116TH CONGRESS
2D SESSION

S. 3939

To establish the Interagency Working Group on Coastal Blue Carbon, and for other purposes.

IN THE SENATE OF THE UNITED STATES

JUNE 11, 2020

Ms. MURKOWSKI (for herself and Mr. WHITEHOUSE) introduced the following bill; which was read twice and referred to the Committee on Commerce, Science, and Transportation

---

A BILL

To establish the Interagency Working Group on Coastal Blue Carbon, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the ''Blue Carbon for Our Planet Act''.

SEC. 2. DEFINITIONS.

In this Act:

(1) ADMINISTRATOR.—The term ''Administrator'' means the Under Secretary of Commerce for Oceans and Atmosphere in the Under Secretary's

capacity as the Administrator of the National Oceanic and Atmospheric Administration.

(2) COASTAL BLUE CARBON ECOSYSTEMS.—

(A) IN GENERAL.—The term ''coastal blue carbon ecosystems'' means vegetated coastal habitats, including mangroves, tidal marshes, seagrasses, kelp forests, and other tidal or saltwater wetlands, that have the ability to sequester carbon from the atmosphere, accumulate carbon in biomass for years to decades, and store carbon in soils for centuries to millennia.

(B) INCLUSIONS.—The term ''coastal blue carbon ecosystems'' includes autochthonous carbon and allochthonous carbon.

(3) COASTAL CARBON DATA CLEARINGHOUSE.—The term ''Coastal Carbon Data Clearinghouse'' means the Coastal Carbon Data Clearinghouse operated by the Smithsonian Environmental Research Center.

(4) INTERAGENCY WORKING GROUP.—The term ''Interagency Working Group'' means the Interagency Working Group on Coastal Blue Carbon established under section 3(a).

(5) STATE.—The term ''State'' means each State of the United States, the District of Columbia,

the Commonwealth of Puerto Rico, American Samoa, Guam, the Commonwealth of the Northern Mariana Islands, the Virgin Islands of the United States, and any other territory or possession of the United States.

SEC. 3. INTERAGENCY WORKING GROUP ON COASTAL BLUE CARBON.

(a) ESTABLISHMENT.—The Subcommittee on Ocean Science and Technology of the National Science and Technology Council shall establish an interagency working group, to be known as the ''Interagency Working Group on Coastal Blue Carbon''.

(b) PURPOSES.—The Interagency Working Group shall—

(1) oversee the development of a national map of coastal blue carbon ecosystems;

(2) establish national restoration priorities for coastal blue carbon ecosystems;

(3) assess the biophysical, social, and economic impediments to restoration of coastal blue carbon ecosystems;

(4) study the effects of climate change and environmental and human stressors on sequestration rates; and

(5) preserve the continuity of coastal blue carbon data.

(c) MEMBERSHIP.—The Interagency Working Group shall be comprised of senior representatives from—

(1) the National Oceanic and Atmospheric Administration;

(2) the Environmental Protection Agency;

(3) the National Science Foundation;

(4) the National Aeronautics and Space Administration;

(5) the United States Geological Survey;

(6) the United States Fish and Wildlife Service;

(7) the National Park Service;

(8) the Bureau of Indian Affairs;

(9) the Smithsonian Institution;

(10) the Army Corps of Engineers;

(11) the Department of Agriculture;

(12) the Department of Energy;

(13) the Department of Defense;

(14) the Department of Transportation; and

(15) the Federal Emergency Management Agency.

(d) CHAIRPERSON.—The Interagency Working Group shall be chaired by the Administrator.

(e) RESPONSIBILITIES.—The Interagency Working Group shall—

(1) oversee the development, updates, and maintenance of a national map and inventory of coastal blue carbon ecosystems, including habitat types, with a regional focus in analysis that is usable for local-level protection, planning, and restoration;

(2) develop a strategic assessment of the biophysical, social, statutory, regulatory, and economic impediments to protection and restoration of coastal blue carbon ecosystems;

(3) develop a national strategy for foundational science necessary to study, synthesize, and evaluate the effects of climate change and environmental and human stressors on sequestration rates and capabilities of coastal blue carbon ecosystems protection;

(4) establish national protection and restoration priorities for coastal blue carbon ecosystems, including an assessment of Federal funding being used for restoration efforts; and

(5) ensure the continuity, use, and interoperability of data assets through the Coastal Carbon Data Clearinghouse.

