration, and characterization data;

(P) set forth a timetable and estimated costs for implementation and completion of the plan;

(Q) to the extent practicable, align ocean exploration and characterization efforts with existing programs and identify key gaps; and

(R) identify criteria for determining the optimal frequency of observations.

(j) BRIEFINGS.—Not later than 1 year after the date of the enactment of this Act, and not less frequently than once every 2 years thereafter, the Council shall brief the appropriate committees of Congress on—

(1) progress made toward meeting the national priorities described in subsection (i)(2)(B); and

(2) recommendations for meeting such priorities, such as additional authorities that may be needed to develop a mechanism for non-Federal partnerships and stakeholder engagement described in subsection (i)(2)(H).

(k) APPROPRIATE COMMITTEES OF CONGRESS DEFINED.—In this section, the term “appropriate committees of Congress” means—

(1) the Committee on Commerce, Science, and Transportation and the Committee on Armed Services of the Senate; and

(2) the Committee on Natural Resources, the Committee on Science, Space, and Technology, and the Committee on Armed Services of the House of Representatives.

**SEC. 5406. MODIFICATIONS TO THE OCEAN EXPLORATION PROGRAM OF THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION.**

(a) PURPOSE.—Section 12001 of the Omnibus Public Land Management Act of 2009 (33 U.S.C. 3401) is amended by striking “and the national undersea research program”.

(b) PROGRAM ESTABLISHED.—Section 12002 of such Act (33 U.S.C. 3402) is amended—

(1) in the first sentence, by striking “and undersea”; and

(2) in the second sentence, by striking “and undersea research and exploration” and inserting “research and ocean exploration and characterization efforts”.

(c) POWERS AND DUTIES OF THE ADMINISTRATOR.—

(1) IN GENERAL.—Section 12003(a) of such Act (33 U.S.C. 3403(a)) is amended—

(A) in the matter preceding paragraph (1), by inserting “, in coordination with the Ocean Policy Committee established under section 8932 of title 10, United States Code,” after “Administration”;

(B) in paragraph (1)—

(i) by striking “voyages” and inserting “expeditions”;

(ii) by striking “Federal agencies” and all that follows through “and survey” and inserting “Federal and State agencies, Tribal governments, private industry, academia, and nongovernmental organizations, to map, explore, and characterize”; and

(iii) by inserting “characterize,” after “observe”;

(C) in paragraph (2), by inserting “of the exclusive economic zone” after “deep ocean regions”;

(D) in paragraph (3), by striking “voyages” and inserting “expeditions”;

(E) in paragraph (4), by striking “, in consultation with the National Science Foundation,”;

(F) by amending paragraph (5) to read as follows:

“(5) support technological innovation of the United States marine science community by promoting the development and use of new and emerging technologies for research, communication, navigation, and data collection, such as sensors and autonomous vehicles;”;

(G) in paragraph (6)—

(i) by inserting “, in collaboration with the National Ocean Mapping, Exploration, and Characterization Council established under section 5405 of the National Ocean Exploration Act,” after “forum”; and

(ii) by striking the period at the end and inserting “; and”; and

(H) by adding at the end the following:

“(7) provide guidance, in coordination with the National Ocean Mapping, Exploration, and Characterization Council, to Federal and

State agencies, Tribal governments, private industry, academia (including secondary schools, community colleges, and universities), and nongovernmental organizations on data standards, protocols for accepting data, and coordination of data collection, compilation, processing, archiving, and dissemination for data relating to ocean exploration and characterization.”.

(2) DONATIONS.—Section 12003(b) of such Act (33 U.S.C. 3403(b)) is amended to read as follows:

“(b) DONATIONS.—For the purpose of mapping, exploring, and characterizing the oceans or increasing the knowledge of the oceans, the Administrator may—

“(1) accept monetary donations and donations of property, data, and equipment; and

“(2) pay all necessary expenses in connection with the conveyance or transfer of a gift, devise, or bequest.”.

(3) DEFINITION OF EXCLUSIVE ECONOMIC ZONE.—Section 12003 of such Act (33 U.S.C. 3403) is amended by adding at the end the following:

“(c) DEFINITION OF EXCLUSIVE ECONOMIC ZONE.—In this section, the term ‘exclusive economic zone’ means the zone established by Presidential Proclamation Number 5030, dated March 10, 1983 (16 U.S.C. 1453 note; relating to the exclusive economic zone of the United States of America).”.

(d) REPEAL OF OCEAN EXPLORATION AND UNDERSEA RESEARCH TECHNOLOGY AND INFRASTRUCTURE TASK FORCE.—Section 12004 of such Act (33 U.S.C. 3404) is repealed.

(e) EDUCATION, WORKFORCE TRAINING, AND OUTREACH.—

(1) IN GENERAL.—Such Act is further amended by inserting after section 12003 the following new section 12004:

**“SEC. 12004. EDUCATION, WORKFORCE TRAINING, AND OUTREACH.**

“(a) IN GENERAL.—The Administrator of the National Oceanic and Atmospheric Administration shall—

“(1) conduct education and outreach efforts in order to broadly disseminate information to the public on the discoveries made by the program under section 12002; and

“(2) to the extent possible, coordinate the efforts described in paragraph (1) with the outreach strategies of other domestic or international ocean mapping, exploration, and characterization initiatives.

“(b) EDUCATION AND OUTREACH EFFORTS.—Efforts described in subsection (a)(1) may include—

“(1) education of the general public, teachers, students, and ocean and coastal resource managers; and

“(2) workforce training, reskilling, and opportunities to encourage development of ocean related science, technology, engineering, and mathematics (STEM) technical training programs involving secondary schools, community colleges, and universities, including Historically Black Colleges or Universities (within the meaning of the term ‘part B institution’ under section 322 of the Higher Education Act of 1965 (20 U.S.C. 1061)), Tribal Colleges or Universities (as defined in section 316(b) of such Act (20 U.S.C. 1059c(b))), and other minority-serving institutions (as described in section 371(a) of such Act (20 U.S.C. 1067q(a))).

“(c) OUTREACH STRATEGY.—Not later than 180 days after the date of the enactment of the National Ocean Exploration Act, the Administrator of the National Oceanic and Atmospheric Administration shall develop an outreach strategy to broadly disseminate information on the discoveries made by the program under section 12002.”.

(2) CLERICAL AMENDMENT.—The table of contents in section 1(b) of the Omnibus Public Land Management Act of 2009 (Public Law 111–11; 123 Stat. 991) is amended by

striking the item relating to section 12004 and inserting the following:

“Sec. 12004. Education, workforce training, and outreach.

(f) OCEAN EXPLORATION ADVISORY BOARD.—(1) ESTABLISHMENT.—Section 12005(a)(1) of such Act (33 U.S.C. 3505(1)) is amended by inserting “and the National Ocean Mapping, Exploration, and Characterization Council established under section 5405 of the National Ocean Exploration Act” after “advise the Administrator”.

(2) TECHNICAL AMENDMENT.—Section 12005(c) of such Act (33 U.S.C. 3505(c)) is amended by inserting “this” before “part”.

(g) AUTHORIZATION OF APPROPRIATIONS.—Section 12006 of such Act (33 U.S.C. 3406) is amended by striking “this part” and all that follows and inserting “this part \$60,000,000 for each of fiscal years 2023 through 2028”.

(h) DEFINITIONS.—Such Act is further amended by inserting after section 12006 the following:

**“SEC. 12007. DEFINITIONS.**

“In this part:

“(1) CHARACTERIZATION.—The terms ‘characterization’, ‘characterize’, and ‘characterizing’ refer to activities that provide comprehensive data and interpretations for a specific area of interest of the seafloor, sub-bottom, water column, or hydrologic features, such as water masses and currents, in direct support of specific research, environmental protection, resource management, policymaking, or applied mission objectives.

“(2) EXPLORATION.—The term ‘exploration’, ‘explore’, and ‘exploring’ refer to activities that provide—

“(A) a multidisciplinary view of an unknown or poorly understood area of the seafloor, sub-bottom, or water column; and

“(B) an initial assessment of the physical, chemical, geological, biological, archaeological, or other characteristics of such an area.

“(3) MAPPING.—The terms ‘map’ and ‘mapping’ refer to activities that provide comprehensive data and information needed to understand seafloor characteristics, such as depth, topography, bottom type, sediment composition and distribution, underlying geologic structure, and benthic flora and fauna.”.

(i) CLERICAL AMENDMENT.—The table of contents in section 1(b) of the Omnibus Public Land Management Act of 2009 (Public Law 111–11; 123 Stat. 991) is amended by inserting after the item relating to section 12006 the following:

“Sec. 12007. Definitions.

**SEC. 5407. REPEAL.**

(a) IN GENERAL.—The NOAA Undersea Research Program Act of 2009 (part II of subtitle A of title XII of Public Law 111–11; 33 U.S.C. 3421 et seq.) is repealed.

(b) CLERICAL AMENDMENT.—The table of contents in section 1(b) of the Omnibus Public Land Management Act of 2009 (Public Law 111–11; 123 Stat. 991) is amended by striking the items relating to part II of subtitle A of title XII of such Act.

**SEC. 5408. MODIFICATIONS TO OCEAN AND COASTAL MAPPING PROGRAM OF THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION.**

(a) ESTABLISHMENT OF PROGRAM.—

(1) IN GENERAL.—Section 12202(a) of the Ocean and Coastal Mapping Integration Act (33 U.S.C. 3501(a)) is amended—

(A) by striking “establish a program to develop a coordinated and” and inserting “establish and maintain a program to coordinate”;

(B) by striking “plan” and inserting “efforts”;

(C) by striking “that enhances” and all that follows and inserting “that—

“(1) enhances ecosystem approaches in decision-making for natural resource and habitat management restoration and conservation, emergency response, and coastal resilience and adaptation;

“(2) establishes research and mapping priorities;

“(3) supports the siting of research and other platforms; and

“(4) advances ocean and coastal science.”.

(2) MEMBERSHIP.—Section 12202 of such Act (33 U.S.C. 3501) is amended by striking subsection (b) and redesignating subsection (c) as subsection (b).

(3) PROGRAM PARAMETERS.—Subsection (b) of section 12202 of such Act (33 U.S.C. 3501), as redesignated by paragraph (2), is amended—

(A) in the matter preceding paragraph (1), by striking “developing” and inserting “maintaining”;

(B) in paragraph (2), by inserting “and for leveraging existing Federal geospatial services capacities and contract vehicles for efficiencies” after “coastal mapping”;

(C) in paragraph (7), by striking “with coastal state and local government programs” and inserting “with mapping programs, in conjunction with Federal and State agencies, Tribal governments, private industry, academia, and nongovernmental organizations”;

(D) in paragraph (8), by striking “of real-time tide data and the development” and inserting “of tide data and water-level data and the development and dissemination”;

(E) in paragraph (9), by striking “; and” and inserting a semicolon;

(F) in paragraph (10), by striking the period at the end and inserting “; and”;

(G) by adding at the end the following:

“(11) support—

“(A) the Ocean Science and Technology Subcommittee of the Ocean Policy Committee established under section 8932(c) of title 10, United States Code; and

“(B) the National Ocean Mapping, Exploration, and Characterization Council established under section 5405 of the National Ocean Exploration Act.”.

(b) INTERAGENCY WORKING GROUP ON OCEAN AND COASTAL MAPPING.—

(1) NAME CHANGE.—The Ocean and Coastal Mapping Integration Act (33 U.S.C. 3501 et seq.) is amended—

(A) in section 12202 (33 U.S.C. 3501)—

(i) in subsection (a), by striking “Interagency Committee on Ocean and Coastal Mapping” and inserting “Interagency Working Group on Ocean and Coastal Mapping under section 12203”; and

(ii) in subsection (b), as redesignated by subsection (a)(2), by striking “Committee” and inserting “Working Group”;

(B) in section 12203 (33 U.S.C. 3502)—

(i) in the section heading, by striking “COMMITTEE” and inserting “WORKING GROUP”;

(ii) in subsection (b), in the first sentence, by striking “committee” and inserting “Working Group”;

(iii) in subsection (e), by striking “committee” and inserting “Working Group”; and

(iv) in subsection (f), by striking “committee” and inserting “Working Group”; and

(C) in section 12208 (33 U.S.C. 3507), by amending paragraph (3) to read as follows:

“(3) WORKING GROUP.—The term ‘Working Group’ means the Interagency Working Group on Ocean and Coastal Mapping under section 12203.”.

(2) IN GENERAL.—Section 12203(a) of such Act (33 U.S.C. 3502(a)) is amended by striking “within 30 days” and all that follows and inserting “not later than 30 days after the date of the enactment of the National Ocean Exploration Act, shall use the Interagency Working Group on Ocean and Coastal Map-

ping in existence as of the date of the enactment of such Act to implement section 12202.”.

(3) MEMBERSHIP.—Section 12203(b) of such Act (33 U.S.C. 3502(b)) is amended—

(A) in the first sentence, by striking “senior” both places it appears and inserting “senior-level”;

(B) in the third sentence, by striking “the Minerals Management Service” and inserting “the Bureau of Ocean Energy Management of the Department of the Interior, the Office of the Assistant Secretary, Fish and Wildlife and Parks of the Department of the Interior”;

(C) by striking the second sentence.

(4) CO-CHAIRS.—Section 12203(c) of such Act (33 U.S.C. 3502(c)) is amended to read as follows:

“(c) CO-CHAIRS.—The Working Group shall be co-chaired by one representative from each of the following:

“(1) The National Oceanic and Atmospheric Administration.

“(2) The Department of the Interior.”.

(5) SUBORDINATE GROUPS.—Section 12203(d) of such Act (33 U.S.C. 3502(d)) is amended to read as follows:

“(d) SUBORDINATE GROUPS.—The co-chairs may establish such permanent or temporary subordinate groups as determined appropriate by the Working Group.”.

(6) MEETINGS.—Section 12203(e) of such Act (33 U.S.C. 3502(e)) is amended by striking “each subcommittee and each working group” and inserting “each subordinate group”.

(7) COORDINATION.—Section 12203(f) of such Act (33 U.S.C. 3502(f)) is amended by striking paragraphs (1) through (5) and inserting the following:

“(1) other Federal efforts;

“(2) international mapping activities;

“(3) coastal states;

“(4) coastal Indian Tribes;

“(5) data acquisition and user groups through workshops, partnerships, and other appropriate mechanisms; and

“(6) representatives of nongovernmental entities.”.

(8) ADVISORY PANEL.—Section 12203 of such Act (33 U.S.C. 3502) is amended by striking subsection (g).

