

119TH CONGRESS
1ST SESSION

S. 2586

To require the Administrator of the National Oceanic and Atmospheric Administration to establish an assessment program for commercial-scale offshore aquaculture through demonstration projects, to establish Aquaculture Centers of Excellence, to support aquaculture workforce development and working waterfronts, and for other purposes.

IN THE SENATE OF THE UNITED STATES

JULY 31, 2025

Mr. WICKER (for himself and Mr. SCHATZ) introduced the following bill; which was read twice and referred to the Committee on Commerce, Science, and Transportation

A BILL

To require the Administrator of the National Oceanic and Atmospheric Administration to establish an assessment program for commercial-scale offshore aquaculture through demonstration projects, to establish Aquaculture Centers of Excellence, to support aquaculture workforce development and working waterfronts, and for other purposes.

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

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

2 (a) SHORT TITLE.—This Act may be cited as the
 3 “Marine Aquaculture Research for America Act of 2025”
 4 or the “MARA Act of 2025”.

5 (b) TABLE OF CONTENTS.—The table of contents for
 6 this Act is as follows:

Sec. 1. Short title; table of contents.
 Sec. 2. Purposes.
 Sec. 3. Definitions.

TITLE I—OFFICE OF AQUACULTURE

Sec. 101. Office of Aquaculture.

TITLE II—COMMERCIAL-SCALE DEMONSTRATION PROJECTS

Sec. 201. Assessment program for offshore aquaculture.
 Sec. 202. Permits for demonstration projects for offshore aquaculture facilities.
 Sec. 203. Coordination of permit reviews for demonstration projects.
 Sec. 204. Reporting by assessment program participants.
 Sec. 205. Rule of construction; savings provisions.

TITLE III—WORKFORCE DEVELOPMENT, FINANCING, AND OTHER
 SUPPORT

Sec. 301. General support for industry.
 Sec. 302. Aquaculture Centers of Excellence.
 Sec. 303. Working waterfronts preservation grant program.
 Sec. 304. Outreach on sustainable offshore aquaculture.

TITLE IV—STUDIES AND REPORTS

Sec. 401. Study on offshore aquaculture by Ocean Studies Board of the Na-
 tional Academies of Sciences, Engineering, and Medicine.
 Sec. 402. Report on offshore aquaculture by Government Accountability Office.

7 **SEC. 2. PURPOSES.**

8 The purposes of this Act are—

9 (1) to authorize the National Oceanic and At-
 10 mospheric Administration to establish and study
 11 commercial-scale demonstration projects to answer
 12 scientific questions needed to safely and sustainably
 13 regulate offshore aquaculture in the United States;

1 (2) to commission a study and report to assess
2 the environmental and regulatory viability of a
3 United States offshore aquaculture industry;

4 (3) to support aquaculture workforce develop-
5 ment and working waterfronts by creating new jobs
6 and to support existing jobs and businesses within
7 the seafood industry of the United States, including
8 jobs and businesses for traditional participants in
9 the fishing industry;

10 (4) to establish Aquaculture Centers of Excel-
11 lence to meet the needs of the growing domestic sus-
12 tainable aquaculture industry; and

13 (5) to reduce the United States seafood trade
14 deficit by expanding the domestic supply of seafood
15 through the production of sustainable offshore aqua-
16 culture.

17 **SEC. 3. DEFINITIONS.**

18 In this Act:

19 (1) **ADMINISTRATION.**—The term “Administra-
20 tion” means the National Oceanic and Atmospheric
21 Administration.

22 (2) **ADMINISTRATOR.**—The term “Adminis-
23 trator” means the Administrator of the Administra-
24 tion.

1 (3) APPROPRIATE COMMITTEES OF CON-
 2 GRESS.—The term “appropriate committees of Con-
 3 gress” means—

4 (A) the Committee on Commerce, Science,
 5 and Transportation, the Committee on Environ-
 6 ment and Public Works, and the Committee on
 7 Agriculture, Nutrition, and Forestry of the Sen-
 8 ate; and

9 (B) the Committee on Natural Resources,
 10 the Committee on Agriculture, and the Com-
 11 mittee on Transportation and Infrastructure of
 12 the House of Representatives.

13 (4) AQUACULTURE.—The term “aqua-
 14 culture”—

15 (A) means any activity involved in the
 16 propagation, rearing, or attempted propagation
 17 or rearing, of cultured species, including the
 18 capture and rearing of broodstock; and

19 (B) does not include the practice of—

20 (i) capturing juvenile finfish to rear to
 21 maturity in an aquaculture facility for sub-
 22 sequent commercial sale; or

23 (ii) the practice of rearing and releas-
 24 ing cultured species for the purpose of en-
 25 hancing wild populations.

1 (5) AQUACULTURE STAKEHOLDER.—The term
2 “aquaculture stakeholder” means—

3 (A) an owner or operator of an offshore
4 aquaculture facility;

5 (B) a Regional Fishery Management Coun-
6 cil established under section 302(a) of the Mag-
7 nuson-Stevens Fishery Conservation and Man-
8 agement Act (16 U.S.C. 1852(a));

9 (C) an interstate fisheries commission;

10 (D) a conservation organization;

11 (E) a fisheries association;

12 (F) a State or county government;

13 (G) an Indian Tribe;

14 (H) a Native Hawaiian organization;

15 (I) a Native Hawaiian community;

16 (J) a Tribal or Indigenous community;

17 (K) a Federal or State agency with inter-
18 ests in aquaculture; or

19 (L) any other interested party.

20 (6) COASTAL STATE.—The term “coastal
21 State” has the meaning given the term “coastal
22 state” in section 304(4) of the Coastal Zone Man-
23 agement Act of 1972 (16 U.S.C. 1453(4)).

24 (7) CULTURED SPECIES.—The term “cultured
25 species”—

1 (A) means any species propagated and
 2 reared for marine aquaculture;

3 (B) includes larval marine shellfish species
 4 that self-recruit in the offshore environment;
 5 and

6 (C) excludes any member of the class Aves,
 7 Reptilia, or Mammalia.

8 (8) ESCAPE.—The term “escape” means the es-
 9 cape of juvenile- or adult-farmed organisms, viable
 10 gametes, or fertilized eggs spawned by farmed orga-
 11 nisms from offshore aquaculture facilities.

12 (9) EXCLUSIVE ECONOMIC ZONE.—

13 (A) IN GENERAL.—Unless otherwise speci-
 14 fied by the President in the public interest in
 15 a writing published in the Federal Register, the
 16 term “exclusive economic zone” means a zone,
 17 the outer boundary of which—

18 (i) except as provided by clause (ii), is
 19 200 nautical miles from the baseline from
 20 which the breadth of the territorial sea is
 21 measured; or

22 (ii)(I) if an applicable maritime
 23 boundary treaty is in force or is being pro-
 24 visionally applied by the United States, is
 25 established by that treaty; or

1 (II) in the absence of such a treaty
2 and in a case in which the distance be-
3 tween the United States and another coun-
4 try is less than 400 nautical miles, is a line
5 equidistant between the United States and
6 the other country.

