

119TH CONGRESS
2D SESSION

H. R. 9673

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 HOUSE OF REPRESENTATIVES

JULY 14, 2026

Mr. EZELL (for himself, Mr. PANETTA, Ms. TOKUDA, and Ms. PINGREE) introduced the following bill; which was referred to the Committee on Natural Resources, and in addition to the Committee on Education and Workforce, for a period to be subsequently determined by the Speaker, in each case for consideration of such provisions as fall within the jurisdiction of the committee concerned

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 2026”
 4 or the “MARA Act of 2026”.

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.

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;

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; and

17 (6) to support the development of offshore
18 aquaculture in a manner that minimizes conflicts
19 with existing recreational and commercial fishing ac-
20 cess and uses.

21 **SEC. 3. DEFINITIONS.**

22 In this Act:

23 (1) ADMINISTRATION.—The term “Administra-
24 tion” means the National Oceanic and Atmospheric
25 Administration.

1 (2) ADMINISTRATOR.—The term “Adminis-
2 trator” means the Administrator of the Administra-
3 tion.

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

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

12 (B) the Committee on Natural Resources,
13 the Committee on Agriculture, and the Com-
14 mittee on Transportation and Infrastructure of
15 the House of Representatives.

16 (4) AQUACULTURE.—The term “aqua-
17 culture”—

18 (A) means any activity involved in the
19 propagation, rearing, or attempted propagation
20 or rearing, of cultured species, including the
21 capture of wild individuals for rearing as
22 broodstock; and

23 (B) does not include the practice of—

24 (i) capturing juvenile finfish to rear to
25 maturity in an aquaculture facility for sub-

sequent commercial sale, commonly referred to as ranching; or

(ii) rearing and releasing cultured species for the purpose of enhancing wild populations.

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

(A) an owner or operator of an offshore aquaculture facility or a land or coastal-based facility supporting offshore operation, including hatcheries and nurseries;

(B) a Regional Fishery Management Council established under section 302(a) of the Magnuson-Stevens Fishery Conservation and Management Act (16 U.S.C. 1852(a));

(C) an interstate fisheries commission;

(D) a conservation organization;

(E) a fisheries association;

(F) a State or county government;

(G) an Indian Tribe;

(H) a Native Hawaiian organization;

(I) a Native Hawaiian community;

(J) a Tribal or Indigenous community;

(K) a Federal or State agency with interests in aquaculture; or

1 (L) any other interested party.

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

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

8 (A) means any species propagated and
9 reared for marine aquaculture;

10 (B) includes marine shellfish species in-
11 tended for propagation that self-recruit to aqua-
12 culture structures in the offshore environment;
13 and

14 (C) excludes any member of the class Aves,
15 Reptilia, or Mammalia.

16 (8) ESCAPE.—The term “escape” means the es-
17 cape of juvenile- or adult-farmed organisms or fer-
18 tilized eggs spawned by cultured species from off-
19 shore aquaculture facilities or land or coastal-based
20 hatcheries, nurseries, or associated facilities.

21 (9) EXCLUSIVE ECONOMIC ZONE.—

22 (A) IN GENERAL.—Unless otherwise speci-
23 fied by the President in the public interest in
24 a writing published in the Federal Register, the

term “exclusive economic zone” means a zone,
the outer boundary of which—

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

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

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

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

(i) in the case of the coastal States, a
line coterminous with the seaward bound-
ary of each such State, as described in sec-

tion 4 of the Submerged Lands Act (43 U.S.C. 1312);

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

(iii) in the case of American Samoa, the United States Virgin Islands, or Guam, a line 3 geographic miles from the coastlines of American Samoa, the United States Virgin Islands, or Guam, respectively; or

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

(I) the coastline of the Commonwealth of the Northern Mariana Islands, until the Commonwealth of the Northern Mariana Islands is granted authority by the United States to regulate all fishing to a line seaward of its coastline; and

(II) upon the United States grant of such authority, the line established by such grant of authority.

1 (C) RULE OF CONSTRUCTION.—Nothing in
2 this paragraph may be construed to diminish
3 the authority of the Department of Defense, the
4 Department of the Interior, or any other Fed-
5 eral agency.

6 (10) FISHERY STAKEHOLDERS.—The term
7 “fishery stakeholders” means—

8 (A) subsistence fishery participants and
9 their dependents;

10 (B) commercial fishermen;

11 (C) seafood processing and distribution
12 workers;

13 (D) recreational fishery participants;

14 (E) Tribal fisheries; and

15 (F) territorial fishing communities, includ-
16 ing such communities in Hawaii, American
17 Samoa, Guam, the Commonwealth of the
18 Northern Mariana Islands, Puerto Rico, and
19 the United States Virgin Islands.

20 (11) GENETICALLY MODIFIED ORGANISM; GE-
21 NETICALLY MODIFIED.—The terms “genetically
22 modified organism” and “genetically modified”
23 mean any organism whose genetic material (DNA)
24 has been altered using technology in a way that does
25 not occur naturally by conventional breeding or nat-

1 ural processes and results in permanent, heritable
2 changes, with the exception of sterilization.

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

7 (13) INSTITUTION OF HIGHER EDUCATION.—
8 The term “institution of higher education” has the
9 meaning given that term in section 201 of the High-
10 er Education Act of 1965 (20 U.S.C. 1001).

11 (14) NATIVE HAWAIIAN COMMUNITY.—The
12 term “Native Hawaiian community” means the dis-
13 tinct Native Hawaiian indigenous political commu-
14 nity that Congress, exercising its plenary power over
15 Native American affairs, has recognized and with
16 which Congress has implemented a special political
17 and trust relationship.