(9) FUNCTIONS.—Section 12203 of such Act (33 U.S.C. 3502), as amended by paragraph (8), is further amended by adding at the end the following:

“(g) SUPPORT FUNCTIONS.—The Working Group shall support the National Ocean Mapping, Exploration, and Characterization Council established under section 5405 of the National Ocean Exploration Act and the Ocean Science and Technology Subcommittee of the Ocean Policy Committee established under section 8932(c) of title 10, United States Code, on ocean mapping activities and associated technology development across the Federal Government, State governments, coastal Indian Tribes, private industry, nongovernmental organizations, and academia.”.

(10) CLERICAL AMENDMENT.—The table of contents in section 1(b) of the Omnibus Public Land Management Act of 2009 (Public Law 111–11; 123 Stat. 991) is amended by striking the item relating to section 12203 and inserting the following:

“Sec. 12203. Interagency working group on ocean and coastal mapping.

(c) BIENNIAL REPORTS.—Section 12204 of the Ocean and Coastal Mapping Integration Act (33 U.S.C. 3503) is amended—

(1) in the matter preceding paragraph (1), by striking “No later” and all that follows through “House of Representatives” and inserting “Not later than 18 months after the date of the enactment of the National Ocean



Exploration Act, and biennially thereafter until 2040, the co-chairs of the Working Group, in coordination with the National Ocean Mapping, Exploration, and Characterization Council established under section 5405 of such Act, shall submit to the Committee on Commerce, Science, and Transportation and the Committee on Energy and Natural Resources of the Senate, and the Committee on Natural Resources and the Committee on Science, Space, and Technology of the House of Representatives,";

(2) in paragraph (1), by inserting ", including the data maintained by the National Centers for Environmental Information of the National Oceanic and Atmospheric Administration," after "mapping data";

(3) in paragraph (3), by inserting ", including a plan to map the coasts of the United States on a requirements-based cycle, with mapping agencies and partners coordinating on a unified approach that factors in recent related studies, meets multiple user requirements, and identifies gaps" after "accomplished";

(4) by striking paragraph (10) and redesignating paragraphs (11), (12), and (13) as paragraphs (10), (11), and (12), respectively;

(5) in paragraph (10), as so redesignated, by striking "with coastal state and local government programs" and inserting "with international, coastal state, and local government and nongovernmental mapping programs";

(6) in paragraph (11), as redesignated by paragraph (4)—

(A) by striking "increase" and inserting "streamline and expand";

(B) by inserting "for the purpose of fulfilling Federal mapping and charting responsibilities, plans, and strategies" after "entities"; and

(C) by striking "; and" and inserting a semicolon;

(7) in paragraph (12), as redesignated by paragraph (4), by striking the period at the end and inserting a semicolon; and

(8) by adding at the end the following:

"(13) a progress report on the development of new and innovative technologies and applications through research and development, including cooperative or other agreements with joint or cooperative research institutes and centers and other nongovernmental entities;

"(14) a description of best practices in data processing and distribution and leveraging opportunities among agencies represented on the Working Group and with coastal states, coastal Indian Tribes, and nongovernmental entities;

"(15) an identification of any training, technology, or other requirements for enabling Federal mapping programs, vessels, and aircraft to support a coordinated ocean and coastal mapping program; and

"(16) a timetable for implementation and completion of the plan described in paragraph (3), including recommendations for integrating new approaches into the program."

(d) NOAA JOINT OCEAN AND COASTAL MAPPING CENTERS.—

(1) CENTERS.—Section 12205(c) of such Act (33 U.S.C. 3504(c)) is amended—

(A) in the matter preceding paragraph (1), by striking "3" and inserting "three"; and

(B) in paragraph (4), by inserting "and uncrewed" after "sensing";

(2) PLAN.—Section 12205 of such Act (33 U.S.C. 3504) is amended—

(A) in the section heading, by striking "PLAN" and inserting "NOAA JOINT OCEAN AND COASTAL MAPPING CENTERS";

(B) by striking subsections (a), (b), and (d); and

(C) in subsection (c), by striking "(c) NOAA JOINT OCEAN AND COASTAL MAPPING CENTERS.—";

(3) CLERICAL AMENDMENT.—The table of contents in section 1(b) of the Omnibus Public Land Management Act of 2009 (Public Law 111–11; 123 Stat. 991) is amended by striking the item relating to section 12205 and inserting the following:

"Sec. 12205. NOAA joint ocean and coastal mapping centers.

(e) OCEAN AND COASTAL MAPPING FEDERAL FUNDING OPPORTUNITY.—The Ocean and Coastal Mapping Integration Act (33 U.S.C. 3501 et seq.) is amended—

(1) by redesignating sections 12206, 12207, and 12208 as sections 12208, 12209, and 12210, respectively; and

(2) by inserting after section 12205 the following:

"SEC. 12206. OCEAN AND COASTAL MAPPING FEDERAL FUNDING OPPORTUNITY.

"(a) IN GENERAL.—Not later than one year after the date of the enactment of the National Ocean Exploration Act, the Administrator shall develop an integrated ocean and coastal mapping Federal funding match opportunity, to be known as the 'Brennan Ocean Mapping Fund' in memory of Rear Admiral Richard T. Brennan, within the National Oceanic and Atmospheric Administration with Federal, State, Tribal, local, non-profit, private industry, or academic partners in order to increase the coordinated acquisition, processing, stewardship, and archival of new ocean and coastal mapping data in United States waters.

"(b) RULES.—The Administrator shall develop administrative and procedural rules for the ocean and coastal mapping Federal funding match opportunity developed under subsection (a), to include—

"(1) specific and detailed criteria that must be addressed by an applicant, such as geographic overlap with pre-established priorities, number and type of project partners, benefit to the applicant, coordination with other funding opportunities, and benefit to the public;

"(2) determination of the appropriate funding match amounts and mechanisms to use, such as grants, agreements, or contracts; and

"(3) other funding award criteria as are necessary or appropriate to ensure that evaluations of proposals and decisions to award funding under this section are based on objective standards applied fairly and equitably to those proposals.

"(c) GEOSPATIAL SERVICES AND CONTRACT VEHICLES.—The ocean and coastal mapping Federal funding match opportunity developed under subsection (a) shall leverage Federal expertise and capacities for geospatial services and Federal geospatial contract vehicles using the private sector for acquisition efficiencies.

"SEC. 12207. AGREEMENTS AND FINANCIAL ASSISTANCE.

"(a) AGREEMENTS.—The head of a Federal agency that is represented on the Inter-agency Committee on Ocean and Coastal Mapping may enter into agreements with any other agency that is so represented to provide, on a reimbursable or nonreimbursable basis, facilities, equipment, services, personnel, and other support services to carry out the purposes of this subtitle.

"(b) FINANCIAL ASSISTANCE.—The Administrator may make financial assistance awards (grants of cooperative agreements) to any State or subdivision thereof or any public or private organization or individual to carry out the purposes of this subtitle."

(f) AUTHORIZATION OF APPROPRIATIONS.—Section 12209 of such Act, as redesignated by subsection (e)(1), is amended—

(1) in subsection (a), by striking "this subtitle" and all that follows and inserting

"this subtitle \$45,000,000 for each of fiscal years 2023 through 2028.";

(2) in subsection (b), by striking "this subtitle" and all that follows and inserting "this subtitle \$15,000,000 for each of fiscal years 2023 through 2028.";

(3) by striking subsection (c); and

(4) by inserting after subsection (b) the following:

"(c) OCEAN AND COASTAL MAPPING FEDERAL FUNDING OPPORTUNITY.—Of amounts appropriated pursuant to subsection (a), \$20,000,000 is authorized to carry out section 12206."

(g) DEFINITIONS.—

(1) OCEAN AND COASTAL MAPPING.—Paragraph (5) of section 12210 of such Act, as redesignated by subsection (e)(1), is amended by striking "processing, and management" and inserting "processing, management, maintenance, interpretation, certification, and dissemination".

(2) COASTAL INDIAN TRIBE.—Section 12210 of such Act, as redesignated by subsection (e)(1), is amended by adding at the end the following:

"(9) COASTAL INDIAN TRIBE.—The term 'coastal Indian Tribe' means an 'Indian tribe', as defined in section 4 of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 5304), the land of which is located in a coastal state."

(h) CLERICAL AMENDMENTS.—The table of contents in section 1(b) of the Omnibus Public Land Management Act of 2009 (Public Law 111–11; 123 Stat. 991) is amended by striking the items relating to sections 12206 through 12208 and inserting the following:

"Sec. 12206. Ocean and coastal mapping Federal funding opportunity.

"Sec. 12207. Cooperative agreements, contracts, and grants.

"Sec. 12208. Effect on other laws.

"Sec. 12209. Authorization of appropriations.

"Sec. 12210. Definitions.

SEC. 5409. MODIFICATIONS TO HYDROGRAPHIC SERVICES IMPROVEMENT ACT OF 1998.

(a) DEFINITIONS.—Section 302(4)(A) of the Hydrographic Services Improvement Act of 1998 (33 U.S.C. 892(4)(A)) is amended by inserting "hydrodynamic forecast and datum transformation models," after "nautical information databases."

(b) FUNCTIONS OF THE ADMINISTRATOR.—Section 303(b) of such Act (33 U.S.C. 892a(b)) is amended—

(1) in the matter preceding paragraph (1), by inserting "precision navigation," after "promote"; and

(2) in paragraph (2)—

(A) by inserting "and hydrodynamic forecast models" after "monitoring systems";

(B) by inserting "and provide foundational information and services required to support coastal resilience planning for coastal transportation and other infrastructure, coastal protection and restoration projects, and related activities" after "efficiency"; and

(C) by striking "; and" and inserting a semicolon.

(c) QUALITY ASSURANCE PROGRAM.—Section 304(a) of such Act (33 U.S.C. 892b(a)) is amended by striking "product produced" and inserting "product or service produced or disseminated".

(d) AUTHORIZATION OF APPROPRIATIONS.—Section 306(a) of such Act (33 U.S.C. 892d(a)) is amended—

(1) in paragraph (1), by striking "\$70,814,000 for each of fiscal years 2019 through 2023" and inserting "\$71,000,000 for each of fiscal years 2023 through 2028";

(2) in paragraph (2), by striking "\$25,000,000 for each of fiscal years 2019 through 2023" and inserting "\$34,000,000 for each of fiscal years 2023 through 2028";

(3) in paragraph (3), by striking "\$29,932,000 for each of fiscal years 2019 through 2023"



and inserting “\$38,000,000 for each of fiscal years 2023 through 2028”;

(4) in paragraph (4), by striking “\$26,800,000 for each of fiscal years 2019 through 2023” and inserting “\$45,000,000 for each of fiscal years 2023 through 2028”; and

(5) in paragraph (5), by striking “\$30,564,000 for each of fiscal years 2019 through 2023” and inserting “\$35,000,000 for each of fiscal years 2023 through 2028”.

#### TITLE LV—MARINE MAMMAL RESEARCH AND RESPONSE

##### SEC. 5501. SHORT TITLE.

This title may be cited as the “Marine Mammal Research and Response Act of 2022”.

##### SEC. 5502. DATA COLLECTION AND DISSEMINATION.

Section 402 of the Marine Mammal Protection Act of 1972 (16 U.S.C. 1421a) is amended—

(1) in subsection (b)—

(A) in paragraph (1)(A), by inserting “or entangled” after “stranded”;

(B) in paragraph (3)—

(i) by striking “strandings,” and inserting “unusual and entanglements, including unusual mortality events,”;

(ii) by inserting “stranding” before “region”; and

(iii) by striking “marine mammals; and” and inserting “marine mammals and entangled marine mammals to allow comparison of the causes of illness and deaths in stranded marine mammals and entangled marine mammals with physical, chemical, and biological environmental parameters; and”;

(C) in paragraph (4), by striking “analyses, that would allow comparison of the causes of illness and deaths in stranded marine mammals with physical, chemical, and biological environmental parameters.” and inserting “analyses.”; and

(2) by striking subsection (c) and inserting the following:

“(c) INFORMATION REQUIRED TO BE SUBMITTED AND COLLECTED.—

“(1) IN GENERAL.—After each response to a stranding or entanglement event, the Secretary shall collect (including from any staff of the National Oceanic and Atmospheric Administration that respond directly to such an event), and shall require each stranding network participant who responds to that stranding or entanglement to submit to the Administrator of the National Oceanic and Atmospheric Administration or the Director of the United States Fish and Wildlife Service—

“(A) data on the stranding event, including NOAA Form 89-864 (OMB #0648-0178), NOAA Form 89-878 (OMB #0648-0178), similar successor forms, or similar information in an appropriate format required by the United States Fish and Wildlife Service for species under its management authority;

“(B) supplemental data to the data described in subparagraph (A), which may include, as available, relevant information about—

“(i) weather and tide conditions;

“(ii) offshore human, predator, or prey activity;

“(iii) morphometrics;

“(iv) behavior;

“(v) health assessments;

“(vi) life history samples; or

“(vii) stomach and intestinal contents; and

“(C) data and results from laboratory analysis of tissues, which may include, as appropriate and available—

“(i) histopathology;

“(ii) toxicology;

“(iii) microbiology

“(iv) virology; or

“(v) parasitology.

“(2) TIMELINE.—A stranding network participant shall submit—

“(A) the data described in paragraph (1)(A) not later than 30 days after the date of a response to a stranding or entanglement event;

“(B) the compiled data described in paragraph (1)(B) not later than 30 days after the date on which the data is available to the stranding network participant; and

“(C) the compiled data described in paragraph (1)(C) not later than 30 days after the date on which the laboratory analysis has been reported to the stranding network participant.

“(3) ONLINE DATA INPUT SYSTEM.—The Secretary, acting through the Under Secretary of Commerce for Oceans and Atmosphere, in consultation with the stranding network and the Office of Evaluation Sciences of the General Services Administration, shall establish an online system for the purposes of efficient and timely submission of data described in paragraph (1).

“(d) AVAILABILITY OF DATA.—

“(1) IN GENERAL.—The Secretary shall develop a program to make information, including any data and metadata collected under paragraphs (3) or (4) of subsection (b) or subsection (c), available to researchers, stranding network participants, and the public—

“(A) to improve real-time coordination of response to stranding and entanglement events across geographic areas and between stranding coordinators;

“(B) to identify and quickly disseminate information on potential public health risks;

“(C) to facilitate integrated interdisciplinary research;

“(D) to facilitate peer-reviewed publications;

“(E) to archive regional data into 1 national database for future analyses; and

“(F) for education and outreach activities.

“(2) ACCESS TO DATA.—The Secretary shall ensure that any data or metadata collected under subsection (c)—

“(A) by staff of the National Oceanic and Atmospheric Administration or the United States Fish and Wildlife Service that responded directly to a stranding or entanglement event is available to the public through the Health MAP and the Observation System not later than 30 days after that data or metadata is collected by, available to, or reported to the Secretary; and

“(B) by a stranding network participant that responded directly to a stranding or entanglement event is made available to the public through the Health MAP and the Observation System 2 years after the date on which that data is submitted to the Secretary under subsection (c).