7 (B) INNER BOUNDARY.—Without affecting
8 any Presidential proclamation with regard to
9 the establishment of the United States terri-
10 torial sea or exclusive economic zone, the inner
11 boundary of the exclusive economic zone is—

12 (i) in the case of the coastal States, a
13 line coterminous with the seaward bound-
14 ary of each such State, as described in sec-
15 tion 4 of the Submerged Lands Act (43
16 U.S.C. 1312);

17 (ii) in the case of the Commonwealth
18 of Puerto Rico, a line 9 nautical miles
19 from the coastline of the Commonwealth of
20 Puerto Rico;

21 (iii) in the case of American Samoa,
22 the United States Virgin Islands, or Guam,
23 a line 3 geographic miles from the coast-
24 lines of American Samoa, the United

1 States Virgin Islands, or Guam, respec-
 2 tively; or

3 (iv) in the case of the Commonwealth
 4 of the Northern Mariana Islands—

5 (I) the coastline of the Common-
 6 wealth of the Northern Mariana Is-
 7 lands, until the Commonwealth of the
 8 Northern Mariana Islands is granted
 9 authority by the United States to reg-
 10 ulate all fishing to a line seaward of
 11 its coastline; and

12 (II) upon the United States
 13 grant of such authority, the line es-
 14 tablished by such grant of authority.

15 (C) RULE OF CONSTRUCTION.—Nothing in
 16 this paragraph may be construed to diminish
 17 the authority of the Department of Defense, the
 18 Department of the Interior, or any other Fed-
 19 eral agency.

20 (10) FISHERY STAKEHOLDERS.—The term
 21 “fishery stakeholders” means—

22 (A) subsistence fishery participants and
 23 their dependents;

24 (B) fishing vessel crews;

1 (C) fish processor and distribution work-
2 ers;

3 (D) recreational fisheries;

4 (E) Tribal fisheries; and

5 (F) territorial fishing communities, includ-
6 ing such communities in American Samoa,
7 Guam, the Commonwealth of the Northern
8 Mariana Islands, Puerto Rico, and the United
9 States Virgin Islands.

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

14 (12) INSTITUTION OF HIGHER EDUCATION.—
15 The term “institution of higher education” has the
16 meaning given that term in section 201 of the High-
17 er Education Act of 1965 (20 U.S.C. 1001).

18 (13) NATIVE HAWAIIAN COMMUNITY.—The
19 term “Native Hawaiian community” means the dis-
20 tinct Native Hawaiian indigenous political commu-
21 nity that Congress, exercising its plenary power over
22 Native American affairs, has recognized and with
23 which Congress has implemented a special political
24 and trust relationship.

1 (14) NATIVE HAWAIIAN ORGANIZATION.—The
 2 term “Native Hawaiian organization” has the mean-
 3 ing given that term in section 6207 of the Elemen-
 4 tary and Secondary Education Act of 1965 (20
 5 U.S.C. 7517) and includes the Department of Ha-
 6 waiian Home Lands and the Office of Hawaiian Af-
 7 fairs.

8 (15) NATIONAL SEA GRANT COLLEGE PRO-
 9 GRAM.—The term “national sea grant college pro-
 10 gram” means the program maintained under section
 11 204(a) of the National Sea Grant College Program
 12 Act (33 U.S.C. 1123(a)).

13 (16) OFFSHORE AQUACULTURE.—The term
 14 “offshore aquaculture” means aquaculture con-
 15 ducted in the exclusive economic zone.

16 (17) OFFSHORE AQUACULTURE FACILITY.—The
 17 term “offshore aquaculture facility” means—

18 (A) an installation or structure used, in
 19 whole or in part, for offshore aquaculture; or

20 (B) an area of the seabed, water column,
 21 or the sediment used for offshore aquaculture.

22 (18) STATE.—The term “State” means each of
 23 the several States, the District of Columbia, and
 24 each commonwealth, territory, or possession of the
 25 United States.

1 (19) TRIBAL FISHERY.—The term “Tribal fish-
2 ery” means a fishery that is—

3 (A) owned, operated, or managed by a
4 Tribal or Indigenous community; or

5 (B) located in an area—

6 (i) that is subject to the jurisdiction
7 of an Indian Tribe; and

8 (ii) for which the Indian Tribe has
9 sovereign authority over fishing activity in
10 the area.

11 (20) TRIBAL LAND.—The term “Tribal land”
12 means land that is subject to the jurisdiction of an
13 Indian Tribe.

14 (21) TRIBAL OR INDIGENOUS COMMUNITY.—
15 The term “Tribal or Indigenous community” means
16 a population of people who are—

17 (A) enrolled members of an Indian Tribe;

18 (B) members of an Alaska Native or Na-
19 tive Hawaiian community or organization; or

20 (C) members of any other community of
21 Indigenous people located in a State.

TITLE I—OFFICE OF AQUACULTURE

SEC. 101. OFFICE OF AQUACULTURE.

(a) ESTABLISHMENT.—There is established within the headquarters of the National Marine Fisheries Service of the Administration the Office of Aquaculture (in this section referred to as the “Office”).

(b) RESOURCES.—The Administrator shall ensure the Office is provided with sufficient resources to carry out the duties of the Office under subsection (d).

(c) REPRESENTATION AT REGIONAL FISHERIES OFFICES.—

(1) IN GENERAL.—The Administrator shall provide for representation of the Office in each of the regional fisheries offices of the Administration.

(2) MINIMUM PRESENCE.—In carrying out paragraph (1), the Administrator—

(A) shall provide for the placement of at least one regional aquaculture coordinator from the Office in each regional fisheries office;

(B) shall otherwise ensure that the representation of the Office at a regional fisheries office is, at a minimum, sufficient to permit the Office to fulfill the duties of the Office under subsection (d); and

1 (C) may increase that representation to the
2 extent warranted by the activity and interest of
3 aquaculture stakeholders in the region.

4 (d) DUTIES.—

5 (1) IN GENERAL.—The Office shall—

6 (A) coordinate the implementation of this
7 Act, including administration of—

8 (i) the aquaculture research program
9 established under subsection (e);

10 (ii) the offshore aquaculture assess-
11 ment program established under section
12 201; and

13 (iii) the issuance of permits under sec-
14 tion 202;

15 (B) coordinate regulatory, scientific, out-
16 reach, and international issues related to aqua-
17 culture within the Administration;

18 (C) collaborate with and leverage existing
19 efforts by the national sea grant college pro-
20 gram—

21 (i) to conduct outreach, education, ex-
22 tension services, and training efforts for
23 aquaculture and offshore aquaculture; and

24 (ii) to engage with aquaculture stake-
25 holders and, from time to time, convene

conferences for aquaculture stakeholders to
exchange information and ideas;

(D) maintain aquaculture capacity in the
regions covered by the regional fisheries offices
of the Administration;

(E) develop recommendations for perform-
ance standards for offshore aquaculture oper-
ations that, at a minimum—

(i) encourage development of offshore
aquaculture in a manner that complies
with environmental law;

(ii) are based on the best scientific in-
formation available;

(iii) take into account traditional
knowledge of Tribal and Indigenous com-
munities as appropriate to the region;

(iv) are adaptive to offshore aqua-
culture developments, such as updates in
technology and changes in environmental
conditions; and

(v) prefer species that are native or
historically naturalized to the region; and

(F) prioritize the health of cultured spe-
cies.

(2) AGREEMENTS WITH STATES.—

1 (A) IN GENERAL.—Upon request of the
2 Governor of a coastal State, the Office shall
3 enter into an agreement with the State to allow
4 the State, and aquaculture stakeholders in the
5 State as appropriate, to participate in the ac-
6 tivities authorized under sections 201 and 203
7 and titles III and IV, as though—

8 (i) the aquaculture conducted in the
9 State’s coastal waters were offshore aqua-
10 culture; and

11 (ii) facilities for aquaculture in the
12 State’s coastal waters were offshore aqua-
13 culture facilities.

14 (B) RULE OF CONSTRUCTION.—Nothing in
15 this paragraph or in any agreement entered
16 into under this paragraph shall be construed to
17 affect the authority of the Administrator to
18 issue permits for or regulate aquaculture in
19 State waters, except as expressly provided in
20 such an agreement.