18 (15) NATIVE HAWAIIAN ORGANIZATION.—The
19 term “Native Hawaiian organization” has the mean-
20 ing given that term in section 6207 of the Elemen-
21 tary and Secondary Education Act of 1965 (20
22 U.S.C. 7517) and includes the Department of Ha-
23 waiian Home Lands and the Office of Hawaiian Af-
24 fairs.

1 (16) NATIONAL SEA GRANT COLLEGE PRO-
2 GRAM.—The term “national sea grant college pro-
3 gram” means the program maintained under section
4 204(a) of the National Sea Grant College Program
5 Act (33 U.S.C. 1123(a)).

6 (17) OFFSHORE AQUACULTURE.—The term
7 “offshore aquaculture” means aquaculture con-
8 ducted in the exclusive economic zone.

9 (18) OFFSHORE AQUACULTURE FACILITY.—The
10 term “offshore aquaculture facility” means—

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

13 (B) an area of the seabed or water column
14 used for offshore aquaculture.

15 (19) STATE.—The term “State” means each of
16 the several States, the District of Columbia, the
17 Commonwealth of Puerto Rico, American Samoa,
18 the Virgin Islands, Guam, and any other Common-
19 wealth, territory, or possession of the United States.

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

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

1 (A) enrolled members of an Indian Tribe;

2 (B) members of an Alaska Native or Na-

3 tive Hawaiian community or organization; or

4 (C) members of any other community of

5 Indigenous people located in a State.

6 **TITLE I—OFFICE OF**
7 **AQUACULTURE**

8 **SEC. 101. OFFICE OF AQUACULTURE.**

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

13 (b) RESOURCES.—The Administrator shall ensure
14 the Office is provided with sufficient resources to carry
15 out the duties of the Office under subsection (d), subject
16 to available appropriations.

17 (c) REPRESENTATION AT REGIONAL FISHERIES OF-
18 FICES.—

19 (1) IN GENERAL.—The Administrator shall pro-
20 vide for representation of the Office in each of the
21 regional fisheries offices of the Administration.

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

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

4 (B) shall otherwise ensure that the rep-
5 resentation of the Office at a regional fisheries
6 office is, at a minimum, sufficient to permit the
7 Office to fulfill the duties of the Office under
8 subsection (d); and

9 (C) may increase that representation to the
10 extent warranted by the activity and interest of
11 aquaculture stakeholders in the region.

12 (d) DUTIES.—The Office shall—

13 (1) coordinate the implementation of this Act,
14 including administration of—

15 (A) the offshore aquaculture assessment
16 program established under section 201; and

17 (B) the issuance of permits under section
18 202;

19 (2) coordinate regulatory, scientific, outreach,
20 and international issues related to aquaculture with-
21 in the Administration;

22 (3) collaborate with and leverage existing ef-
23 forts by the Administrator—

1 (A) to conduct outreach, education, exten-
2 sion services, and training efforts for aqua-
3 culture and offshore aquaculture; and

4 (B) to engage with aquaculture stake-
5 holders and, periodically, convene conferences
6 or workshops for aquaculture stakeholders to
7 exchange information and ideas;

8 (4) develop recommendations for best manage-
9 ment practices for offshore aquaculture operations
10 that, at a minimum—

11 (A) encourage development of offshore
12 aquaculture in a manner that complies with en-
13 vironmental law;

14 (B) are based on the best scientific infor-
15 mation available;

16 (C) take into account traditional knowl-
17 edge of Tribal and Indigenous communities as
18 appropriate to the region;

19 (D) are adaptive to offshore aquaculture
20 developments, such as updates in technology
21 and different environmental conditions;

22 (E) prefer species that are native or his-
23 torically naturalized to the region;

24 (F) evaluate and, where appropriate, incor-
25 porate practices that reduce reliance on wild-

1 caught marine forage in aquaculture feeds, con-
2 sistent with best available science and the avail-
3 ability of sustainable alternatives; and

4 (G) prioritize the health of cultured spe-
5 cies;

6 (5) coordinate and conduct additional research
7 to support the development of sustainable offshore
8 aquaculture;

9 (6) administer support for industry under sec-
10 tion 301;

11 (7) administer the Aquaculture Centers of Ex-
12 cellence under section 302;

13 (8) administer the contract to conduct the
14 study described in section 401; and

15 (9) coordinate the engagement of the Adminis-
16 tration with the Comptroller General of the United
17 States as the Comptroller General prepares the re-
18 port required by section 402.

19 (e) AGREEMENTS WITH STATES.—

20 (1) IN GENERAL.—Upon request of the Gov-
21 ernor of a coastal State, the Administrator may
22 enter into an agreement with the State to allow the
23 State, and aquaculture stakeholders in the State as
24 appropriate, to participate in activities authorized
25 under sections 201 and 203 and titles III and IV

1 with respect to aquaculture operations located in
2 State waters that—

3 (A) are directly exposed to open ocean con-
4 ditions; and

5 (B) possess oceanographic or bathymetric
6 characteristics substantially similar to offshore
7 waters of the exclusive economic zone.

8 (2) LIMITATION.—An agreement entered into
9 under this subsection shall not be construed to sub-
10 ject aquaculture operations in State waters to per-
11 mitting or regulatory requirements applicable exclu-
12 sively to offshore aquaculture in the exclusive eco-
13 nomic zone, unless expressly provided in such agree-
14 ment and authorized under applicable State law.

15 (3) RULE OF CONSTRUCTION.—Nothing in this
16 subsection or in any agreement entered into under
17 this subsection shall be construed to displace, super-
18 sede, or diminish the authority of a coastal State to
19 regulate aquaculture within its waters or the author-
20 ity of the Administrator under otherwise applicable
21 law.

22 (f) BUDGET REQUEST.—The Administrator shall in-
23 clude, in the budget justification materials submitted to
24 Congress in support of the budget of the President for
25 a fiscal year pursuant to section 1105 of title 31, United

1 States Code, a request for funding for the Office as a sep-
 2 arate line item with the National Marine Fisheries Service.

