

103<sup>D</sup> CONGRESS  
1<sup>ST</sup> SESSION

# S. 1288

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 commercialization research program, and for other purposes.

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## IN THE SENATE OF THE UNITED STATES

JULY 27 (legislative day, JUNE 30), 1993

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

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## A BILL

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 commercialization 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; REF-**  
4        **ERENCES.**

5        (a) SHORT TITLE.—This Act may be cited as the  
6        “National Aquaculture Development, Commercialization,  
7        and Promotion Act of 1993”.

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

- Sec. 1. Short title; table of contents; references.
- Sec. 2. Findings and purpose.
- Sec. 3. Definitions.
- Sec. 4. National aquaculture development plan.
- Sec. 5. National Aquaculture Information Center; assignment of new programs;  
 market development program.
- Sec. 6. Coordination with the aquaculture industry.
- Sec. 7. Aquaculture commercialization research.
- Sec. 8. National policy for private aquaculture.
- Sec. 9. Pollution assessment.
- Sec. 10. Native American fishpond revitalization.
- Sec. 11. Disaster assistance for aquaculture farms.
- Sec. 12. Aquaculture education.
- Sec. 13. International aquaculture scientific exchange.
- Sec. 14. Authorization of appropriations.
- Sec. 15. Eligibility of aquaculture farmers for farm credit assistance.
- Sec. 16. International aquaculture information and data collection.
- Sec. 17. Eligibility of aquaculture farms for emergency conservation program.
- Sec. 18. Aquaculture information network report.
- Sec. 19. Implementation report.

3 (c) REFERENCES TO NATIONAL AQUACULTURE ACT  
 4 OF 1980.—Except as otherwise expressly provided, when-  
 5 ever in this Act an amendment or repeal is expressed in  
 6 terms of an amendment to, or repeal of, a section or other  
 7 provision, the reference shall be considered to be made to  
 8 a section or other provision of the National Aquaculture  
 9 Act of 1980 (16 U.S.C. 2801 et seq.).

10 **SEC. 2. FINDINGS AND PURPOSE.**

11 (a) FINDINGS.—Subsection (a) of section 2 (16  
 12 U.S.C. 2801(a)) is amended to read as follows:

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

14 “(1) The wild harvest or capture fisheries of  
 15 certain seafood species exceeds levels of optimum

1 sustainable yield, thereby making it more difficult to  
2 meet the increasing demand for aquatic food.

3 “(2) To satisfy the domestic market for aquatic  
4 food, the United States imports more than 59 per-  
5 cent of its seafood. This dependence on imports ad-  
6 versely affects the national balance of payments and  
7 contributes to the uncertainty of supplies and prod-  
8 uct quality.

9 “(3) Although aquaculture currently contributes  
10 approximately 16 percent by weight of world seafood  
11 production, less than 9 percent by weight of current  
12 United States seafood production results from aqua-  
13 culture. As a result, domestic aquaculture produc-  
14 tion has the potential for significant growth.

15 “(4) Aquaculture production of aquatic animals  
16 and plants can provide sources for food, industrial  
17 materials, pharmaceuticals, energy, and aesthetic en-  
18 joyment, and can assist in the control and abate-  
19 ment of pollution.

20 “(5) The rehabilitation and enhancement of fish  
21 and shellfish resources are desirable applications of  
22 aquaculture technology.

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

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

5                   “(A) inadequate credit;

6                   “(B) limited research and development  
7           programs;

8                   “(C) diffused legal jurisdiction;

9                   “(D) inconsistent interpretations between  
10          Federal agencies;

11                  “(E) the lack of management information;

12                  “(F) the lack of supportive policies of the  
13          Federal Government;

14                  “(G) the lack of therapeutic compounds for  
15          treatment of the diseases of aquatic animals  
16          and plants; and

17                  “(H) the lack of reliable supplies of seed  
18          stock.

19           “(8) Many areas of the United States are suit-  
20          able for aquaculture, but are subject to land-use or  
21          water-use management policies and regulations that  
22          do not adequately consider the potential for aqua-  
23          culture and may inhibit the development of aqua-  
24          culture.

1           “(9) In 1990, the United States ranked only  
2 tenth in the world in aquaculture production based  
3 on total value of products.

4           “(10) Despite the current and increasing im-  
5 portance of private aquaculture to the United States  
6 economy and to rural areas in the United States,  
7 Federal efforts to nurture aquaculture development  
8 have failed to keep pace with the needs of fish and  
9 aquatic plant farmers.

10           “(11) The United States has a premier oppor-  
11 tunity to develop an important new agricultural in-  
12 dustry to serve national needs and the global mar-  
13 ketplace.

14           “(12) United States aquaculture provides  
15 wholesome products for domestic consumers and  
16 contributes significantly to the quality of life in rural  
17 areas in the United States.

18           “(13) Since 1980, the United States trade defi-  
19 cit in edible fishery products foods has increased by  
20 48 percent, from \$1,777,921,000 to \$2,634,738,000  
21 in 1991.

22           “(14) Aquaculture is poised to become a major  
23 growth industry of the 21st century. With global  
24 seafood demand projected to increase 70 percent by  
25 2025, and harvests from capture fisheries stable or

1 declining, aquaculture would have to increase pro-  
2 duction by 700 percent, a total of 77 million metric  
3 tons annually.

4 “(15) Private aquaculture production in the  
5 United States has increased an average of 20 per-  
6 cent by weight annually since 1980, and is one of  
7 the fastest growing segments of United States and  
8 world agriculture.

