

105TH CONGRESS
1ST SESSION

S. 1080

To amend the National Aquaculture Act of 1980 to provide for the coordination and implementation of a national aquaculture policy for the private sector by the Secretary of Agriculture, to establish an aquaculture development and research program, and for other purposes.

IN THE SENATE OF THE UNITED STATES

JULY 29, 1997

Mr. AKAKA (for himself, Mr. CRAIG, Mr. LEAHY, and Mr. DASCHLE) introduced the following bill; which was read twice and referred to the Committee on Agriculture, Nutrition, and Forestry

A BILL

To amend the National Aquaculture Act of 1980 to provide for the coordination and implementation of a national aquaculture policy for the private sector by the Secretary of Agriculture, to establish an aquaculture development and research program, 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; TABLE OF CONTENTS.**

4 (a) SHORT TITLE.—This Act may be cited as the
5 “National Aquaculture Development, Research, and Pro-
6 motion Act of 1997”.

1 (b) TABLE OF CONTENTS.—The table of contents of
 2 this Act is as follows:

- Sec. 1. Short title; table of contents.
- Sec. 2. Findings and purpose.
- Sec. 3. Definitions.
- Sec. 4. National aquaculture development plan.
- Sec. 5. National Aquaculture Information Center.
- Sec. 6. Coordination with the aquaculture industry.
- Sec. 7. Aquaculture commercialization research.
- Sec. 8. National policy for private aquaculture.
- Sec. 9. Authorization of appropriations.
- Sec. 10. Eligibility of aquaculture farmers for farm credit assistance.
- Sec. 11. International aquaculture information and data collection.
- Sec. 12. Aquaculture information network report.
- Sec. 13. Implementation report.

3 **SEC. 2. FINDINGS AND PURPOSE.**

4 (a) FINDINGS.—Section 2 of the National Aqua-
 5 culture Act of 1980 (16 U.S.C. 2801) is amended by strik-
 6 ing subsection (a) and inserting the following:

7 “(a) FINDINGS.—Congress finds the following:

8 “(1)(A) The wild harvest or capture of certain
 9 seafood species exceeds levels of optimum sustain-
 10 able yield, thereby making it more difficult to meet
 11 the increasing demand for aquatic food.

12 “(B) The Food and Agriculture Organization of
 13 the United Nations has identified aquaculture as one
 14 of the world’s fastest growing food production activi-
 15 ties.

16 “(C) The world production of aquaculture dou-
 17 bled from 10,000,000 metric tons in 1984 to
 18 21,300,000 metric tons in 1995, with a value of ap-
 19 proximately \$40,000,000,000.

1 “(D) The United States produced 666,000,000
2 pounds of aquaculture products in 1994, less than 3
3 percent of the world output.

4 “(E) The United States is a major importer of
5 aquaculture products.

6 “(2)(A) To satisfy the domestic market for
7 aquatic food, the United States imports more than
8 59 percent of its seafood.

9 “(B) This dependence on imports adversely af-
10 fects the national balance of payments and contrib-
11 utes to the uncertainty of supplies and product qual-
12 ity.

13 “(3)(A) Although aquaculture currently contrib-
14 utes approximately 17 percent by weight of world
15 seafood production, less than 9 percent by weight of
16 current United States seafood production results
17 from aquaculture.

18 “(B) As a result, domestic aquaculture produc-
19 tion has the potential for significant growth.

20 “(4) Aquaculture production of aquatic animals
21 and plants is a source of food, industrial materials,
22 pharmaceuticals, energy, and aesthetic enjoyment,
23 and can assist in the control and abatement of pollu-
24 tion.

1 “(5) The rehabilitation and enhancement of fish
2 and shellfish resources are desirable applications of
3 aquaculture technology.

4 “(6) The principal responsibility for the devel-
5 opment of aquaculture in the United States must
6 rest with the private sector.

7 “(7) Despite its potential, the development of
8 aquaculture in the United States has been inhibited
9 by many scientific, economic, legal, and production
10 factors, such as—

11 “(A) inadequate credit;

12 “(B) limited research and development and
13 demonstration programs;

14 “(C) diffused legal jurisdiction;

15 “(D) inconsistent interpretations between
16 Federal agencies;

17 “(E) the lack of management information;

18 “(F) the lack of supportive policies of the
19 Federal Government;

20 “(G) the lack of therapeutic compounds for
21 treatment of the diseases of aquatic animals
22 and plants;

23 “(H) the lack of reliable supplies of seed
24 stock; and

1 “(I) the availability of additional species
2 for commercial production.