3 **TITLE II—COMMERCIAL-SCALE**
 4 **DEMONSTRATION PROJECTS**

5 **SEC. 201. ASSESSMENT PROGRAM FOR OFFSHORE AQUA-**
 6 **CULTURE.**

7 (a) ESTABLISHMENT OF PROGRAM.—Not later than
 8 180 days after the date of the enactment of this Act, the
 9 Administrator shall establish an assessment program (in
 10 this section referred to as the “assessment program”) with
 11 the objective of assessing the viability of offshore aqua-
 12 culture—

13 (1) in light of changing circumstances and ad-
 14 vances in technology; and

15 (2) using the best available science, information
 16 from aquaculture stakeholders, and information de-
 17 veloped from demonstration projects for which per-
 18 mits are issued under section 202.

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

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

24 (A) to survive various atmospheric and
 25 ocean conditions, including high wind speeds or

high-energy ocean conditions associated with severe weather, or tidal or tsunami activity, while preventing, to the extent possible—

(i) escapes;

(ii) loss of or damage to infrastructure; or

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

(B) to prevent, to the extent possible, entanglements of large whales, sea turtles, and other species protected under—

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

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

(C) to prevent, to the extent possible, adverse impacts on the marine environment, including impacts to habitat, water chemistry, and wildlife; and

(D) to comply with the requirements of the United States Coast Guard and United States Army Corps of Engineers in preventing adverse impacts on navigation and safety to existing ocean users due to offshore aquaculture facilities, including requirements for operations,

1 navigation, and transit associated with such fa-
2 cilities.

3 (2) The ability of different technologies to pro-
4 vide reliable and timely data on offshore aquaculture
5 facilities, including visual data and other relevant
6 data types, on a regular basis to enable the Adminis-
7 trator to monitor—

8 (A) the compliance of demonstration
9 projects for which permits are issued under sec-
10 tion 202 with the requirements under sub-
11 section (b) of such section;

12 (B) impacts on the marine environment;
13 and

14 (C) interference with existing uses of the
15 water bodies in which demonstration projects
16 for which permits are issued under section 202
17 are located.

18 (3) The relative risks, benefits, and costs of
19 various types of offshore aquaculture, including dif-
20 ferent cultured species, in different geographies and
21 under varying environmental conditions.

22 (c) REPORT REQUIRED.—Not later than 5 years
23 after the date on which the Administrator establishes the
24 assessment program, the Administrator shall publish,
25 make available to the public, and submit to the National

1 Academy of Sciences and the Comptroller General of the
2 United States, a report that includes the following:

3 (1) A description of each demonstration project
4 for which a permit is issued under section 202, in-
5 cluding documentation supporting the issuance of
6 the permit and summary of information submitted
7 to the Administrator for each demonstration project.

8 (2) A description of the progress made toward
9 meeting the objective described in subsection (a).

10 (d) RULE OF CONSTRUCTION.—Nothing in this sec-
11 tion shall be construed to require the development of new
12 assessment frameworks where existing ecosystem-based
13 assessment tools of the Administrator, including Inte-
14 grated Ecosystem Assessments, are sufficient to meet the
15 requirements of the assessment program under this sec-
16 tion.

17 **SEC. 202. PERMITS FOR DEMONSTRATION PROJECTS FOR**
18 **OFFSHORE AQUACULTURE FACILITIES.**

19 (a) ISSUANCE OF PERMITS.—After the Administrator
20 establishes the assessment program under section 201, the
21 Administrator shall issue permits for commercial-scale
22 demonstration projects for proposed offshore aquaculture
23 facilities in furtherance of the assessment program.

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

4 (1) advance the objective described in section
5 201(a);

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

10 (3) ensure that there will be no intentional cul-
11 ture, propagation, or release of genetically modified
12 organisms if such organisms present a material risk
13 of harmful ecological, genetic, or disease impacts
14 that is greater than such risk associated with con-
15 ventional stock;

16 (4) incorporate design and operational practices
17 that minimize the risk of escape, adverse wildlife im-
18 pacts (including entanglement), adverse impacts to
19 navigation, and adverse pollution impacts;

20 (5) develop an escape response and infrastruc-
21 ture loss or damage plan that minimizes the impact
22 of any escapes or infrastructure loss or damage on
23 the marine environment, including wild populations
24 and fishery resources, and on other uses of the
25 water body in which the project is located;

1 (6) comply with all applicable requirements, in-
2 cluding—

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

6 (B) the Endangered Species Act of 1973
7 (16 U.S.C. 1531 et seq.);

8 (C) the Marine Mammal Protection Act of
9 1972 (16 U.S.C. 1361 et seq.); and

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

12 (7) maximize compatibility with, and prevent or
13 minimize displacement of, existing uses and users of
14 the marine environment in the near vicinity of where
15 the project is located; and

16 (8) conform to best practices to minimize the
17 use of therapeutants and pharmaceuticals, including
18 antibiotics, and minimize the release of such sub-
19 stances into the environment.

20 (c) AUTHORIZED ACTIVITIES.—A person that holds
21 a permit for a demonstration project issued under sub-
22 section (a) may conduct offshore aquaculture for commer-
23 cial sale consistent with this Act, including regulations
24 promulgated by the Administrator to carry out this Act.