9 “(16) In 1990, private United States aqua-  
10 culture production was 860,750,000 pounds, worth  
11 \$761,500,000 to United States fish farmers, up  
12 from 203,178,000 pounds, worth \$191,977,000, in  
13 1980.

14 “(17) Since 1960, per capita consumption of  
15 aquatic foods in the United States has increased by  
16 49 percent to 14.9 pounds in 1991, and could reach  
17 20 pounds by the year 2000. Total United States  
18 demand is projected to double by 2020.”.

19 (b) PURPOSE.—Subsection (b) of section 2 (16  
20 U.S.C. 2801(b)) is amended to read as follows:

21 “(b) PURPOSE.—It is the purpose of this Act to pro-  
22 mote aquaculture in the United States by—

23 “(1) declaring a national aquaculture policy;

24 “(2) establishing private aquaculture as a form  
25 of agriculture;

1           “(3) establishing cultivated aquatic animals,  
2           plants, microorganisms, and their products produced  
3           by private persons and moving in standard commod-  
4           ity channels as agricultural livestock, crops, and  
5           commodities;

6           “(4) establishing the Department as the lead  
7           Federal agency for the development, implementation,  
8           promotion, and coordination of national policy and  
9           programs for private aquaculture by—

10                   “(A) designating the Secretary as the per-  
11                   manent chairperson of a Federal interagency  
12                   aquaculture coordinating group;

13                   “(B) assigning overall responsibility to the  
14                   Secretary for coordinating, developing, and car-  
15                   rying out policies and programs for private  
16                   aquaculture; and

17                   “(C) establishing a National Aquaculture  
18                   Information Center within the Department to  
19                   support the United States aquaculture industry;  
20                   and

21           “(5) encouraging—

22                   “(A) aquaculture activities and programs  
23                   in both the public and private sectors of the  
24                   economy of the United States;

1           “(B) the creation of new industries and job  
2           opportunities related to aquaculture activities;

3           “(C) the reduction of the fisheries trade  
4           deficit; and

5           “(D) other national policy benefits deriving  
6           from aquaculture activities.”.

7 **SEC. 3. DEFINITIONS.**

8           Section 3 (16 U.S.C. 2802) is amended—

9           (1) in paragraph (1), by striking “the  
10          propogation” and all that follows through the period  
11          at the end and inserting “the controlled cultivation  
12          of aquatic plants and animals.”;

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

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

17          (4) by redesignating paragraphs (5) and (6) as  
18          paragraphs (6) and (7), respectively;

19          (5) by inserting after paragraph (4) the follow-  
20          ing new paragraph:

21                 “(5) The term ‘Department’ means the United  
22                 States Department of Agriculture.”; and

23          (6) by inserting before paragraph (9) (as redesi-  
24          gnated by paragraph (3)) the following new para-  
25          graph:



1           “(8) The term ‘private aquaculture’ means the  
2           controlled cultivation of aquatic plants and animals  
3           other than cultivation carried out by, or under con-  
4           tract with, the Federal Government or any State or  
5           local government.”.

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

7           Section 4 (16 U.S.C. 2803) is amended—

8           (1) in the second sentence of subsection (c)—

9                   (A) in subparagraph (A), by adding “and”  
10                  at the end;

11                  (B) in subparagraph (B), by striking “;  
12                  and” and inserting a period; and

13                  (C) by striking subparagraph (C);

14           (2) in the second sentence of subsection (d), by  
15           striking “Secretaries determine” and inserting “Sec-  
16           retary, in consultation with the other Secretaries,  
17           determines”;

18           (3) in subsection (e)—

19                   (A) by striking “Secretaries” and inserting  
20                  “Secretary”; and

21                   (B) by inserting “and in consultation with  
22                  the other Secretaries and representatives of  
23                  other Federal agencies” after “coordinating  
24                  group”; and

1           (4) by adding at the end the following new sub-  
2           section:

3           “(f) ACCOMPLISHMENTS IN AQUACULTURE PRO-  
4 GRAMS.—Not later than December 31, 1994, the Sec-  
5 retary, in consultation with the Secretary of Commerce  
6 and the Secretary of the Interior, shall submit to Congress  
7 a report evaluating the actions taken in accordance with  
8 subsection (d) with respect to the Plan, and making rec-  
9 ommendations for updating and modifying the Plan. The  
10 report shall also contain a compendium on Federal regula-  
11 tions relating to aquaculture.”.

12 **SEC. 5. NATIONAL AQUACULTURE INFORMATION CENTER;**  
13                   **ASSIGNMENT OF NEW PROGRAMS; MARKET**  
14                   **DEVELOPMENT PROGRAM.**

15           Section 5 (16 U.S.C. 2804) is amended—

16           (1) in subsection (b)(3), by striking “Secretar-  
17 ies deem” and inserting “Secretary, in consultation  
18 with the other Secretaries, considers”;

19           (2) in subsection (c)(1)(B)—

20                   (A) by striking clause (i) and inserting the  
21 following new clause:

22                           “(i) establish, within the Department,  
23 within the National Agricultural Library, a Na-  
24 tional Aquaculture Information Center that  
25 shall—

1           “(I) serve as a repository and clear-  
2           inghouse for the information collected  
3           under subparagraph (A) and other provi-  
4           sions of this Act;

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

11          “(III) make available, on request, in-  
12          formation described in subclause (I) (in-  
13          cluding information collected under sub-  
14          section (e));”;

15          (B) in clause (ii), by striking the comma  
16          and inserting a semicolon;

17          (3) in the first sentence of subsection (d), by  
18          striking “Interior,,” and inserting “Interior,,”; and

19          (4) by adding at the end the following new sub-  
20          sections:

21          “(e) ASSIGNMENT OF NEW PROGRAMS.—In consulta-  
22          tion with representatives of the United States aquaculture  
23          industry and in coordination with the Secretary of the In-  
24          terior, the Secretary of Commerce, and the heads of other  
25          appropriate Federal agencies, the Secretary shall assess

1 Federal aquatic animal health programs and make rec-  
2 ommendations as to the appropriate assignment to Fed-  
3 eral agencies of new programs, initiatives, and activities  
4 in support of aquaculture and resource stewardship and  
5 management.

