AMENDMENT TO RULES COMMITTEE PRINT 117-31

OFFERED BY MS. BONAMICI OF OREGON

Page 1668, after line 13, insert the following:

1**TITLE XII—BLUE CARBON FOR**2**OUR PLANET**

3 SEC. 71201. INTERAGENCY WORKING GROUP.

4 (a) ESTABLISHMENT.—The National Science and
5 Technology Council Subcommittee on Ocean Science and
6 Technology shall establish an Interagency Working Group
7 on Coastal Blue Carbon.

8 (b) PURPOSES.—The Interagency Working Group on 9 Coastal Blue Carbon shall oversee the development of a 10 national map of coastal blue carbon ecosystems, establish 11 national coastal blue carbon ecosystem protection and res-12 toration priorities, assess the biophysical, social, and economic impediments to coastal blue carbon ecosystem res-13 14 toration, study the effects of climate change, environmental stressors, and human stressors on carbon seques-15 16 tration rates, and preserve the continuity of coastal blue 17 carbon data.

18 (c) MEMBERSHIP.—The Interagency Working Group19 on Coastal Blue Carbon shall be comprised of senior rep-

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resentatives from the National Oceanic and Atmospheric 1 2 Administration, the Environmental Protection Agency, the 3 National Science Foundation, the National Aeronautics 4 and Space Administration, the United States Geological 5 Survey, the United States Fish and Wildlife Service, the National Park Service, the Bureau of Indian Affairs, the 6 7 Smithsonian Institution, the Army Corps of Engineers, 8 the Department of Agriculture, the Department of En-9 ergy, the Department of Defense, the Department of 10 Transportation, the Department of State, the Federal Emergency Management Agency, and the Council on En-11 12 vironmental Quality.

13 (d) CHAIR.—The Interagency Working Group shall14 be chaired by the Administrator.

15 (e) RESPONSIBILITIES.—The Interagency Working16 Group shall—

(1) oversee the development, update, 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, chemical, social, statutory, regulatory, and
economic impediments to protection and restoration
of coastal blue carbon ecosystems;

1	(3) develop a national strategy for foundational
2	science necessary to study, synthesize, and evaluate
3	the effects of climate change, environmental, and
4	human stressors on sequestration rates and capabili-
5	ties of coastal blue carbon ecosystems protection;
6	(4) establish national coastal blue carbon eco-
7	system protection and restoration priorities, includ-
8	ing an assessment of current Federal funding being
9	used for restoration efforts;
10	(5) ensure the continuity, use, and interoper-
11	ability of data assets through the Smithsonian Envi-
12	ronmental Research Center's Coastal Carbon Data
13	Clearinghouse; and
14	(6) assess current legal authorities to protect
15	and restore blue carbon ecosystems.
16	(f) Reports to Congress.—
17	(1) IN GENERAL.—Not later than one year
18	after the date of the enactment of this Act, the
19	Interagency Working Group shall provide to the
20	Committee on Science, Space, and Technology of the
21	House of Representatives, the Committee on Natural
22	Resources of the House of Representatives, and the
23	Committee on Commerce, Science, and Transpor-
24	tation of the Senate a report containing the fol-
25	lowing:

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(A) A summary of federally funded coastal 2 blue carbon ecosystem research, monitoring, preservation, and restoration activities, includ-3 4 ing the budget for each of these activities and describe the progress in advancing the national 6 priorities established in section 71204(a)(4)(A).

7 (B) An assessment of biophysical, social, 8 and economic impediments to coastal blue car-9 bon ecosystem restoration, including the vulner-10 ability of coastal blue carbon ecosystems to cli-11 mate impacts, such as sea-level rise, ocean and 12 coastal acidification, and other environmental 13 and human stressors.

