

SJR

49

# COMMITTEE REPORT

## SENATE

FURTHER: None

Date: \_\_\_\_\_

Mr. President:

The Committee on RESOURCES has had SJR 40  
*national energy plan and support, S. 2762.*

under consideration and (a majority of the committee) (the committee reports it back as follows)

- recommends it do pass                       recommends it do not pass
- recommends it do pass with attached amendment(s)
- recommends it be replaced with CS for \_\_\_\_\_
- and \_\_\_\_\_  new title                       same title
- AND attaches a Letter of Intent                       New Fiscal Note
- reports it back without recommendation
- and recommends it be referred to the \_\_\_\_\_ Committee

MEMBERS SIGNING DO PASS:

OTHER RECOMMENDATIONS:

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\_\_\_\_\_

[Handwritten Signature]  
Chairman

PRINCE WILLIAM SOUND  
AQUACULTURE CORPORATION

APR 3 1978

DIVISION OF F.R.E.D.

P.O. Box 1110  
Cordova, Alaska 99571  
(907) 424-3111

*A regional non-profit organization for the enhancement of fisheries.*

March 31, 1978

Chief

The Honorable Mike Gravel  
United States Senate  
3121 Dirksen Senate Office Building  
Washington D.C. 20510

Dear Senator Gravel:

I recently received from your office a copy of your aquaculture bill, S-2762, and I am enclosing my comments for your consideration.

We in the Prince William Sound Aquaculture Corporation are very appreciative of your efforts in regard to this subject which is of such great importance to Alaska. We have enjoyed working with your aid, Mr. Tom Roach and we commend his work on this bill.

I have restricted the majority of my comments to the subject of the National Aquaculture Development Plan and the development programs that it calls for. My primary concern in this regard is the role of the states in relation to the role of the federal government in the plan and development program formulation. I am very concerned that the present wording of the bill will result in a federal domination of these activities because too much responsibility and authority is given to the Secretary of Commerce. My recommendations to correct this situation are as follows:

1. Assign to the regional subcommittees the responsibility for identification of priority species and for the formulation of their development programs.
2. Limit the Secretary's role in regard to the development programs to one of reviewing, approving and implementing.
3. Require the Secretary to consult with the appropriate regional subcommittee prior to revising or cancelling any program.
4. Provide funding for the regional subcommittees to carry out their planning activities.

I am very pleased to see the attention that you have given to the rehabilitation and enhancement of publicly owned fish and shellfish resources. Your bill corrects the deficiencies of similar bills in this regard by identifying this subject as one of vital concern to all states with publicly owned fishery resources. Do you think that this concern might be given more funding attention in the bill? A matching federal, state and local grant program would stimulate greater efforts in these areas, and would most certainly benefit Alaska.

I have not addressed myself to the sections of the bill that deal with Contracts and Grants (section 7), Guarantees of Obligations Issued for Aquaculture Facilities (section 8), Disaster Loans (section 9), or Insurance Against Certain Losses Incurred in Aquaculture Facility Operations (section 10), because of the limitations of my expertise in these areas.

In closing, I would like to emphasize the position of my organization that Mr. Leggett's bill, H.R. 9370, as presently written is not good for Alaska. Your bill S-2762, is a great improvement on that bill and, with the additions of our recommended amendments in regards to the role and responsibilities of the regional subcommittees, will be good not only for Alaska, but for the other 49 states as well.

Sincerely yours,

PRINCE WILLIAM SOUND  
AQUACULTURE CORPORATION

*A. W. Hall*

A. W. Hall  
Business Manager

AWH:ec

Enc.

cc: Floyd Heimlich, CIRA  
Jack H. H. H., BERA  
Derek D. H., BERA  
Shari G. H., USA  
Bob Boyd, ADPAG  
Bob Palmer, Office of Governor  
Senator Shevons  
Congressman Young

PRINCE WILLIAM SOUND AQUACULTURE CORPORATION  
COMMENTS AND RECOMMENDATIONS TO S-2762  
BY SENATOR MIKE GRAVEL

Section 4, National Aquaculture Development Plan.