(f) SUBMISSIONS TO CONGRESS.—

(1) REPORT.—Not later than 1 year after the date of the enactment of this Act, the Interagency Working Group shall submit to the Committee on Commerce, Science, and Transportation of the Senate, the Committee on Science, Space, and Technology of the House of Representatives, and the Committee on Natural Resources of the House of Representatives a report containing the following:

(A) A summary of federally funded research, monitoring, preservation, and restoration activities relating to coastal blue carbon ecosystems, including—

(i) the budget for each such activity; and

(ii) a description of the progress made by each such activity in advancing the national priorities established under section 5(a)(4)(A).

(B) An assessment of biophysical, social, statutory, regulatory, and economic impediments to restoration of coastal blue carbon ecosystems.

(2) STRATEGIC PLAN.—

(A) IN GENERAL.—The Interagency Working Group shall create a strategic plan for Fed-

eral investments in basic research, development, demonstration, long-term monitoring and stewardship, and deployment of coastal blue carbon ecosystem projects for the 5-year period beginning on the date on which the first fiscal year after the date on which the report is submitted under paragraph (1) begins.

(B) ASSESSMENT.—The plan shall include an assessment of the use of Federal programs existing as of the date of the enactment of this Act to protect and preserve coastal blue carbon ecosystems.

(C) TIMING.—The Interagency Working Group shall—

(i) on a date that is not later than 1 year after the enactment of this Act and not earlier than the date on which the report is submitted under paragraph (1), submit to the Committee on Commerce, Science, and Transportation of the Senate, the Committee on Science, Space, and Technology of the House of Representatives, and the Committee on Natural Resources of the House of Representatives

the strategic plan under subparagraph (A); and

(ii) submit a revised version of such plan not less frequently than once every 5 years thereafter.

(D) FEDERAL REGISTER.—Not later than 90 days before the date on which the strategic plan or any revised version of such plan is submitted under subparagraph (C), the Interagency Working Group shall—

(i) publish such plan in the Federal Register; and

(ii) provide an opportunity for submission of public comments for a period of not less than 60 days.

SEC. 4. NATIONAL MAP AND INVENTORY OF COASTAL BLUE CARBON ECOSYSTEMS.

(a) IN GENERAL.—The Interagency Working Group shall produce, update, and maintain a national-level map and inventory of coastal blue carbon ecosystems, including—

(1) the types of habitats and species in such ecosystems;

(2) the condition of such habitats, including whether a habitat is degraded, drained, eutrophic, or tidally restricted;

(3) the size of such ecosystems;

(4) the salinity boundaries of such ecosystems;

(5) the tidal boundaries of such ecosystems;

(6) an assessment of carbon sequestration potential, methane production, and net greenhouse gas reductions with respect to such ecosystems;

(7) an assessment of cobenefits of ecosystem and carbon sequestration;

(8) the potential for landward migration as a result of sea level rise;

(9) any upstream restrictions detrimental to the watershed process and conditions such as dams, dikes, and levees;

(10) the conversion of such ecosystems to other land uses and the cause of such conversion; and

(11) a depiction of the effects of climate change, including sea level rise, environmental stressors, and human stressors on the sequestration rate, carbon storage, and potential of such ecosystems.

(b) DATA INCORPORATION; ENGAGEMENT.—In carrying out subsection (a), the Administrator shall—

(1) incorporate, to the extent practicable, existing data, as determined on the date of enactment of this Act, collected through federally funded research by a Federal agency, State agency, Tribe, or local agency, including data collected from—

(A) the Coastal Change Analysis Program of the National Oceanic and Atmospheric Administration;

(B) the National Wetlands Inventory of the United States Fish and Wildlife Service;

(C) the Landcarbon program of the United States Geological Survey; and

(D) the National Coastal Blue Carbon Assessment of the Department of Agriculture; and

(2) engage regional technical experts in order to accurately account for regional differences in coastal blue carbon ecosystems.