3 “(8) Many areas of the United States are suit-
4 able for aquaculture, but are subject to land-use or
5 water-use management policies and regulations that
6 do not adequately consider the potential for aqua-
7 culture and may inhibit the development of aqua-
8 culture.

9 “(9) In 1994, the United States ranked only
10 ninth in the world in aquaculture production based
11 on total value of products.

12 “(10) Despite the current and increasing im-
13 portance of private aquaculture to the United States
14 economy and to rural areas in the United States,
15 Federal efforts to nurture aquaculture development
16 have failed to keep pace with the needs of fish and
17 aquatic plant farmers.

18 “(11) The United States has a premier oppor-
19 tunity to expand existing aquaculture production
20 and develop new aquaculture industries to serve na-
21 tional needs and the global marketplace.

22 “(12) United States aquaculture provides
23 wholesome products for domestic consumers and
24 contributes significantly to employment opportunities

1 and the quality of life in rural areas in the United
2 States.

3 “(13)(A) Aquaculture is poised to become a
4 major growth industry of the 21st century.

5 “(B) With global seafood demand projected to
6 increase 70 percent by 2025, and harvests from cap-
7 ture fisheries stable or declining, aquaculture will
8 have to increase production by 700 percent, a total
9 of 77 million metric tons annually, to meet that pro-
10 jection.

11 “(14)(A) In 1983, United States aquaculture
12 production was 308,400,000 pounds with a farm
13 gate value of \$261,000,000.

14 “(B) In 1994, the industry produced
15 666,000,000 pounds with a farm gate value of
16 \$751,000,000.

17 “(C) Aquaculture accounted for approximately
18 6 percent of the total United States fish and shell-
19 fish harvest in 1994.

20 “(15)(A) In 1994, per capita consumption of
21 aquatic foods in the United States was 15 pounds
22 per person per year.

23 “(B) Demand is projected to double by 2025.”.

24 (b) PURPOSE.—Section 2(b) of the National Aqua-
25 culture Act of 1980 (16 U.S.C. 2801(b)) is amended—

1 (1) by striking paragraph (2) and inserting the
2 following:

3 “(2) establishing private aquaculture as a form
4 of agriculture for the purposes of programs of the
5 Department;”;

6 (2) in paragraph (3), by striking “and” at the
7 end; and

8 (3) by inserting after paragraph (4) the follow-
9 ing:

10 “(5) establishing cultivated aquatic animals,
11 plants, microorganisms, and their products produced
12 by private persons and moving in commodity chan-
13 nels as agricultural livestock, crops, and commod-
14 ities; and

15 “(6) authorizing the establishment of a Na-
16 tional Aquaculture Information Center within the
17 Department to support the United States aqua-
18 culture industry;”.

19 **SEC. 3. DEFINITIONS.**

20 Section 3 of the National Aquaculture Act of 1980
21 (16 U.S.C. 2802) is amended—

22 (1) in paragraph (1), by striking “the propaga-
23 tion” and all that follows through the period at the
24 end and inserting “the controlled cultivation of
25 aquatic plants, animals, and microorganisms, except

1 that the term does not include private, for-profit
 2 ocean ranching of Pacific salmon in a State in which
 3 the ranching is prohibited by law.”;

4 (2) in paragraph (3), by inserting before the pe-
 5 riod at the end the following: “or microorganism”;

6 (3) by redesignating paragraphs (7) through
 7 (9) as paragraphs (9) through (11), respectively;

8 (4) by redesignating paragraphs (5) and (6) as
 9 paragraphs (6) and (7), respectively;

10 (5) by inserting after paragraph (4) the follow-
 11 ing:

12 “(5) DEPARTMENT.—The term ‘Department’
 13 means the United States Department of Agri-
 14 culture.”; and

15 (6) by inserting before paragraph (9) (as redes-
 16 ignated by paragraph (3)) the following:

17 “(8) PRIVATE AQUACULTURE.—The term ‘pri-
 18 vate aquaculture’ means the controlled cultivation of
 19 aquatic plants, animals, and microorganisms other
 20 than cultivation carried out by the Federal Govern-
 21 ment or any State or local government.”.