14 (2) Strategic plan.—

15 (A) IN GENERAL.—The Interagency Work-16 ing group shall create a strategic plan for Fed-17 eral investments in basic research, development, 18 demonstration, long-term monitoring and stew-19 ardship, and deployment of coastal blue carbon 20 ecosystem projects for the 5-year period begin-21 ning at the start of the first fiscal year after 22 the date on which the budget assessment is sub-23 mitted under paragraph (1). The plan shall in-24 clude an assessment of the use of existing Fed-25 eral programs to protect and preserve coastal

1	blue carbon ecosystems and identify the need
2	for any additional authorities or programs.
3	(B) TIMING.—The Interagency Working
4	Group shall—
5	(i) submit the strategic plan under
6	paragraph (A) to the Committee on
7	Science, Space, and Technology of the
8	House of Representatives, the Committee
9	on Natural Resources of the House of Rep-
10	resentatives, and the Committee on Com-
11	merce, Science, and Transportation of the
12	Senate on a date that is not later than one
13	year after the enactment of this Act and
14	not earlier than the date on which the re-
15	port under paragraph (1) is submitted to
16	such committees of Congress; and
17	(ii) submit a revised version of such
18	plan not less than quinquennially there-
19	after.
20	(C) FEDERAL REGISTER.—Not later than
21	90 days before the strategic plan under this
22	paragraph, or any revision thereof, is submitted
23	under subparagraph (B), the Interagency
24	Working Group shall publish such plan in the
25	Federal Register and provide an opportunity for

1	submission of public comments for a period of
2	not less than 60 days.
3	SEC. 71202. NATIONAL MAP OF COASTAL BLUE CARBON
4	ECOSYSTEMS.
5	(a) NATIONAL MAP.—The Interagency Working
6	Group shall—
7	(1) produce, update at least once every five
8	years, and maintain a national level map and inven-
9	tory of coastal blue carbon ecosystems, including—
10	(A) the species and types of habitats and
11	species in the ecosystem;
12	(B) the condition of such habitats includ-
13	ing whether a habitat is degraded, drained, eu-
14	trophic, or tidally restricted;
15	(C) type of public or private ownership and
16	any protected status;
17	(D) the size of the ecosystem;
18	(E) the salinity boundaries;
19	(F) the tidal boundaries;
20	(G) an assessment of carbon sequestration
21	potential, methane production, and net green-
22	house gas reductions including consideration
23	of—
24	(i) quantification;
25	(ii) verifiability;

1	(iii) comparison to a historical base-
2	line, as available; and
3	(iv) permanence of those benefits;
4	(H) an assessment of cobenefits of eco-
5	system and carbon sequestration;
6	(I) the potential for landward migration as
7	a result of sea level rise;
8	(J) any upstream restrictions detrimental
9	to the watershed process and conditions such as
10	dams, dikes, and levees;
11	(K) the conversion of coastal blue carbon
12	ecosystems to other land uses and the cause of
13	such conversion; and
14	(L) a depiction of the effects of climate
15	change, including sea level rise, environmental
16	stressors, and human stressors on the seques-
17	tration rate, carbon storage, and potential of
18	coastal blue carbon ecosystems; and
19	(2) in carrying out paragraph (1) —
20	(A) incorporate, to the extent possible, ex-
21	isting data collected through federally funded
22	research and by a Federal agency, State agen-
23	cy, local agency, Tribe, including data collected
24	from the National Oceanic and Atmospheric
25	Administration Coastal Change Analysis Pro-