(c) USE OF MAP AND INVENTORY.—The Interagency Working Group shall use the national map and inventory produced under subsection (a)—

(1) to assess the carbon sequestration potential of different coastal blue carbon ecosystems and account for any regional differences;

(2) to assess and quantify emissions from degraded and destroyed coastal blue carbon ecosystems;

(3) to develop regional assessments and to provide technical assistance to—

(A) regional, State, Tribal, and local government agencies; and

(B) regional information coordination entities (as defined in section 12303(6) of the Integrated Coastal and Ocean Observation System Act of 2009 (33 U.S.C. 3602));

(4) to assess degraded coastal blue carbon ecosystems and the potential for restoration of such ecosystems, including developing scenario modeling to identify vulnerable land areas where management, protection, and restoration efforts should be focused; and

(5) to produce predictions relating to coastal blue carbon ecosystems and carbon sequestration rates in the context of climate change, environmental stressors, and human stressors.

SEC. 5. RESTORATION OF AND PROTECTIONS FOR EXISTING COASTAL BLUE CARBON ECOSYSTEMS.

(a) IN GENERAL.—The Administrator shall—

(1) lead the Interagency Working Group in implementing the strategic plan under section 3(f)(2);

(2) coordinate monitoring and research efforts among Federal agencies in cooperation with State, Tribal, and local governments, international partners, and nongovernmental organizations;

(3) assess the feasibility and potential of—

(A) establishing a national goal of conserving at least 30 percent of the ocean and coastal blue carbon ecosystems within the territory of the United States by 2030, including the effects of climate change and sea level rise on such goal; and

(B) as appropriate, setting targets for restoration of degraded coastal blue carbon ecosystems;

(4) in coordination with the Interagency Working Group, and as informed by the report under section 3(f)(1), identify—

(A) national protection and restoration priorities for coastal blue carbon ecosystems that would produce the highest rate of carbon sequestration and greatest ecosystem benefits, such as flood protection, soil and beach retention, erosion reduction, biodiversity, water puri-

fication, and nutrient cycling, in the context of other environmental stressors and climate change; and

(B) ways to improve coordination and to prevent unnecessary duplication of effort among Federal agencies and departments with respect to research on coastal blue carbon ecosystems through existing and new coastal management networks; and

(5) in coordination with State, Tribal, and local governments and coastal stakeholders, develop integrated pilot programs to restore degraded coastal blue carbon ecosystems in accordance with subsection (b).

(b) INTEGRATED PILOT PROGRAMS TO RESTORE DEGRADED COASTAL BLUE CARBON ECOSYSTEMS.—

(1) IN GENERAL.—In carrying out subsection (a)(5), the Administrator shall establish one or more integrated pilot programs that—

(A) develop—

(i) best management practices, including design criteria and performance functions for restoration of coastal blue carbon ecosystems;

(ii) nature-based adaptation strategies;

(iii) restoration areas that intersect with built environments as green-gray infrastructure projects; and

(iv) management practices for landward progression or migration of coastal blue carbon ecosystems; and

(B) identify potential barriers to restoration efforts.

(2) LOCATIONS.—The Administrator shall ensure that pilot programs under paragraph (1) cover geographically and ecologically diverse locations with—

(A) significant ecological, economic, and social benefits, such as flood protection, soil and beach retention, erosion reduction, biodiversity, water purification, and nutrient cycling to reduce hypoxic conditions; and

(B) maximum potential for greenhouse gas emission reduction.

(3) APPLICATION REVIEW.—The Administrator shall establish a procedure for reviewing applications for pilot programs under paragraph (1).

(4) COMMUNICATION.—The Administrator shall ensure, through consultation with the Interagency Working Group, that the goals and metrics for pilot programs under paragraph (1) are communicated to the appropriate State, Tribal, and local governments, and to the general public.

(5) COORDINATION.—The Administrator shall coordinate with relevant Federal agencies and departments specified under section 3(c) to prevent unnecessary duplication of effort among such agencies and departments with respect to restoration programs.