22 **SEC. 4. NATIONAL AQUACULTURE DEVELOPMENT PLAN.**

23 Section 4 of the National Aquaculture Act of 1980
 24 (16 U.S.C. 2803) is amended—

1 (1) in subsection (b)(3)(B), by adding at the
 2 end the following: “including the development of best
 3 management practices for maintaining water qual-
 4 ity,”;

5 (2) in subsection (e)—

6 (A) in paragraph (5), by striking “and” at
 7 the end;

8 (B) in paragraph (6), by striking the pe-
 9 riod at the end and inserting “; and”; and

10 (C) by adding at the end the following:

11 “(7) the identification of efforts of States to im-
 12 prove water quality through the development of best
 13 management practices.”; and

14 (3) by adding at the end the following:

15 “(f) ACCOMPLISHMENTS IN AQUACULTURE PRO-
 16 GRAMS.—Not later than December 31, 1998, the Sec-
 17 retary, in collaboration with the Secretary of Commerce
 18 and the Secretary of the Interior, shall submit to Congress
 19 a report evaluating the actions taken in accordance with
 20 subsection (d) with respect to the Plan, and making rec-
 21 ommendations for updating and modifying the Plan. The
 22 report shall also contain a compendium on Federal regula-
 23 tions relating to aquaculture.”.

1 **SEC. 5. NATIONAL AQUACULTURE INFORMATION CENTER.**

2 Section 5 of the National Aquaculture Act of 1980
3 (16 U.S.C. 2804) is amended—

4 (1) in subsection (c)(1)(B)—

5 (A) by striking “Secretary shall—” and in-
6 serting “Secretary—”;

7 (B) by redesignating clauses (ii) and (iii)
8 as clauses (iii) and (iv), respectively;

9 (C) by striking clause (i) and inserting the
10 following:

11 “(i) may establish within the regional cen-
12 ters of aquaculture established under section
13 1475(d) of the National Agricultural Research,
14 Extension, and Teaching Policy Act of 1977 (7
15 U.S.C. 3322(d)), or within the institutions af-
16 filiated with the regional centers, a means of
17 electronically compiling and accessing informa-
18 tion for the National Aquaculture Information
19 Center;

20 “(ii) may establish, within the Department,
21 a National Aquaculture Information Center
22 that shall—

23 “(I) serve as a repository and clear-
24 inghouse for the information collected
25 under subparagraph (A) and other provi-
26 sions of this Act;

1 “(II) carry out a program to notify
 2 organizations, institutions, and individuals
 3 known to be involved in aquaculture of the
 4 existence of the Center and the kinds of in-
 5 formation that the Center can make avail-
 6 able to the public; and

7 “(III) make available, on request, in-
 8 formation described in subclause (I) (in-
 9 cluding information collected under sub-
 10 section (e));”;

11 (D) in clause (iii) (as redesignated by sub-
 12 paragraph (B))—

13 (i) by inserting “shall” before “ar-
 14 range”; and

15 (ii) by striking the comma and insert-
 16 ing a semicolon; and

17 (E) in clause (iv) (as redesignated by sub-
 18 paragraph (B)), by inserting “shall” before
 19 “conduct”; and

20 (2) in the first sentence of subsection (d), by
 21 striking “Interior,,” and inserting “Interior,”.

22 **SEC. 6. COORDINATION WITH THE AQUACULTURE INDUS-**
 23 **TRY.**

24 Section 6(b) of the National Aquaculture Act of 1980
 25 (16 U.S.C. 2805(b)) is amended—

1 (1) in paragraph (4), by inserting before the
 2 semicolon at the end the following: “, including in-
 3 formation on best management practices for main-
 4 taining water quality”;

5 (2) in paragraph (5), by striking “and” at the
 6 end;

7 (3) in paragraph (6), by striking the period at
 8 the end and inserting “; and”; and

9 (4) by adding at the end the following:

10 “(7) facilitate improved communication and
 11 interaction among aquaculture producers, the aqua-
 12 culture community, the Federal Government, and
 13 the coordinating group, establish a working relation-
 14 ship with national organizations, commodity associa-
 15 tions, and professional societies representing aqua-
 16 culture interests.”.