1 (d) APPLICATIONS.—A person seeking a permit for
2 a demonstration project shall submit to the Administrator
3 an application that specifies—

4 (1) the proposed location of the offshore aqua-
5 culture facility and the location of on-shore facilities
6 used for propagation or rearing of cultured species,
7 such as hatcheries, nurseries, or research operations;

8 (2) the proposed type of aquaculture gear that
9 will be used at facilities described in paragraph (1);

10 (3) the cultured species to be propagated or
11 reared, or both, at the offshore aquaculture facility;

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

15 (B) an analysis of the likely ecosystem impacts
16 of such operations, such as the risk of escapes, ad-
17 verse wildlife impacts, risk of pollution, and spread
18 of pathogens; and

19 (C) the information upon which the analysis
20 was based;

21 (5) plans to respond to—

22 (A) a natural disaster;

23 (B) an escape;

24 (C) disease;

25 (D) loss or damage to infrastructure;

1 (E) entanglements; and

2 (F) other circumstances designated by the
3 Administrator; and

4 (6) such other design, construction, and oper-
5 ational information as the Administrator may re-
6 quire to ensure the integrity of the operations and
7 contingency planning.

8 (e) NOTICE, PUBLIC COMMENT, AND RECOMMENDA-
9 TIONS.—

10 (1) IN GENERAL.—Not later than 90 days after
11 receiving an application under this section, the Ad-
12 ministrator shall—

13 (A) conduct a preliminary review to deter-
14 mine whether the application is complete and
15 complies with the requirements of this Act and
16 other applicable Federal law;

17 (B) for each application that the Adminis-
18 trator has determined is incomplete or does not
19 comply with the requirements of this Act and
20 other applicable Federal law, provide to the ap-
21 plicant a notice that specifies modifications to
22 the application and the opportunity for resub-
23 mission;

24 (C) for each complete application that the
25 Administrator has determined complies with the

1 requirements of this Act and other applicable
2 Federal law under subparagraph (A), publish in
3 the Federal Register, and provide to the Gov-
4 ernor or Tribal leader of each specially affected
5 coastal jurisdiction, the application; and

6 (D) for a period of 60 days, invite and
7 consider all public comments, and recommenda-
8 tions to modify the application or to deny the
9 permit from any Governor or Tribal leader of a
10 specially affected coastal jurisdiction designated
11 under this subsection, on applications for per-
12 mits described in subparagraph (C).

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

17 (A) the land, Tribal land, or waters of
18 which—

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

21 (ii) are used, or are scheduled to be
22 used, as a support base for the project;
23 and

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

4 (3) DESIGNATION OF A SPECIALLY AFFECTED
5 COASTAL JURISDICTION.—The Administrator shall
6 establish a mechanism for identifying and desig-
7 nating, with respect to each application for a dem-
8 onstration project received under this section, the
9 adjacent specially affected coastal jurisdiction or ju-
10 risdictions.

11 (f) PRIORITY CONSIDERATION.—In considering ap-
12 plications for permits for demonstration projects under
13 this section, the Administrator shall give priority consider-
14 ation to applications for demonstration projects—

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

24 (2) sited within an Aquaculture Opportunity
25 Area identified by the Secretary of Commerce in ac-

1 cordance with section 7 of Executive Order 13921
2 (16 U.S.C. 1801 note; relating to promoting Amer-
3 ican seafood competitiveness and economic growth).

4 (g) SOCIOECONOMIC DATA.—In considering applica-
5 tions for permits for demonstration projects under this
6 section, and to support the study described in section 401,
7 the report required by section 402, and the assessment
8 program established under section 201, the Administrator
9 shall collect quantitative and qualitative socioeconomic
10 data associated with the owner or operator of, and commu-
11 nities employed or otherwise affected by, each demonstra-
12 tion project.

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

15 (1) IN GENERAL.—Not later than 90 days after
16 the conclusion of the period for public comments
17 under subsection (e) with respect to an application
18 for a permit for a demonstration project under this
19 section, the Administrator shall—

20 (A) issue the permit, if the Administrator
21 determines the application complies with the re-
22 quirements of this Act and other applicable law;

23 (B) if the Administrator determines that
24 the application does not comply with the re-
25 quirements of this Act and other applicable law,

1 or if the Administrator approves recommenda-
2 tions for modifications under subsection (e),
3 and the application can be modified to comply
4 with those requirements—

5 (i) defer the decision on the permit;

6 and

7 (ii) provide to the applicant a notice
8 that specifies modifications to the proposed
9 demonstration project needed for a permit
10 to be issued and a timeline for resubmis-
11 sion and additional agency review; or

12 (C) if the Administrator determines that
13 the application does not comply with the re-
14 quirements of this Act and other applicable law,
15 and that the application cannot be modified to
16 comply with such requirements, or if the Ad-
17 ministrator has approved a recommendation to
18 deny the permit under subsection (e), deny the
19 permit and provide a justification for the de-
20 nial.

21 (2) OTHER APPROVAL.—

22 (A) IN GENERAL.—An application for a
23 permit for a demonstration project under this
24 section shall be considered approved, as if a

1 permit for the application had been issued
2 under paragraph (1)(A), if—

3 (i) the Administrator has determined
4 under subsection (e)(1)(A) that the appli-
5 cation is complete and complies with the
6 requirements of this Act and all other ap-
7 plicable Federal law;

8 (ii) the period for public comments
9 under subsection (e)(1)(D) has ended;

10 (iii) no recommendation for modifying
11 the application or denying the permit has
12 been received under subsection (e)(1)(D);
13 and

14 (iv) the Administrator does not take
15 action under subparagraph (A), (B), or (C)
16 of paragraph (1) before the date that is 90
17 days after the conclusion of the period for
18 public comments under subsection
19 (e)(1)(D) with respect to the application.

20 (B) PROCESS.—The Administrator shall
21 establish a process for the approval of applica-
22 tions under this paragraph.

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

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

4 (2) may be renewed as provided by subsection
5 (j).

6 (j) RENEWAL.—

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

12 (A) the owner or operator of the project
13 submits to the Administrator a proposal for re-
14 newal of the permit by a date determined by
15 the Administrator; and

16 (B) the Administrator determines that the
17 permit, as modified by the proposal, remains in
18 compliance with the requirements described in
19 subsection (b)(1).