1	gram, U.S. Fish and Wildlife Service National
2	Wetlands Inventory, United States Geological
3	Survey LandCarbon program, Federal Emer-
4	gency Management Agency LiDAR information
5	coordination and knowledge program, Depart-
6	ment of Energy Biological and Environmental
7	Research program, and Department of Agri-
8	culture National Coastal Blue Carbon Assess-
9	ment; and
10	(B) engage regional technical experts in
11	order to accurately account for regional dif-
12	ferences in coastal blue carbon ecosystems.
13	(b) USE.—The Interagency Working Group shall use
13 14	(b) USE.—The Interagency Working Group shall use the national map and inventory—
14	the national map and inventory—
14 15	the national map and inventory— (1) to assess the carbon sequestration potential
14 15 16	the national map and inventory— (1) to assess the carbon sequestration potential of different coastal blue carbon habitats, and ac-
14 15 16 17	 the national map and inventory— (1) to assess the carbon sequestration potential of different coastal blue carbon habitats, and account for any regional differences;
14 15 16 17 18	 the national map and inventory— (1) to assess the carbon sequestration potential of different coastal blue carbon habitats, and account for any regional differences; (2) to assess and quantify emissions from de-
14 15 16 17 18 19	 the national map and inventory— (1) to assess the carbon sequestration potential of different coastal blue carbon habitats, and account for any regional differences; (2) to assess and quantify emissions from degraded and destroyed coastal blue carbon eco-
14 15 16 17 18 19 20	 the national map and inventory— (1) to assess the carbon sequestration potential of different coastal blue carbon habitats, and account for any regional differences; (2) to assess and quantify emissions from degraded and destroyed coastal blue carbon ecosystems;
 14 15 16 17 18 19 20 21 	 the national map and inventory— (1) to assess the carbon sequestration potential of different coastal blue carbon habitats, 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 pro-

1	123030(6) of the Integrated Coastal and Ocean Ob-
2	servation System Act (33 U.S.C. 3602);
3	(4) to assess degraded coastal blue carbon eco-
4	systems and their potential for restoration, including
5	developing scenario modeling to identify vulnerable
6	areas where management, protection, and restora-
7	tion efforts should be focused;
8	(5) produce future predictions of coastal blue
9	carbon ecosystems and carbon sequestration rates in
10	the context of climate change, environmental
11	stressors, and human stressors; and
12	(6) use such map to inform the Administrator
13	of the Environmental Protection Agency's creation
14	of the annual Inventory of U.S. Greenhouse Gas
15	Emissions and Sinks.
16	SEC. 71203. RESTORATION AND PROTECTIONS FOR EXIST-
17	ING COASTAL BLUE CARBON ECOSYSTEMS.
18	(a) IN GENERAL.—The Administrator shall—
19	(1) lead the Interagency Working Group in im-
20	plementing the strategic plan under section
20 21	plementing the strategic plan under section 71202(e)(2);

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

1	(3) establish a national goal for conserving
2	ocean and coastal blue carbon ecosystems within the
3	territory of the United States, and as appropriate
4	setting targets for restoration of degraded coastal
5	blue carbon ecosystems;
6	(4) in coordination with the Interagency Work-
7	ing Group and as informed by the report under sec-
8	tion 71202(e) on current Federal expenditures on
9	coastal blue carbon ecosystem restoration, identify—
10	(A) national coastal blue carbon ecosystem
11	protection and restoration priorities that would
12	produce the highest rate of carbon sequestra-
13	tion and greatest ecosystem benefits such as
14	flood protection, soil and beach retention, ero-
15	sion reduction, biodiversity, water purification,
16	and nutrient cycling in the context of other en-
17	vironmental stressors and climate change; and
18	(B) ways to improve coordination and to
19	prevent unnecessary duplication of effort among
20	Federal agencies and departments with respect
21	to research on coastal blue carbon ecosystems
22	through existing and new coastal management
23	networks; and
24	(5) in coordination with State, local, and Tribal
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governments and coastal stakeholders, develop inte-

grated pilot programs to restore degraded coastal
 blue carbon ecosystems in accordance with sub section (b).