6       “(f) USE OF EXCESS SECTION 32 FUNDS.—(1)(A)(i)  
7 Subject to subparagraphs (B) and (C), the Secretary shall  
8 expend for aquaculture export promotion, research, devel-  
9 opment, education, market development, and demonstra-  
10 tion projects, for each fiscal year, an amount equal to the  
11 aquaculture production percentage of the funds remaining  
12 available to the Department for the fiscal year under sec-  
13 tion 32 of the Act entitled ‘An Act to amend the Agricul-  
14 tural Adjustment Act, and for other purposes’, approved  
15 August 14, 1935 (7 U.S.C. 612c), after the application  
16 of the first 5 sentences of such section.

17       “(ii) As used in clause (i), the term ‘aquaculture pro-  
18 duction percentage’ means the annual weight of aqua-  
19 culture products of the United States divided by the an-  
20 nual weight of fisheries landings of the United States  
21 (other than landings that are not used for human con-  
22 sumption).

23       “(B) The Secretary may expend all or part of the  
24 funds required to be expended pursuant to subparagraph

1 (A)(i) for the purpose of strengthening aquaculture mar-  
2 kets, income, and supply.

3 “(C) In determining the purposes for which the funds  
4 required to be expended pursuant to subparagraph (A)(i)  
5 are to be expended, the Secretary shall give high priority  
6 to carrying out subsection (e)(2).

7 “(2) For the purpose of carrying out this Act, for  
8 each fiscal year, the Secretary may expend the funds re-  
9 maining available to the Department for the fiscal year  
10 under section 32 of the Act entitled ‘An Act to amend  
11 the Agricultural Adjustment Act, and for other purposes’,  
12 approved August 14, 1935 (7 U.S.C. 612c), after the ap-  
13 plication of paragraph (1).

14 “(3) For each fiscal year, if funds remain available  
15 to the Department for the fiscal year under section 32  
16 of such Act after the exercise (if any) of authority under  
17 paragraph (2), the Secretary shall provide to the National  
18 Aquaculture Information Center established under sub-  
19 section (c)(1)(B)(i) for activities of the Center during the  
20 fiscal year the lesser of—

21 “(A) the amount of the remaining funds; or

22 “(B)(i) \$1,000,000; minus

23 “(ii) the lesser of—

24 “(I) any funds provided to the Center  
25 under paragraph (2); or

1 “(II) \$1,000,000.”.

2 **SEC. 6. COORDINATION WITH THE AQUACULTURE INDUS-**  
3 **TRY.**

4 Section 6(b) (16 U.S.C. 2805(b)) is amended—

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

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

9 (3) by adding at the end the following new  
10 paragraph:

11 “(7) in order to facilitate improved communica-  
12 tion and interaction among aquaculture producers,  
13 the aquaculture community, the Federal Govern-  
14 ment, and the coordinating group, establish a work-  
15 ing relationship with—

16 “(A) the industry advisory councils of the  
17 regional aquaculture centers established by the  
18 Secretary under section 1475(d) of the National  
19 Agricultural Research, Extension, and Teaching  
20 Policy Act of 1977 (7 U.S.C. 3322(d)); and

21 “(B) national organizations, commodity as-  
22 sociations, and professional societies represent-  
23 ing aquaculture interests.”.

24 **SEC. 7. AQUACULTURE COMMERCIALIZATION RESEARCH.**

25 The Act (16 U.S.C. 2801 et seq.) is amended—

1 (1) by redesignating sections 7 through 11 as  
2 sections 14 through 18, respectively; and

3 (2) by inserting after section 6 the following  
4 new section:

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

6 “(a) DEFINITIONS.—As used in this section:

7 “(1) ELIGIBLE ENTITY.—The term ‘eligible en-  
8 tity’ means a public or private research or edu-  
9 cational organization, private company, regional cen-  
10 ter, Federal, State, or regional agency, or individual  
11 that is eligible to receive a grant or enter into a con-  
12 tract under this section.

13 “(2) REGIONAL AQUACULTURE CENTER.—The  
14 term ‘regional aquaculture center’ means an  
15 aquacultural research, development, and demonstra-  
16 tion center established under section 1475(d) of the  
17 National Agricultural Research, Extension, and  
18 Teaching Policy Act of 1977 (7 U.S.C. 3322(d)).

19 “(b) ASSISTANCE AND COORDINATION.—

20 “(1) IN GENERAL.—The Secretary—

21 “(A) may pay the Federal share of the cost  
22 of making grants and awarding contracts to eli-  
23 gible entities to support aquaculture research  
24 that—

1           “(i) demonstrates strong potential for  
2           aquaculture becoming commercially viable;  
3           or

4           “(ii) will assist the United States  
5           aquaculture industry in developing aqua-  
6           culture products or processes that will be  
7           competitive with aquaculture products or  
8           processes of other countries; and

9           “(B) shall, acting through the executive  
10          committee of the interagency aquaculture co-  
11          ordinating group established pursuant to sec-  
12          tion 6, coordinate the implementation of a re-  
13          search program based on the findings contained  
14          in the report entitled ‘Report of the Joint Com-  
15          mittee on Aquaculture Task Force on Thera-  
16          peutic Compounds’, published in August 1988.