20 (2) NOTICE AND PUBLIC COMMENT.—The Ad-
21 ministrators shall—

22 (A) publish in the Federal Register a no-
23 tice summarizing each proposal received under
24 paragraph (1) with respect to the renewal of a
25 permit;

1 (B) invite public comments for a period of
2 not less than 60 days regarding each such pro-
3 posal; and

4 (C) consider such comments in deter-
5 mining whether to approve the renewal of the
6 permit.

7 (3) RENEWAL DETERMINATION.—Not later
8 than 90 days after the conclusion of the period for
9 public comments under subsection (e) with respect
10 to an application for a renewal permit for a dem-
11 onstration project under this section, the Adminis-
12 trator shall—

13 (A) issue the renewal permit, if the Admin-
14 istrator determines the application complies
15 with the requirements of this Act and other ap-
16 plicable law;

17 (B) if the Administrator determines that
18 the application does not comply with the re-
19 quirements described in subparagraph (A), and
20 the application can be modified to comply with
21 those requirements—

22 (i) defer the decision on the renewal
23 permit; and

24 (ii) provide to the applicant a notice
25 that specifies modifications to the proposed

1 demonstration project needed for a permit
2 to be issued and a timeline for resubmis-
3 sion and additional agency review; or

4 (C) if the Administrator determines that
5 the application does not comply with the re-
6 quirements described in subparagraph (A) and
7 that the application cannot be modified to com-
8 ply with such requirements, deny the permit
9 and provide a justification for the denial.

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

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

22 (B) operation of the project results in take of
23 endangered species or marine mammals in excess of
24 take authorized pursuant to—

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

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

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

7 (i) the permit; or

8 (ii) modifications required by the Adminis-
9 trator under this subsection; or

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

13 (i) the marine environment;

14 (ii) nearby human communities; or

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

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

21 (A) the Administrator provides a warning
22 notice to the owner or operator of the project;
23 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 (m) FISHING ACCESS AND COORDINATION.—

10 (1) IN GENERAL.—In carrying out this section,
11 the Administrator shall consider the effects of off-
12 shore aquaculture facilities on fishing access and op-
13 portunities in adjacent public waters and, to the
14 maximum extent practicable consistent with applica-
15 ble law, seek to minimize unnecessary adverse im-
16 pacts on fishing access and use.

17 (2) COORDINATION.—The Administrator shall
18 coordinate, as appropriate, with the Commandant of
19 the Coast Guard and other relevant Federal agencies
20 regarding navigational safety measures associated
21 with offshore aquaculture facilities authorized under
22 this section.

23 (3) ADMINISTRATIVE RECORD.—The Adminis-
24 trator shall include in the administrative record for
25 a permit issued under this section a description of

1 any known fishing access impacts and any measures
2 identified to avoid or minimize such impacts.

3 **SEC. 203. COORDINATION OF PERMIT REVIEWS FOR DEM-**
4 **ONSTRATION PROJECTS.**

5 (a) IN GENERAL.—

6 (1) LEAD AGENCY.—The Administration shall
7 serve as the lead Federal agency for purposes of pro-
8 viding information on Federal permitting require-
9 ments for demonstration projects under section 202.

10 (2) COORDINATION.—The Administrator shall
11 coordinate with the Secretary of the Interior, the
12 Secretary of Agriculture, the Administrator of the
13 Environmental Protection Agency, the Chief of the
14 Army Corps of Engineers, the Commissioner of the
15 Food and Drug Administration, and the head of the
16 department in which the Coast Guard is operating,
17 and any other agency the Administrator considers
18 appropriate to simplify the Federal permitting proc-
19 ess for demonstration projects under section 202.

20 (b) RELATION TO CURRENT LAW.—Nothing in this
21 section shall be construed in derogation of law in effect
22 on the date of enactment of this Act that is applicable
23 to offshore aquaculture operations, and the unified permit-
24 ting and review process established under this section shall

1 not affect the timelines or standards established under
2 other laws.

3 (c) UNIFIED PERMITTING AND REVIEW PROCESS.—

4 Not later than 1 year after the date of enactment of this
5 Act, the Secretaries of Commerce, Interior, Agriculture,
6 Health and Human Services, and the department in which
7 the Coast Guard is operating, the Administrator of the
8 Environmental Protection Agency, and the Chief of Engi-
9 neers shall, through the Secretary of Commerce, initiate,
10 subject to the requirements of subsection (a), a rule-
11 making for all permits administered by such agency heads
12 relating to demonstration projects under section 202 for
13 a unified process, public notice, and public comment for—

14 (1) initial issuance of permits;

15 (2) renewal of permits; and

16 (3) transfer of permits.

17 (d) INFORMAL CONSULTATIONS.—The Administrator
18 shall convene representatives of the Department of Agri-
19 culture, the Environmental Protection Agency, the Army
20 Corps of Engineers, the Department in which the U.S.
21 Coast Guard is operating, and any other agency the Ad-
22 ministrator deems appropriate to provide prospective ap-
23 plicants for permits for demonstration projects under sec-
24 tion 202 an opportunity for informal consultation with
25 such agencies. Nothing in this subsection shall preclude

1 an applicant or a prospective applicant from contacting
2 Federal agencies directly.

3 (e) ENVIRONMENTAL ANALYSIS.—To the extent al-
4 lowable under the National Environmental Policy Act of
5 1969 (42 U.S.C. 4321 et seq.), any environmental analysis
6 or environmental impact statement required under that
7 Act for offshore aquaculture activities proposed to be car-
8 ried out under a demonstration project under section 202
9 shall be conducted through a single, consolidated environ-
10 mental review and the Administration, through the Office
11 of Aquaculture established by section 101, shall serve as
12 the lead Federal agency.