17 **SEC. 7. AQUACULTURE COMMERCIALIZATION RESEARCH.**

18 The National Aquaculture Act of 1980 (16 U.S.C.
 19 2801 et seq.) is amended—

20 (1) by redesignating sections 7 through 11 as
 21 sections 9 through 13, respectively; and

22 (2) by inserting after section 6 the following:

23 **“SEC. 7. AQUACULTURE COMMERCIALIZATION RESEARCH.**

24 “(a) ASSISTANCE AND COORDINATION.—

1 “(1) IN GENERAL.—The Secretary may make
2 grants and enter into contracts with any person or
3 governmental agency to support the market develop-
4 ment and commercialization of aquaculture research
5 and technology that—

6 “(A) demonstrates strong potential for ac-
7 celerating the transfer to the marketplace of
8 aquaculture products, processes, and tech-
9 nologies that can improve profitability, produc-
10 tion, efficiency, and sustainability of existing
11 and emerging aquaculture sectors;

12 “(B) will help the United States aqua-
13 culture industry to be more competitive in the
14 global marketplace; and

15 “(C) will facilitate the commercialization of
16 promising research and technologies deriving
17 from existing aquaculture research programs.

18 “(2) COST SHARE.—

19 “(A) FEDERAL SHARE.—Except as pro-
20 vided in subparagraph (B), the Federal share of
21 the cost of a grant or contract under this sec-
22 tion shall be 80 percent.

23 “(B) REMAINING SHARE.—The remaining
24 share of the cost of a grant or contract under
25 this section may be—

1 “(i) in the form of cash or in-kind
2 payments; and

3 “(ii) partially comprised of funds
4 made available under other Federal pro-
5 grams, except that the non-Federal share
6 may not be less than 10 percent of the cost
7 of the grant or contract.

8 “(b) PRIORITIES.—In making grants or awarding
9 contracts under subsection (a), the Secretary shall give a
10 higher priority to—

11 “(1) highly focused, applied aquaculture re-
12 search;

13 “(2) investigations of new aquaculture products
14 or processes that demonstrate a high potential for
15 commercialization;

16 “(3) market development programs for new or
17 improved aquaculture products or processes;

18 “(4) activities that have a strong potential to
19 create employment opportunities involving aqua-
20 culture;

21 “(5) other activities that accelerate the com-
22 mercialization of promising aquaculture technologies;

23 “(6) the extent to which the proposal promotes
24 sustainable aquaculture development; and

1 “(7) the extent to which the proposal includes
2 participation with a private aquaculture farm or
3 business that supplies products or services that are
4 necessary for aquaculture farming.

5 “(c) COMPETITIVE REVIEW.—

6 “(1) IN GENERAL.—To be eligible to receive a
7 grant or enter into a contract under subsection (a),
8 a proposal shall be competitively reviewed under pro-
9 cedures established by the Secretary.

10 “(2) COMPETITIVE REVIEW PANELS.—A com-
11 petitive review panel shall be composed of individuals
12 appointed by the Secretary, at least 50 percent of
13 whom work in private aquaculture or have a dem-
14 onstrated competence to objectively evaluate the like-
15 lihood of a proposal being economically successful or
16 promoting economic success within the aquaculture
17 industry.

18 “(3) EVALUATION.—The competitive review
19 shall be based on an evaluation of—

20 “(A) the quality of the proposal and the
21 research methodology;

22 “(B) the capability of the participating or-
23 ganization to perform the proposed work;

1 “(C) the amount of matching funds pro-
 2 vided by the participating organization or ob-
 3 tained from non-Federal sources;

4 “(D) in the case of a noncommercial en-
 5 tity, the existence of a cooperative arrangement
 6 with a commercial entity; and

7 “(E) such other factors as the Secretary
 8 determines to be appropriate.