4 (b) INTEGRATED PILOT PROGRAMS TO RESTORE
5 AND PROTECT DEGRADED COASTAL BLUE CARBON ECO6 SYSTEMS.—In carrying out subsection (a)(5), the Admin7 istrator shall—

8 (1) establish integrated pilot programs that de-9 velop best management practices, including design 10 criteria and performance functions for coastal blue 11 carbon ecosystem restoration and protection, nature-12 based adaptation strategies, restoration areas that 13 intersect with the built environments as green-gray 14 infrastructure projects, management practices for 15 landward progression or migration of coastal blue 16 carbon ecosystems, and identify potential barriers to 17 restoration efforts, and increase long-term carbon 18 sequestration and storage;

(2) ensure that the pilot programs cover geographically and ecologically diverse locations with
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,

1	and maximum potential for greenhouse gas emission
2	reduction;
3	(3) establish a procedure for reviewing applica-
4	tions for the pilot program, taking into account—
5	(A) quantification;
6	(B) verifiability;
7	(C) additionality as compared to a histor-
8	ical baseline, when feasible; and
9	(D) permanence of those benefits;
10	(4) ensure, through consultation with the Inter-
11	agency Working Group, that the goals and metrics
12	for the pilot programs are communicated to the ap-
13	propriate State, Tribe, and local governments, and
14	to the general public;
15	(5) coordinate with relevant Federal agencies
16	on the Interagency Working Group to prevent un-
17	necessary duplication of effort among Federal agen-
18	cies and departments with respect to restoration and
19	protection programs;
20	(6) give priority to proposed eligible restoration
21	activities that would—
22	(A) result in long-term protection and se-
23	questration of carbon stored in coastal and ma-
24	rine environments;

1	(B) protect key habitats for fish, wildlife,
2	and the maintenance of biodiversity;
3	(C) provide coastal protection from devel-
4	opment, storms, flooding, and land-based pollu-
5	tion;
6	(D) protect coastal resources of national,
7	historical, and cultural significance; and
8	(E) benefit communities of color, low-in-
9	come communities, Tribal or Indigenous com-
10	munities, or rural communities; and
11	(7) report to the Interagency Working Group,
12	and Committee on Science, Space, and Technology
13	of the House of Representatives, the Committee on
14	Natural Resources of the House of Representatives,
15	and the Committee on Commerce, Science, and
16	Transportation of the Senate on the total number of
17	acres of land or water protected or restored through
18	the program, the status of restoration projects, and
19	the blue carbon sequestration potential of each res-
20	toration pilot project.
21	SEC. 71204. NAS ASSESSMENT OF CONTAINMENT OF CAR-
22	BON DIOXIDE IN DEEP SEAFLOOR ENVIRON-
23	MENT.
24	Not later than 90 days after the date of the enact-
25	ment of this Act, the Administrator shall seek to enter

into an agreement with the National Academy of Sciences
 to conduct a comprehensive assessment on the long-term
 effects of geologic stores of carbon dioxide in a deep
 seafloor environment, including impacts on marine species
 and ecosystems.

6 SEC. 71205. AUTHORIZATION OF APPROPRIATIONS.

7 There are authorized to be appropriated to the Na8 tional Oceanic and Atmospheric Administration to carry
9 out this title \$15,000,000 for each of the fiscal years 2023
10 through 2027.

11 SEC. 71206. DEFINITIONS.

12 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 the Administrator of the National Oceanic and Atmospheric Administration.

18 (2) COASTAL BLUE CARBON ECOSYSTEM.—The 19 term "coastal blue carbon ecosystem" refers to vege-20 tated coastal habitats including mangroves, tidal 21 marshes, seagrasses, kelp forests, and other tidal, 22 freshwater, or salt-water wetlands, and their ability 23 to sequester carbon from the atmosphere, accumu-24 late it in biomass for years to decades, and store it 25 in soils for centuries to millennia. Coastal blue car-

- bon ecosystems include both autochthonous carbon
 and allochthonous carbon.
- 3 (3) STATE.—The term "State" means each
 4 State of the United States, the District of Columbia,
 5 the Commonwealth of Puerto Rico, American
 6 Samoa, Guam, the Commonwealth of the Northern
 7 Mariana Islands, the Virgin Islands of the United
 8 States, and any other territory of the United States.

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