13 (f) COORDINATION OF PERMIT REVIEWS.—To the
14 extent practicable under this Act and all other applicable
15 laws, including regulations, Federal agencies with permit-
16 ting requirements applicable to offshore aquaculture ac-
17 tivities proposed to be carried out under a demonstration
18 project under section 202 shall coordinate their review
19 processes in order to provide a timely response to an appli-
20 cant not later than 240 days after the submission of the
21 application.

22 (g) MAGNUSON-STEVENSON FISHERY CONSERVATION
23 AND MANAGEMENT ACT.—The conduct of offshore aqua-
24 culture shall be considered a commercial fishing operation

1 for purposes of the Marine Mammal Protection Act of
2 1972 (16 U.S.C. 1362).

3 **SEC. 204. REPORTING BY ASSESSMENT PROGRAM PARTICI-**
4 **PANTS.**

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

12 (1) Production data.

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

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

18 (A) effluent;

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

21 (C) health of the cultivated species.

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

24 (5) Information on feed sourcing, including an
25 estimate of the concentration of wild-caught marine

1 ingredients (fishmeal and fish oil) in a feed relative
2 to the original wild fish, the species and geographic
3 origin of such forage, any planned changes to feed
4 formulations, and any other relevant information.

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

9 (7) Owner, operator, and employee demographic
10 data and other relevant data as determined appro-
11 priate by the Administrator for purposes of assess-
12 ing—

13 (A) the direct benefits of the demonstra-
14 tion project to fishery and aquaculture stake-
15 holders; and

16 (B) the quantifiable economic and social
17 impacts of the demonstration project for nearby
18 coastal communities and any specially affected
19 coastal jurisdictions.

20 (8) Information on navigation and safety im-
21 pacts to existing ocean users.

22 (9) Such additional information as the Adminis-
23 trator requires to fulfill the goals and objectives of
24 the assessment program established under section
25 201.

1 (b) TECHNICAL ASSISTANCE.—The Administrator
2 shall, upon request, provide technical assistance to owners
3 and operators of demonstration projects for which permits
4 are issued under section 202 to comply with the reporting
5 requirements of this section.

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

12 (d) PRIVACY.—The Administrator shall ensure that
13 data provided under this section is maintained in a man-
14 ner that safeguards personally identifiable information
15 and confidential business information.

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

17 (a) STATUTORY CONSTRUCTION.—A permit for a
18 demonstration project issued under section 202 shall not
19 supersede or substitute for any other authorization re-
20 quired under Federal or State law.

21 (b) APPLICABILITY.—This title does not apply with
22 respect to applications for a permit in process on the date
23 of the enactment of this Act or permits that are in effect
24 on that date.

1 **TITLE III—WORKFORCE DEVEL-**
2 **OPMENT, FINANCING, AND**
3 **OTHER SUPPORT**

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

5 (a) MARKETING AND PROMOTION GRANTS.—The Ad-
6 ministrator, in consultation with private sector aqua-
7 culture stakeholders, shall support the sale and public per-
8 ception of cultured species domestically and internation-
9 ally through existing grant programs.

10 (b) WORKFORCE DEVELOPMENT GRANTS.—

11 (1) IN GENERAL.—The Administrator, in con-
12 sultation with private sector aquaculture stake-
13 holders, academic institutions, and the national sea
14 grant college program, shall establish and administer
15 a grant program to support the education and train-
16 ing of individuals with the skills needed to manage
17 and operate offshore aquaculture facilities.

18 (2) AQUACULTURE CENTERS OF EXCEL-
19 LENCE.—The Administrator may carry out para-
20 graph (1) through the program established under
21 section 302(b)(1).

22 (c) REGIONAL NETWORKS.—The Administrator,
23 through each regional fisheries office of the Administra-
24 tion, shall organize a network of—

1 (1) regional experts and Federal agency con-
2 tacts, in coordination with relevant organizations, in-
3 cluding the national sea grant college program, the
4 Regional Aquaculture Centers of the Department of
5 Agriculture, institutions of higher education, and the
6 Cooperative Extension System of the Department of
7 Agriculture, to provide technical expertise and exten-
8 sion services for offshore aquaculture and informa-
9 tion on Federal permit requirements for offshore
10 aquaculture; and

11 (2) individuals and businesses interested in
12 aquaculture operations and products to facilitate
13 professional development, marketing, mentoring op-
14 portunities, and agency outreach and education on
15 aquaculture.

16 (d) AQUACULTURE DATABASE.—

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

20 (2) INCLUSIONS.—The database required by
21 paragraph (1) shall include information on research,
22 technologies, monitoring techniques, best practices,
23 and advisory board recommendations relating to
24 aquaculture and offshore aquaculture.

1 (3) SAFEGUARDING OF INFORMATION.—The
2 Administrator shall make the database required by
3 paragraph (1) available in a manner that safeguards
4 personally identifiable information and confidential
5 business information.

6 (4) PATENTS.—The inclusion of information in
7 the database required by paragraph (1) shall not be
8 considered to be publication for purposes of sub-
9 section (a) or (b) of section 102 of title 35, United
10 States Code.

11 (e) TECHNICAL ASSISTANCE PROGRAMS FOR OPERA-
12 TORS.—

13 (1) IN GENERAL.—The Administrator, through
14 the Office of Aquaculture established by section 101
15 and the regional aquaculture coordinators described
16 in such section, shall organize a program in each re-
17 gional fisheries office of the Administration to pro-
18 vide technical assistance to operators of offshore
19 aquaculture facilities.

20 (2) TAILORING.—The programs required by
21 paragraph (1) shall be tailored to meet the unique
22 needs of each region.

