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(Original Signature of Member)

118TH CONGRESS
1ST SESSION

H. R. _____

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

Mr. HUFFMAN introduced the following bill; which was referred to the Committee on _____

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,*

3 **SECTION 1. SHORT TITLE.**

4 This Act may be cited as the “Coastal Seaweed Farm
5 Act of 2023”.

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

2 (a) PRELIMINARY STUDY ON COASTAL SEAWEED
3 FARMING.—

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

9 (A) the effects of coastal seaweed farming
10 on surrounding communities, the ecosystem,
11 and marine and coastal wildlife;

12 (B) best practices for cultivating and
13 sourcing local seeds to propagate for coastal
14 seaweed farming;

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

18 (C) best practices relating to species selec-
19 tion, harvesting cycles, spatial planning and
20 siting, engineering and design, and environ-
21 mental aspects of coastal seaweed farming
22 that—

23 (i) maximize benefits, and avoid ad-
24 verse effects, on the marine ecosystem and
25 marine and coastal wildlife;

26 (ii) lead to optimal yields;

1 (iii) account for the impact climate
2 change may have on natural habitats and
3 coastal seaweed farming operations;

4 (v) minimize entanglements and other
5 harmful interactions between marine life
6 and nearshore seaweed farming infrastruc-
7 ture and gear;

8 (vi) account for changes in migration
9 patterns of marine mammals and highly
10 migratory species (as defined in section 3
11 of the Magnuson-Stevens Fishery Con-
12 servation and Management Act (16 U.S.C.
13 1802)); and

14 (vii) account for and avoid inter-
15 ference with competing uses, including ves-
16 sel traffic and commercial and recreational
17 fishing;

18 (D) the potential for growing seaweed for
19 long-term carbon sequestration and best prac-
20 tices for measurement, reporting, and
21 verification approaches for growing seaweed for
22 long-term carbon sequestration specific to the
23 sequestration reservoir;

1 (E) the effects of co-cultivation of bivalves
2 with seaweed on the ecosystem, ocean acidifica-
3 tion, and hypoxia levels;

4 (F) the effects of coastal seaweed farming
5 on water quality;

6 (G) best practices for limiting the use of
7 plastic in coastal seaweed farming gear;

8 (H) the history and use of Indigenous and
9 traditional seaweed farming practices;

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

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

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

23 (L) assessment of existing and potential
24 markets and market capacity for major cul-
25 tivated seaweed species;

1 (M) development of baseline economic
2 analyses and business planning models for
3 major cultivated seaweed species;

4 (N) the effects of water quality on the
5 quality of cultivated seaweed for human con-
6 sumption, including the absorption of toxic
7 heavy metals and persistent organic pollutants;

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

13 (L) best practices in efficient and effective
14 Federal and State regulatory systems for coast-
15 al seaweed farming.

16 (2) CONSULTATION.—In preparing the report
17 under paragraph (1), the Secretaries shall consult
18 with—

19 (A) the Interagency Working Group on In-
20 digenous Traditional Ecological Knowledge,
21 with respect to—

22 (i) kelp, seaweed, and shellfish cultiva-
23 tion;

24 (ii) the use of Tribal waters for coast-
25 al seaweed farming;

1 (iii) the impact and benefits of coastal
2 seaweed farming on Tribal waters; and

3 (iv) best practices for engaging with
4 Tribes on matters relating to coastal sea-
5 weed farming;

6 (B) coastal or historically coastal federally
7 recognized Tribes, State recognized Tribes, and
8 Inter-Tribal organizations;

9 (C) the Interagency Working Group on Re-
10 search for Farming of Seaweeds and
11 Seagrasses;

12 (D) the Interagency Working Group on
13 Ocean Acidification;

14 (E) National Science and Technology
15 Council's Joint Subcommittee on Aquaculture;
16 and

17 (F) such other Federal, State, Tribal, and
18 local government agencies as the Secretary de-
19 termines appropriate.

20 (3) UPDATE.—The Secretaries shall, not later
21 than 2 years after the date on which the report re-
22 quired under paragraph (1) is submitted, submit an
23 updated report to Congress based on pertinent infor-
24 mation derived from Federal research programs, the

1 grant program established under subsection (c), and
2 other sources of information.