1. Page 8, Line 5 - insert after the word "shall" the following: "have", and add a "d" to "prepare".
2. Page 8, Line 9 - "consisting of the chairmen of the subcommittees created under subsection (a) (2) (B) of this section,"
3. Page 9, Line 19 - insert new subsection "E" renumber following subsections.  

"(E) The regional subcommittees shall formulate regional aquaculture development programs for each priority species and submit them to the Secretary for his review and approval".
4. "(G) The Secretary shall provide funding for each regional advisory committee established under sub-paragraph (B) sufficient to support the activities required by this act.
5. Page 10, Line 8 - rewrite line to read: "...which the regional subcommittees determine to have a potential for.."
6. Page 10, Line 10 - strike the wording "the Secretary" and insert in lieu thereof "them".
7. Page 11, Line 1 - rewrite line to read: "(2) contain regional aquaculture development programs, ..."
8. Page 11, Line 2 - strike the word "Secretary" and insert in lieu thereof "Regional Subcommittees".
9. Page 11, Line 4 - insert the word "regional" between "the" and "aquaculture", and add an "s" to "program".
10. Page 11, Line 5 - strike the words "set forth" and insert in lieu thereof "be reviewed".
11. Page 11, Line 6 - rewrite line to read: "...and approved by the Secretary after he determines those actions which should be..."
12. Page 11, Line 7 - insert after the word "undertaken", the following: "to implement the regional plans,"
13. Page 12, Line 5 - add the following language immediately after the word "areas:" "...and the populations of fish and shellfish native to the areas".

- Section 4, continued
14. Page 12, Line 17 - strike the words "In preparing" and insert in lieu thereof "prior to approving".
  15. Page 12, Line 19.- rewrite line to read: "...such programs pursuant to subsections (c) and (1), the Secretary..."
  16. Page 13, Line 18 - rewrite line to read: "...propriate Regional Fishery Management Council, the appropriate regional subcommittee created under Section 4 (a) (2) (B), and any ..."
  17. Page 14, Line 8 - insert between the words "and" and "prepare", the following: "direct the appropriate regional subcommittee to.."
  18. Page 14, Line 11 - insert between the words "Secretary" and "funds" the following: "after consultation with the appropriate regional subcommittee"

Section 7, Contracts and Grants.

1. Page 21, Line 6 - replace "(a)" with "(a) (1)".
2. Page 21, Line 15 - insert new paragraph to read: "(2) The Secretary, together with the secretary of Interior and the Secretary of Agriculture shall establish a matching grant program requiring federal and state or local government participation for the purpose of the rehabilitation and enhancement of publicly owned fish and shellfish resources".

Section 8, Guarantees of Obligations Issued for Aquaculture Facilities.

1. Page 25, Line 5 - insert between the words "fewer" and "employees" the following: "full time".

Section 11, Federal Aquaculture Assistance Fund.

1. Page 44, Line 5 - insert between "sections" and "8", the following: "4,"
2. Page 44, Line 21 - insert between "sections" and "8", the following: "4,"
3. Page 44, Line 25 - insert between "sections" and "8", the following: "4,"

Section 13, Authorization of Appropriations.

1. Page 47, Line 19 - insert between "sections" and "8", the following: "4,"

Senate Commerce Committee  
Room 5207 Dirksen Senate Office Building  
Washington, D.C. 20510  
Mr. Donn Anderson, Consul  
202-224-5115

Committee Members

Senator Howard Cannon, Chairman  
Rm 259, Russell Senate Office Bldg  
Washington, D.C.