17          “(2) COST SHARE.—

18                 “(A) FEDERAL SHARE.—Except as pro-  
19                 vided in subparagraph (B), the Federal share of  
20                 the cost of a project carried out under—

21                         “(i) paragraph (1)(A), shall be 80  
22                         percent; and

23                         “(ii) paragraph (1)(B), shall be 100  
24                         percent.



1           “(B) REMAINING SHARE.—The remaining  
2 share of the cost of a project carried out under  
3 paragraph (1)(A) may be—

4           “(i) in the form of cash or in-kind  
5 payments, or both; and

6           “(ii) partially comprised of funds  
7 made available under other Federal pro-  
8 grams, except that the non-Federal share  
9 of the project may not be less than 10 per  
10 cent of the cost of the project.

11          “(c) PRIORITIES.—In making grants or awarding  
12 contracts under subsection (b), the Secretary shall give  
13 priority to—

14           “(1) highly focused applied research;

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

18           “(3) market development programs for new or  
19 improved aquaculture products or processes;

20           “(4) field testing, commercial field trials, and  
21 applications of aquaculture research to private aqua-  
22 culture that would promote the transfer of promising  
23 aquaculture technologies to the marketplace;

24           “(5) activities that have strong potential to cre-  
25 ate employment opportunities; and

1           “(6) other activities that accelerate the com-  
2           mercialization of promising aquaculture technologies.

3           “(d) COMPETITIVE REVIEW.—

4           “(1) IN GENERAL.—To be eligible to receive a  
5           grant or enter into a contract under subsection (b),  
6           a proposal shall undergo competitive review.

7           “(2) COMPETITIVE REVIEW PANELS.—A com-  
8           petitive review panel shall be composed of individuals  
9           appointed by the Secretary, at least 50 percent of  
10          whom work in private aquaculture or are private sec-  
11          tor representatives who understand sound business  
12          practices and are qualified to objectively evaluate the  
13          likelihood of a proposal being economically successful  
14          or promoting economic success within the aqua-  
15          culture industry. Each competitive review panel shall  
16          contain at least 1 representative from a regional  
17          aquaculture center.

18          “(3) EVALUATION.—A competitive review panel  
19          shall base an evaluation of a proposal under this  
20          subsection on—

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

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

1           “(C) the potential for fostering commer-  
2           cialization, job creation, and increased sales of  
3           aquaculture products;

4           “(D) the amount of matching funds pro-  
5           vided by the supported entity or obtained from  
6           non-Federal sources;

7           “(E) the extent of collaboration with other  
8           Federal and State programs;

9           “(F) the existence of a business plan that  
10          reasonably projects the benefits of the support  
11          being requested;

12          “(G) in the case of a noncommercial en-  
13          tity, the existence of a cooperative agreement  
14          with a commercial entity;

15          “(H) whether the project would promote  
16          responsible environmental stewardship; and

17          “(I) such other factors as the competitive  
18          review panel determines to be appropriate.

19          “(e) LIMITATIONS.—

20                 “(1) REGIONAL AQUACULTURE CENTERS.—Not  
21                 less than 60 percent of the amounts made available  
22                 to carry out this section during a fiscal year shall be  
23                 used to carry out projects that will facilitate the  
24                 commercialization of preliminary research or inves-

1        tigungen that have been funded or coordinated by  
2        regional aquaculture centers.

3            “(2) ADMINISTRATIVE EXPENSES.—Not more  
4        than 3 percent of the amounts made available to  
5        carry out this section during a fiscal year may be  
6        used by the Secretary for the expenses of adminis-  
7        tration and information collection and dissemination.

8            “(3) CONSTRUCTION COSTS.—None of the  
9        funds made available under this section may be used  
10       for the construction of a new building or the acqui-  
11       sition, expansion, remodeling, or alteration of an exist-  
12       ing building (including site grading and improve-  
13       ment and architect fees).

14          “(f) REPORTS.—An eligible entity that receives a  
15       grant or enters into a contract under a project carried out  
16       under this section shall submit an annual progress report,  
17       and a final report, to the Secretary that—

18            “(1) describes project activities and commercial  
19       and economic accomplishments and impacts; and

20            “(2) in the case of an annual progress report,  
21       includes a project plan for the subsequent year.

22          “(g) AUTHORIZATION OF APPROPRIATIONS.—There  
23       are authorized to be appropriated such sums as are nec-  
24       essary to carry out this section.”.

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

2 The Act (16 U.S.C. 2801 et seq.) is amended by in-  
3 serting after section 7 (as added by section 7(2)) the fol-  
4 lowing new section:

5 **“SEC. 8. IMPLEMENTATION OF NATIONAL POLICY FOR PRI-  
6 VATE AQUACULTURE.**

7 “(a) IN GENERAL.—The Secretary, in consultation  
8 with the Secretary of Commerce, the Secretary of the Inte-  
9 rior, and the heads of other agencies, as appropriate, shall  
10 coordinate and implement a national policy for private  
11 aquaculture in accordance with this section.

12 “(b) DEPARTMENT AQUACULTURE PLAN.—

13 “(1) IN GENERAL.—The Secretary shall develop  
14 and implement a Department Aquaculture Plan (re-  
15 ferred to in this section as the ‘plan’) for a unified  
16 Department aquaculture program, coordinated by  
17 the Director of the Office of Aquaculture of the De-  
18 partment, to support the development of private  
19 United States aquaculture.