21 (e) AQUACULTURE RESEARCH PROGRAM AND DU-
22 TIES.—

23 (1) IN GENERAL.—The Administrator shall es-
24 tablish, and provide resources (in addition to the re-
25 sources required under subsection (b)) for, an aqua-

1 culture research program that draws upon the sci-
2 entific capacity of programs of the Administration,
3 such as the Fisheries Science Centers, the national
4 sea grant college program, and the National Centers
5 for Coastal Ocean Science, to support the efforts of
6 the Office to implement this Act.

7 (2) FUNCTIONS.—As part of the aquaculture
8 research program established under paragraph (1),
9 the Office shall—

10 (A) ensure that commercial-scale offshore
11 aquaculture demonstration projects for which
12 permits are issued under section 202 are sci-
13 entifically monitored to support the implemen-
14 tation of this Act;

15 (B) evaluate data;

16 (C) conduct additional research to support
17 the development of sustainable offshore aqua-
18 culture;

19 (D) administer support for industry under
20 section 301;

21 (E) administer the Aquaculture Centers of
22 Excellence under section 302;

23 (F) administer the contract to conduct the
24 study described in section 401; and

1 (G) coordinate the engagement of the Ad-
 2 ministration with the Comptroller General of
 3 the United States as the Comptroller General
 4 prepares the report required by section 402.

5 (f) BUDGET REQUEST.—The Administrator shall in-
 6 clude, in the budget justification materials submitted to
 7 Congress in support of the budget of the President for
 8 a fiscal year pursuant to section 1105 of title 31, United
 9 States Code, a request for funding for the Office as a sep-
 10 arate line item with the National Marine Fisheries Service.

11 **TITLE II—COMMERCIAL-SCALE** 12 **DEMONSTRATION PROJECTS**

13 **SEC. 201. ASSESSMENT PROGRAM FOR OFFSHORE AQUA-** 14 **CULTURE.**

15 (a) ESTABLISHMENT OF PROGRAM.—Not later than
 16 180 days after the date of the enactment of this Act, the
 17 Administrator shall establish an assessment program (in
 18 this section referred to as the “assessment program”) with
 19 the objective of assessing the viability of offshore aqua-
 20 culture—

21 (1) in light of changing circumstances and ad-
 22 vances in technology; and

23 (2) using the best available science, information
 24 from aquaculture stakeholders, and information de-

1 developed from demonstration projects for which per-
 2 mits are issued under section 202.

3 (b) ELEMENTS.—At a minimum, the assessment pro-
 4 gram shall examine the following in order to determine
 5 the viability of offshore aquaculture:

6 (1) The ability of different commercial-scale fa-
 7 cility designs and operational methods—

8 (A) to survive various atmospheric and
 9 ocean conditions to the extent possible, includ-
 10 ing high wind speeds or high-energy ocean con-
 11 ditions associated with severe weather, or tidal
 12 or tsunami activity, without—

13 (i) escapes;

14 (ii) loss of or damage to infrastruc-
 15 ture; or

16 (iii) wildlife entanglement resulting
 17 from loss or damaged infrastructure;

18 (B) to prevent adverse wildlife impacts to
 19 the extent possible, including entanglements of
 20 large whales, sea turtles, and other species pro-
 21 tected under—

22 (i) the Endangered Species Act of
 23 1973 (16 U.S.C. 1531 et seq.); and

24 (ii) the Marine Mammal Protection
 25 Act of 1972 (16 U.S.C. 1361 et seq.);

1 (C) to prevent adverse impacts on the ma-
2 rine environment to the extent possible, includ-
3 ing impacts to habitat, water chemistry, and
4 wildlife; and

5 (D) to prevent adverse impacts on naviga-
6 tion and safety, to the extent possible, to exist-
7 ing ocean users due to offshore aquaculture fa-
8 cilities, including requirements for operations,
9 navigation, and transit associated with such fa-
10 cilities.

11 (2) The ability of different technologies to pro-
12 vide reliable and timely data on offshore aquaculture
13 facilities, including visual data and other relevant
14 data types, on a regular basis to enable the Adminis-
15 trator to monitor—

16 (A) the compliance of demonstration
17 projects for which permits are issued under sec-
18 tion 202 with the requirements under sub-
19 section (b) of such section;

20 (B) impacts on the marine environment;
21 and

22 (C) interference with existing uses of the
23 water bodies in which demonstration projects
24 for which permits are issued under section 202
25 are located.

1 (3) The relative risks, benefits, and costs of
 2 various types of offshore aquaculture, including dif-
 3 ferent species of finfish in different geographies and
 4 under varying climactic and ecological conditions.

5 (c) REPORT REQUIRED.—Not later than 2 years
 6 after the date on which the Administrator establishes the
 7 assessment program, the Administrator shall publish,
 8 make available to the public, and submit to the National
 9 Academy of Sciences and the Comptroller General of the
 10 United States, a report that includes the following:

11 (1) A description of each demonstration project
 12 for which a permit is issued under section 202, in-
 13 cluding documentation supporting the issuance of
 14 the permit.

15 (2) A summary of the information submitted to
 16 the Administrator for each such demonstration
 17 project.

18 (3) A description of the progress made toward
 19 meeting the objective described in subsection (a).

20 **SEC. 202. PERMITS FOR DEMONSTRATION PROJECTS FOR**
 21 **OFFSHORE AQUACULTURE FACILITIES.**

22 (a) ISSUANCE OF PERMITS.—After the Administrator
 23 establishes the assessment program under section 201, the
 24 Administrator shall issue permits for demonstration

1 projects for proposed offshore aquaculture facilities in fur-
2 therance of the assessment program.

3 (b) ELIGIBILITY REQUIREMENTS.—To be eligible for
4 the issuance of a permit under subsection (a), a dem-
5 onstration project is required to—

6 (1) advance the objective described in section
7 201(a);

8 (2) cultivate only native or historically natural-
9 ized species that pose a minimal threat of harm to
10 wildlife and the ecosystem in which the project is lo-
11 cated;

12 (3) incorporate design and operational practices
13 that minimize the risk of escape, wildlife entangle-
14 ment, and adverse pollution impacts;

15 (4) develop an escape response and infrastruc-
16 ture loss or damage plan that minimizes the impact
17 of any escapes or infrastructure loss or damage on
18 the marine environment and on other uses of the
19 water body in which the project is located;

20 (5) comply with all applicable requirements
21 of—

22 (A) the Federal Water Pollution Control
23 Act (33 U.S.C. 1251 et seq.) (commonly re-
24 ferred to as the “Clean Water Act”);

1 (B) the Endangered Species Act of 1973
2 (16 U.S.C. 1531 et seq.);

3 (C) the Marine Mammal Protection Act of
4 1972 (16 U.S.C. 1361 et seq.); and

5 (D) the National Environmental Policy Act
6 of 1969 (42 U.S.C. 4321 et seq.);

7 (6) maximize compatibility with, and prevent or
8 minimize displacement of, existing uses and users of
9 the marine environment in the near vicinity of where
10 the project is located;

11 (7) conform to best practices to avoid or mini-
12 mize the use of antibiotics and other pharma-
13 ceuticals and minimize the release of such pharma-
14 ceuticals into the environment; and

15 (8) be designed and managed in partnership
16 with—

17 (A) a land-grant college or university (as
18 defined in section 1404 of the National Agricul-
19 tural Research, Extension, and Teaching Policy
20 Act of 1977 (7 U.S.C. 3103));

21 (B) a historically black college or univer-
22 sity (as defined by the term “part B institu-
23 tion” in section 322 of the Higher Education
24 Act of 1965 (20 U.S.C. 1061));

1 (C) a 1994 Institution (as defined in sec-
2 tion 532 of the Equity in Educational Land-
3 Grant Status Act of 1994 (Public Law 103–
4 382; 7 U.S.C. 301 note)); or

5 (D) a sea grant college (as defined in sec-
6 tion 203 of the National Sea Grant College
7 Program Act (33 U.S.C. 1122)).