“(3) EXCEPTIONS.—

“(A) WRITTEN RELEASE.—Notwithstanding paragraph (2)(B), the Secretary may make data described in paragraph (2)(B) publicly available earlier than 2 years after the date on which that data is submitted to the Secretary under subsection (c), if the stranding network participant has completed a written release stating that such data may be made publicly available.

“(B) LAW ENFORCEMENT.—Notwithstanding paragraph (2), the Secretary may withhold data for a longer period than the period of time described in paragraph (2) in the event of a law enforcement action or legal action that may be related to that data.

“(e) STANDARDS.—The Secretary, in consultation with the marine mammal stranding community, shall—

“(1) make publicly available guidance about uniform data and metadata standards to ensure that data collected in accordance with this section can be archived in a form that is readily accessible and understandable to the public through the Health MAP and the Observation System; and

“(2) periodically update such guidance.

“(f) MANAGEMENT POLICY.—In collaboration with the regional stranding networks, the Secretary shall develop, and periodically update, a data management and public outreach collaboration policy for stranding or entanglement events.

“(g) AUTHORSHIP AGREEMENTS AND ACKNOWLEDGMENT POLICY.—The Secretary, acting through the Under Secretary of Commerce for Oceans and Atmosphere, shall include authorship agreements or other acknowledgment considerations for use of data by the public, as determined by the Secretary.

“(h) SAVINGS CLAUSE.—The Secretary shall not require submission of research data that is not described in subsection (c).”

##### SEC. 5503. STRANDING OR ENTANGLEMENT RESPONSE AGREEMENTS.

(a) IN GENERAL.—Section 403 of the Marine Mammal Protection Act of 1972 (16 U.S.C. 1421b) is amended—

(1) in the section heading by inserting “OR ENTANGLEMENT” before “RESPONSE”;

(2) in subsection (a), by striking the period at the end and inserting “or entanglement.”; and

(3) in subsection (b)—

(A) in paragraph (1), by striking “and” after the semicolon;

(B) in paragraph (2), by striking the period at the end and inserting “; and”;

(C) by adding at the end the following:

“(3) include a description of the data management and public outreach policy established under section 402(f).”

(b) TABLE OF CONTENTS AMENDMENT.—The table of contents in the first section of the Marine Mammal Protection Act of 1972 (Public Law 92-522; 86 Stat. 1027) is amended by striking the item related to section 403 and inserting the following:

“Sec. 403. Stranding or entanglement response agreements.

##### SEC. 5504. UNUSUAL MORTALITY EVENT ACTIVITY FUNDING.

Section 405 of the Marine Mammal Protection Act of 1972 (16 U.S.C. 1421d) is amended—

(1) by striking subsection (b) and inserting the following:

“(b) USES.—Amounts in the Fund—

“(1) shall be available only for use by the Secretary, in consultation with the Secretary of the Interior, and dispersed among claimants based on budgets approved by the Secretary prior to expenditure—

“(A) to make advance, partial, or progress payments under contracts or other funding mechanisms for property, supplies, salaries, services, and travel costs incurred in acting in accordance with the contingency plan issued under section 404(b) or under the direction of an Onsite Coordinator for an unusual mortality event designated under section 404(a)(2)(B)(iii);

“(B) for reimbursing any stranding network participant for costs incurred in the collection, preparation, analysis, and transportation of marine mammal tissues and samples collected with respect to an unusual mortality event for the Tissue Bank; and

“(C) for the care and maintenance of a marine mammal seized under section 104(c)(2)(D); and

“(2) shall remain available until expended.”; and

(2) in subsection (c)—

(A) in paragraph (2), by striking “and” at the end;

(B) in paragraph (3), by striking the period at the end and inserting a semicolon; and

(C) by adding at the end the following:

“(4) not more than \$250,000 per year, as determined by the Secretary of Commerce, from sums collected as fines, penalties, or forfeitures of property by the Secretary of Commerce for violations of any provision of this Act; and

“(5) sums received from emergency declaration grants for marine mammal conservation.”.

**SEC. 5505. LIABILITY.**

Section 406(a) of the Marine Mammal Protection Act of 1972 (16 U.S.C. 1421e(a)) is amended, in the matter preceding paragraph (1)—

(1) by inserting “or entanglement” after “to a stranding”; and

(2) by striking “government” and inserting “Government”.

**SEC. 5506. NATIONAL MARINE MAMMAL TISSUE BANK AND TISSUE ANALYSIS.**

Section 407 of the Marine Mammal Protection Act of 1972 (16 U.S.C. 1421f) is amended—

(1) in subsection (c)(2)(A), by striking “the health of marine mammals and” and inserting “marine mammal health and mortality and the health of”; and

(2) in subsection (d), in the matter preceding paragraph (1), by inserting “public” before “access”.

**SEC. 5507. MARINE MAMMAL RESCUE AND RESPONSE GRANT PROGRAM AND RAPID RESPONSE FUND.**

(a) IN GENERAL.—Section 408 of the Marine Mammal Protection Act of 1972 (16 U.S.C. 1421f-1) is amended—

(1) by striking the section heading and inserting “MARINE MAMMAL RESCUE AND RESPONSE GRANT PROGRAM AND RAPID RESPONSE FUND”;

(2) by striking subsections (a) through (d) and subsections (f) through (h);

(3) by redesignating subsection (e) as subsection (f); and

(4) by inserting before subsection (f), as redesignated by paragraph (3), the following:

“(a) DEFINITIONS.—In this section:

“(1) EMERGENCY ASSISTANCE.—

“(A) IN GENERAL.—The term ‘emergency assistance’ means—

“(i) financial assistance provided to respond to, or that results from, a stranding event or entanglement event that—

“(I) causes an immediate increase in the cost of a response, recovery, or rehabilitation that is greater than the usual cost of a response, recovery, or rehabilitation;

“(II) is cyclical or endemic; or

“(III) involves a marine mammal that is out of the normal range for that marine mammal; or

“(ii) financial assistance provided to respond to, or that results from, a stranding event or an entanglement event that—

“(I) the applicable Secretary considers to be an emergency; or

“(II) with the concurrence of the applicable Secretary, a State, territorial, or Tribal government considers to be an emergency.

“(B) EXCLUSIONS.—The term ‘emergency assistance’ does not include financial assistance to respond to an unusual mortality event.

“(2) SECRETARY.—The term ‘Secretary’ has the meaning given that term in section 3(12)(A).

“(3) STRANDING REGION.—The term ‘stranding region’ means a geographic region designated by the applicable Secretary for purposes of administration of this title.

“(b) JOHN H. PRESCOTT MARINE MAMMAL RESCUE AND RESPONSE GRANT PROGRAM.—

“(1) IN GENERAL.—Subject to the availability of appropriations or other funding, the applicable Secretary shall carry out a grant program, to be known as the ‘John H. Prescott Marine Mammal Rescue and Response Grant Program’ (referred to in this section as the ‘grant program’), to award grants to eligible stranding network participants or stranding network collaborators, as described in this subsection.

“(2) PURPOSES.—The purposes of the grant program are to provide for—

“(A) the recovery, care, or treatment of sick, injured, or entangled marine mammals;

“(B) responses to marine mammal stranding events that require emergency assistance;

“(C) the collection of data and samples from living or dead stranded marine mammals for scientific research or assessments regarding marine mammal health;

“(D) facility operating costs that are directly related to activities described in subparagraph (A), (B), or (C); and

“(E) development of stranding network capacity, including training for emergency response, where facilities do not exist or are sparse.

“(3) CONTRACT, GRANT, AND COOPERATIVE AGREEMENT AUTHORITY.—

“(A) IN GENERAL.—The applicable Secretary may enter into a contract, grant, or cooperative agreement with any eligible stranding network participant or stranding network collaborator, as the Secretary determines to be appropriate, for the purposes described in paragraph (2).

“(B) EMERGENCY AWARD FLEXIBILITY.—Following a request for emergency award flexibility and analysis of the merits of and necessity for such a request, the applicable Secretary may—

“(i) amend any contract, grant, or cooperative agreement entered into under this paragraph, including provisions concerning the period of performance; or

“(ii) waive the requirements under subsection (f) for grant applications submitted during the provision of emergency assistance.

“(4) EQUITABLE DISTRIBUTION OF FUNDS.—

“(A) IN GENERAL.—The Secretary shall ensure, to the extent practicable, that funds awarded under the grant program are distributed equitably among the stranding regions.

“(B) CONSIDERATIONS.—In determining priorities among the stranding regions under this paragraph, the Secretary may consider—

“(i) equitable distribution within the stranding regions, including the sub regions (including, but not limited to, the Gulf of Mexico);

“(ii) any episodic stranding, entanglement, or mortality events, except for unusual mortality events, that occurred in any stranding region in the preceding year;

“(iii) any data with respect to average annual stranding, entanglements, and mortality events per stranding region;

“(iv) the size of the marine mammal populations inhabiting a stranding region;

“(v) the importance of the region’s marine mammal populations to the well-being of indigenous communities; and

“(vi) the conservation of protected, depleted, threatened, or endangered marine mammal species.

“(C) STRANDINGS.—For the purposes of this program, priority is to be given to applications focusing on marine mammal strandings.

“(5) APPLICATION.—To be eligible for a grant under the grant program, a stranding network participant shall—

“(A) submit an application in such form and manner as the applicable Secretary prescribes; and

“(B) be in compliance with the data reporting requirements under section 402(d) and any applicable reporting requirements of the United States Fish and Wildlife Service for species under its management jurisdiction.

“(6) GRANT CRITERIA.—The Secretary shall, in consultation with the Marine Mammal Commission, a representative from each of the stranding regions, and other individuals who represent public and private organizations that are actively involved in rescue, re-

habilitation, release, scientific research, marine conservation, and forensic science with respect to stranded marine mammals under that Department’s jurisdiction, develop criteria for awarding grants under their respective grant programs.

“(7) LIMITATIONS.—

“(A) MAXIMUM GRANT AMOUNT.—No grant made under the grant program for a single award may exceed \$150,000 in any 12-month period.

“(B) UNEXPENDED FUNDS.—Any funds that have been awarded under the grant program but that are unexpended at the end of the 12-month period described in subparagraph (A) shall remain available until expended.

“(8) ADMINISTRATIVE COSTS AND EXPENSES.—The Secretary’s administrative costs and expenses related to reviewing and awarding grants under the grant program, in any fiscal year may not exceed the greater of—

“(A) 6 percent of the amounts made available each fiscal year to carry out the grant program; or

“(B) \$80,000.

“(9) TRANSPARENCY.—The Secretary shall make publicly available a list of grant proposals for the upcoming fiscal year, funded grants, and requests for grant flexibility under this subsection.

“(c) JOSEPH R. GERACI MARINE MAMMAL RESCUE AND RAPID RESPONSE FUND.—

“(1) IN GENERAL.—There is established in the Treasury of the United States an interest-bearing fund, to be known as the ‘Joseph R. Geraci Marine Mammal Rescue and Rapid Response Fund’ (referred to in this section as the ‘Rapid Response Fund’).

“(2) USE OF FUNDS.—Amounts in the Rapid Response Fund shall be available only for use by the Secretary to provide emergency assistance.

“(d) AUTHORIZATION OF APPROPRIATIONS.—

“(1) IN GENERAL.—

“(A) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to carry out the grant program \$7,000,000 for each of fiscal years 2023 through 2028, to remain available until expended, of which for each fiscal year—

“(i) \$6,000,000 shall be made available to the Secretary of Commerce; and

“(ii) \$1,000,000 shall be made available to the Secretary of the Interior.

“(B) DERIVATION OF FUNDS.—Funds to carry out the activities under this section shall be derived from amounts authorized to be appropriated pursuant to subparagraph (A) that are enacted after the date of enactment of the Marine Mammal Research and Response Act of 2022.

“(2) JOSEPH R. GERACI MARINE MAMMAL RESCUE AND RAPID RESPONSE FUND.—There is authorized to be appropriated to the Rapid Response Fund \$500,000 for each of fiscal years 2023 through 2028.

“(e) ACCEPTANCE OF DONATIONS.—For the purposes of carrying out this section, the Secretary may solicit, accept, receive, hold, administer, and use gifts, devises, and bequests without any further approval or administrative action.”.

(b) TECHNICAL EDITS.—Section 408 of the Marine Mammal Protection Act of 1972 (16 U.S.C. 1421f-1), as amended by subsection (a), is further amended in subsection (f), as redesignated by subsection (a)(3)—

(1) in paragraph (1)—

(A) by striking “the costs of an activity conducted with a grant under this section shall be” and inserting “a project conducted with funds awarded under the grant program under this section shall be not less than”; and

(B) by striking “such costs” and inserting “such project”; and

(2) in paragraph (2)—

(A) by striking “an activity” and inserting “a project”; and

(B) by striking “the activity” and inserting “the project”.

(c) TABLE OF CONTENTS AMENDMENT.—The table of contents in the first section of the Marine Mammal Protection Act of 1972 (Public Law 92-522; 86 Stat. 1027) (as amended by section 5503(b)) is amended by striking the item related to section 408 and inserting the following:

“Sec. 408. Marine Mammal Rescue and Response Grant Program and Rapid Response Fund.

**SEC. 5508. HEALTH MAP.**

(a) IN GENERAL.—Title IV of the Marine Mammal Protection Act of 1972 (16 U.S.C. 1421 et seq.) is amended by inserting after section 408 the following:

**“SEC. 408A. MARINE MAMMAL HEALTH MONITORING AND ANALYSIS PLATFORM (HEALTH MAP).**

“(a) IN GENERAL.—Not later than 1 year after the date of enactment of the Marine Mammal Research and Response Act of 2022, the Secretary, acting through the Administrator of the National Oceanic and Atmospheric Administration, in consultation with the Secretary of the Interior and the Marine Mammal Commission, shall—

“(1) establish a marine mammal health monitoring and analysis platform (referred to in this Act as the ‘Health MAP’);

“(2) incorporate the Health MAP into the Observation System; and

“(3) make the Health MAP—

“(A) publicly accessible through the web portal of the Observation System; and

“(B) interoperable with other national data systems or other data systems for management or research purposes, as practicable.

“(b) PURPOSES.—The purposes of the Health MAP are—

“(1) to promote—

“(A) interdisciplinary research among individuals with knowledge and experience in marine mammal science, marine mammal veterinary and husbandry practices, medical science, and oceanography, and with other marine scientists;

“(B) timely and sustained dissemination and availability of marine mammal health, stranding, entanglement, and mortality data;

“(C) identification of spatial and temporal patterns of marine mammal mortality, disease, and stranding;

“(D) evaluation of marine mammal health in terms of mortality, as well as sublethal marine mammal health impacts;

“(E) improved collaboration and forecasting of marine mammal and larger ecosystem health events;

“(F) rapid communication and dissemination of information regarding marine mammal strandings that may have implications for human health, such as those caused by harmful algal blooms; and

“(G) increased accessibility of data in a user friendly visual interface for public education and outreach; and

“(2) to contribute to an ocean health index that incorporates marine mammal health data.