20 “(2) ELEMENTS OF PLAN.—The plan shall ad-  
21 dress—

22 “(A) individual agency programs related to  
23 aquaculture in the Department that are consist-  
24 ent with Department programs applied to other  
25 agricultural programs, livestock, crops, prod-

1           ucts, and commodities under the jurisdiction of  
2           Department agencies;

3           “(B) the treatment of cultivated aquatic  
4           animals as livestock and cultivated aquatic  
5           plants as agricultural crops; and

6           “(C) means for effective coordination and  
7           implementation of aquaculture activities and  
8           programs within the Department, including in-  
9           dividual agency commitments of personnel and  
10          resources.

11          “(3) DEADLINE.—Not later than 1 year after  
12          the date of enactment of the National Aquaculture  
13          Development, Commercialization, and Promotion Act  
14          of 1993, the Secretary shall submit the plan to Con-  
15          gress.

16          “(4) REPORTS.—Not later than 1 year after the  
17          date of the submission of the plan pursuant to para-  
18          graph (3), and annually thereafter, the Secretary  
19          shall report to Congress on actions taken to imple-  
20          ment the plan during the year preceding the date of  
21          the report.

22          “(5) NATIONAL AQUACULTURE INFORMATION  
23          CENTER.—

24          “(A) IN GENERAL.—In carrying out sec-  
25          tion 5, the Secretary shall maintain and sup-

1 port the National Aquaculture Information  
2 Center (referred to in this paragraph as the  
3 ‘Center’) as a repository for information on na-  
4 tional and international aquaculture.

5 “(B) PUBLIC ACCESS.—Information in the  
6 Center shall be made available to the public.

7 “(C) INTERNATIONAL EXCHANGE.—The  
8 head of the Center shall arrange with foreign  
9 nations for the exchange of information relating  
10 to aquaculture and shall support a translation  
11 service.

12 “(D) SUPPORT.—The Center shall provide  
13 direct support to the coordinating group.

14 “(c) NATIONAL AQUACULTURE DEVELOPMENT  
15 PLAN.—

16 “(1) IN GENERAL.—Not later than 1 year after  
17 the date of enactment of the National Aquaculture  
18 Development, Commercialization, and Promotion Act  
19 of 1993, the Secretary shall revise the National  
20 Aquaculture Development Plan required to be estab-  
21 lished under section 4.

22 “(2) COORDINATION.—The Secretary shall inte-  
23 grate and coordinate the aquaculture and related  
24 missions, major objectives, and program components

1 of individual aquaculture plans of the coordinating  
2 group members.

3 “(3) SUBMISSION TO CONGRESS.—Not later  
4 than 1 year after the date of enactment of the Na-  
5 tional Aquaculture Development, Commercialization,  
6 and Promotion Act of 1993, the Secretary shall sub-  
7 mit a revised Plan to Congress.

8 “(4) UPDATES.—Not later than 5 years after  
9 the date of the submission of the revised Plan pursu-  
10 ant to paragraph (3), and annually thereafter, the  
11 Secretary shall revise the National Aquaculture De-  
12 velopment Plan.

13 “(d) TREATMENT OF AQUACULTURE.—The Sec-  
14 retary shall, for all purposes, treat—

15 “(1) private aquaculture as a form of agri-  
16 culture; and

17 “(2) aquaculture products produced by private  
18 persons and moving in standard commodity channels  
19 as agricultural commodities.

20 “(e) RESOLUTION OF INTERAGENCY CONFLICT.—In  
21 consultation with representatives of affected Federal agen-  
22 cies, the Secretary shall be responsible for resolving any  
23 interagency conflict in the coordination or implementation  
24 of the policy described in this section.



1       “(f) PRIVATE AQUACULTURE POLICY COORDINA-  
2 TION, DEVELOPMENT, AND IMPLEMENTATION.—

3           “(1) RESPONSIBILITY.—The Secretary shall  
4 have overall responsibility for coordinating, develop-  
5 ing, and carrying out policies and programs for pri-  
6 vate aquaculture.

7           “(2) DUTIES.—The Director of the Office of  
8 Aquaculture of the Department shall—

9           “(A) represent the Secretary in all inter-  
10 departmental functions and activities relating to  
11 private aquaculture;

12           “(B) coordinate all intradepartmental  
13 functions and activities relating to private aqua-  
14 culture;

15           “(C) establish formal structures and proce-  
16 dures for the coordination of functions, and  
17 consultation, with the coordinating group;

18           “(D) recommend to the National Agricul-  
19 tural Library methods by which the aquaculture  
20 resources of the Library can be made more eas-  
21 ily retrievable and can be more widely dissemi-  
22 nated; and

23           “(E) report directly to the Secretary in  
24 carrying out the duties of the Director.

25           “(3) LIAISON WITH THE OFFICE.—

1           “(A) AGENCIES OF THE DEPARTMENT.—  
2           To facilitate communication and interaction be-  
3           tween the aquaculture community and the De-  
4           partment, the head of each agency of the De-  
5           partment shall designate an officer or employee  
6           of the agency to be the liaison of the agency  
7           with the Office of Aquaculture of the Depart-  
8           ment.

9           “(B) DEPARTMENTS OF COMMERCE AND  
10          INTERIOR.—The Secretary of Commerce and  
11          the Secretary of the Interior shall each des-  
12          ignate an officer or employee of their respective  
13          Departments to be the liaison of their respec-  
14          tive Departments with the Office of Aqua-  
15          culture of the Department.”.