8 (c) AUTHORIZED ACTIVITIES.—A person that holds
9 a permit for a demonstration project issued under sub-
10 section (a) may conduct offshore aquaculture consistent
11 with—

12 (1) this Act, including regulations prescribed to
13 carry out this Act; and

14 (2) other applicable provisions of law, including
15 regulations.

16 (d) APPLICATIONS.—A person seeking a permit for
17 a demonstration project shall submit to the Administrator
18 an application that specifies—

19 (1) the proposed location of the offshore aqua-
20 culture facility and the location of on-shore facilities
21 used for propagation or rearing of cultured species,
22 such as hatcheries or research operations;

23 (2) the type of aquaculture operations that will
24 be conducted at all facilities described in paragraph
25 (1);

1 (3) the cultured species, or a specified range of
 2 species, to be propagated or reared, or both, at the
 3 offshore aquaculture facility;

4 (4)(A) the source of eggs, larvae, or juvenile
 5 cultured species that will be used in offshore aqua-
 6 culture operations;

7 (B) an analysis of the likely ecosystem impacts
 8 of such operations, such as the spread of pathogens;
 9 and

10 (C) the information upon which the analysis
 11 was based;

12 (5) plans to respond to—

13 (A) a natural disaster;

14 (B) an escape;

15 (C) disease;

16 (D) loss or damage to infrastructure; and

17 (E) other circumstances designated by the
 18 Administrator; and

19 (6) such other design, construction, and oper-
 20 ational information as the Administrator may re-
 21 quire to ensure the integrity of the operations and
 22 contingency planning.

23 (e) NOTICE, PUBLIC COMMENT, AND OBJECTIONS.—

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

1 (A) not later than 90 days after receiving
 2 an application under this section, publish in the
 3 Federal Register a notice summarizing the ap-
 4 plication; and

5 (B) invite and consider public comments,
 6 and formal objections from any Governor or
 7 Tribal leader of a specially affected coastal ju-
 8 risdiction, on applications for permits under
 9 this section.

10 (2) SPECIALLY AFFECTED COASTAL JURISDIC-
 11 TION.—In this subsection, the term “specially af-
 12 fected coastal jurisdiction” means any coastal State
 13 or Indian Tribe—

14 (A) the land, Tribal land, or waters of
 15 which—

16 (i) are adjacent to the Federal waters
 17 in which the project will be conducted; and

18 (ii) are used, or are scheduled to be
 19 used, as a support base for the project;
 20 and

21 (B) for which there is a reasonable prob-
 22 ability of significant effect on uses of land,
 23 Tribal land, or water from the project.

24 (f) PRIORITY CONSIDERATION.—In considering ap-
 25 plications for permits for demonstration projects under

1 this section, the Administrator shall give priority consider-
2 ation to applications for demonstration projects—

3 (1) owned or operated by applicants who can
4 demonstrate that the demonstration project will di-
5 rectly benefit individuals who are already partici-
6 pating in the agricultural, wild-caught fishery, or
7 aquaculture industries who have been negatively im-
8 pacted by the COVID–19 pandemic, natural disas-
9 ters, or major disasters declared under section 401
10 of the Robert T. Stafford Disaster Relief and Emer-
11 gency Assistance Act (42 U.S.C. 5170); or

12 (2) sited within an Aquaculture Opportunity
13 Area identified by the Secretary of Commerce in ac-
14 cordance with section 7 of Executive Order 13921
15 (16 U.S.C. 1801 note; relating to promoting Amer-
16 ican seafood competitiveness and economic growth).

17 (g) SOCIOECONOMIC DATA.—In considering applica-
18 tions for permits for demonstration projects under this
19 section, and to support the study described in section 401,
20 the report required by section 402, and the assessment
21 program established under section 201, the Administrator
22 shall collect socioeconomic data associated with the owner
23 or operator of, and communities employed or otherwise af-
24 fected by, each demonstration project.

1 (h) DECISIONS WITH RESPECT TO ISSUANCE, DE-
2 FERRAL, OR DENIAL.—

3 (1) IN GENERAL.—Not later than 90 days after
4 the conclusion of the period for public comments
5 under subsection (e) with respect to an application
6 for a permit for a demonstration project under this
7 section, the Administrator shall—

8 (A) issue the permit, if the Administrator
9 determines the application complies with the re-
10 quirements of this Act, the National Environ-
11 mental Policy Act of 1969 (42 U.S.C. 4321 et
12 seq.), and other applicable law;

13 (B) if the Administrator determines that
14 the application does not comply with the re-
15 quirements described in subparagraph (A) and
16 can be modified to comply with those require-
17 ments—

18 (i) defer the decision on the permit;

19 and

20 (ii) provide to the applicant a notice
21 that specifies modifications to the proposed
22 demonstration project needed for a permit
23 to be issued; or

24 (C) if the Administrator determines that
25 the application does not comply with the re-

quirements described in subparagraph (A) and that the application cannot be modified to comply with such requirements, deny the permit and provide a justification for the denial.

(2) OTHER APPROVAL.—

(A) IN GENERAL.—An application for a permit for a demonstration project under this section shall be considered approved, as if a permit for the application had been issued under paragraph (1)(A), if—

(i) the Administrator does not take action under subparagraph (A), (B), or (C) of paragraph (1) within 90 days after the conclusion of the period for public comments under subsection (e) with respect to the application;

(ii) no formal objection to the application has been received from the Governor or Tribal leader of a specially affected coastal jurisdiction (as defined in subsection (e)); and

(iii) the Administrator has determined that the application complies with the requirements described in paragraph (1)(A).

1 (B) PROCESS.—The Administrator shall
 2 establish a process for the approval of applica-
 3 tions under this paragraph.

4 (i) EFFECTIVE PERIOD.—A permit for a demonstra-
 5 tion project issued under this section—

6 (1) shall be in effect during the 10-year period
 7 beginning on the date on which the project begins
 8 in-water operations; and

9 (2) may be renewed as provided by subsection
 10 (k).

11 (j) RENEWAL.—

12 (1) IN GENERAL.—The Administrator may
 13 renew a permit, that has not been revoked, for a
 14 demonstration project issued under this section for
 15 an additional 10-year period after the 10-year period
 16 described in subsection (i)(1) if—

17 (A) the owner or operator of the project
 18 submits to the Administrator a proposal for re-
 19 newal of the permit by a date determined by
 20 the Administrator; and

21 (B) the Administrator determines that the
 22 permit, as modified by the proposal, remains in
 23 compliance with the requirements described in
 24 subsection (j)(1).

1 (2) NOTICE AND PUBLIC COMMENT.—The Ad-
2 ministrator shall—

3 (A) publish in the Federal Register a no-
4 tice summarizing each proposal received under
5 paragraph (1) with respect to the renewal of a
6 permit;

7 (B) invite public comments for a period of
8 not less than 60 days regarding each such pro-
9 posal; and

10 (C) consider such comments in deter-
11 mining whether to approve the renewal of the
12 permit.