“(c) REQUIREMENTS.—The Health MAP shall—

“(1) integrate in situ, remote, and other marine mammal health, stranding, and mortality data, including visualizations and metadata, collected by marine mammal stranding networks, Federal, State, local, and Tribal governments, private partners, and academia; and

“(2) be designed—

“(A) to enhance data and information availability, including data sharing among

stranding network participants, scientists, and the public within and across stranding network regions;

“(B) to facilitate data and information access across scientific disciplines, scientists, and managers;

“(C) to facilitate public access to national and regional marine mammal health, stranding, entanglement, and mortality data, including visualizations and metadata, through the national and regional data portals of the Observation System; and

“(D) in collaboration with, and with input from, States and stranding network participants.

“(d) PROCEDURES AND GUIDELINES.—The Secretary shall establish and implement policies, protocols, and standards for—

“(1) reporting marine mammal health data collected by stranding networks consistent with subsections (c) and (d) of section 402;

“(2) promptly transmitting health data from the stranding networks and other appropriate data providers to the Health MAP;

“(3) disseminating and making publicly available data on marine mammal health, stranding, entanglement, and mortality data in a timely and sustained manner; and

“(4) integrating additional marine mammal health, stranding, or other relevant data as the Secretary determines appropriate.

“(e) CONSULTATION.—The Administrator of the National Oceanic and Atmospheric Administration shall maintain and update the Health MAP in consultation with the Secretary of the Interior and the Marine Mammal Commission.

“(f) CONTRIBUTIONS.—For purposes of carrying out this section, the Secretary may solicit, accept, receive, hold, administer, and use gifts, devises, and bequests without any further approval or administrative action.”.

(b) TABLE OF CONTENTS AMENDMENT.—The table of contents in the first section of the Marine Mammal Protection Act of 1972 (Public Law 92-522; 86 Stat. 1027) (as amended by section 5507(b)) is amended by inserting after the item related to section 408 the following:

“Sec. 408A. Marine Mammal Health Monitoring and Analysis Platform (Health MAP).

**SEC. 5509. REPORTS TO CONGRESS.**

(a) IN GENERAL.—Title IV of the Marine Mammal Protection Act of 1972 (16 U.S.C. 1421 et seq.) (as amended by section 5508(a)) is amended by inserting after section 408A the following:

**“SEC. 408B. REPORTS TO CONGRESS.**

“(a) DEFINITION OF APPROPRIATE COMMITTEES OF CONGRESS.—In this section, the term ‘appropriate committees of Congress’ means—

“(1) the Committee on Commerce, Science, and Transportation of the Senate;

“(2) the Committee on Environment and Public Works of the Senate;

“(3) the Committee on Natural Resources of the House of Representatives; and

“(4) the Committee on Science, Space, and Technology of the House of Representatives.

“(b) HEALTH MAP STATUS REPORT.—

“(1) IN GENERAL.—Not later than 2 year after the date of enactment of the Marine Mammal Research and Response Act of 2022, the Administrator of the National Oceanic and Atmospheric Administration, in consultation with the Marine Mammal Commission, the Secretary of the Interior, and the National Ocean Research Leadership Council, shall submit to the appropriate committees of Congress a report describing the status of the Health MAP.

“(2) REQUIREMENTS.—The report under paragraph (1) shall include—

“(A) a detailed evaluation of the data made publicly available through the Health MAP;

“(B) a detailed list of any gaps in data collected pursuant to the Health MAP, a de-

scription of the reasons for those gaps, and recommended actions to close those gaps;

“(C) an analysis of the effectiveness of using the website of the Observation System as the platform to collect, organize, visualize, archive, and disseminate marine mammal stranding and health data;

“(D) a list of publications, presentations, or other relevant work product resulting from, or produced in collaboration with, the Health MAP;

“(E) a description of emerging marine mammal health concerns and the applicability of those concerns to human health;

“(F) an analysis of the feasibility of the Observation System being used as an alert system during stranding events, entanglement events, and unusual mortality events for the stranding network, Observation System partners, Health MAP partners, Federal and State agencies, and local and Tribal governments;

“(G) an evaluation of the use of Health MAP data to predict broader ecosystem events and changes that may impact marine mammal or human health and specific examples of proven or potential uses of Observation System data for those purposes; and

“(H) recommendations for the Health MAP with respect to—

“(i) filling any identified data gaps;

“(ii) standards that could be used to improve data quality, accessibility, transmission, interoperability, and sharing;

“(iii) any other strategies that would contribute to the effectiveness and usefulness of the Health MAP; and

“(iv) the funding levels needed to maintain and improve the Health MAP.

“(c) DATA GAP ANALYSIS.—

“(1) IN GENERAL.—Not later than 5 years after the date on which the report required under subsection (b)(1) is submitted, and every 10 years thereafter, the Administrator of the National Oceanic and Atmospheric Administration, in consultation with the Marine Mammal Commission and the Director of the United States Fish and Wildlife Service, shall—

“(A) make publicly available a report on the data gap analysis described in paragraph (2); and

“(B) provide a briefing to the appropriate committees of Congress concerning that data gap analysis.

“(2) REQUIREMENTS.—The data gap analysis under paragraph (1) shall include—

“(A) an overview of existing participants within a marine mammal stranding network;

“(B) an identification of coverage needs and participant gaps within a network;

“(C) an identification of data and reporting gaps from members of a network; and

“(D) an analysis of how stranding and health data are shared and made available to scientists, academics, State, local, and Tribal governments, and the public.

“(d) MARINE MAMMAL RESPONSE CAPABILITIES IN THE ARCTIC.—

“(1) IN GENERAL.—Not later than 1 year after the date of enactment of the Marine Mammal Research and Response Act of 2022, the Administrator of the National Oceanic and Atmospheric Administration, the Director of the United States Fish and Wildlife Service, and the Director of the United States Geologic Survey, in consultation with the Marine Mammal Commission, shall—

“(A) make publicly available a report describing the response capabilities for sick and injured marine mammals in the Arctic regions of the United States; and

“(B) provide a briefing to the appropriate committees of Congress on that report.

“(2) ARCTIC.—The term ‘Arctic’ has the meaning given the term in section 112 of the Arctic Research and Policy Act of 1984 (15 U.S.C. 4111).

“(3) REQUIREMENTS.—The report under paragraph (1) shall include—

“(A) a description, developed in consultation with the Fish and Wildlife Service of the Department of the Interior, of all marine mammal stranding agreements in place for the Arctic region of the United States, including species covered, response capabilities, facilities and equipment, and data collection and analysis capabilities;

“(B) a list of State and local government agencies that have personnel trained to respond to marine mammal strandings in the Arctic region of the United States;

“(C) an assessment of potential response and data collection partners and sources of local information and knowledge, including Alaska Native people and villages;

“(D) an analysis of spatial and temporal trends in marine mammal strandings and unusual mortality events that are correlated with changing environmental conditions in the Arctic region of the United States;

“(E) a description of training and other resource needs to meet emerging response requirements in the Arctic region of the United States;

“(F) an analysis of oiled marine mammal response and rehabilitation capabilities in the Arctic region of the United States, including personnel, equipment, facilities, training, and husbandry capabilities, and an assessment of factors that affect response and rehabilitation success rates; and

“(G) recommendations to address future stranding response needs for marine mammals in the Arctic region of the United States.”

(b) TABLE OF CONTENTS AMENDMENT.—The table of contents in the first section of the Marine Mammal Protection Act of 1972 (Public Law 92-522; 86 Stat. 1027) (as amended by section 5508(b)) is amended by inserting after the item related to section 408A the following:

“Sec. 408B. Reports to Congress.

**SEC. 5510. AUTHORIZATION OF APPROPRIATIONS.**

Section 409 of the Marine Mammal Protection Act of 1972 (16 U.S.C. 1421g) is amended—

(1) in paragraph (1), by striking “1993 and 1994;” and inserting “2023 through 2028;”;

(2) in paragraph (2), by striking “1993 and 1994;” and inserting “2023 through 2028;”;

(3) in paragraph (3), by striking “fiscal year 1993.” and inserting “for each of fiscal years 2023 through 2028.”

**SEC. 5511. DEFINITIONS.**

Section 410 of the Marine Mammal Protection Act of 1972 (16 U.S.C. 1421h) is amended—

(1) by redesignating paragraphs (1) through (6) as paragraphs (2), (5), (6), (7), (8), and (9), respectively;

(2) by inserting before paragraph (2) (as so redesignated) the following:

“(1) The term ‘entangle’ or ‘entanglement’ means an event in the wild in which a living or dead marine mammal has gear, rope, line, net, or other material wrapped around or attached to the marine mammal and is—

“(A) on lands under the jurisdiction of the United States, including beaches and shorelines; or

“(B) in waters under the jurisdiction of the United States, including any navigable waters.”;

(3) in paragraph (2) (as so redesignated) by striking “The term” and inserting “Except as used in section 408, the term”;

(4) by inserting after paragraph (2) (as so redesignated) the following:

“(3) The term ‘Health MAP’ means the Marine Mammal Health Monitoring and Analysis Platform established under section 408A(a)(1).

“(4) The term ‘Observation System’ means the National Integrated Coastal and Ocean Observation System established under sec-

tion 12304 of the Integrated Coastal and Ocean Observation System Act of 2009 (33 U.S.C. 3603).”

**SEC. 5512. STUDY ON MARINE MAMMAL MORTALITY.**

(a) IN GENERAL.—Not later than 12 months after the date of enactment of this Act, the Undersecretary of Commerce for Oceans and Atmosphere shall, in consultation with the Secretary of the Interior and the Marine Mammal Commission, conduct a study evaluating the connections among marine heat waves, frequency and intensity of harmful algal blooms, prey availability, and habitat degradation, and the impacts of these conditions on marine mammal mortality.

(b) REPORT.—The Undersecretary of Commerce for Oceans and Atmosphere, in consultation with the Secretary of the Interior and the Marine Mammal Commission, shall prepare, post to a publicly available website, and brief the appropriate committees of Congress on, a report containing the results of the study described in subsection (a). The report shall identify priority research activities, opportunities for collaboration, and current gaps in effort and resource limitations related to advancing scientific understanding of how ocean heat waves, harmful algae blooms, availability of prey, and habitat degradation impact marine mammal mortality. The report shall include recommendations for policies needed to mitigate and respond to mortality events.

**TITLE LVI—VOLCANIC ASH AND FUMES**

**SEC. 5601. SHORT TITLE.**

This title may be cited as the “Volcanic Ash and Fumes Act of 2022”.

**SEC. 5602. MODIFICATIONS TO NATIONAL VOLCANO EARLY WARNING AND MONITORING SYSTEM.**

(a) DEFINITIONS.—Subsection (a) of section 5001 of the John D. Dingell, Jr. Conservation, Management, and Recreation Act (43 U.S.C. 31k) is amended—

(1) by redesignating paragraph (2) as paragraph (3);

(2) by inserting after paragraph (1) the following:

“(2) SECRETARY OF COMMERCE.—The term ‘Secretary of Commerce’ means the Secretary of Commerce, acting through the Under Secretary of Commerce for Oceans and Atmosphere.”; and

(3) by adding at the end the following:

“(4) VOLCANIC ASH ADVISORY CENTER.—The term ‘Volcanic Ash Advisory Center’ means an entity designated by the International Civil Aviation Organization that is responsible for informing aviation interests about the presence of volcanic ash in the airspace.”

(b) PURPOSES.—Subsection (b)(1)(B) of such section is amended—

(1) in clause (i), by striking “and” at the end;

(2) in clause (ii), by striking the period at the end and inserting “; and”; and

(3) by adding at the end the following:

“(iii) to strengthen the warning and monitoring systems of volcano observatories in the United States by integrating relevant capacities of the National Oceanic and Atmospheric Administration, including with the Volcanic Ash Advisory Centers located in Anchorage, Alaska, and Washington, DC, to observe and model emissions of gases, aerosols, and ash, atmospheric dynamics and chemistry, and ocean chemistry resulting from volcanic eruptions.”

(c) SYSTEM COMPONENTS.—Subsection (b)(2) of such section is amended—

(1) in subparagraph (B)—

(A) by striking “and” before “spectrometry”; and

(B) by inserting “, and unoccupied aerial vehicles” after “emissions”; and

(2) by adding at the end the following:

“(C) MEMORANDUM OF UNDERSTANDING.—The Secretary and the Secretary of Commerce shall develop and execute a memorandum of understanding to establish cooperative support for the activities of the System from the National Oceanic and Atmospheric Administration, including environmental observations, modeling, and temporary duty assignments of personnel to support emergency activities, as necessary or appropriate.”

(d) MANAGEMENT.—Subsection (b)(3) of such section is amended—

(1) in subparagraph (A), by adding at the end the following:

“(iii) UPDATE.—

“(I) NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION COST ESTIMATES.—The Secretary of Commerce shall submit to the Secretary annual cost estimates for modernization activities and support of the System for the National Oceanic and Atmospheric Administration.

“(II) UPDATE OF MANAGEMENT PLAN.—The Secretary shall update the management plan submitted under clause (i) to include the cost estimates submitted under subclause (I).”;

(2) by adding at the end the following:

“(E) COLLABORATION.—The Secretary of Commerce shall collaborate with the Secretary to implement activities carried out under this section related to the expertise of the National Oceanic and Atmospheric Administration, including observations and modeling of emissions of gases, aerosols, and ash, atmospheric dynamics and chemistry, and ocean chemistry resulting from volcanic eruptions.”

(e) FUNDING.—Subsection (c) of such section is amended—

(1) in paragraph (1)—

(A) in the paragraph heading, by inserting “, UNITED STATES GEOLOGICAL SURVEY” after “APPROPRIATIONS”; and

(B) by inserting “to the United States Geological Survey” after “appropriated”;

(2) by redesignating paragraph (2) as paragraph (3);

(3) by inserting after paragraph (1) the following:

“(2) AUTHORIZATION OF APPROPRIATIONS, NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION.—There is authorized to be appropriated to the National Oceanic and Atmospheric Administration to carry out this section such sums as may be necessary for the period of fiscal years 2023 through 2024.”; and

(4) in paragraph (3), as redesignated by paragraph (2)—

(A) by striking “United States Geological Survey”; and

(B) by inserting “of the United States Geological Survey and the National Oceanic and Atmospheric Administration” after “programs”.

(f) IMPLEMENTATION PLAN.—

(1) DEVELOPMENT OF PLAN.—Not later than 180 days after the date of the enactment of this Act, the Secretary of Commerce, in consultation with the Secretary of the Interior, shall develop a plan to implement the amendments made by this Act during the 5-year period beginning on the date on which the plan is developed.