16 **SEC. 9. POLLUTION ASSESSMENT.**

17          The Act (16 U.S.C. 2801 et seq.) is amended by in-  
18          serting after section 8 (as added by section 8) the follow-  
19          ing new section:

20 **“SEC. 9. POLLUTION ASSESSMENT.**

21          “(a) ASSESSMENT.—The Administrator of the Envi-  
22          ronmental Protection Agency is authorized to carry out,  
23          in consultation with the Secretary, collaborative inter-  
24          agency programs that demonstrate the application of  
25          aquaculture to environmental enhancement and assess-

1 ment, including a program to assess the impact of pollu-  
2 tion on aquatic organisms and ecosystems using aqua-  
3 culture-raised fish to serve as an indicator of environ-  
4 mental pollution.

5 “(b) GRANTS; COOPERATIVE AGREEMENTS.—The  
6 Administrator may provide grants or enter into coopera-  
7 tive agreements or contracts with private research organi-  
8 zations for research and demonstration of the technology  
9 authorized by this section.”.

10 **SEC. 10. NATIVE AMERICAN FISHPOND REVITALIZATION.**

11 The Act (16 U.S.C. 2801 et seq.) is amended by in-  
12 serting after section 9 (as added by section 9) the follow-  
13 ing new section:

14 **“SEC. 10. NATIVE AMERICAN FISHPOND REVITALIZATION.**

15 “(a) DEFINITION OF NATIVE AMERICAN.—As used  
16 in this section, the term ‘Native American’ means—

17 “(1) an Indian, as defined in section 4(d) of the  
18 Indian Self-Determination and Education Assistance  
19 Act (25 U.S.C. 450b(d));

20 “(2) a Native Hawaiian, as defined in section  
21 8(3) of the Native Hawaiian Health Care Act of  
22 1988 (42 U.S.C. 11707(3)) or section 815(3) of the  
23 Native American Programs Act (42 U.S.C.  
24 2992c(3));

1           “(3) an Alaska Native, within the meaning pro-  
2           vided for the term ‘Native’ in section 3(b) of the  
3           Alaska Native Claims Settlement Act (43 U.S.C.  
4           1602(b)); and

5           “(4) a Pacific Islander, within the meaning of  
6           the Native American Programs Act of 1974 (42  
7           U.S.C. 2991 et seq.)

8           “(b) AUTHORIZATION OF PROGRAM.—The Secretary  
9           of Agriculture is authorized to carry out a program to revi-  
10          talize fishponds used by Native Americans to cultivate  
11          aquatic species.

12          “(c) GRANTS; COOPERATIVE AGREEMENTS.—The  
13          Secretary may provide grants or enter into cooperative  
14          agreements with individuals and organizations, including  
15          Native American organizations, to promote fishpond revi-  
16          talization. Funds provided under this section may be used  
17          to engage in fishpond research, pond culture technology  
18          development, the application of traditional pond culture  
19          techniques and modern aquaculture practices to ancient  
20          fishponds, technical assistance and technology transfer,  
21          and such other activities as the Secretary determines are  
22          appropriate.”.

1 **SEC. 11. DISASTER ASSISTANCE FOR AQUACULTURE**  
2 **FARMS.**

3 (a) IN GENERAL.—The Act (16 U.S.C. 2801 et seq.)  
4 is amended by inserting after section 10 (as added by sec-  
5 tion 10) the following new section:

6 **“SEC. 11. DISASTER ASSISTANCE FOR AQUACULTURE**  
7 **FARMS.**

8 “(a) DEFINITIONS.—As used in this section:

9 “(1) DAMAGING WEATHER.—The term ‘damag-  
10 ing weather’ includes drought, hail, excessive mois-  
11 ture, flooding, freeze, tornado, hurricane, earth-  
12 quake, or excessive wind, or any combination there-  
13 of.

14 “(2) ELIGIBLE AQUACULTURE FARMER.—The  
15 term ‘eligible aquaculture farmer’ means a person  
16 who produces aquaculture crops for commercial pur-  
17 poses and devotes 100 acres or less to aquaculture  
18 cultivation.

19 “(3) RELATED CONDITION.—The term ‘related  
20 condition’ includes insect infestations, plant diseases,  
21 or other deterioration of a crop of an aquatic spe-  
22 cies, including aflatoxin, that is accelerated or exac-  
23 erbated naturally as a result of damaging weather  
24 occurring prior to or during harvest.

25 “(b) ELIGIBILITY.—

1           “(1) LOSS.—Subject to the limitation in para-  
2           graph (2), the Secretary shall provide assistance, as  
3           specified in subsection (c), to eligible aquaculture  
4           farmers who suffered losses (including losses due to  
5           mortality, crop destruction, or unmarketability) of  
6           an aquatic crop as a result of damaging weather or  
7           related condition.

8           “(2) LIMITATION.—An eligible aquaculture  
9           farmer shall qualify for assistance under paragraph  
10          (1) only if the loss, as a result of damaging weather  
11          or related condition, exceeds 35 percent of the aqua-  
12          culture yield, as determined under subsection (d),  
13          for the aquaculture crop.

14          “(c) ASSISTANCE.

15          “(1) PAYMENT RATE.—The Secretary shall  
16          make payments to eligible aquaculture farmers at a  
17          rate equal to 65 percent of the applicable payment  
18          level under paragraph (2), as determined by the Sec-  
19          retary, for any losses.

20          “(2) PAYMENT LEVEL.—For the purposes of  
21          paragraph (1), the payment level for an aquaculture  
22          crop shall equal the simple average price received by  
23          producers of the commodity as determined by the  
24          Secretary.

1           “(3) CROP-BY-CROP BASIS.—The Secretary  
2 shall make disaster payments under this section on  
3 a crop-by-crop basis for each type of aquatic species  
4 produced.