13 (k) AUTHORITY TO MODIFY OR TERMINATE PAR-
14 TICIPATION OF DEMONSTRATION PROJECTS AND ORDER
15 REMOVAL OF FACILITIES.—The Administrator may re-
16 quire modifications to a demonstration project for which
17 a permit is issued under this section, terminate such a
18 permit, or order the removal of an offshore aquaculture
19 facility authorized to operate under such a permit, if—

20 (1)(A) the project incurs an incident involving
21 a death or serious personal injury and the Adminis-
22 trator determines that negligence of the project op-
23 erator was the cause of or a contributing factor to
24 the incident;

1 (B) operation of the project results in a viola-
2 tion of—

3 (i) the Endangered Species Act of 1973
4 (16 U.S.C. 1531 et seq.); or

5 (ii) the Marine Mammal Protection Act of
6 1972 (16 U.S.C. 1361 et seq.);

7 (C) the owner or operator of the project fails to
8 comply with all of the terms and conditions of—

9 (i) the permit; or

10 (ii) modifications required by the Adminis-
11 trator under this subsection; or

12 (D) the Administrator determines that oper-
13 ation of the demonstration project would be unsafe
14 or result in unacceptable negative impacts to—

15 (i) the marine environment;

16 (ii) nearby communities; or

17 (iii) other users of the water body in which
18 the project is located; and

19 (2) before requiring a modification to the dem-
20 onstration project, terminating the permit, or order-
21 ing the removal of the offshore aquaculture facil-
22 ity—

23 (A) the Administrator provides a warning
24 notice to the owner or operator of the project;
25 and

1 (B) the owner or operator is given an op-
 2 portunity to address the Administrator's con-
 3 cerns.

4 (l) COASTAL ZONE MANAGEMENT ACT REVIEW.—
 5 The submission of an application for a permit for a dem-
 6 onstration project under this section shall trigger the right
 7 of review by a coastal State under the Coastal Zone Man-
 8 agement Act of 1972 (16 U.S.C. 1451 et seq.).

9 **SEC. 203. COORDINATION OF PERMIT REVIEWS FOR DEM-**
 10 **ONSTRATION PROJECTS.**

11 (a) IN GENERAL.—The Administration shall serve as
 12 the lead Federal agency for purposes of providing informa-
 13 tion on Federal permitting requirements for demonstra-
 14 tion projects under section 202.

15 (b) INFORMAL CONSULTATIONS.—

16 (1) IN GENERAL.—The Administrator shall con-
 17 vene representatives of the agencies described in
 18 paragraph (2) to provide prospective applicants for
 19 permits for demonstration projects under section
 20 202 an opportunity for informal consultation with
 21 such agencies.

22 (2) AGENCIES DESCRIBED.—The agencies de-
 23 scribed in this paragraph are the following:

24 (A) The Department of Agriculture.

25 (B) The Environmental Protection Agency.

1 (C) The Army Corps of Engineers.

2 (D) The Department in which the Coast
3 Guard is operating.

4 (E) The Department of Defense.

5 (F) Any other agency the Administrator
6 considers appropriate.

7 (3) RULE OF CONSTRUCTION.—Nothing in this
8 subsection shall preclude an applicant or a prospec-
9 tive applicant from contacting Federal agencies di-
10 rectly.

11 (c) ENVIRONMENTAL ANALYSIS.—To the extent al-
12 lowable under the National Environmental Policy Act of
13 1969 (42 U.S.C. 4321 et seq.), any environmental analysis
14 or environmental impact statement required under that
15 Act for offshore aquaculture activities proposed to be car-
16 ried out under a demonstration project under section 202
17 shall be conducted through a single, consolidated environ-
18 mental review and the Administration, through the Office
19 of Aquaculture established by section 101, shall serve as
20 the lead Federal agency.

21 (d) COORDINATION OF PERMIT REVIEWS.—To the
22 extent practicable under this Act and all other applicable
23 laws, including regulations, Federal agencies with permit-
24 ting requirements applicable to offshore aquaculture ac-
25 tivities proposed to be carried out under a demonstration

1 project under section 202 shall coordinate their review
 2 processes in order to provide a timely response to an appli-
 3 cant not later than 180 days after the submission of the
 4 application.

5 **SEC. 204. REPORTING BY ASSESSMENT PROGRAM PARTICI-**
 6 **PANTS.**

7 (a) IN GENERAL.—Not later than 1 year after the
 8 date on which a demonstration project for which a permit
 9 is issued under section 202 commences, and annually
 10 thereafter until the demonstration project terminates, the
 11 owner or operator of the demonstration project shall sub-
 12 mit to the Administrator the following:

13 (1) Production data.

14 (2) Information on interactions with wild spe-
 15 cies, mitigation measures taken, and the results of
 16 such interactions and measures.

17 (3) Information on technology and operational
 18 practices used to measure and monitor—

19 (A) effluent;

20 (B) integrity of cage materials and other
 21 gear; and

22 (C) health of the cultivated species.

23 (4) Information on environmental and eco-
 24 system impacts.

1 (5) Data necessary for the Ocean Studies
2 Board of the National Academies of Sciences, Engi-
3 neering, and Medicine to complete the study de-
4 scribed in section 401.

5 (6) Owner, operator, and employee demographic
6 data and other relevant data as determined appro-
7 priate by the Administrator for purposes of assess-
8 ing—

9 (A) the direct benefits of the demonstra-
10 tion project to fishery stakeholders; and

11 (B) the economic and social benefits of the
12 demonstration project for nearby coastal com-
13 munities.

14 (7) Information on navigation and safety im-
15 pacts to existing ocean users.

16 (8) Such additional information as the Adminis-
17 trator requires to fulfill the goals and objective of
18 the assessment program established under section
19 201.

20 (b) TECHNICAL ASSISTANCE.—The Administrator
21 shall, upon request, provide technical assistance to owners
22 and operators of demonstration projects for which permits
23 are issued under section 202 to comply with the reporting
24 requirements of this section.

1 (c) EMERGENCY REPORTING.—The Administrator
2 shall establish an emergency reporting process for each
3 owner or operator of a demonstration project for which
4 a permit is issued under section 202 to immediately report
5 suspected or known interactions between project facilities
6 or vessels and protected wild species.

7 **SEC. 205. RULE OF CONSTRUCTION; SAVINGS PROVISIONS.**

8 (a) RULE OF CONSTRUCTION.—Any requirement in
9 this title to identify or consider an impact or effect on
10 human health or the environment shall be construed as
11 including a requirement to make such identification or
12 consideration while taking into account—

13 (1) the cumulative impact of such impact or ef-
14 fect in the context of all sources of emissions, dis-
15 charges, or releases from any source, past, present,
16 or in the reasonably foreseeable future, on the af-
17 fected environment and population;

18 (2) any characteristics of such environment and
19 population that may heighten vulnerability to envi-
20 ronmental pollution and related health risks; and

21 (3) any action or practice that, even if appear-
22 ing neutral, has the effect of subjecting individuals
23 to discrimination on the basis of race, color, or na-
24 tional origin.

1 (b) STATUTORY CONSTRUCTION.—A permit for a
 2 demonstration project issued under section 202 shall not
 3 supersede or substitute for any other authorization re-
 4 quired under Federal or State law.

5 (c) APPLICABILITY.—This title does not apply with
 6 respect to applications for a permit in process on the date
 7 of the enactment of this Act or permits that are in effect
 8 on that date.

9 **TITLE III—WORKFORCE DEVEL-** 10 **OPMENT, FINANCING, AND** 11 **OTHER SUPPORT**

12 **SEC. 301. GENERAL SUPPORT FOR INDUSTRY.**

13 (a) IN GENERAL.—The Administrator shall support
 14 the development of offshore aquaculture consistent with
 15 this Act and other applicable Federal law.