(2) ELEMENTS.—The plan developed under paragraph (1) shall include an estimate of the cost and schedule required for the implementation described in such paragraph.

(3) PUBLIC AVAILABILITY.—Upon completion of the plan developed under paragraph (1), the Secretary of Commerce shall make the plan publicly available.

**TITLE LVII—WILDFIRE AND FIRE WEATHER PREPAREDNESS**

**SEC. 5701. SHORT TITLE.**

This title may be cited as the “Fire Ready Nation Act of 2022”.

**SEC. 5702. DEFINITIONS.**

In this title:

(1) **ADMINISTRATION.**—The term “Administration” means the National Oceanic and Atmospheric Administration.

(2) **APPROPRIATE COMMITTEES OF CONGRESS.**—The term “appropriate committees of Congress” means—

(A) the Committee on Commerce, Science, and Transportation of the Senate; and

(B) the Committee on Science, Space, and Technology of the House of Representatives.

(3) **EARTH SYSTEM MODEL.**—The term “Earth system model” means a mathematical model containing all relevant components of the Earth, namely the atmosphere, oceans, land, cryosphere, and biosphere.

(4) **FIRE ENVIRONMENT.**—The term “fire environment” means—

(A) the environmental conditions, such as soil moisture, vegetation, topography, snowpack, atmospheric temperature, moisture, and wind, that influence—

(i) fuel and fire behavior; and

(ii) smoke dispersion and transport; and

(B) the associated environmental impacts occurring during and after fire events.

(5) **FIRE WEATHER.**—The term “fire weather” means the weather conditions that influence the start, spread, character, or behavior of wildfire or fires at the wildland-urban interface and relevant meteorological and chemical phenomena, including air quality, smoke, and meteorological parameters such as relative humidity, air temperature, wind speed and direction, and atmospheric composition and chemistry, including emissions and mixing heights.

(6) **IMPACT-BASED DECISION SUPPORT SERVICES.**—The term “impact-based decision support services” means forecast advice and interpretative services the Administration provides to help core partners, such as emergency personnel and public safety officials, make decisions when weather, water, and climate impact the lives and livelihoods of the people of the United States.

(7) **SEASONAL.**—The term “seasonal” has the meaning given that term in section 2 of the Weather Research and Forecasting Innovation Act of 2017 (15 U.S.C. 8501).

(8) **SECRETARY.**—The term “Secretary” means the Secretary of Commerce.

(9) **SMOKE.**—The term “smoke” means emissions, including the gases and particles released into the air as a result of combustion.

(10) **STATE.**—The term “State” means a State, the District of Columbia, the Commonwealth of Puerto Rico, Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, the United States Virgin Islands, the Federated States of Micronesia, the Republic of the Marshall Islands, or the Republic of Palau.

(11) **SUBSEASONAL.**—The term “subseasonal” has the meaning given that term in section 2 of the Weather Research and Forecasting Innovation Act of 2017 (15 U.S.C. 8501).

(12) **TRIBAL GOVERNMENT.**—The term “Tribal government” means the recognized governing body of any Indian or Alaska Native tribe, band, nation, pueblo, village, community, component band, or component reservation, individually identified (including parenthetically) in the list published most recently as of the date of enactment of this Act pursuant to section 104 of the Federally Recognized Indian Tribe List Act of 1994 (25 U.S.C. 5131).

(13) **UNDER SECRETARY.**—The term “Under Secretary” means the Under Secretary of Commerce for Oceans and Atmosphere.

(14) **WEATHER ENTERPRISE.**—The term “weather enterprise” has the meaning given that term in section 2 of the Weather Research and Forecasting Innovation Act of 2017 (15 U.S.C. 8501).

(15) **WILDFIRE.**—The term “wildfire” means any non-structure fire that occurs in vegetation or natural fuels, originating from an unplanned ignition.

(16) **WILDLAND-URBAN INTERFACE.**—The term “wildland-urban interface” means the area, zone, or region of transition between unoccupied or undeveloped land and human development where structures and other human development meet or intermingle with undeveloped wildland or vegetative fuels.

**SEC. 5703. ESTABLISHMENT OF FIRE WEATHER SERVICES PROGRAM.**

(a) **IN GENERAL.**—The Under Secretary shall establish and maintain a coordinated fire weather services program among the offices of the Administration in existence as of the date of the enactment of this Act and designated by the Under Secretary.

(b) **PROGRAM FUNCTIONS.**—The functions of the program established under subsection (a), consistent with the priorities described in section 101 of the Weather Research and Forecasting Innovation Act of 2017 (15 U.S.C. 8511), shall be—

(1) to support readiness, responsiveness, understanding, and overall resilience of the United States to wildfires, fire weather, smoke, and other associated conditions, hazards, and impacts in built and natural environments and at the wildland-urban interface;

(2) to collaboratively develop and disseminate accurate, precise, effective, and timely risk communications, forecasts, watches, and warnings relating to wildfires, fire weather, smoke, and other associated conditions, hazards, and impacts, as applicable, with Federal land management agencies;

(3) to partner with and support the public, Federal, State, and Tribal governments, and academic and local partners through the development of capabilities, impact-based decision support services, and overall service delivery and utility;

(4) to conduct and support research and development of new and innovative models, technologies, techniques, products, systems, processes, and procedures to improve understanding of wildfires, fire weather, air quality, and the fire environment;

(5) to develop strong research-to-operations and operations-to-research transitions, in order to facilitate delivery of products, services, and tools to operational users and platforms; and

(6) to develop, in coordination with Federal land management agencies and the Armed Forces, as appropriate, impact-based decision support services that operationalize and integrate the functions described in paragraphs (1) through (5) in order to provide comprehensive impact-based decision support services that encompass the fire environment.

(c) **PROGRAM PRIORITIES.**—In developing and implementing the program established under subsection (a), the Under Secretary shall prioritize—

(1) development of a fire weather-enabled Earth system model and data assimilation systems that—

(A) are capable of prediction and forecasting across relevant spatial and temporal timescales;

(B) include variables associated with fire weather, air quality from smoke, and the fire environment;

(C) improve understanding of the connections between fire weather and modes of climate variability; and

(D) incorporate emerging techniques such as artificial intelligence, machine learning, and cloud computing;

(2) advancement of existing and new observational capabilities, including satellite-, airborne-, air-, and ground-based systems and technologies and social networking and other public information-gathering applications that—

(A) identify—

(i) high-risk pre-ignition conditions;

(ii) conditions that influence fire behavior and spread including those conditions that suppress active fire events; and

(iii) fire risk values;

(B) support real-time notification and monitoring of ignitions;

(C) support observations and data collection of fire weather and fire environment variables, including smoke, for development of the model and systems under paragraph (1); and

(D) support forecasts and advancing understanding and research of the impacts of wildfires on military activities, human health, ecosystems, climate, transportation, and economies; and

(3) development and implementation of advanced and user-oriented impact-based decision tools, science, and technologies that—

(A) ensure real-time and retrospective data, products, and services are findable, accessible, interoperable, usable, inform further research, and are analysis- and decision-ready;

(B) provide targeted information throughout the fire lifecycle including pre-ignition, detection, forecasting, post-fire, and monitoring phases; and

(C) support early assessment of post-fire hazards, such as air quality, debris flows, mudslides, and flooding.

(d) **PROGRAM ACTIVITIES.**—In developing and implementing the program established under subsection (a), the Under Secretary may—

(1) conduct relevant physical and social science research activities in support of the functions described in subsection (b) and the priorities described in subsection (c);

(2) conduct relevant activities, in coordination with Federal land management agencies and Federal science agencies, to assess fuel characteristics, including moisture, loading, and other parameters used to determine fire risk levels and outlooks;

(3) support and conduct research that assesses impacts to marine, riverine, and other relevant ecosystems, which may include forest and rangeland ecosystems, resulting from activities associated with mitigation of and response to wildfires;

(4) support and conduct attribution science research relating to wildfires, fire weather, fire risk, smoke, and associated conditions, risks, and impacts;

(5) develop smoke and air quality forecasts, forecast guidance, and prescribed burn weather forecasts, and conduct research on the impact of such forecasts on response behavior that minimizes health-related impacts from smoke exposure;

(6) use, in coordination with Federal land management agencies, wildland fire resource intelligence to inform fire environment impact-based decision support products and services for safety;

(7) work with Federal agencies to provide data, tools, and services to support determinations by such agencies for the implementation of mitigation measures;

(8) provide training and support to ensure effective media utilization of impact-based decision support products and guidance to

the public regarding actions needing to be taken;

(9) provide comprehensive training to ensure staff of the program established under subsection (a) is properly equipped to deliver the impact-based decision support products and services described in paragraphs (1) through (6); and

(10) acquire through contracted purchase private sector-produced observational data to fill identified gaps, as needed.

(e) COLLABORATION; AGREEMENTS.—

(1) COLLABORATION.—The Under Secretary shall, as the Under Secretary considers appropriate, collaborate and consult with partners in the weather and climate enterprises, academic institutions, States, Tribal governments, local partners, and Federal agencies, including land and fire management agencies, in the development and implementation of the program established under subsection (a).

(2) AGREEMENTS.—The Under Secretary may enter into agreements in support of the functions described in subsection (b), the priorities described in subsection (c), the activities described in subsection (d), and activities carried out under section 5708.

(f) PROGRAM ADMINISTRATION PLAN.—

(1) IN GENERAL.—Not later than 180 days after the date of the enactment of this Act, the Under Secretary shall submit to the appropriate committees of Congress a plan that details how the program established under subsection (a) will be administered and governed within the Administration.

(2) ELEMENTS.—The plan required by paragraph (1) should include a description of—

(A) how the functions described in subsection (b), the priorities described in subsection (c), and the activities described in subsection (d) will be distributed among the line offices of the Administration; and

(B) the mechanisms in place to ensure seamless coordination among those offices.

**SEC. 5704. NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION DATA MANAGEMENT.**

Section 301 of the Weather Research and Forecasting Innovation Act of 2017 (15 U.S.C. 8531) is amended—

(1) by redesignating subsections (f) and (g) as subsections (g) and (h), respectively; and

(2) by inserting after subsection (e) the following:

“(f) DATA AVAILABILITY AND MANAGEMENT.—

“(1) IN GENERAL.—The Under Secretary shall—

“(A) make data and metadata generated or collected by the National Oceanic and Administration that the Under Secretary has the legal right to redistribute fully and openly available, in accordance with chapter 35 of title 44, United States Code, and the Foundations for Evidence-Based Policymaking Act of 2018 (Public Law 115–435; 132 Stat. 5529) and the amendments made by that Act, and preserve and curate such data and metadata, in accordance with chapter 31 of title 44, United States Code (commonly known as the ‘Federal Records Act of 1950’), in order to maximize use of such data and metadata; and

“(B) manage and steward the access, archival, and retrieval activities for the data and metadata described in subparagraph (A) by—

“(i) using—

“(I) enterprise-wide infrastructure, emerging technologies, commercial partnerships, and the skilled workforce needed to provide appropriate data management from collection to broad access; and

“(II) associated information services; and

“(ii) pursuing the maximum interoperability of data and information by—

“(I) leveraging data, information, knowledge, and tools from across the Federal Government to support equitable access, cross-

sectoral collaboration and innovation, and local planning and decision-making; and

“(II) developing standards and practices for the adoption and citation of digital object identifiers for datasets, models, and analytical tools.

“(2) COLLABORATION.—In carrying out this subsection, the Under Secretary shall collaborate with such Federal partners and stakeholders as the Under Secretary considers relevant—

“(A) to develop standards to pursue maximum interoperability of data, information, knowledge, and tools across the Federal Government, convert historical records into common digital formats, and improve access and usability of data by partners and stakeholders;

“(B) to identify and solicit relevant data from Federal and international partners and other relevant stakeholders, as the Under Secretary considers appropriate;

“(C) to develop standards and practices for the adoption and citation of digital object identifiers for datasets, models, and analytical tools; and

“(D) to ensure that, to the maximum extent possible, data access and distribution is compatible with national security equities.”.

**SEC. 5705. DIGITAL FIRE WEATHER SERVICES AND DATA MANAGEMENT.**

(a) IN GENERAL.—

(1) DIGITAL PRESENCE.—The Under Secretary shall develop and maintain a comprehensive, centralized, and publicly accessible digital presence designed to promote findability, accessibility, interoperability, usability, and utility of the services, tools, data, and information produced by the program established under section 5703(a).

(2) DIGITAL PLATFORM AND TOOLS.—In carrying out paragraph (1), the Under Secretary shall seek to ensure the digital platform and tools of the Administration integrate geospatial data, decision support tools, training, and best practices to provide real-time fire weather forecasts and address fire-related issues and needs.

(b) INTERNET-BASED TOOLS.—In carrying out subsections (a) and (b), the Under Secretary shall develop and implement internet-based tools, such as webpages and smartphone and other mobile applications, to increase utility and access to services and products for the benefit of users.

**SEC. 5706. HIGH-PERFORMANCE COMPUTING.**

(a) IN GENERAL.—The Under Secretary shall seek to acquire sufficient high-performance computing resources and capacity for research, operations, and data storage in support of the program established under section 5703(a).

(b) CONSIDERATIONS.—In acquiring high-performance computing capacity under subsection (a), the Under Secretary shall consider requirements needed for—

(1) conducting research and development;

(2) the transition of research and testbed developments into operations;

(3) capabilities existing in other Federal agencies and the commercial sector; and

(4) skilled workforce development.

**SEC. 5707. GOVERNMENT ACCOUNTABILITY OFFICE REPORT ON FIRE WEATHER SERVICES PROGRAM.**

(a) IN GENERAL.—Not later than 3 years after the date of the enactment of this Act, the Comptroller General of the United States shall submit to Congress a report on the program established under section 5703(a).

(b) ELEMENTS.—The report required by subsection (a) shall—

(1) evaluate the performance of the program by establishing initial baseline capabilities and tracking progress made toward fully operationalizing the functions described in section 5703(b); and

(2) include such other recommendations as the Comptroller General determines are appropriate to improve the program.

**SEC. 5708. FIRE WEATHER TESTBED.**

(a) ESTABLISHMENT OF FIRE WEATHER TESTBED.—The Under Secretary shall establish a fire weather testbed that enables engagement across the Federal Government, State and local governments, academia, private and federally funded research laboratories, the private sector, and end-users in order to evaluate the accuracy and usability of technology, models, fire weather products and services, and other research to accelerate the implementation, transition to operations, and use of new capabilities by the Administration, Federal and land management agencies, and other relevant stakeholders.

