

118TH CONGRESS
1ST SESSION

H. R. 1461

To direct the Secretary of Agriculture and the Administrator of the National Oceanic and Atmospheric Administration to carry out a study on coastal seaweed farming, issue regulation relating to such farming, and establish an Indigenous seaweed farming fund, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

MARCH 8, 2023

Mr. HUFFMAN (for himself and Mrs. PELTOLA) introduced the following bill; which was referred to the Committee on Natural Resources, and in addition to the Committees on Agriculture, and Energy and Commerce, 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 direct the Secretary of Agriculture and the Administrator of the National Oceanic and Atmospheric Administration to carry out a study on coastal seaweed farming, issue regulation relating to such farming, and establish an Indigenous seaweed farming fund, 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.**

2 This Act may be cited as the “Coastal Seaweed Farm
3 Act of 2023”.

4 **SEC. 2. PROGRAM ON COASTAL SEAWEED FARMING.**

5 (a) PRELIMINARY STUDY ON COASTAL SEAWEED
6 FARMING.—

7 (1) IN GENERAL.—Not later than 2 years after
8 the date of the enactment of this Act, the Secre-
9 taries shall jointly submit a preliminary report to
10 Congress and publish such report on such Secre-
11 taries’ agency websites analyzing—

12 (A) the effects of coastal seaweed farming
13 on surrounding communities, the ecosystem,
14 and marine and coastal wildlife;

15 (B) best practices for cultivating and
16 sourcing local seeds to propagate for coastal
17 seaweed farming;

18 (C) best practices to prevent the escape or
19 spread of any organism that would alter the
20 natural ecosystem or present a biofouling risk;

21 (D) best practices relating to species selec-
22 tion, harvesting cycles, spatial planning and
23 siting, engineering and design, and environ-
24 mental aspects of coastal seaweed farming
25 that—

- 1 (i) maximize benefits, and avoid ad-
2 verse effects, on the marine ecosystem and
3 marine and coastal wildlife;
- 4 (ii) lead to optimal yields;
- 5 (iii) account for the impact climate
6 change may have on natural habitats and
7 coastal seaweed farming operations;
- 8 (iv) minimize entanglements and other
9 harmful interactions between marine life
10 and nearshore seaweed farming infrastruc-
11 ture and gear;
- 12 (v) account for changes in migration
13 patterns of marine mammals and highly
14 migratory species (as defined in section 3
15 of the Magnuson-Stevens Fishery Con-
16 servation and Management Act (16 U.S.C.
17 1802)); and
- 18 (vi) account for and avoid interference
19 with competing uses, including vessel traf-
20 fic and commercial and recreational fish-
21 ing;
- 22 (E) the potential for growing seaweed for
23 long-term carbon sequestration and best prac-
24 tices for measurement, reporting, and
25 verification approaches for growing seaweed for

1 long-term carbon sequestration specific to the
2 sequestration reservoir;

3 (F) the effects of co-cultivation of bivalves
4 with seaweed on the ecosystem, ocean acidifica-
5 tion, and hypoxia levels;

6 (G) the effects of coastal seaweed farming
7 on water quality;

8 (H) best practices for limiting the use of
9 plastic in coastal seaweed farming gear;

10 (I) the history and use of Indigenous and
11 traditional seaweed farming practices;

12 (J) best practices for sustainable harvest
13 and post-harvest processing of coastal seaweed
14 farming products, including methods of reduc-
15 ing energy costs;

16 (K) scalable commercial applications for
17 value-added seaweed or products derived from
18 seaweed, including as feedstock for animals and
19 other agricultural, commercial, and industrial
20 applications;

21 (L) processes for processing, storage, and
22 transportation of seaweed that are cost-effec-
23 tive, reduce carbon emissions from transpor-
24 tation, and efficient;

1 (M) assessment of existing and potential
2 markets and market capacity for major cul-
3 tivated seaweed species;

4 (N) development of baseline economic anal-
5 yses and business planning models for major
6 cultivated seaweed species;

7 (O) the effects of water quality on the
8 quality of cultivated seaweed for human con-
9 sumption, including the absorption of toxic
10 heavy metals and persistent organic pollutants;

11 (P) best practices for onshore farming
12 issues that reduce energy requirements to pump
13 water and include management of effluent, spa-
14 tial planning and address conflicting uses of the
15 onshore coastal zone; and

16 (Q) best practices in efficient and effective
17 Federal and State regulatory systems for coast-
18 al seaweed farming.