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

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

18 (1) ensure that design, development, siting, spe-
19 cies selection, operation, and production systems of
20 coastal seaweed farming maximize potential benefits,
21 and avoid potential adverse effects, on the marine
22 ecosystem, wildlife, and fisheries and surrounding
23 communities; and

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

1 (A) the marine ecosystem, including ma-
2 rine wildlife, biodiversity, productivity, water
3 quality, and stored carbon; and

4 (B) surrounding communities, including
5 relating to the equitable distribution of costs
6 and benefits (economic and environmental)
7 within such communities; and

8 (3) require monitoring and reporting relating
9 to—

10 (A) any adverse effects on the marine eco-
11 system and wildlife, including entanglements of
12 marine life; and

13 (B) any effects on commercial and rec-
14 reational fishing.

15 (c) INDIGENOUS SEAWEED FARMING FUND.—

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

22 (A) obtaining, planting, growing, and
23 maintaining a coastal seaweed farm;

24 (B) purchasing equipment for coastal sea-
25 weed farm operations;

1 (C) transportation, processing, and storage
2 of coastal seaweed farm products;

3 (D) funding for development and use of
4 models and measurements to identify and miti-
5 gate adverse impacts of coastal seaweed farm-
6 ing, including monitoring and signal buoys; and

7 (E) to operate a coastal seaweed farm that
8 performs restorative ecological functions, in-
9 cluding providing essential habitat to native
10 species.

11 (2) OUTREACH.—The Secretaries shall—

12 (A) conduct outreach and use existing pro-
13 grams and initiatives to make eligible entities
14 aware of the Indigenous Seaweed Farming
15 Fund;

16 (B) solicit comments and recommendations
17 relating to each stage of the operation of the
18 grant program established under subsection (a);

19 (C) solicit scientific input from eligible en-
20 tities, including through public meetings noticed
21 in advance and in such languages as are appro-
22 priate for the community; and

23 (D) prepare, publish, and distribute to in-
24 stitutions of higher learning, including voca-
25 tional schools training materials for individuals

1 engaged in coastal seaweed farming and indi-
2 viduals seeking employment relating to such
3 farming, including Indigenous youth.

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

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

14 (5) TECHNICAL ASSISTANCE.—The Secretaries
15 shall, at the request of an applicant or grantee, pro-
16 vide technical assistance to such applicant or grantee
17 to further the purposes of this subsection.

18 (d) DEFINITIONS.—In this section:

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

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

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

1 (A) a federally recognized Tribe, Native
2 Village, or Tribal reservation;

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

7 (C) a Native person of—

8 (i) Hawaii;

9 (ii) a Pacific Island;

10 (iii) Puerto Rico; or

11 (iv) the United States Virgin Islands;

12 (D) a member of an entity described in
13 subparagraphs (A) or (B); or

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

16 (4) **FEDERALLY RECOGNIZED TRIBE.**—The
17 term “federally recognized Tribe” has the meaning
18 given to the term “Indian Tribe” in section 4 of the
19 Indian Self-Determination and Education Assistance
20 Act (25 U.S.C. 5304).

21 (5) **COASTAL SEAWEED FARMING.**—The term
22 “coastal seaweed farming” means the onshore or
23 nearshore propagation and harvesting of seaweed
24 and seaweed products within the coastal zone (as
25 such term is defined in section 304 of the Coastal

1 Zone Management Act of 1972 (16 U.S.C. 1453))

2 that—

3 (A) does not use—

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

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

10 (B) does not produce fin fish for commer-
11 cial purposes.

12 (6) SECRETARIES.—The term “Secretaries”
13 means the Secretary of Agriculture and the Sec-
14 retary of Commerce, acting through the Under Sec-
15 retary for Oceans and Atmosphere.

16 (e) AUTHORIZATION OF APPROPRIATIONS.—There is
17 authorized to be appropriated—

18 (1) \$3,000,000 for each of fiscal years 2023
19 through 2027 to carry out subsections (a) and (b);
20 and

21 (2) \$20,000,000 for each of fiscal years 2023
22 through 2027 to carry out subsections (c), (d), and
23 (e) [(c) and (d)?].