(b) UNCREWED AIRCRAFT SYSTEMS.—

(1) IN GENERAL.—The Under Secretary shall—

(A) research and assess the role and potential of uncrewed aircraft systems to improve data collection in support of modeling, observations, predictions, forecasts, and impact-based decision support services;

(B) transition uncrewed aircraft systems technologies from research to operations as the Under Secretary considers appropriate; and

(C) coordinate with other Federal agencies that may be developing uncrewed aircraft systems and related technologies to meet the challenges of wildland fire management.

(2) PILOT REQUIRED.—In carrying out paragraph (1), not later than 1 year after the date of the enactment of this Act, the Under Secretary shall conduct pilots of uncrewed aircraft systems for fire weather and fire environment observations, including—

(A) testing of uncrewed systems in approximations of real-world scenarios;

(B) assessment of the utility of meteorological data collected from fire response and assessment aircraft;

(C) input of the collected data into appropriate models to predict fire behavior, including coupled atmosphere and fire models; and

(D) collection of best management practices for deployment of uncrewed systems and other remote data technology, including for communication and coordination between the stakeholders described in subsection (a).

(3) PROHIBITION.—

(A) IN GENERAL.—Except as provided under subparagraphs (B) and (C), the Under Secretary may not procure any covered uncrewed aircraft system that is manufactured or assembled by a covered foreign entity, which includes associated elements (consisting of communication links and the components that control the uncrewed aircraft) that are required for the operator to operate safely and efficiently in the national airspace system. The Federal Acquisition Security Council, in coordination with the Secretary of Transportation, shall develop and update a list of associated elements.

(B) EXEMPTION.—The Under Secretary, in consultation with the Secretary of Homeland Security, is exempt from the prohibition under subparagraph (A) if the operation or procurement is necessary for the sole purpose of marine or atmospheric science or management.

(C) WAIVER.—The Under Secretary may waive the prohibition under subparagraph (A) on a case-by-case basis—

(i) with the approval of the Secretary of Homeland Security or the Secretary of Defense; and

(ii) upon notification to Congress.

(D) DEFINITIONS.—In this paragraph:



(i) COVERED FOREIGN ENTITY.—The term “covered foreign entity” means an entity included on a list developed and maintained by the Federal Acquisition Security Council. The list shall include entities in the following categories:

(I) An entity included on the Consolidated Screening List.

(II) Any entity that is subject to extrajudicial direction from a foreign government, as determined by the Secretary of Homeland Security.

(III) Any entity the Secretary of Homeland Security, in coordination with the Director of National Intelligence and the Secretary of Defense, determines poses a national security risk.

(IV) Any entity domiciled in the People’s Republic of China or subject to influence or control by the Government of the People’s Republic of China or the Communist Party of the People’s Republic of China, as determined by the Secretary of Homeland Security.

(V) Any subsidiary or affiliate of an entity described in subclauses (I) through (IV).

(ii) COVERED UNCREWED AIRCRAFT SYSTEM.—The term “covered uncrewed aircraft system” has the meaning given the term “unmanned aircraft system” in section 44801 of title 49, United States Code.

(4) SAVINGS CLAUSE.—

(A) IN GENERAL.—In carrying out activities under this subsection, the Under Secretary shall ensure that any testing or deployment of uncrewed aircraft systems follow procedures, restrictions, and protocols established by the heads of the Federal agencies with statutory or regulatory jurisdiction over any airspace in which wildfire response activities are conducted during an active wildfire event.

(B) CONSULTATION AND COORDINATION.—The Under Secretary shall consult and coordinate with relevant Federal land management agencies, Federal science agencies, and the Federal Aviation Administration to develop processes for the appropriate deployment of the systems described in subparagraph (A).

(C) ADDITIONAL PILOT PROJECTS.—The Under Secretary shall establish additional pilot projects relating to the fire weather testbed that may include the following elements:

(1) Advanced satellite detection products.

(2) Procurement and use of commercial data.

**SEC. 5709. FIRE WEATHER SURVEYS AND ASSESSMENTS.**

(a) ANNUAL POST-FIRE-WEATHER SEASON SURVEY AND ASSESSMENT.—

(1) IN GENERAL.—During the second winter following the enactment of this Act, and each year thereafter, the Under Secretary shall conduct a post-fire-weather season survey and assessment.

(2) ELEMENTS.—After conducting a post-fire-weather season survey and assessment under paragraph (1), the Under Secretary shall—

(A) investigate any gaps in data collected during the assessment;

(B) identify and implement strategies and procedures to improve program services and information dissemination;

(C) update systems, processes, strategies, and procedures to enhance the efficiency and reliability of data obtained from the assessment;

(D) evaluate the accuracy and efficacy of physical fire weather forecasting information for each incident included in the survey and assessment; and

(E) assess and refine performance measures, as needed.

(b) SURVEYS AND ASSESSMENTS FOLLOWING INDIVIDUAL WILDFIRE EVENTS.—The Under Secretary may conduct surveys and assess-

ments following individual wildfire events as the Under Secretary determines necessary.

(c) GOAL.—In carrying out activities under this section, the Under Secretary shall seek to increase the number of post-wildfire community impact studies, including by surveying individual and collective responses and incorporating other applicable topics of social science research.

(d) ANNUAL BRIEFING.—Not less frequently than once each year, the Under Secretary shall provide a briefing to the appropriate committees of Congress that provides—

(1) an overview of the fire season; and

(2) an outlook for the fire season for the coming year.

(e) COORDINATION.—In conducting any survey or assessment under this section, the Under Secretary shall coordinate with Federal, State, and local partners, Tribal governments, private entities, and such institutions of higher education as the Under Secretary considers relevant in order to—

(1) improve operations and collaboration; and

(2) optimize data collection, sharing, integration, assimilation, and dissemination.

(f) DATA AVAILABILITY.—The Under Secretary shall make the data and findings obtained from each assessment conducted under this section available to the public in an accessible digital format as soon as practicable after conducting the assessment.

(g) SERVICE IMPROVEMENTS.—The Under Secretary shall make best efforts to incorporate the results and recommendations of each assessment conducted under this section into the research and development plan and operations of the Administration.

**SEC. 5710. INCIDENT METEOROLOGIST SERVICE.**

(a) ESTABLISHMENT.—The Under Secretary shall establish and maintain an Incident Meteorologist Service within the National Weather Service (in this section referred to as the “Service”).

(b) INCLUSION OF EXISTING INCIDENT METEOROLOGISTS.—The Service shall include—

(1) the incident meteorologists of the Administration as of the date of the enactment of this Act; and

(2) such incident meteorologists of the Administration as may be appointed after such date.

(c) FUNCTIONS.—The Service shall provide—

(1) on-site impact-based decision support services to Federal, State, Tribal government, and local government emergency response agencies preceding, during, and following wildland fires or other events that threaten life or property, including high-impact and extreme weather events; and

(2) support to Federal, State, Tribal government, and local government decision makers, partners, and stakeholders for seasonal planning.

(d) DEPLOYMENT.—The Service shall be deployed—

(1) as determined by the Under Secretary; or

(2) at the request of the head of another Federal agency and with the approval of the Under Secretary.

(e) STAFFING AND RESOURCES.—In establishing and maintaining the Service, the Under Secretary shall identify, acquire, and maintain adequate levels of staffing and resources to meet user needs.

(f) SYMBOL.—

(1) IN GENERAL.—The Under Secretary may—

(A) create, adopt, and publish in the Federal Register a symbol for the Service; and

(B) restrict the use of such symbol as appropriate.

(2) USE OF SYMBOL.—The Under Secretary may authorize the use of a symbol adopted under this subsection by any individual or

entity as the Under Secretary considers appropriate.

(3) CONTRACT AUTHORITY.—The Under Secretary may award contracts for the creation of symbols under this subsection.

(4) OFFENSE.—It shall be unlawful for any person—

(A) to represent themselves as an official of the Service absent the designation or approval of the Under Secretary;

(B) to manufacture, reproduce, or otherwise use any symbol adopted by the Under Secretary under this subsection, including to sell any item bearing such a symbol, unless authorized by the Under Secretary; or

(C) to violate any regulation promulgated by the Secretary under this subsection.

(g) SUPPORT FOR INCIDENT METEOROLOGISTS.—The Under Secretary shall provide resources, access to real-time fire weather forecasts, training, administrative and logistical support, and access to professional counseling or other forms of support as the Under Secretary considers appropriate for the betterment of the emotional and mental health and well-being of incident meteorologists and other employees of the Administration involved with response to high-impact and extreme fire weather events.

**SEC. 5711. AUTOMATED SURFACE OBSERVING SYSTEM.**

(a) JOINT ASSESSMENT AND PLAN.—

(1) IN GENERAL.—The Under Secretary, in collaboration with the Administrator of the Federal Aviation Administration and the Secretary of Defense, shall—

(A) conduct an assessment of resources, personnel, procedures, and activities necessary to maximize the functionality and utility of the automated surface observing system of the United States that identifies—

(i) key system upgrades needed to improve observation quality and utility for weather forecasting, aviation safety, and other users;

(ii) improvements needed in observations within the planetary boundary layer, including mixing height;

(iii) improvements needed in public accessibility of observational data;

(iv) improvements needed to reduce latency in reporting of observational data;

(v) relevant data to be collected for the production of forecasts or forecast guidance relating to atmospheric composition, including particulate and air quality data, and aviation safety;

(vi) areas of concern regarding operational continuity and reliability of the system, which may include needs for on-night staff, particularly in remote and rural areas and areas where system failure would have the greatest negative impact to the community;

(vii) stewardship, data handling, data distribution, and product generation needs arising from upgrading and changing the automated surface observation systems;

(viii) possible solutions for areas of concern identified under clause (vi), including with respect to the potential use of backup systems, power and communication system reliability, staffing needs and personnel location, and the acquisition of critical component backups and proper storage location to ensure rapid system repair necessary to ensure system operational continuity; and

(ix) research, development, and transition to operations needed to develop advanced data collection, quality control, and distribution so that the data are provided to models, users, and decision support systems in a timely manner; and

(B) develop and implement a plan that addresses the findings of the assessment conducted under subparagraph (A), including by seeking and allocating resources necessary to ensure that system upgrades are standardized across the Administration, the Federal



Aviation Administration, and the Department of Defense to the extent practicable.

(2) **STANDARDIZATION.**—Any system standardization implemented under paragraph (1)(B) shall not impede activities to upgrade or improve individual units of the system.

(3) **REMOTE AUTOMATIC WEATHER STATION COORDINATION.**—The Under Secretary, in collaboration with relevant Federal agencies and the National Interagency Fire Center, shall assess and develop cooperative agreements to improve coordination, interoperability standards, operations, and placement of remote automatic weather stations for the purpose of improving utility and coverage of remote automatic weather stations, automated surface observation systems, smoke monitoring platforms, and other similar stations and systems for weather and climate operations.

(b) **REPORT TO CONGRESS.**—

(1) **IN GENERAL.**—Not later than 2 years after the date of the enactment of this Act, the Under Secretary, in collaboration with the Administrator of the Federal Aviation Administration and the Secretary of Defense, shall submit to the appropriate committees of Congress a report that—

(A) details the findings of the assessment required by subparagraph (A) of subsection (a)(1); and

(B) the plan required by subparagraph (B) of such subsection.

(2) **ELEMENTS.**—The report required by paragraph (1) shall include a detailed assessment of appropriations required—

(A) to address the findings of the assessment required by subparagraph (A) of subsection (a)(1); and

(B) to implement the plan required by subparagraph (B) of such subsection.

(c) **GOVERNMENT ACCOUNTABILITY OFFICE REPORT.**—Not later than 4 years after the date of the enactment of this Act, the Comptroller General of the United States shall submit to Congress a report that—

(1) evaluates the functionality, utility, reliability, and operational status of the automated surface observing system across the Administration, the Federal Aviation Administration, and the Department of Defense;

(2) evaluates the progress, performance, and implementation of the plan required by subsection (a)(1)(B);

(3) assesses the efficacy of cross-agency collaboration and stakeholder engagement in carrying out the plan and provides recommendations to improve such activities;

(4) evaluates the operational continuity and reliability of the system, particularly in remote and rural areas and areas where system failure would have the greatest negative impact to the community, and provides recommendations to improve such continuity and reliability;

(5) assesses Federal coordination regarding the remote automatic weather station network, air resource advisors, and other Federal observing assets used for weather and climate modeling and response activities, and provides recommendations for improvements; and

(6) includes such other recommendations as the Comptroller General determines are appropriate to improve the system.

**SEC. 5712. EMERGENCY RESPONSE ACTIVITIES.**

(a) **DEFINITIONS.**—In this section:

(1) **BASIC PAY.**—The term “basic pay” includes any applicable locality-based comparability payment under section 5304 of title 5, United States Code, any applicable special rate supplement under section 5305 of such title, or any equivalent payment under a similar provision of law.

(2) **COVERED EMPLOYEE.**—The term “covered employee” means an employee of the

Department of Agriculture, the Department of the Interior, or the Department of Commerce.

(3) **COVERED SERVICES.**—The term “covered services” means services that are performed by a covered employee while serving—

(A) as a wildland firefighter or a fire management response official, including a regional fire director, a deputy regional fire director, and a fire management officer;

(B) as an incident meteorologist accompanying a wildland firefighter crew; or

(C) on an incident management team, at the National Interagency Fire Center, at a Geographic Area Coordinating Center, or at an operations center.

(4) **PREMIUM PAY.**—The term “premium pay” means premium pay paid under a provision of law described in the matter preceding paragraph (1) of section 5547(a) of title 5, United States Code.

(5) **RELEVANT COMMITTEES.**—The term “relevant committees” means—

(A) the Committee on Homeland Security and Governmental Affairs of the Senate;

(B) the Committee on Commerce, Science, and Transportation of the Senate;

(C) the Committee on Agriculture, Nutrition, and Forestry of the Senate;

(D) the Committee on Appropriations of the Senate;

(E) the Committee on Energy and Natural Resources of the Senate;

(F) the Committee on Oversight and Reform of the House of Representatives;

(G) the Committee on Natural Resources of the House of Representatives;

(H) the Committee on Science, Space, and Technology of the House of Representatives;

(I) the Committee on Agriculture of the House of Representatives; and

(J) the Committee on Appropriations of the House of Representatives.

(6) **SECRETARY CONCERNED.**—The term “Secretary concerned” means—

(A) the Secretary of Agriculture, with respect to an employee of the Department of Agriculture;

(B) the Secretary of the Interior, with respect to an employee of the Department of the Interior; and

(C) the Secretary of Commerce, with respect to an employee of the Department of Commerce.

(b) **WAIVER.**—

(1) **IN GENERAL.**—Any premium pay received by a covered employee for covered services shall be disregarded in calculating the aggregate of the basic pay and premium pay for the covered employee for purposes of applying the limitation on premium pay under section 5547(a) of title 5, United States Code.