19 (2) CONSULTATION.—In preparing the report
20 under paragraph (1), the Secretaries shall consult
21 with—

22 (A) the Interagency Working Group on In-
23 digenous Traditional Ecological Knowledge,
24 with respect to—

1 (i) kelp, seaweed, and shellfish cultiva-
2 tion;

3 (ii) the use of Tribal waters for coast-
4 al seaweed farming;

5 (iii) the impact and benefits of coastal
6 seaweed farming on Tribal waters; and

7 (iv) best practices for engaging with
8 Tribes on matters relating to coastal sea-
9 weed farming;

10 (B) coastal or historically coastal federally
11 recognized Tribes, State recognized Tribes, and
12 Inter-Tribal organizations;

13 (C) the Interagency Working Group on Re-
14 search for Farming of Seaweeds and
15 Seagrasses;

16 (D) the Interagency Working Group on
17 Ocean Acidification;

18 (E) National Science and Technology
19 Council's Joint Subcommittee on Aquaculture;
20 and

21 (F) such other Federal, State, Tribal, and
22 local government agencies as the Secretary de-
23 termines appropriate.

24 (3) UPDATE.—The Secretaries shall, not later
25 than 2 years after the date on which the report re-

1 quired under paragraph (1) is submitted, submit an
2 updated report to Congress based on pertinent infor-
3 mation derived from Federal research programs, the
4 grant program established under subsection (c), and
5 other sources of information.

6 (4) REPORT ON REGULATION OF SEAWEED
7 FOOD SAFETY.—The Commissioner of Food and
8 Drugs shall, not later than 180 days after the date
9 of the enactment of this Act and in consultation
10 with such State agencies as the Commissioner deter-
11 mines appropriate, submit a report to Congress
12 making regulatory and legislative recommendations
13 to improve Federal regulation of seaweed for human
14 consumption, focusing on standards and testing
15 methods to identify, address, and prevent contami-
16 nation by bacteria, heavy metals, and pathogens.

17 (b) REGULATIONS.—The Secretaries shall, not later
18 than 1 year after the publication of the study required
19 by subsection (a), issue such regulations as the Secretaries
20 determine appropriate to—

21 (1) ensure that design, development, siting, spe-
22 cies selection, operation, and production systems of
23 coastal seaweed farming maximize potential benefits,
24 and avoid potential adverse effects, on the marine

1 ecosystem, wildlife, and fisheries and surrounding
2 communities; and

3 (2) establish evaluation metrics to measure the
4 impact and benefits of coastal seaweed farming on—

5 (A) the marine ecosystem, including ma-
6 rine wildlife, biodiversity, productivity, water
7 quality, and stored carbon; and

8 (B) surrounding communities, including
9 relating to the equitable distribution of costs
10 and benefits (economic and environmental)
11 within such communities; and

12 (3) require monitoring and reporting relating
13 to—

14 (A) any adverse effects on the marine eco-
15 system and wildlife, including entanglements of
16 marine life; and

17 (B) any effects on commercial and rec-
18 reational fishing.

19 (c) INDIGENOUS SEAWEED FARMING FUND.—

20 (1) ESTABLISHMENT.—The Secretaries shall,
21 not later than 1 year after the date of the enactment
22 of this Act, jointly establish the Indigenous Seaweed
23 Farming Fund to provide grants to eligible entities
24 for the purpose of supporting coastal seaweed farm-
25 ing, including—

1 (A) obtaining, planting, growing, and
2 maintaining a coastal seaweed farm;

3 (B) purchasing equipment for coastal sea-
4 weed farm operations;

5 (C) transportation, processing, and storage
6 of coastal seaweed farm products;

7 (D) funding for development and use of
8 models and measurements to identify and miti-
9 gate adverse impacts of coastal seaweed farm-
10 ing, including monitoring and signal buoys; and

11 (E) to operate a coastal seaweed farm that
12 performs restorative ecological functions, in-
13 cluding providing essential habitat to native
14 species.