9 “(d) LIMITATIONS.—

10 “(1) REGIONAL AQUACULTURE CENTERS.—Not
 11 less than 40 percent of the amounts made available
 12 to carry out this section for a fiscal year shall be
 13 used to carry out projects that will facilitate the
 14 commercialization of research or investigations fund-
 15 ed or coordinated by regional aquaculture centers es-
 16 tablished under section 1475(d) of the National Ag-
 17 ricultural Research, Extension, and Teaching Policy
 18 Act of 1977 (7 U.S.C. 3322(d)).

19 “(2) ADMINISTRATIVE EXPENSES.—Not more
 20 than 3 percent of the amounts made available to
 21 carry out this section for a fiscal year may be used
 22 by the Secretary to pay the expenses of administra-
 23 tion and information collection and dissemination.

24 “(3) CONSTRUCTION COSTS.—None of the
 25 funds made available under this section may be used

1 for the construction of a new building or the acquisi-
 2 tion, expansion, remodeling, or alteration of an exist-
 3 ing building (including site grading and improve-
 4 ment and architect fees).

5 “(e) REPORTS.—An eligible entity that receives a
 6 grant or enters into a contract with respect to a project
 7 carried out under this section shall submit an annual
 8 progress report, and a final report, to the Secretary that
 9 describes project activities and commercial and economic
 10 accomplishments and impacts.

11 “(f) APPLICABILITY OF THE FEDERAL ADVISORY
 12 COMMITTEE ACT.—The Federal Advisory Committee Act
 13 (5 U.S.C. App.) and title XVIII of the Food and Agri-
 14 culture Act of 1977 (7 U.S.C. 2281 et seq.) shall not apply
 15 to a panel or board created solely for the purpose of re-
 16 viewing applications or proposals submitted under this
 17 section.”.

18 **SEC. 8. NATIONAL POLICY FOR PRIVATE AQUACULTURE.**

19 The National Aquaculture Act of 1980 (16 U.S.C.
 20 2801 et seq.) is amended by inserting after section 7 (as
 21 added by section 7(2)) the following:

22 **“SEC. 8. NATIONAL POLICY FOR PRIVATE AQUACULTURE.**

23 “(a) REQUIREMENT.—In collaboration with the Sec-
 24 retary of Commerce and the Secretary of the Interior, the

1 Secretary shall coordinate and implement a national policy
2 for private aquaculture in accordance with this section.

3 “(b) DEPARTMENT OF AGRICULTURE AQUACULTURE
4 PLAN.—

5 “(1) IN GENERAL.—The Secretary shall develop
6 and implement a Department of Agriculture Aqua-
7 culture Plan (referred to in this section as the ‘De-
8 partment Plan’) for a unified aquaculture program
9 of the Department to support the development of
10 private aquaculture.

11 “(2) ELEMENTS.—The Department Plan shall
12 address—

13 “(A) programs of individual agencies of
14 the Department related to aquaculture that are
15 consistent with Department programs applied
16 to other areas of agriculture, including live-
17 stock, crops, products, and commodities under
18 the jurisdiction of agencies of the Department;

19 “(B) the treatment of commercially cul-
20 tivated aquatic animals as livestock and com-
21 mercially cultivated aquatic plants as agricul-
22 tural crops; and

23 “(C) means for effective coordination and
24 implementation of aquaculture activities and
25 programs within the Department, including in-

1 dividual agency commitments of personnel and
2 resources.

3 “(c) NATIONAL AQUACULTURE INFORMATION CEN-
4 TER.—In carrying out section 5, the Secretary may main-
5 tain and support a National Aquaculture Information
6 Center at the National Agricultural Library as a reposi-
7 tory for information on national and international aqua-
8 culture.

9 “(d) TREATMENT OF AQUACULTURE.—The Sec-
10 retary shall treat—

11 “(1) private aquaculture as agriculture for the
12 purpose of programs of the Department; and

13 “(2) commercially cultivated aquatic animals,
14 plants, and microorganisms, and products of the ani-
15 mals, plants, and microorganisms, produced by pri-
16 vate persons and transported or moved in standard
17 commodity channels as agricultural livestock, crops,
18 and commodities, respectively.

19 “(e) PRIVATE AQUACULTURE POLICY COORDINA-
20 TION, DEVELOPMENT, AND IMPLEMENTATION.—

21 “(1) RESPONSIBILITY.—The Secretary shall co-
22 ordinate, develop, and carry out policy and programs
23 of the Department related to private aquaculture.