(2) **CALCULATION OF AGGREGATE PAY.**—Any pay that is disregarded under paragraph (1) shall be disregarded in calculating the aggregate pay of the applicable covered employee for purposes of applying the limitation under section 5307 of title 5, United States Code, during calendar year 2023.

(3) **LIMITATION.**—A covered employee may not be paid premium pay under this subsection if, or to the extent that, the aggregate of the basic pay and premium pay (including premium pay for covered services) of the covered employee for a calendar year would exceed the rate of basic pay payable for a position at level II of the Executive Schedule under section 5313 of title 5, United States Code, as in effect at the end of that calendar year.

(4) **TREATMENT OF ADDITIONAL PREMIUM PAY.**—If the application of this subsection results in the payment of additional premium pay to a covered employee of a type that is normally creditable as basic pay for retirement or any other purpose, that additional premium pay shall not be—

(A) considered to be basic pay of the covered employee for any purpose; or

(B) used in computing a lump-sum payment to the covered employee for accumulated and accrued annual leave under section 5551 or 5552 of title 5, United States Code.

(5) **EFFECTIVE PERIOD.**—This subsection shall be in effect during calendar year 2023 and apply to premium pay payable during that year.

(c) **AMENDMENT.**—Section 5542(a)(5) of title 5, United States Code, is amended by inserting “, the Department of Commerce,” after “Interior”.

(d) **PLAN TO ADDRESS NEEDS.**—

(1) **DEVELOPMENT AND IMPLEMENTATION.**—Not later than March 30, 2023, the Secretaries referred to in subsection (a)(6), in consultation with the Director of the Office of Management and Budget and the Director of the Office of Personnel Management, shall jointly develop and implement a plan that addresses the needs of the Department of Agriculture, the Department of the Interior, and the Department of Commerce, as applicable, to hire, appoint, promote, or train additional covered employees who carry out covered services such that sufficient covered employees are available throughout each fiscal year, beginning in fiscal year 2024, without the need for waivers of premium pay limitations.

(2) **SUBMITTAL.**—Not later than 30 days before the date on which the Secretaries implement the plan developed under paragraph (1), the Secretaries shall submit the plan to the relevant committees.

(3) **LIMITATION.**—The plan developed under paragraph (1) shall not be contingent on any Secretary receiving amounts appropriated for fiscal years beginning in fiscal year 2024 in amounts greater than amounts appropriated for fiscal year 2023.

(e) **POLICIES AND PROCEDURES FOR HEALTH, SAFETY, AND WELL-BEING.**—The Secretary concerned shall maintain policies and procedures to promote the health, safety, and well-being of covered employees.

**SEC. 5713. GOVERNMENT ACCOUNTABILITY OFFICE REPORT ON INTERAGENCY WILDFIRE FORECASTING, PREVENTION, PLANNING, AND MANAGEMENT BODIES.**

Not later than 1 year after the date of the enactment of this Act, the Comptroller General of the United States shall submit to Congress a report that—

(1) identifies all Federal interagency bodies established for the purpose of wildfire forecasting, prevention, planning, and management (such as wildfire councils, commissions, and workgroups), including—

(A) the Wildland Fire Leadership Council;

(B) the National Interagency Fire Center;

(C) the Wildland Fire Management Policy Committee;

(D) the Wildland Fire Mitigation and Management Commission;

(E) the Joint Science Fire Program;

(F) the National Interagency Coordination Center;

(G) the National Predictive Services Oversight Group;

(H) the Interagency Council for Advancing Meteorological Services;

(I) the National Wildfire Coordinating Group;

(J) the National Multi-Agency Coordinating Group; and

(K) the Mitigation Framework Leadership Group;

(2) evaluates the roles, functionality, and utility of such interagency bodies;

(3) evaluates the progress, performance, and implementation of such interagency bodies;

(4) assesses efficacy and identifies potential overlap and duplication of such interagency bodies in carrying out interagency

collaboration with respect to wildfire prevention, planning, and management; and

(5) includes such other recommendations as the Comptroller General determines are appropriate to streamline and improve wildfire forecasting, prevention, planning, and management, including recommendations regarding the interagency bodies for which the addition of the Administration is necessary to improve wildfire forecasting, prevention, planning, and management.

**SEC. 5714. AMENDMENTS TO INFRASTRUCTURE INVESTMENT AND JOBS ACT RELATING TO WILDFIRE MITIGATION.**

The Infrastructure Investment and Jobs Act (Public Law 117–58; 135 Stat. 429) is amended—

(1) in section 70202—  
 (A) in paragraph (1)—  
 (i) in subparagraph (J), by striking “; and” and inserting a semicolon;  
 (ii) in subparagraph (K), by striking the period at the end and inserting a semicolon; and  
 (iii) by adding at the end the following:  
 “(L) the Committee on Commerce, Science, and Transportation of the Senate; and  
 “(M) the Committee on Science, Space, and Technology of the House of Representatives.”; and

(B) in paragraph (6)—  
 (i) in subparagraph (B), by striking “; and” and inserting a semicolon;  
 (ii) in subparagraph (C), by striking the period at the end and inserting “; and”; and  
 (iii) by adding at the end the following:  
 “(D) The Secretary of Commerce, acting through the Under Secretary of Commerce for Oceans and Atmosphere.”; and  
 (2) in section 70203(b)(1)(B)—  
 (A) in the matter preceding clause (i), by striking “9” and inserting “not fewer than 10”;

(B) in clause (i)—  
 (i) in subclause (IV), by striking “; and” and inserting a semicolon;  
 (ii) in subclause (V), by adding “and” at the end; and  
 (iii) by adding at the end the following:  
 “(VI) the National Oceanic and Atmospheric Administration.”;

(C) in clause (iv), by striking “; and” and inserting a semicolon; and  
 (D) by adding at the end the following:  
 “(vi) if the Secretaries determine it to be appropriate, 1 or more representatives from the relevant line offices of the National Oceanic and Atmospheric Administration; and”.

**SEC. 5715. WILDFIRE TECHNOLOGY MODERNIZATION AMENDMENTS.**

Section 1114 of the John D. Dingell, Jr. Conservation, Management, and Recreation Act (43 U.S.C. 1748b–1) is amended—

(1) in subsection (c)(3), by inserting “the National Oceanic and Atmospheric Administration,” after “Federal Aviation Administration.”;

(2) in subsection (e)(2)—  
 (A) by redesignating subparagraph (B) as subparagraph (C); and  
 (B) by inserting after subparagraph (A) the following:

“(B) CONSULTATION.—  
 “(i) IN GENERAL.—In carrying out subparagraph (A), the Secretaries shall consult with the Under Secretary of Commerce for Oceans and Atmosphere regarding any development of impact-based decision support services that relate to wildfire-related activities of the National Oceanic and Atmospheric Administration.  
 “(ii) DEFINITION OF IMPACT-BASED DECISION SUPPORT SERVICES.—In this subparagraph, the term ‘impact-based decision support services’ means forecast advice and interpretative services the National Oceanic and Atmospheric Administration provides to help

core partners, such as emergency personnel and public safety officials, make decisions when weather, water, and climate impact the lives and livelihoods of the people of the United States.”; and  
 (3) in subsection (f)—

(A) by redesignating paragraphs (1) and (2) as subparagraphs (A) and (B), respectively, and moving such subparagraphs, as so redesignated, 2 ems to the right;

(B) by striking “The Secretaries” and inserting the following:  
 “(1) IN GENERAL.—The Secretaries”; and  
 (C) by adding at the end the following:

“(2) COLLABORATION.—In carrying out paragraph (1), the Secretaries shall collaborate with the Under Secretary of Commerce for Oceans and Atmosphere to improve coordination, utility of systems and assets, and interoperability of data for smoke prediction, forecasting, and modeling.”.

**SEC. 5716. COOPERATION; COORDINATION; SUPPORT TO NON-FEDERAL ENTITIES.**

(a) COOPERATION.—Each Federal agency shall cooperate and coordinate with the Under Secretary, as appropriate, in carrying out this title and the amendments made by this title.

(b) COORDINATION.—  
 (1) IN GENERAL.—In meeting the requirements under this title and the amendments made by this title, the Under Secretary shall coordinate, and as appropriate, establish agreements with Federal and external partners to fully use and leverage existing assets, systems, networks, technologies, and sources of data.

(2) INCLUSIONS.—Coordination carried out under paragraph (1) shall include coordination with—

(A) the National Interagency Fire Center, including the Predictive Services Program that provides impact-based decision support services to the wildland fire community at the Geographic Area Coordination Center and the National Interagency Coordination Center;

(B) the National Wildfire Coordinating Group; and

(C) relevant interagency bodies identified in the report required by section 5713.

(3) CONSULTATION.—In carrying out this subsection, the Under Secretary shall consult with Federal partners.

(c) COORDINATION WITH NON-FEDERAL ENTITIES.—Not later than 540 days after the date of the enactment of this Act, the Under Secretary shall develop and submit to the appropriate committees of Congress a process for annual coordination with Tribal, State, and local governments to assist the development of improved fire weather products and services.

(d) SUPPORT TO NON-FEDERAL ENTITIES.—In carrying out the activities under this title and the amendments made by this title, the Under Secretary may provide support to non-Federal entities by making funds and resources available through—

(1) competitive grants;  
 (2) contracts under the mobility program under subchapter VI of chapter 33 of title 5, United States Code (commonly referred to as the ‘Intergovernmental Personnel Act Mobility Program’);

(3) cooperative agreements; and

(4) colocation agreements as described in section 502 of the National Oceanic and Atmospheric Administration Commissioned Officer Corps Amendments Act of 2020 (33 U.S.C. 851 note prec.).

**SEC. 5717. INTERNATIONAL COORDINATION.**

(a) IN GENERAL.—The Under Secretary, in coordination with the Secretary of State, may develop collaborative relationships with foreign partners and counterparts to address transboundary issues pertaining to wildfires,

fire weather, smoke, air quality, and associated conditions and hazards or other relevant meteorological phenomena, as appropriate, to facilitate full and open exchange of data and information.

(b) COORDINATION.—In carrying out activities under this section, the Under Secretary shall coordinate with other Federal agencies as the Under Secretary considers relevant.

**SEC. 5718. SUBMISSIONS TO CONGRESS REGARDING THE FIRE WEATHER SERVICES PROGRAM, INCIDENT METEOROLOGIST WORKFORCE NEEDS, AND NATIONAL WEATHER SERVICE WORKFORCE SUPPORT.**

(a) REPORT TO CONGRESS.—Not later than 540 days after the date of the enactment of this Act, the Under Secretary shall submit to the appropriate committees of Congress—

(1) the plan described in subsection (b);  
 (2) the assessment described in subsection (c); and  
 (3) the assessment described in subsection (d).

(b) FIRE WEATHER SERVICES PROGRAM PLAN.—

(1) ELEMENTS.—The plan submitted under subsection (a)(1) shall detail—

(A) the observational data, modeling requirements, ongoing computational needs, research, development, and technology transfer activities, data management, skilled-personnel requirements, engagement with relevant Federal emergency and land management agencies and partners, and corresponding resources and timelines necessary to achieve the functions described in subsection (b) of section 5703 and the priorities described in subsection (c) of such section; and  
 (B) plans and needs for all other activities and requirements under this title and the amendments made by this title.

(2) SUBMITTAL OF ANNUAL BUDGET FOR PLAN.—Following completion of the plan submitted under subsection (a)(1), the Under Secretary shall, not less frequently than once each year concurrent with the submission of the budget by the President to Congress under section 1105 of title 31, United States Code, submit to Congress a proposed budget corresponding with the elements detailed in the plan.

(c) INCIDENT METEOROLOGIST WORKFORCE NEEDS ASSESSMENT.—

(1) IN GENERAL.—The Under Secretary shall conduct a workforce needs assessment on the current and future demand for additional incident meteorologists for wildfires and other high-impact fire weather events.

(2) ELEMENTS.—The assessment required by paragraph (1) shall include the following:

(A) A description of staffing levels as of the date on which the assessment is submitted under subsection (a)(2) and projected future staffing levels.

(B) An assessment of the state of the infrastructure of the National Weather Service as of the date on which the assessment is submitted and future needs of such infrastructure in order to meet current and future demands, including with respect to information technology support and logistical and administrative operations.

(3) CONSIDERATIONS.—In conducting the assessment required by paragraph (1), the Under Secretary shall consider factors including projected climate conditions, infrastructure, relevant hazard meteorological response system equipment, user needs, and feedback from relevant stakeholders.

(d) SUPPORT SERVICES ASSESSMENT.—

(1) IN GENERAL.—The Under Secretary shall conduct a workforce support services assessment with respect to employees of the National Weather Service engaged in emergency response.

(2) ELEMENTS.—The assessment required by paragraph (1) shall include the following:

(A) An assessment of need for further support of employees of the National Weather Service engaged in emergency response through services provided by the Public Health Service.

(B) A detailed assessment of appropriations required to secure the level of support services needed as identified in the assessment described in subparagraph (A).

(3) **ADDITIONAL SUPPORT SERVICES.**—Following the completion of the assessment required by paragraph (1), the Under Secretary shall seek to acquire additional support services to meet the needs identified in the assessment.

**SEC. 5719. GOVERNMENT ACCOUNTABILITY OFFICE REPORT; FIRE SCIENCE AND TECHNOLOGY WORKING GROUP; STRATEGIC PLAN.**

(a) **GOVERNMENT ACCOUNTABILITY OFFICE REPORT.**—Not later than 1 year after the date of the enactment of this Act, the Comptroller General of the United States shall submit to Congress a report that identifies—

(1) the authorities, roles, and science and support services relating to Federal agencies engaged in or providing wildland fire prediction, detection, forecasting, modeling, resilience, response, management, and assessments; and

(2) recommended areas in and mechanisms by which the agencies listed under paragraph (1) could support and improve—

(A) coordination between Federal agencies, State and local governments, Tribal governments, and other relevant stakeholders, including through examination of possible public-private partnerships;

(B) research and development, including interdisciplinary research, related to fire environments, wildland fires, associated smoke, and the impacts of such environments, fires, and smoke, in furtherance of a coordinated interagency effort to address wildland fire risk reduction;

(C) data management and stewardship, the development and coordination of data systems and computational tools, and the creation of a centralized, integrated data collaboration environment for agency data, including historical data, relating to weather, fire environments, wildland fires, associated smoke, and the impacts of such environments, fires, and smoke, and the assessment of wildland fire risk mitigation measures;

(D) interoperability, usability, and accessibility of the scientific data, data systems, and computational and information tools of the agencies listed under paragraph (1);

(E) coordinated public safety communications relating to fire weather events, fire hazards, and wildland fire and smoke risk reduction strategies; and

(F) secure and accurate real-time data, alerts, and advisories to wildland firefighters and other decision support tools for wildland fire incident command posts.