23 (3) CONSULTATIONS.—Under each program re-
24 quired by paragraph (1), the regional aquaculture
25 coordinators described in section 101 may conduct

1 consultations with the operator of each offshore
2 aquaculture facility in the region concerned on a
3 regular basis—

4 (A) to assess the status of the operator’s
5 business; and

6 (B) if appropriate, to identify available re-
7 sources to support the operator, such as re-
8 gional experts, university extension agents, and
9 grant opportunities.

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

11 (a) DEFINITIONS.—In this section:

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

14 (A) a minority-serving institution;

15 (B) a Native Hawaiian-serving institution;

16 (C) an Alaska Native-serving institution;

17 (D) a historically Black college or univer-
18 sity; or

19 (E) a Tribal college or university.

20 (2) HISTORICALLY BLACK COLLEGE OR UNI-
21 VERSITY.—The term “historically Black college or
22 university” has the meaning given the term “part B
23 institution” in section 322 of the Higher Education
24 Act of 1965 (20 U.S.C. 1061).

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

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

13 (b) AQUACULTURE CURRICULUM GRANTS.—

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

23 (2) AQUACULTURE CENTERS OF EXCEL-
24 LENCE.—A covered institution that receives a grant

1 under this section shall be known as an “Aqua-
2 culture Center of Excellence”.

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

9 (4) USE OF GRANT AMOUNTS.—

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

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

19 (I) offshore aquaculture oper-
20 ations;

21 (II) business management, stra-
22 tegic planning, business plan develop-
23 ment, capital financing and fund-
24 raising, financial management and ac-
25 counting, market analysis and com-

petitive analysis, and market entry
and strategy execution; and

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

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

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

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

(II) transfer newly developed
techniques and research information
developed or collated at the covered
institution to aquaculture stake-
holders.

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

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

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

22 (c) AUTHORIZATION OF APPROPRIATIONS.—There is
23 authorized to be appropriated to carry out this section
24 \$25,000,000 for each of fiscal years 2026 through 2030,
25 to remain available until expended.

TITLE IV—STUDIES AND REPORTS

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

(a) IN GENERAL.—The Administrator shall seek to enter into a contract with the Ocean Studies Board of the National Academies of Sciences, Engineering, and Medicine (in this section referred to as the “Board”) under which the Board shall, not later than 5 years after the date on which the Administrator establishes the assessment program under section 201—

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

(2) submit to Congress and make publicly available the results of the study.

(b) ELEMENTS.—The study completed pursuant to subsection (a) shall, with respect to offshore aquaculture—

(1) identify—

(A) optimal methods of operation of offshore aquaculture facilities to limit adverse ef-

fects on the environment, wildlife, and human well-being, including—

(i) considerations to guide siting decisions of such facilities;

(ii) appropriate stocking densities; and

(iii) opportunities for selective breeding;

(B) a science-based definition of “responsible offshore aquaculture feed or other inputs”, including guidance on sourcing feed or other inputs to address long- or short-term concerns, including the availability and scalability of such inputs;

(C) potential adverse effects on the environment, wildlife, and human well-being, including from—

(i) the use of antibiotics and other pharmaceuticals by offshore aquaculture facilities, including through analyses necessary to establish acceptable rates, impact levels, and risk thresholds, such as analyses of organism antibiotic consumption or metabolization versus excretion to the surrounding environment;

- 1 (ii) pollution originating from offshore
2 aquaculture facilities, including such effect
3 on marine organisms and the environment,
4 including the potential for assimilation;
- 5 (iii) abandoned, lost, damaged, or oth-
6 erwise discarded gear or equipment;
- 7 (iv) harmful interactions with wildlife;
- 8 (v) genetic mixing between cultured
9 species and wild marine species;
- 10 (vi) the transfer of disease between
11 cultured species and wild species;
- 12 (vii) the collection and removal of
13 brood stock for offshore aquaculture oper-
14 ations, and hatcheries and prestocking
15 rearing operations that are specific to off-
16 shore aquaculture;
- 17 (viii) large-scale cultivation of filter-
18 feeding bivalve organisms and seaweed;
- 19 (ix) offshore aquaculture facilities act-
20 ing as aggregating devices for wild fish-
21 eries and wildlife populations;
- 22 (x) predator control devices and meth-
23 ods; and
- 24 (xi) the use of non-sustainable sources
25 of feed or other inputs, including the use

1 of globally limited marine resources for
2 feed ingredients, and scalability of alter-
3 natives, including—

4 (I) novel ingredients (for exam-
5 ple, insect, single cell protein, and
6 algae);

7 (II) traditional ingredients (for
8 example, soya); and

9 (III) other inputs;

10 (D) potential methods and technologies to
11 mitigate adverse effects, including the effects
12 identified under subparagraph (C);

13 (E) potential methods to identify conflicts
14 between offshore aquaculture facilities and
15 other users of the offshore environment, and ru-
16 brics for developing solutions to mitigate such
17 conflicts;

18 (F) the types of quantitative data and
19 qualitative information necessary for the opti-
20 mal operation of offshore aquaculture facilities
21 and appropriate methods of procuring such
22 data and information, including from—

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

1 (ii) the traditional knowledge of Trib-
2 al and Indigenous communities; and

3 (iii) offshore aquaculture operators;

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

8 (H) economic impacts and contributions of
9 offshore aquaculture to local, State, regional,
10 and national economies;

11 (I) the business profitability potential and
12 market opportunities for offshore aquaculture
13 enterprises; and

14 (J) potential benefits from offshore aqua-
15 culture operations at the local, State, and na-
16 tional levels, including social, cultural, eco-
17 nomic, and environmental ecosystem services;
18 and

19 (2) provide recommendations for legislative or
20 administrative action with respect to—

21 (A) methods of operation identified under
22 paragraph (1)(A);

23 (B) mitigating adverse effects identified
24 under paragraph (1)(C);

1 (C) environmental standards, control rules,
2 or reference points that build on the existing
3 public and private standards or best practices
4 for the sustainability of offshore aquaculture;
5 and

6 (D) ensuring that operators of offshore
7 aquaculture facilities adhere to international
8 standards for social responsibility, public
9 health, and equitable labor practices, including
10 with respect to sourcing inputs for such facili-
11 ties.