5           “(d) YIELDS.—

6           “(1) PROVEN YIELDS AVAILABLE.—If an eligi-  
7 ble aquaculture farmer can provide satisfactory evi-  
8 dence to the Secretary of actual aquaculture crop  
9 yields on the farm for at least 1 of the immediately  
10 preceding 3 years, the aquaculture yield for the farm  
11 shall be based on proven yield.

12           “(2) PROVEN YIELDS NOT AVAILABLE.—If the  
13 data referred to in paragraph (1) do not exist for  
14 any of the 3 preceding years, the Secretary shall es-  
15 tablish a yield for the farm by using the historical  
16 average yield of all producers of the aquaculture  
17 crop.

18           “(3) BEST AVAILABLE DATA.—In establishing  
19 historic average yields where proven yields are not  
20 available, the Secretary shall use the best available  
21 information concerning yields. The information may  
22 include Extension Service records, credible non-  
23 governmental studies, and yields at similar aqua-  
24 culture farms.

1       “(e) REGULATIONS.—The Secretary shall issue regu-  
2 lations—

3           “(1) defining the term ‘person’ for the purposes  
4 of this section, which shall conform, to the extent  
5 practicable, to the regulations issued under section  
6 1001 of the Food Security Act of 1985 (7 U.S.C.  
7 1308) and chapter 3 of subtitle B of title XXII of  
8 the Food, Agriculture, Conservation, and Trade Act  
9 of 1990 (7 U.S.C. 1421 note); and

10          “(2) prescribing such rules as the Secretary de-  
11 termines necessary to ensure a fair and reasonable  
12 application of this section.”.

13       (b) REPORT ON CROP INSURANCE PROGRAM FOR  
14 AQUACULTURE FARMING.—Not later than 1 year after  
15 the date of enactment of this Act, the Secretary of Agri-  
16 culture shall report to the appropriate committees of Con-  
17 gress on the feasibility of establishing a crop insurance  
18 program for aquaculture farming.

19 **SEC. 12. AQUACULTURE EDUCATION.**

20       The Act (16 U.S.C. 2801 et seq.) is amended by in-  
21 serting after section 11 (as added by section 11) the fol-  
22 lowing new section:

23 **“SEC. 12. AQUACULTURE EDUCATION.**

24       “(a) DEFINITIONS.—As used in this section:



1           “(1) POSTSECONDARY VOCATIONAL INSTITU-  
2           TION.—The term ‘postsecondary vocational institu-  
3           tion’ has the same meaning given the term by sec-  
4           tion 481(c) of the Higher Education Act of 1965  
5           (20 U.S.C. 1088(c)), except that the term only in-  
6           cludes an institution that awards an associates de-  
7           gree but does not award a bachelor’s degree.

8           “(2) SECONDARY SCHOOL.—The term ‘second-  
9           ary school’ has the same meaning given the term by  
10          section 1471(21) of the Elementary and Secondary  
11          Education Act of 1965 (20 U.S.C. 2891(21)).

12          “(b) AUTHORIZATION OF PROGRAM.—The Secretary  
13          is authorized to establish a program to expand and im-  
14          prove instruction, on aquaculture and the basic principles  
15          of aquaculture farming, in the agriculture curriculum for  
16          students attending secondary schools and postsecondary  
17          vocational institutions.

18          “(c) GRANTS AND CURRICULUM.—In carrying out  
19          subsection (b), the Secretary may—

20                 “(1) make grants to—

21                         “(A) establish and maintain aquaculture  
22                         learning centers in secondary schools and post-  
23                         secondary vocational institutions;

24                         “(B) promote aquaculture technology  
25                         transfer; and

1           “(C) educate consumers and the public  
2           concerning the benefits of aquaculture; and

3           “(2) develop curriculum and supporting mate-  
4           rials on aquaculture farming, field test the content  
5           of the curriculum, and supply training to educators  
6           at secondary schools and postsecondary vocational  
7           institutions on the aquaculture curriculum and ma-  
8           terials developed.

9           “(d) PRIORITY FOR GRANTS.—In awarding grants  
10          under subsection (c)(1), the Secretary shall give priority  
11          to—

12               “(1) the ability of the proposed aquaculture  
13          learning center to gain access to—

14                       “(A) a commercial aquaculture farm;

15                       “(B) a regional aquaculture center estab-  
16                       lished by the Secretary under section 1475(d)  
17                       of the National Agricultural Research, Exten-  
18                       sion, and Teaching Policy Act of 1977 (7  
19                       U.S.C. 3322(d));

20                       “(C) an aquaculture research facility; or

21                       “(D) a similar venture that would afford  
22                       students the opportunity to experience aqua-  
23                       culture research and development or commer-  
24                       cialization;

1           “(2) the ability of the center to achieve out-  
2 reach to minority audiences or students in inner-city  
3 schools;

4           “(3) the ability of the center to foster aware-  
5 ness of aquaculture among consumers and the gen-  
6 eral public;

7           “(4) the ability of the center to serve as an  
8 aquaculture education facility for visiting students  
9 participating in a field trip or a similar educational  
10 experience for inservice training; and

11           “(5) the level of assistance to be provided from  
12 non-Federal sources.

13           “(e) LIMITATION.—

14           “(1) IN GENERAL.—Except as provided in para-  
15 graph (2), a grantee may not receive a grant under  
16 this section for more than 5 fiscal years.

17           “(2) WAIVER.—In the case of grantees that re-  
18 ceive grants under this section for fiscal year 1995,  
19 the Secretary may waive the application of para-  
20 graph (1) to the grantees for the fiscal year if the  
21 Secretary determines that the application of para-  
22 graph (1) to the grantees would result in the termi-  
23 nation of an excessive number of grants.”.