24 “(2) DUTIES.—The Secretary shall—

1 “(A) coordinate all intradepartmental func-
 2 tions and activities of the Department relating
 3 to private aquaculture; and

4 “(B) establish procedures for the coordina-
 5 tion of functions, and consultation with, the co-
 6 ordinating group.”.

7 **SEC. 9. AUTHORIZATION OF APPROPRIATIONS.**

8 (a) IN GENERAL.—Section 12 of the National Aqua-
 9 culture Act of 1980 (as redesignated by section 7(1)) is
 10 amended by striking the first sentence and inserting the
 11 following: “There is authorized to be appropriated to carry
 12 out this Act (including the functions of the Joint Sub-
 13 committee on Aquaculture established under section 6(a))
 14 \$3,000,000 for each of fiscal years 1998 through 2002.”.

15 (b) EFFECTIVE DATE.—The amendment made by
 16 subsection (a) take effect on October 1, 1997.

17 **SEC. 10. ELIGIBILITY OF AQUACULTURE FARMERS FOR**
 18 **FARM CREDIT ASSISTANCE.**

19 Section 343(a) of the Consolidated Farm and Rural
 20 Development Act (7 U.S.C. 1991(a)) is amended by strik-
 21 ing “fish farming” both places it appears in paragraphs
 22 (1) and (2) and inserting “aquaculture (as defined in sec-
 23 tion 3 of the National Aquaculture Act of 1980 (16 U.S.C.
 24 2802))”.

1 **SEC. 11. INTERNATIONAL AQUACULTURE INFORMATION**
2 **AND DATA COLLECTION.**

3 (a) IN GENERAL.—Section 502 of the Agricultural
4 Trade Act of 1978 (7 U.S.C. 5692) is amended by adding
5 at the end the following:

6 “(d) INTERNATIONAL AQUACULTURE INFORMATION
7 AND DATA COLLECTION.—

8 “(1) IN GENERAL.—The Secretary is authorized
9 to establish and carry out a program of data collec-
10 tion, analysis, and dissemination of information to
11 provide continuing and timely economic information
12 concerning international aquaculture production.

13 “(2) CONSULTATION.—In carrying out para-
14 graph (1), the Secretary shall consult with the Joint
15 Subcommittee on Aquaculture established under sec-
16 tion 6(a) of the National Aquaculture Act of 1980
17 (16 U.S.C. 2805(a)), and representatives of the
18 United States aquaculture industry, concerning
19 means of effectively providing data described in
20 paragraph (1) to the Joint Subcommittee and the
21 industry.”.

22 (b) EFFECTIVE DATE.—The amendment made by
23 subsection (a) take effect on October 1, 1997.

24 **SEC. 12. AQUACULTURE INFORMATION NETWORK REPORT.**

25 Not later than 180 days after the date of enactment
26 of this Act, the Secretary of Agriculture shall report to

1 Congress on the feasibility of expanding current informa-
2 tion systems at regional aquaculture centers established
3 by the Secretary under section 1475(d) of the National
4 Agricultural Research, Extension, and Teaching Policy
5 Act of 1977 (7 U.S.C. 3322(d)), universities, research in-
6 stitutions, and the Agricultural Research Service to permit
7 an on-line link between those entities for the sharing of
8 data, publication, and technical assistance information in-
9 volving aquaculture.

10 **SEC. 13. IMPLEMENTATION REPORT.**

11 (a) IN GENERAL.—Not later than 180 days after the
12 date of enactment of this Act, the Secretary of Agriculture
13 shall report to Congress on the progress made in carrying
14 out this Act and the amendments made by this Act with
15 respect to policies and programs of the Department of Ag-
16 riculture.

17 (b) CONTENTS.—The report required by subsection
18 (a) shall include—

19 (1) a description of all programs and activities
20 of the Department of Agriculture and all other agen-
21 cies and Departments in support of private aqua-
22 culture;

23 (2) the specific authorities for the activities de-
24 scribed in paragraph (1); and

1 (3) recommendations for such actions as the
2 Secretary of Agriculture determines are necessary to
3 improve recognition and support of private aqua-
4 culture in each agency of the Department of Agri-
5 culture.

○