Senator John C. Danforth  
Rm 229 Russell Senate Office Bldg

Senator Warren Magnusen  
Rm 127, Russell Senate Office Bldg

Senator Russell Long  
Rm 217, Russell Senate Office Bldg

Senator Ernest Hollins  
Rm 115, Russell Senate Office Bldg

Senator Daniel Inouye  
Rm 442, Russell Senate Office Bldg

Senator Adlai Stevenson  
Rm 456, Russell Senate Office Bldg

Senator Wendell Ford  
Rm 2104 Dirksen Senate Office Bldg

Senator John Durkin  
Rm 3230 Dirksen Senate Office Bldg

Senator Edward Zorinsky  
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Senator Donald Riegle, Jr.  
Rm 253, Russell Senate Office Bldg

Senator James Pearson  
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Senator Robert Griffin  
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Senator Ted Stevens  
Rm 411, Russell Senate Office Bldg

Senator Barry Goldwater  
Rm 427 Russell Senate Office Bldg

Senator Bob Packwood  
Rm 1317 Dirksen Senate Office Bldg

Senator Harrison H. Schmitt  
Rm 5229 Dirksen Senate Office Bldg

NOT POSTED TO GOVERNMENT RECORDS  
Aquaculture Association, Inc.

P.O. BOX 756 SITKA, ALASKA 99875

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RM. 205, OLD CITY HALL BLDG.

6 April 1978

The Honorable Mike Gravel  
United States Senate  
3121 Dirksen Senate Office Bldg.  
Washington, D.C. 20510

Dear Senator Gravel:

After reviewing the "National Aquaculture Organic Act of 1978", S-2762 received from your office, I have the following comments for your consideration.

Your aide, Mr. Tom Roach, contacted me last fall at which time we briefly discussed national aquaculture legislation and the possibility of your action. Since that time, Mr. Roach has kept me informed, and I have followed the progress of the legislation with interest. Your efforts to improve the legislation which passed the House are greatly appreciated. Your bill will be much better for Alaska and our fishermen than the House bill.

I have discussed the bill with Mr. Bill Hall of the Prince William Sound Aquaculture Corporation, and I have read his comments and recommendations. I am supportive of Mr. Hall's comments and recommendations for amending the bill.

Additionally, I would like to add some comments.

- (1) I am especially supportive of the regional subcommittee concept in your bill and believe funding and any other support to maximize its effectiveness should be promoted. By developing the plan close to the people, the end product will reflect their interests, experience and expertise. I know that in Southeast Alaska the Forest Service and the National Marine Fisheries Service have personnel very knowledgeable about the potential for aquaculture development. Hopefully, these people, state biologists and local fishermen will be able to either serve on a regional subcommittee or provide input directly to the subcommittee.
- (2) The NSEMA Board of Directors has taken a strong position in favor of rehabilitation of natural salmon

stocks. The preferred emphasis is on cost-effective projects which complement and enhance rather than conflict with or replace natural production. A matching federal, state or local grant program to stimulate the efforts of fishermen and other groups to this area would greatly benefit Alaska.


- (3) I am requesting, in a separate letter, that your Juneau office send copies of your comments in the Congressional Record prefacing introduction of S-2762 to each NSRAA Board member to keep them informed of developments on the national legislation. You may receive some additional comments from them.

Enclosed are copies of our latest informational brochures which were sent to fishermen explaining our program. These materials may give you some ideas on how to coordinate our plans with the national aquaculture plan and possibilities for our Association to work in partnership with the federal and state governments through a combination of grants, loans and insurance to enhance our fisheries.

Finally, I would like to restate my support for your bill S-2762, and the proposed changes recommended by Mr. Bill Hall. S-2762, especially with the suggested changes, will benefit Alaska more than Mr. Leggett's bill HR 9370.

Thank you for keeping us informed.

Sincerely,



Derek Poon, Ph.D.  
General Manager

DP/EJ/vf

cc: Bob Palmer, Office of the Governor  
Keith Specking, Office of the Governor  
Dr. Ronald A. Skoog, Commissioner, ADP&G  
John A. Saador, Regional Forester, U.S.F.S.  
Dr. Bill Smoker, Sr., NMFS  
Jack Milnes, Southern Southeast Regional Aquaculture Assn.  
Armin Koernig, Prince William Sound Aquaculture Corp.  
Floyd E. Heimbuch, Cook Inlet Aquaculture Assn.  
Senator Ted Stevens  
Senator Henry Jackson  
Senator Warren Magnusson

Enc.