1 **SEC. 13. INTERNATIONAL AQUACULTURE SCIENTIFIC EX-**  
2 **CHANGE.**

3 The Act (16 U.S.C. 2801 et seq.) is amended by in-  
4 serting after section 12 (as added by section 12) the fol-  
5 lowing new section:

6 **“SEC. 13. INTERNATIONAL AQUACULTURE SCIENTIFIC EX-**  
7 **CHANGE.**

8 “(a) DEFINITION OF ELIGIBLE ENTITY.—As used in  
9 this section, the term ‘eligible entity’ means a regional  
10 aquaculture center, college, university, or nonprofit orga-  
11 nization engaged in aquaculture research and education  
12 in the United States or a foreign country.

13 “(b) GRANTS.—The Secretary may make grants to  
14 eligible entities to defray the cost, in whole or in part, of  
15 allowing aquaculture researchers and aquaculture tech-  
16 nologists to engage in research, education, and demonstra-  
17 tion at the eligible entities for periods of up to 2 years.

18 “(c) FUNDING.—The Secretary may use proceeds  
19 from the payments referred to in section 104(a) of the  
20 Agricultural Trade Development and Assistance Act of  
21 1954 (7 U.S.C. 1704(a)) to carry out this section.”.

22 **SEC. 14. AUTHORIZATION OF APPROPRIATIONS.**

23 The first sentence of section 17 (as redesignated by  
24 section 7(1)) is amended to read as follows: “There are  
25 authorized to be appropriated to carry out this Act to the  
26 Department \$3,000,000 for each of fiscal years 1994

1 through 2000 (of which not less than \$500,000 shall be  
 2 used for each fiscal year to carry out the Joint Sub-  
 3 committee on Aquaculture established under section 6(a)),  
 4 to the Department of Commerce \$1,000,000 for each of  
 5 fiscal years 1994 through 2000, and to the Department  
 6 of the Interior \$1,000,000 for each of fiscal years 1994  
 7 through 2000.’’.

8 **SEC. 15. ELIGIBILITY OF AQUACULTURE FARMERS FOR**  
 9 **FARM CREDIT ASSISTANCE.**

10 Section 343 of the Consolidated Farm and Rural De-  
 11 velopment Act (7 U.S.C. 1991) is amended by striking  
 12 “fish farming” both places it appears in paragraphs (1)  
 13 and (2) and inserting “aquaculture (as the term is defined  
 14 in section 3(1) of the National Aquaculture Act of 1980  
 15 (16 U.S.C. 2802(1)))”.

16 **SEC. 16. INTERNATIONAL AQUACULTURE INFORMATION**  
 17 **AND DATA COLLECTION.**

18 Section 502 of the Agricultural Trade Act of 1978  
 19 (7 U.S.C. 5692) is amended by adding at the end the fol-  
 20 lowing new subsection:

21 “(d) INTERNATIONAL AQUACULTURE INFORMATION  
 22 AND DATA COLLECTION.—

23 “(1) IN GENERAL.—The Administrator of the  
 24 Foreign Agricultural Service shall establish and  
 25 carry out a program of data collection, analysis, and

1 dissemination of information to provide continuing  
2 and timely economic information concerning inter-  
3 national aquaculture production.

4 “(2) CONSULTATION.—In carrying out para-  
5 graph (1), the Administrator shall consult with the  
6 Joint Subcommittee on Aquaculture established  
7 under section 6(a) of the National Aquaculture Act  
8 of 1980 (16 U.S.C. 2805(a)), and representatives of  
9 the United States aquaculture industry, concerning  
10 means of effectively providing data described in  
11 paragraph (1) to the Joint Subcommittee and the  
12 industry.”.

13 **SEC. 17. ELIGIBILITY OF AQUACULTURE FARMS FOR EMER-**  
14 **GENCY CONSERVATION PROGRAM.**

15 Section 401 of the Agricultural Credit Act of 1978  
16 (16 U.S.C. 2201) is amended—

17 (1) by inserting “or aquaculture farms” after  
18 “farmlands” both places it appears; and

19 (2) by inserting “or aquaculture farm” after  
20 “land” each place it appears.

21 **SEC. 18. AQUACULTURE INFORMATION NETWORK REPORT.**

22 Not later than 180 days after the date of enactment  
23 of this Act, the Secretary of Agriculture shall report to  
24 Congress on the feasibility and benefits of expanding cur-  
25 rent information systems at regional aquaculture centers

1 established by the Secretary under section 1475(d) of the  
2 National Agricultural Research, Extension, and Teaching  
3 Policy Act of 1977 (7 U.S.C. 3322(d)), universities, re-  
4 search institutions, and the National Agricultural Library  
5 to permit an on-line link between those entities for the  
6 sharing of data, publication, and technical assistance in-  
7 formation involving aquaculture.

8 **SEC. 19. IMPLEMENTATION REPORT.**

9 (a) IN GENERAL.—Not later than 180 days after the  
10 date of enactment of this Act, the Secretary of Agriculture  
11 shall report to Congress on the progress made in carrying  
12 out this Act and the amendments made by this Act.

13 (b) CONTENTS.—The report required by subsection  
14 (a) shall include—

15 (1) a description of all programs and activities  
16 of the Department of Agriculture and all other agen-  
17 cies and Departments in support of private aqua-  
18 culture;

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

21 (3) recommendations for such actions as the  
22 Secretary of Agriculture determines are necessary to  
23 improve recognition and support of private aqua-  
24 culture in each agency of the Department of Agri-  
25 culture.



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