(b) **FIRE SCIENCE AND TECHNOLOGY WORKING GROUP.**—

(1) **ESTABLISHMENT.**—Not later than 90 days after the date of the enactment of this Act, the Executive Director of the Interagency Committee for Advancing Weather Services established under section 402 of the Weather Research and Forecasting Innovation Act of 2017 (15 U.S.C. 8542) (in this section referred to as the “Interagency Committee”) shall establish a working group, to be known as the “Fire Science and Technology Working Group” (in this section referred to as the “Working Group”).

(2) **CHAIR.**—The Working Group shall be chaired by the Under Secretary, or designee.

(3) **GENERAL DUTIES.**—

(A) **IN GENERAL.**—The Working Group shall seek to build efficiencies among the agencies listed under subsection (a)(1) and coordinate the planning and management of science, re-

search, technology, and operations related to science and support services for wildland fire prediction, detection, forecasting, modeling, resilience, response, management, and assessments.

(B) **INPUT.**—The Working Group shall solicit input from non-Federal stakeholders.

(c) **STRATEGIC PLAN.**—

(1) **IN GENERAL.**—Not later than 540 days after the date of the enactment of this Act, the Interagency Committee shall prepare and submit to the committees specified in paragraph (3) a strategic plan for interagency coordination, research, and development that will improve the assessment of fire environments and the understanding and prediction of wildland fires, associated smoke, and the impacts of such fires and smoke, including—

(A) at the wildland-urban interface;

(B) on communities, buildings, and other infrastructure;

(C) on ecosystem services and watersheds;

(D) social and economic impacts;

(E) by developing and encouraging the adoption of science-based and cost-effective measures—

(i) to enhance community resilience to wildland fires;

(ii) to address and mitigate the impacts of wildland fire and associated smoke; and

(iii) to restore natural fire regimes in fire-dependent ecosystems;

(F) by improving the understanding and mitigation of the effects of weather and long-term drought on wildland fire risk, frequency, and severity;

(G) through integrations of social and behavioral sciences in public safety fire communication;

(H) by improving the forecasting and understanding of prescribed fires and the impacts of such fires, and how those impacts may differ from impacts of wildland fires that originate from an unplanned ignition; and

(I) consideration and adoption of any recommendations included in the report required by subsection (a) pursuant to paragraph (2) of such subsection.

(2) **PLAN ELEMENTS.**—The strategic plan required by paragraph (1) shall include the following:

(A) A description of the priorities and needs of vulnerable populations.

(B) A description of high-performance computing, visualization, and dissemination needs.

(C) A timeline and guidance for implementation of—

(i) an interagency data sharing system for data relevant to performing fire assessments and modeling fire risk and fire behavior;

(ii) a system for ensuring that the fire prediction models of relevant agencies can be interconnected; and

(iii) to the maximum extent practicable, any recommendations included in the report required by subsection (a).

(D) A plan for incorporating and coordinating research and operational observations, including from infrared technologies, microwave, radars, satellites, mobile weather stations, and uncrewed aerial systems.

(E) A flexible framework to communicate clear and simple fire event information to the public.

(F) Integration of social, behavioral, risk, and communication research to improve the fire operational environment and societal information reception and response.

(3) **COMMITTEES SPECIFIED.**—The committees specified in this paragraph are—

(A) the Committee on Commerce, Science, and Transportation of the Senate;

(B) the Committee on Energy and Natural Resources of the Senate;

(C) the Committee on Agriculture, Nutrition, and Forestry of the Senate;

(D) the Committee on Agriculture of the House of Representatives;

(E) the Committee on Natural Resources of the House of Representatives; and

(F) the Committee on Science, Space, and Technology of the House of Representatives.

**SEC. 5720. FIRE WEATHER RATING SYSTEM.**

(a) **IN GENERAL.**—The Under Secretary shall, in collaboration with the Chief of the United States Forest Service, the Director of the United States Geological Survey, the Director of the National Park Service, the Administrator of the Federal Emergency Management Agency, and such stakeholders as the Under Secretary considers appropriate—

(1) evaluate the system used as of the date of the enactment of this Act to rate the risk of wildfire; and

(2) determine whether updates to that system are required to ensure that the ratings accurately reflect the severity of fire risk.

(b) **UPDATE REQUIRED.**—If the Under Secretary determines under subsection (a) that updates to the system described in paragraph (1) of such subsection are necessary, the Under Secretary shall update that system.

**SEC. 5721. AVOIDANCE OF DUPLICATION.**

(a) **IN GENERAL.**—The Under Secretary shall ensure, to the greatest extent practicable, that activities carried out under this title and the amendments made by this title are not duplicative of activities supported by other parts of the Administration or other relevant Federal agencies.

(b) **COORDINATION.**—In carrying out activities under this title and the amendments made by this title, the Under Secretary shall coordinate with the Administration and heads of other Federal research agencies—

(1) to ensure those activities enhance and complement, but do not constitute unnecessary duplication of, efforts; and

(2) to ensure the responsible stewardship of funds.

**SEC. 5722. AUTHORIZATION OF APPROPRIATIONS.**

(a) **IN GENERAL.**—In addition to amounts appropriated under title VIII of division D of the Infrastructure Investment and Jobs Act (Public Law 117–58; 135 Stat. 1094), there are authorized to be appropriated to the Administration to carry out new policies and programs to address fire weather under this title and the amendments made by this title—

(1) \$15,000,000 for fiscal year 2023;

(2) \$111,360,000 for fiscal year 2024;

(3) \$116,928,000 for fiscal year 2025;

(4) \$122,774,400 for fiscal year 2026; and

(5) \$128,913,120 for fiscal year 2027.

(b) **PROHIBITION.**—None of the amounts authorized to be appropriated by subsection (a) may be used to unnecessarily duplicate activities funded under title VIII of division D of the Infrastructure Investment and Jobs Act (Public Law 117–58; 135 Stat. 1094).

**TITLE LVIII—LEARNING EXCELLENCE AND GOOD EXAMPLES FROM NEW DEVELOPERS**

**SEC. 5801. SHORT TITLE.**

This title may be cited as the “Learning Excellence and Good Examples from New Developers Act of 2022” or the “LEGEND Act of 2022”.

**SEC. 5802. DEFINITIONS.**

In this title:

(1) **ADMINISTRATION.**—The term “Administration” means the National Oceanic and Atmospheric Administration.

(2) **ADMINISTRATOR.**—The term “Administrator” means the Under Secretary of Commerce for Oceans and Atmosphere and Administrator of the National Oceanic and Atmospheric Administration.

(3) **EARTH PREDICTION INNOVATION CENTER.**—The term “Earth Prediction Innovation Center” means the community global weather

research modeling system described in paragraph (5)(E) of section 102(b) of the Weather Research Forecasting and Innovation Act of 2017 (15 U.S.C. 8512(b)), as redesignated by section 5804(g).

(4) **MODEL.**—The term “model” means any vetted numerical model and associated data assimilation of the Earth’s system or its components—

(A) developed, in whole or in part, by scientists and engineers employed by the Administration; or

(B) otherwise developed using Federal funds.

(5) **OPERATIONAL MODEL.**—The term “operational model” means any model that has an output used by the Administration for operational functions.

(6) **SUITABLE MODEL.**—The term “suitable model” means a model that meets the requirements described in paragraph (5)(E)(ii) of section 102(b) of the Weather Research Forecasting and Innovation Act of 2017 (15 U.S.C. 8512(b)), as redesignated by section 5804(g), as determined by the Administrator.

**SEC. 5803. PURPOSES.**

The purposes of this title are—

(1) to support innovation in modeling by allowing interested stakeholders to have easy and complete access to the models used by the Administration, as the Administrator determines appropriate; and

(2) to use vetted innovations arising from access described in paragraph (1) to improve modeling by the Administration.

**SEC. 5804. PLAN AND IMPLEMENTATION OF PLAN TO MAKE CERTAIN MODELS AND DATA AVAILABLE TO THE PUBLIC.**

(a) **IN GENERAL.**—The Administrator shall develop and implement a plan to make available to the public the following:

(1) Operational models developed by the Administration.

(2) Models that are not operational models, including experimental and developmental models, as the Administrator determines appropriate.

(3) Applicable information and documentation for models described in paragraphs (1) and (2).

(4) Subject to section 5807, all data owned by the Federal Government and data that the Administrator has the legal right to redistribute that are associated with models made available to the public pursuant to the plan and used in operational forecasting by the Administration, including—

(A) relevant metadata;

(B) data used for operational models used by the Administration as of the date of the enactment of this Act; and

(C) a description of intended model outputs.

(b) **ACCOMMODATIONS.**—In developing and implementing the plan under subsection (a), the Administrator may make such accommodations as the Administrator considers appropriate to ensure that the public release of any model, information, documentation, or data pursuant to the plan does not jeopardize—

(1) national security;

(2) intellectual property or redistribution rights, including under titles 17 and 35, United States Code;

(3) any trade secret or commercial or financial information subject to section 552(b)(4) of title 5, United States Code;

(4) any models or data that are otherwise restricted by contract or other written agreement; or

(5) the mission of the Administration to protect lives and property.

(c) **PRIORITY.**—In developing and implementing the plan under subsection (a), the Administrator shall prioritize making available to the public the models described in subsection (a)(1).

(d) **PROTECTIONS FOR PRIVACY AND STATISTICAL INFORMATION.**—In developing and implementing the plan under subsection (a), the Administrator shall ensure that all requirements incorporated into any models described in subsection (a)(1) ensure compliance with statistical laws and other relevant data protection requirements, including the protection of any personally identifiable information.

(e) **EXCLUSION OF CERTAIN MODELS.**—In developing and implementing the plan under subsection (a), the Administrator may exclude models that the Administrator determines will be retired or superseded in fewer than 5 years after the date of the enactment of this Act.

(f) **PLATFORMS.**—In carrying out subsections (a) and (b), the Administrator may use government servers, contracts or agreements with a private vendor, or any other platform consistent with the purpose of this title.

(g) **SUPPORT PROGRAM.**—The Administrator shall plan for and establish a program to support infrastructure, including telecommunications and technology infrastructure of the Administration and the platforms described in subsection (f), relevant to making operational models and data available to the public pursuant to the plan under subsection (a).

(h) **TECHNICAL CORRECTION.**—Section 102(b) of the Weather Research Forecasting and Innovation Act of 2017 (15 U.S.C. 8512(b)) is amended by redesignating the second paragraph (4) (as added by section 4(a) of the National Integrated Drought Information System Reauthorization Act of 2018 (Public Law 115–423; 132 Stat. 5456)) as paragraph (5).

**SEC. 5805. REQUIREMENT TO REVIEW MODELS AND LEVERAGE INNOVATIONS.**

The Administrator shall—

(1) consistent with the mission of the Earth Prediction Innovation Center, periodically review innovations and improvements made by persons outside the Administration to the operational models made available to the public pursuant to the plan under section 5804(a) in order to improve the accuracy and timeliness of forecasts of the Administration; and

(2) if the Administrator identifies an innovation for a suitable model, develop and implement a plan to use the innovation to improve the model.

**SEC. 5806. REPORT ON IMPLEMENTATION.**

(a) **IN GENERAL.**—Not later than 2 years after the date of the enactment of this Act, the Administrator shall submit to the appropriate congressional committees a report on the implementation of this title that includes a description of—

(1) the implementation of the plan required by section 5804;

(2) the process of the Administration under section 5805—

(A) for engaging with interested stakeholders to learn what innovations those stakeholders have found;

(B) for reviewing those innovations; and

(C) for operationalizing innovations to improve suitable models.

(b) **APPROPRIATE CONGRESSIONAL COMMITTEES DEFINED.**—In this section, the term “appropriate congressional committees” means—

(1) the Committee on Commerce, Science, and Transportation and the Committee on Appropriations of the Senate; and

(2) the Committee on Science, Space, and Technology and the Committee on Appropriations of the House of Representatives.

**SEC. 5807. PROTECTION OF NATIONAL SECURITY INTERESTS.**

(a) **IN GENERAL.**—Notwithstanding any other provision of this title, the Adminis-

trator, in consultation with the Secretary of Defense, as appropriate, may withhold any model or data if the Administrator determines doing so to be necessary to protect the national security interests of the United States.

(b) **RULE OF CONSTRUCTION.**—Nothing in this title shall be construed to supersede any other provision of law governing the protection of the national security interests of the United States.

**SEC. 5808. AUTHORIZATION OF APPROPRIATIONS.**

(a) **IN GENERAL.**—There is authorized to be appropriated to carry out this title \$2,000,000 for each of fiscal years 2023 through 2027.

(b) **DERIVATION OF FUNDS.**—Funds to carry out this section shall be derived from amounts authorized to be appropriated to the National Weather Service that are enacted after the date of the enactment of this Act.

**SA 6467.** Mr. REED (for Mr. CORNYN (for himself and Mr. KING)) submitted an amendment intended to be proposed to amendment SA 5499 proposed by Mr. REED (for himself and Mr. INHOFE) to the bill H.R. 7900, to authorize appropriations for fiscal year 2023 for military activities of the Department of Defense and for military construction, and for defense activities of the Department of Energy, to prescribe military personnel strengths for such fiscal year, and for other purposes; which was ordered to lie on the table; as follows:

At the end of subtitle C of title XII, add the following:

**SEC. 1239. IMPOSITION OF SANCTIONS WITH RESPECT TO THE SALE, SUPPLY, OR TRANSFER OF GOLD TO OR FROM RUSSIA.**

(a) **IDENTIFICATION.**—Not later than 90 days after the date of the enactment of this Act, and periodically as necessary thereafter, the President—

(1) shall submit to Congress a report identifying foreign persons that knowingly participated in a significant transaction—

(A) for the sale, supply, or transfer (including transportation) of gold, directly or indirectly, to or from the Russian Federation or the Government of the Russian Federation, including from reserves of the Central Bank of the Russian Federation held outside the Russian Federation; or

(B) that otherwise involved gold in which the Government of the Russian Federation had any interest; and

(2) shall impose the sanctions described in subsection (b)(1) with respect to each such person; and

(3) may impose the sanctions described in subsection (b)(2) with respect to any such person that is an alien.

(b) **SANCTIONS DESCRIBED.**—The sanctions described in this subsection are the following:

(1) **BLOCKING OF PROPERTY.**—The exercise of all powers granted to the President by the International Emergency Economic Powers Act (50 U.S.C. 1701 et seq.) to the extent necessary to block and prohibit all transactions in all property and interests in property of a foreign person identified in the report required by subsection (a)(1) if such property and interests in property are in the United States, or come within the possession or control of a United States person.

(2) **INELIGIBILITY FOR VISAS, ADMISSION, OR PAROLE.**—

(A) **VISAS, ADMISSION, OR PAROLE.**—An alien described in subsection (a)(1) is—

(i) inadmissible to the United States;

(ii) ineligible to receive a visa or other documentation to enter the United States; and