SEC. 6. COASTAL CARBON DATA CLEARINGHOUSE.

(a) DEFINITION OF SECRETARY.—In this section, the term ''Secretary'' means the Secretary of the Smithsonian Institution.

(b) IN GENERAL.—The Secretary, in coordination with the Administrator and members of the Interagency Working Group, shall provide for the long-term stewardship of, and access to, data relating to coastal blue carbon ecosystems and national mapping, by supporting the maintenance of the Coastal Carbon Data Clearinghouse.

(c) COASTAL CARBON DATA CLEARINGHOUSE DUTIES.—The Secretary, in coordination with the Administrator and members of the Interagency Working Group,

shall, through the Coastal Carbon Data Clearinghouse, process, store, archive, provide access to, and incorporate (to the extent practicable) all data relating to coastal carbon collected through federally funded research by a Federal agency, State, Tribe, or local agency, an academic institution, or another relevant entity.

(d) GLOBAL AND NATIONAL DATA ASSETS.—The Secretary, in coordination with the Administrator and members of the Interagency Working Group, shall ensure that existing global and national data assets, as determined on the date of enactment of this Act, are incorporated into the Coastal Carbon Data Clearinghouse, to the greatest extent practicable.

(e) ESTABLISHMENT OF STANDARDS, PROTOCOLS, AND PROCEDURE.—The Secretary, in coordination with the Administrator and members of the Interagency Working Group, shall establish—

(1) standards, protocols, and procedures for the processing, storing, and archiving of, and providing access to, data in the Coastal Carbon Data Clearinghouse; and

(2) best practices for sharing such data with State, local, and Tribal governments, coastal stakeholders, non-Federal resource managers, and academia.

(f) DISSEMINATION; DIGITAL TOOLS AND RESOURCES.—

(1) DISSEMINATION.—The Administrator shall work to disseminate the data available through the Coastal Carbon Data Clearinghouse to the greatest extent practicable.

(2) DIGITAL TOOLS AND RESOURCES.—The Secretary, in coordination with the Administrator and members of the Interagency Working Group, shall develop digital tools and resources to support the public use of the Coastal Carbon Data Clearinghouse.

SEC. 7. NATIONAL ACADEMY OF SCIENCES ASSESSMENTS OF CARBON DIOXIDE STORAGE IN DEEP SEAFLOOR ENVIRONMENTS AND OF COASTAL CARBON MARKETS.

Not later than 90 days after the date of the enactment of this Act, the Administrator shall seek to enter into an agreement with the National Academy of Sciences to conduct—

(1) a comprehensive assessment of—

(A) the long-term effects of containment of carbon dioxide in a deep seafloor environment on marine ecosystems; and

(B) the integrity of existing storage technologies, as determined on the date of enactment of this Act;

(2) a comprehensive assessment of pathways, methods, and technologies able to directly remove carbon dioxide from the oceans by the removal of dissolved carbon dioxide from seawater through engineered or inorganic processes, including filters, membranes, phase change systems, or other technological pathways; and

(3) a comprehensive assessment of the viability of using coastal macroalgae cultivation and sustainable coastal wetlands management and restoration for carbon sequestration, which shall consider—

(A) environmental and economic effects on coastal communities;

(B) durability and cost per ton of carbon dioxide sequestered using coastal macroalgae cultivation and sustainable coastal wetlands management in a variety of regions of the United States, including Alaska, the Gulf Coast, the Mid-Atlantic, and the Pacific Northwest;

(C) research, data, resource management, monitoring, reporting, and verification improve-

ments necessary to develop a carbon market around coastal macroalgae cultivation and sustainable coastal wetlands management or restoration; and

(D) relevant successes and failures of carbon markets in agriculture, forestry, and wetlands and how such successes and failures might apply to a future coastal carbon market.

SEC. 8. AUTHORIZATION OF APPROPRIATIONS.

There are authorized to be appropriated to the Administrator to carry out this Act $15,000,000 for each of the fiscal years 2021 through 2025.

○