16 (b) MARKETING AND PROMOTION GRANTS.—The Ad-
 17 ministrator, in consultation with private sector aqua-
 18 culture stakeholders, shall establish and administer a
 19 grant program to support the sale and public perception
 20 of cultured species domestically and internationally.

21 (c) WORKFORCE DEVELOPMENT GRANTS.—

22 (1) IN GENERAL.—The Administrator, in con-
 23 sultation with private sector operators of offshore
 24 aquaculture facilities, academic institutions, and the
 25 national sea grant college program, shall establish

1 and administer a grant program to support the edu-
2 cation and training of individuals with the skills
3 needed to manage and operate offshore aquaculture
4 facilities.

5 (2) AQUACULTURE CENTERS OF EXCEL-
6 LENCE.—The Administrator may carry out para-
7 graph (1) through the program established under
8 section 302(b)(1).

9 (d) REGIONAL NETWORKS.—The Administrator,
10 through each regional fisheries office of the Administra-
11 tion, shall organize a network of—

12 (1) regional experts and Federal agency con-
13 tacts, in coordination with relevant organizations, in-
14 cluding the national sea grant college program, the
15 Regional Aquaculture Centers of the Department of
16 Agriculture, institutions of higher education, and the
17 Cooperative Extension System of the Department of
18 Agriculture, to provide technical expertise and exten-
19 sion services for offshore aquaculture and informa-
20 tion on Federal permit requirements for offshore
21 aquaculture; and

22 (2) individuals and businesses interested in
23 aquaculture operations and products to facilitate
24 professional development, marketing, mentoring op-

1 portunities, and agency outreach and education on
2 aquaculture.

3 (e) AQUACULTURE DATABASE.—

4 (1) IN GENERAL.—The Administrator shall es-
5 tablish and maintain an aquaculture database within
6 the Office of Aquaculture established by section 101.

7 (2) INCLUSIONS.—The database required by
8 paragraph (1) shall include information on research,
9 technologies, monitoring techniques, best practices,
10 and advisory board recommendations relating to
11 aquaculture and offshore aquaculture.

12 (3) SAFEGUARDING OF INFORMATION.—The
13 Administrator shall make the database required by
14 paragraph (1) available in a manner that safeguards
15 personally identifiable information and confidential
16 business information.

17 (4) PATENTS.—The inclusion of information in
18 the database required by paragraph (1) shall not be
19 considered to be publication for purposes of sub-
20 section (a) or (b) of section 102 of title 35, United
21 States Code.

22 (f) TECHNICAL ASSISTANCE PROGRAMS FOR OPERA-
23 TORS.—

24 (1) IN GENERAL.—The Administrator, through
25 the Office of Aquaculture established by section 101

1 and the regional aquaculture coordinators described
 2 in such section, shall organize a program in each re-
 3 gional fisheries office of the Administration to pro-
 4 vide technical assistance to operators of offshore
 5 aquaculture facilities.

6 (2) TAILORING.—The programs required by
 7 paragraph (1) shall be tailored to meet the unique
 8 needs of each region.

9 (3) CONSULTATIONS.—Under each program re-
 10 quired by paragraph (1), the regional aquaculture
 11 coordinators described in section 101 may conduct
 12 consultations with the operator of each offshore
 13 aquaculture facility in the region concerned on a
 14 regular basis—

15 (A) to assess the status of the operator's
 16 business; and

17 (B) if appropriate, to identify available re-
 18 sources to support the operator, such as re-
 19 gional experts, university extension agents, and
 20 grant opportunities.

21 (g) CAPITAL MARKETS.—

22 (1) PROVISION OF INFORMATION.—In order to
 23 enhance access to capital markets, the Administrator
 24 shall provide financial institutions and investment
 25 firms with objective, science-based information on

1 offshore aquaculture and the Federal regulatory re-
 2 gime for offshore aquaculture.

3 (2) ECONOMIC ANALYSIS.—The Administrator
 4 shall provide economic analysis to answer queries re-
 5 garding the value of offshore aquaculture assets to
 6 secure financing, such as equipment, governmental
 7 permits, inventory, and intellectual property.

8 (3) COLLABORATION.—In order to achieve the
 9 goals of this subsection, the Administrator is encour-
 10 aged to collaborate with the Secretary of Agri-
 11 culture, the Secretary of the Treasury, and the re-
 12 gional networks established under subsection (d).

13 **SEC. 302. AQUACULTURE CENTERS OF EXCELLENCE.**

14 (a) DEFINITIONS.—In this section:

15 (1) COVERED INSTITUTION.—The term “cov-
 16 ered institution” means—

- 17 (A) a minority-serving institution;
- 18 (B) a Native Hawaiian-serving institution;
- 19 (C) an Alaska Native-serving institution;
- 20 (D) a historically Black college or univer-
- 21 sity; or
- 22 (E) a Tribal college or university.

23 (2) HISTORICALLY BLACK COLLEGE OR UNI-
 24 VERSITY.—The term “historically Black college or
 25 university” has the meaning given the term “part B

1 institution” in section 322 of the Higher Education
 2 Act of 1965 (20 U.S.C. 1061).

3 (3) MINORITY-SERVING INSTITUTION.—The
 4 term “minority-serving institution” means an eligi-
 5 ble institution described in paragraph (2), (4), (5),
 6 (6), or (7) of section 371(a) of the Higher Edu-
 7 cation Act of 1965 (20 U.S.C. 1067q(a)).

8 (4) TRIBAL COLLEGE OR UNIVERSITY.—The
 9 term “Tribal college or university” means a Tribal
 10 College or University (as defined in section 316(b)
 11 of the Higher Education Act of 1965 (20 U.S.C.
 12 1059c(b))) that is chartered by the governing body
 13 of the applicable Indian Tribe or by the Federal
 14 Government.

15 (b) AQUACULTURE CURRICULUM GRANTS.—

16 (1) IN GENERAL.—Not later than 1 year after
 17 the date of the enactment of this Act, the Adminis-
 18 trator, in consultation with private sector aqua-
 19 culture stakeholders, academic institutions, and the
 20 national sea grant college program, shall establish a
 21 program to award grants to covered institutions to
 22 assist in establishing or enhancing an aquaculture
 23 curriculum for undergraduate, graduate, or certifi-
 24 cate courses of study at such covered institutions.

1 (2) AQUACULTURE CENTERS OF EXCEL-
 2 LENCE.—A covered institution that receives a grant
 3 under this section shall be known as an “Aqua-
 4 culture Center of Excellence”.

5 (3) APPLICATIONS.—To be eligible to receive a
 6 grant under this section, a covered institution shall
 7 submit to the Administrator an application that in-
 8 cludes any plans to partner with one or more other
 9 institutions of higher education as authorized under
 10 paragraph (5).

11 (4) USE OF GRANT AMOUNTS.—

12 (A) IN GENERAL.—A covered institution
 13 receiving a grant under this section shall use
 14 the grant amounts to establish or enhance an
 15 aquaculture curriculum for undergraduate,
 16 graduate, or certificate courses of study that
 17 may include the following:

18 (i) Training in various skills needed
 19 by successful aquaculture entrepreneurs,
 20 including—

21 (I) offshore aquaculture oper-
 22 ations;

23 (II) business management, stra-
 24 tegic planning, business plan develop-
 25 ment, capital financing and fund-

1 raising, financial management and ac-
 2 counting, market analysis and com-
 3 petitive analysis, and market entry
 4 and strategy execution; and

5 (III) any other skill specific to
 6 the needs of the student population
 7 and the surrounding community, in-
 8 cluding with respect to social and en-
 9 vironmental sustainability, as deter-
 10 mined by the covered institution.