15 (2) OUTREACH.—The Secretaries shall—

16 (A) conduct outreach and use existing pro-
17 grams and initiatives to make eligible entities
18 aware of the Indigenous Seaweed Farming
19 Fund;

20 (B) solicit comments and recommendations
21 relating to each stage of the operation of the
22 grant program established under subsection (a);

23 (C) solicit scientific input from eligible en-
24 tities, including through public meetings noticed

1 in advance and in such languages as are appro-
2 priate for the community; and

3 (D) prepare, publish, and distribute to in-
4 stitutions of higher learning, including voca-
5 tional schools training materials for individuals
6 engaged in coastal seaweed farming and indi-
7 viduals seeking employment relating to such
8 farming, including Indigenous youth.

9 (3) PROHIBITION ON USE OF FUNDS.—No
10 funds provided under this subsection may be used
11 for any purpose that the Secretary of Commerce or
12 the head of a State or Tribal fishery management
13 agency determines will have an adverse affect on
14 commercial fisheries.

15 (4) LIMITATION ON SIZE OF FARMS.—The Sec-
16 retaries shall, by regulation, determine a maximum
17 size for coastal seaweed farming operations that may
18 receive funding under this subsection.

19 (5) TECHNICAL ASSISTANCE.—The Secretaries
20 shall, at the request of an applicant or grantee, pro-
21 vide technical assistance to such applicant or grantee
22 to further the purposes of this subsection.

23 (d) DEFINITIONS.—In this section:

1 (1) ADMINISTRATOR.—The term “Adminis-
2 trator” means the Administrator of the National
3 Oceanic and Atmospheric Administration.

4 (2) SEAWEED.—The term “seaweed” means
5 macroscopic multicellular marine algae species.

6 (3) ELIGIBLE ENTITY.—The term “eligible enti-
7 ty” means—

8 (A) a federally recognized Tribe, Native
9 Village, or Tribal reservation;

10 (B) a State recognized Tribe (as such term
11 is defined in section 4 of the Native American
12 Housing Assistance and Self-Determination Act
13 of 1996);

14 (C) a Native person of—

15 (i) Hawaii;

16 (ii) a Pacific Island;

17 (iii) Puerto Rico; or

18 (iv) the United States Virgin Islands;

19 (D) a member of an entity described in
20 subparagraphs (A) or (B); or

21 (E) any entity owned entirely by an entity
22 described in subparagraphs (A) through (C).

23 (4) FEDERALLY RECOGNIZED TRIBE.—The
24 term “federally recognized Tribe” has the meaning
25 given to the term “Indian Tribe” in section 4 of the

1 Indian Self-Determination and Education Assistance
2 18 Act (25 U.S.C. 5304).

3 (5) COASTAL SEAWEED FARMING.—The term
4 “coastal seaweed farming” means the onshore or
5 nearshore propagation and harvesting of seaweed
6 and seaweed products within the coastal zone (as
7 such term is defined in section 304 of the Coastal
8 Zone Management Act of 1972 (16 U.S.C. 1453))
9 that—

10 (A) does not use—

11 (i) synthetic pesticides (as the term
12 “pesticide” is defined in section 2 of the
13 Federal Insecticide, Fungicide, and
14 Rodenticide Act (7 U.S.C. 136)); and

15 (ii) plastics, unless a suitable replace-
16 ment does not exist; and

17 (B) does not produce fin fish for commer-
18 cial purposes.

19 (6) SECRETARIES.—The term “Secretaries”
20 means the Secretary of Agriculture and the Sec-
21 retary of Commerce, acting through the Under Sec-
22 retary for Oceans and Atmosphere.

23 (e) AUTHORIZATION OF APPROPRIATIONS.—There is
24 authorized to be appropriated—

1 (1) \$3,000,000 for each of fiscal years 2023
2 through 2027 to carry out subsections (a) and (b);
3 and

4 (2) \$20,000,000 for each of fiscal years 2023
5 through 2027 to carry out subsections (c), (d), and
6 (e).

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