12 **SEC. 402. REPORT ON OFFSHORE AQUACULTURE BY GOV-**
13 **ERNMENT ACCOUNTABILITY OFFICE.**

14 (a) IN GENERAL.—Not later than 5 years after the
15 date on which the Administrator establishes the assess-
16 ment program under section 201, the Comptroller General
17 of the United States shall submit to the appropriate com-
18 mittees of Congress a report examining the permitting,
19 monitoring, and regulation of offshore aquaculture that
20 covers the 15-year period prior to the program’s establish-
21 ment and the time period since the program’s establish-
22 ment.

23 (b) BASES OF REPORT.—The Comptroller General
24 shall base the report required by subsection (a) on avail-

1 able literature, case studies, and aquaculture stakeholder
2 input.

3 (c) ELEMENTS OF REPORT.—The report required by
4 subsection (a) shall—

5 (1) assess the feasibility and potential positive
6 and negative implications of designating a lead agen-
7 cy to issue permits for offshore aquaculture oper-
8 ations in a timely manner;

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

11 (A) the effect of offshore aquaculture type,
12 location, and regulatory framework on the suc-
13 cess of offshore aquaculture projects;

14 (B) the degree of involvement of coastal or
15 adjacent States or Tribal or Indigenous commu-
16 nities in consultations for, planning for, or op-
17 erations of offshore aquaculture;

18 (C) safety protocols and risk mitigation
19 measures for the permitting and oversight proc-
20 esses for offshore aquaculture, including—

21 (i) escape prevention measures;

22 (ii) emergency event response plan-
23 ning;

24 (iii) compliance monitoring, particu-
25 larly in remote locations;

1 (iv) compliance with Federal laws;

2 (v) mechanisms for reporting to ap-
3 propriate Federal authorities; and

4 (vi) vessel navigation aids to ensure
5 navigational safety;

6 (D) the effect of incentives to reduce ad-
7 verse effects or disparate impacts from offshore
8 aquaculture operations;

9 (E) building and optimizing synergies be-
10 tween offshore aquaculture and wild-caught
11 fishing activities, or offshore, nearshore, and
12 onshore aquaculture activities, including market
13 development, increasing seafood consumption,
14 and shared infrastructure;

15 (F) the environmental effects of offshore
16 aquaculture operations, including mechanisms
17 to prevent harm to the environment, wildlife, or
18 human well-being;

19 (G) the net economic and social benefits of
20 offshore aquaculture projects, particularly for
21 nearby communities, specially affected coastal
22 jurisdictions as defined in section 202(e), and
23 aquaculture and fishery stakeholders, based on
24 project size, regulatory structures, and financ-
25 ing structures;

1 (H) the impact of introducing offshore
2 aquaculture products to the marketplace on
3 supply and demand for wild-capture fisheries
4 products, and methods for ensuring resiliency
5 and growth for both offshore aquaculture and
6 wild-capture fisheries products;

7 (I) mechanisms to enhance capital invest-
8 ment, workforce development, and equitable op-
9 portunity requirements or assistance programs
10 in the permitting process for offshore aqua-
11 culture, or to diversify permit applicants;

12 (J) outstanding needs for continued re-
13 search, development, education activities, pro-
14 grams, and funding regarding—

15 (i) offshore aquaculture projects; and

16 (ii) development of the domestic work-
17 force and entrepreneurship related to off-
18 shore aquaculture;

19 (K) the economic potential for both large-
20 and small-scale offshore aquaculture operations
21 to generate a positive return on investment
22 under various regulatory and financing struc-
23 tures;

1 (L) the applicability and sufficiency of ex-
2 isting regulatory systems for offshore aqua-
3 culture; and

4 (M) existing local, State, Federal, and for-
5 eign regulatory standards that may serve as
6 models for efficient and effective regulation of
7 offshore aquaculture; and

8 (3) include such recommendations as the Comp-
9 troller General may have with respect to future off-
10 shore aquaculture operations, including with respect
11 to—

12 (A) regulatory processes necessary for per-
13 mitting, monitoring, and oversight, including
14 processes and techniques related to siting, de-
15 ployment, operations, and decommissioning;

16 (B) potential safeguards, data collection,
17 or monitoring required to minimize disparate
18 impacts on specially affected coastal jurisdic-
19 tions (as defined in section 202(e)), fishery
20 stakeholders, local economies, marine environ-
21 ments, and existing domestic economic sectors;

22 (C) mechanisms for optimizing coordina-
23 tion among Federal agencies with a role in per-
24 mitting or supporting offshore aquaculture

1 without compromising the goals of such permit-
2 ting;

3 (D) methods for effectively involving aqua-
4 culture stakeholders, including—

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

7 (ii) local communities;

8 (iii) regional offshore waters users
9 and management groups, including re-
10 gional fishery management councils; and

11 (iv) users of local, State, Tribal, and
12 Federal waters and coastal resources;

13 (E) best practices for incorporating local
14 knowledge, including from Tribal or Indigenous
15 communities;

16 (F) capabilities of Federal agencies that
17 are necessary for effective regulation of the off-
18 shore aquaculture sector; and

19 (G) how creating private rights of action or
20 waiving sovereign immunity would affect the de-
21 velopment of offshore aquaculture projects and
22 the acceptance of such projects by nearshore
23 and offshore waters user groups and coastal
24 communities.

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