11 (ii) Natural and social science re-
 12 search programs in aquaculture and nat-
 13 ural fisheries, including offshore aqua-
 14 culture.

15 (iii) Development of extension pro-
 16 grams (or cooperation with existing exten-
 17 sion programs) that—

18 (I) educate and engage commu-
 19 nity members, including elementary
 20 and secondary school students, on
 21 aquaculture and aquaculture career
 22 pathways; and

23 (II) transfer newly developed
 24 techniques and research information
 25 developed or collated at the covered

1 institution to aquaculture stake-
2 holders.

3 (iv) Career development, such as the
4 establishment of cooperatives, apprentice-
5 ships, internships, practicums,
6 mentorships, accelerators, or grant com-
7 petitions.

8 (B) LIMITATIONS ON USE OF GRANT
9 AMOUNTS.—Amounts from a grant awarded
10 under this section may be used only for ex-
11 penses directly related to the implementation of
12 the curriculum or activities authorized under
13 this section.

14 (5) PARTNERSHIPS.—In applying for grants
15 and carrying out activities with grant amounts
16 under this section, a covered institution may partner
17 with one or more other institutions of higher edu-
18 cation with established aquaculture programs, in-
19 cluding institutions of higher education not other-
20 wise eligible for grants under this section, to facili-
21 tate the sharing of resources and knowledge nec-
22 essary for the development or enhancement of aqua-
23 culture curriculum at the covered institution.

24 (c) AUTHORIZATION OF APPROPRIATIONS.—There is
25 authorized to be appropriated to carry out this section

1 \$25,000,000 for each of fiscal years 2026 through 2030,
2 to remain available until expended.

3 **SEC. 303. WORKING WATERFRONTS PRESERVATION GRANT**
4 **PROGRAM.**

5 (a) IN GENERAL.—The Secretary of Commerce, act-
6 ing through the Assistant Secretary of Commerce for Eco-
7 nomic Development (referred to in this section as the
8 “Secretary”), shall award grants, on a competitive basis,
9 that support the commercial fishing industry, the aqua-
10 culture industry, the for-hire recreational fishing industry,
11 or the boatbuilding industry in coastal States.

12 (b) APPLICATION.—An entity desiring a grant under
13 this section shall submit to the Secretary an application
14 containing such information as the Secretary may reason-
15 ably require.

16 (c) CONSIDERATIONS.—In selecting entities to receive
17 a grant under this section, the Secretary shall give sub-
18 stantial weight to—

- 19 (1) the economic significance of a project to the
20 commercial fishing industry, the aquaculture indus-
21 try, the for-hire recreational fishing industry, or the
22 boatbuilding industry in the immediate vicinity and
23 in the coastal State in which the project is located;
24 (2) the availability of waterfront access points
25 for the commercial fishing industry, the aquaculture

1 industry, the for-hire recreational fishing industry,
2 or the boatbuilding industry within the community
3 in which the entity seeks to carry out the project;

4 (3) the utility of the project for use in the com-
5 mercial fishing industry, the aquaculture industry,
6 the for-hire recreational fishing industry, or the
7 boatbuilding industry with respect to the natural
8 characteristics and developed infrastructure of the
9 community in which the project will be located;

10 (4) whether the entity has a business plan for
11 the project;

12 (5) anticipated or likely impacts of the project
13 on existing uses, including commercial fishing, aqua-
14 culture, offshore aquaculture, for-hire recreational
15 fishing, or boatbuilding;

16 (6) the ability of the entity to demonstrate a
17 need, or support, for the project within that commu-
18 nity; and

19 (7) if the project will confer property protection
20 benefits, and the duration of those benefits.

21 (d) COST-SHARING.—A grant under this section for
22 a project may not exceed 50 percent of the total cost of
23 the project.

24 (e) IMPROVED OR PROTECTED PROPERTY.—

1 (1) IN GENERAL.—A grant under this section
 2 may be used to improve or protect privately-owned
 3 real property or interests in privately-owned real
 4 property, including easements, only from willing
 5 owners.

6 (2) NO EXERCISE OF EMINENT DOMAIN.—No
 7 Federal, State, or local agency may exercise the
 8 power of eminent domain to secure title to any real
 9 property or facilities in connection with a project
 10 carried out with a grant under this section.

11 (f) AUTHORIZATION OF APPROPRIATIONS.—There is
 12 authorized to be appropriated to carry out this section
 13 \$20,000,000 for each of fiscal years 2026 through 2030.

14 **SEC. 304. OUTREACH ON SUSTAINABLE OFFSHORE AQUA-**
 15 **CULTURE.**

16 (a) IN GENERAL.—The Administrator shall conduct
 17 outreach on sustainable offshore aquaculture to promote
 18 understanding, science-based decision making, and com-
 19 mercial adoption.

20 (b) ENGAGEMENT.—In carrying out subsection (a),
 21 the Administrator shall use appropriate means to en-
 22 gage—

- 23 (1) the general public;
- 24 (2) community leaders;
- 25 (3) governmental officials;

- 1 (4) the business community;
- 2 (5) the academic community; and
- 3 (6) the nonprofit sector.

4 **TITLE IV—STUDIES AND** 5 **REPORTS**

6 **SEC. 401. STUDY ON OFFSHORE AQUACULTURE BY OCEAN** 7 **STUDIES BOARD OF THE NATIONAL ACAD-** 8 **EMIES OF SCIENCES, ENGINEERING, AND** 9 **MEDICINE.**

10 (a) IN GENERAL.—The Administrator shall seek to
11 enter into a contract with the Ocean Studies Board of the
12 National Academies of Sciences, Engineering, and Medi-
13 cine (in this section referred to as the “Board”) under
14 which the Board shall, not later than 5 years after the
15 date on which the Administrator establishes the assess-
16 ment program under section 201—

17 (1) complete a study to develop the scientific
18 basis for efficient and effective regulation of offshore
19 aquaculture; and

20 (2) submit to Congress and make publicly avail-
21 able the results of the study.

22 (b) ELEMENTS.—The study completed pursuant to
23 subsection (a) shall, with respect to offshore aqua-
24 culture—

25 (1) identify—

1 (A) optimal methods of operation of off-
2 shore aquaculture facilities to limit adverse ef-
3 fects on the environment, wildlife, and human
4 well-being, including—

5 (i) considerations to guide siting deci-
6 sions of such facilities;

7 (ii) appropriate stocking densities; and

8 (iii) opportunities for selective breed-
9 ing;

10 (B) a science-based definition of “respon-
11 sible offshore aquaculture feed or other inputs”,
12 including guidance on sourcing feed or other in-
13 puts to address long- or short-term concerns,
14 including the availability and scalability of such
15 inputs;

16 (C) potential adverse effects on the envi-
17 ronment, wildlife, and human well-being, includ-
18 ing from—

19 (i) the use of antibiotics and other
20 pharmaceuticals by offshore aquaculture
21 facilities, including through analyses nec-
22 essary to establish acceptable rates, impact
23 levels, and risk thresholds, such as anal-
24 yses of organism antibiotic consumption or

1 metabolization versus excretion to the sur-
2 rounding environment;

3 (ii) assimilation of pollution origi-
4 nating from offshore aquaculture facilities
5 on marine organisms;

6 (iii) abandoned, lost, damaged or oth-
7 erwise discarded equipment;

8 (iv) harmful interactions with wildlife;

9 (v) interbreeding between cultured
10 species and native marine species;

11 (vi) the spread of disease from cul-
12 tured species to wild species;

13 (vii) the collection and removal of
14 brood stock for offshore aquaculture oper-
15 ations, and hatcheries and prestocking
16 rearing operations that are specific to off-
17 shore aquaculture;

18 (viii) large-scale cultivation of filter-
19 feed bivalve organisms and seaweed;

20 (ix) offshore aquaculture facilities act-
21 ing as aggregating devices and increasing
22 the vulnerability of wild fisheries and wild-
23 life populations to fishing or other sources
24 of mortality;

1 (x) predator control devices and meth-
 2 ods; and

3 (xi) the use of non-sustainable sources
 4 of feed or other inputs, including the use
 5 of globally limited marine resources for
 6 feed ingredients, and scalability of alter-
 7 natives, including—

8 (I) novel ingredients (for exam-
 9 ple, insect, single cell protein, and
 10 algae);

11 (II) traditional ingredients (for
 12 example, soya); and

13 (III) other inputs;

14 (D) potential methods and technologies to
 15 mitigate adverse effects, including the effects
 16 identified under subparagraph (C);

17 (E) potential conflicts between offshore
 18 aquaculture facilities and other users of the off-
 19 shore environment, and solutions to mitigate
 20 such conflicts;

21 (F) the types of data and qualitative infor-
 22 mation necessary for the optimal operation of
 23 offshore aquaculture facilities and appropriate
 24 methods of procuring such data and informa-
 25 tion, including from—

1 (i) citizen science (as defined in sec-
2 tion 402(c) of the Crowdsourcing and Cit-
3 izen Science Act (15 U.S.C. 3724(c))); and

4 (ii) the traditional knowledge of Trib-
5 al and Indigenous communities; and

6 (G) best practices for offshore aquaculture
7 siting and operations to manage and plan for
8 predicted changes in global atmospheric and
9 oceanographic conditions; and

10 (2) provide recommendations for legislative or
11 administrative action with respect to—

12 (A) methods of operation identified under
13 paragraph (1)(A);

14 (B) mitigating adverse effects identified
15 under paragraph (1)(C);

16 (C) environmental standards, control rules,
17 or reference points that build on the existing
18 public and private standards for the sustain-
19 ability of offshore aquaculture; and

20 (D) ensuring that operators of offshore
21 aquaculture facilities adhere to international
22 standards for social responsibility, public
23 health, and equitable labor practices, including
24 with respect to sourcing inputs for such facili-
25 ties.

1 **SEC. 402. REPORT ON OFFSHORE AQUACULTURE BY GOV-**
 2 **ERNMENT ACCOUNTABILITY OFFICE.**

3 (a) IN GENERAL.—Not later than 5 years after the
 4 date on which the Administrator establishes the assess-
 5 ment program under section 201, the Comptroller General
 6 of the United States shall submit to the appropriate com-
 7 mittees of Congress a report examining the permitting,
 8 monitoring, and regulation of offshore aquaculture during
 9 the 15-year period ending on such date of establishment.

10 (b) BASES OF REPORT.—The Comptroller General
 11 shall base the report required by subsection (a) on avail-
 12 able literature, case studies, and aquaculture stakeholder
 13 input.

14 (c) ELEMENTS OF REPORT.—The report required by
 15 subsection (a) shall—

16 (1) assess the feasibility and potential positive
 17 and negative implications of designating a lead agen-
 18 cy to issue permits for offshore aquaculture oper-
 19 ations in a timely manner;

20 (2) identify lessons learned during the period
 21 described in subsection (a) with respect to—

22 (A) the effect of offshore aquaculture type,
 23 location, and regulatory framework on the suc-
 24 cess of offshore aquaculture projects;

25 (B) the degree of involvement of coastal or
 26 adjacent States or Tribal or Indigenous commu-

1 nities in consultations for, planning for, or op-
2 erations of offshore aquaculture;

3 (C) safety protocols and risk mitigation
4 measures for the permitting and oversight proc-
5 esses for offshore aquaculture, including—

6 (i) escape prevention measures;

7 (ii) emergency event response plan-
8 ning;

9 (iii) compliance monitoring, particu-
10 larly in remote locations;

11 (iv) compliance with Federal laws;

12 (v) mechanisms for reporting to ap-
13 propriate Federal authorities; and

14 (vi) vessel navigation aids to ensure
15 navigational safety;

16 (D) the effect of incentives to reduce ad-
17 verse effects or disparate impacts from offshore
18 aquaculture operations;

19 (E) building and optimizing synergies be-
20 tween offshore aquaculture and wild-caught
21 fishing activities, or offshore, nearshore, and
22 onshore aquaculture activities, including market
23 development, increasing seafood consumption,
24 and shared infrastructure;

1 (F) the environmental effects of offshore
2 aquaculture operations, including mechanisms
3 to prevent harm to the environment, wildlife, or
4 human well-being;

5 (G) the net economic and social benefits of
6 offshore aquaculture projects, particularly for
7 nearby communities and fishery stakeholders,
8 based on project size, regulatory structures, and
9 financing structures;

10 (H) the impact of introducing offshore
11 aquaculture products to the marketplace on
12 supply and demand for wild-capture fisheries
13 products, and methods for ensuring resiliency
14 and growth for both offshore aquaculture and
15 wild-capture fisheries products;

16 (I) mechanisms to enhance capital invest-
17 ment, workforce development, and equitable op-
18 portunity requirements or assistance programs
19 in the permitting process for offshore aqua-
20 culture, or to diversify permit applicants;

21 (J) outstanding needs for continued re-
22 search, development, education activities, pro-
23 grams, and funding regarding—

24 (i) offshore aquaculture projects; and

1 (ii) development of the domestic work-
 2 force and entrepreneurship related to off-
 3 shore aquaculture;

4 (K) the economic potential for both large-
 5 and small-scale offshore aquaculture operations
 6 to generate a positive return on investment
 7 under various regulatory and financing struc-
 8 tures;

9 (L) the applicability and sufficiency of ex-
 10 isting regulatory systems for offshore aqua-
 11 culture; and

12 (M) existing local, State, Federal, and for-
 13 eign regulatory standards that may serve as
 14 models for efficient and effective regulation of
 15 offshore aquaculture; and

16 (3) include such recommendations as the Comp-
 17 troller General may have with respect to future off-
 18 shore aquaculture operations, including with respect
 19 to—

20 (A) regulatory processes necessary for per-
 21 mitting, monitoring, and oversight, including
 22 processes and techniques related to siting, de-
 23 ployment, operations, and decommissioning;

24 (B) potential safeguards, data collection,
 25 or monitoring required to minimize disparate

1 impacts on specially affected coastal jurisdic-
2 tions (as defined in section 202(e)), fishery
3 stakeholders, local economies, marine environ-
4 ments, and existing domestic economic sectors;

5 (C) mechanisms for optimizing coordina-
6 tion among Federal agencies with a role in per-
7 mitting or supporting offshore aquaculture
8 without compromising the goals of such permit-
9 ting;

10 (D) methods for effectively involving aqua-
11 culture stakeholders, including—

12 (i) specially affected coastal jurisdic-
13 tions (as defined in section 202(e));

14 (ii) local communities;

15 (iii) regional offshore waters users
16 and management groups, including re-
17 gional fishery management councils; and

18 (iv) users of local, State, Tribal, and
19 Federal waters and coastal resources;

20 (E) best practices for incorporating local
21 knowledge, including from Tribal or Indigenous
22 communities;

23 (F) capabilities of Federal agencies that
24 are necessary for effective regulation of the off-
25 shore aquaculture sector; and

1 (G) how creating private rights of action or
2 waiving sovereign immunity would affect the de-
3 velopment of offshore aquaculture projects and
4 the acceptance of such projects by nearshore
5 and offshore waters user groups and coastal
6 communities.

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