TESTIMONY OF

DR. RONALD O. SKOOG

COMMISSIONER DEPARTMENT OF FISH AND GAME

STATE OF ALASKA

BEFORE SUB COMMITTEE ON:

NATIONAL AQUACULTURE ORGANIC ACT OF 1973

APRIL 18, 1978

## POTENTIAL FOR AQUACULTURE IN ALASKA

ALASKA, OF ALL THE STATES, IS UNIQUE BECAUSE OF ITS TREMENDOUS SIZE, NOT ONLY IN LAND MASS, BUT IN COAST LINE. SHE IS ADJACENT TO EXTREMELY PRODUCTIVE ESTUARINE AND MARINE ENVIRONMENTS SUCH AS THE GULF OF ALASKA,, THE BERING SEA, AND THE ARCTIC OCEAN. MILLIONS OF METRIC TONS OF A VARIETY OF SPECIES ARE HARVESTED ANNUALLY IN THOSE WATERS BY UNITED STATES FISHERMEN AS WELL AS FOREIGN FLEETS. WITH THE 200 MILE EXTENSION A NEW DIMENSION HAS BEEN CREATED THAT WILL HAVE A MAJOR IMPACT ON THE FISHERMEN OF ALASKA AS WELL AS OTHER STATES.

ALASKA IS ALSO UNIQUE BECAUSE SHE POSSESSES VAST FRESH-WATER RESOURCES THAT IN SOME INSTANCES ARE HIGHLY PRODUCTIVE, SUCH AS THE MAJOR CYCLICAL RED SALMON PRODUCING LAKES ADJACENT TO BRISTOL BAY, BUT IN OTHER INSTANCES SOME OF HER FRESH-WATER ENVIRONMENTS ARE RELATIVELY NONPRODUCTIVE. LOW LEVELS OF PRODUCTIVITY IN THE FRESH-WATER ENVIRONMENTS MAY BE ATTRIBUTABLE TO MANY CAUSES, SUCH AS THE LACK OF BASIC NUTRIENTS, THE INFLUENCE OF RAPIDLY DISCHARGING GLACIERS, EXTREME FLUCTUATIONS IN TEMPERATURES, DISSOLVED OXYGEN AND WATER FLOWS, AND ABSENCE OF ESTABLISHED FISH POPULATIONS, FROM

BARTER ISLAND IN THE NORTHEAST ARCTIC WESTWARD AND SOUTHWARD TO THE NORTH SIDE OF THE ALASKA PENINSULA, WITH BUT FEW EXCEPTIONS, ALASKA'S COASTLINE IS EXPOSED DIRECTLY TO HIGH WINDS AND SEAS AND LOW WINTER TEMPERATURES. ESTABLISHMENT OF ESTUARINE AND MARINE AQUACULTURE FACILITIES IN THIS REGION COULD BE COSTLY. HOWEVER, MAJOR PRODUCTIVE BUT UNUTILIZED FRESH-WATER RESOURCES ARE AVAILABLE FOR INCREASING THE PRODUCTION OF SALMON, TROUT, CHAR, WHITEFISH, GRAYLING, AND SHEEFISH. THOSE SPECIES HAVE EVOLVED AND ARE ADAPTED TO HARSH ARCTIC AND SUB-ARCTIC ENVIRONMENTS. THEREFORE, EFFECTIVE AQUACULTURE DEVELOPMENT IN THAT REGION OF THE STATE MUST BE TAILORED TOWARDS UTILIZING THESE FRESH-WATER ENVIRONMENTS IN CONJUNCTION WITH SPECIES NATURALLY ASSOCIATED WITH THOSE ENVIRONMENTS.

WITHIN AN ARC BEGINNING ON THE SOUTH SIDE OF THE ALASKA PENINSULA, CURVING NORTHWARD TO COOK INLET, AND THEN SOUTHERLY TO THE BORDERS OF BRITISH COLUMBIA ARE MANY FJORDS PROTECTED FROM WIND AND WAVE THAT ARE SUITABLE FOR THE ESTABLISHMENT OF ESTUARINE AND MARINE AQUACULTURE FACILITIES. FURTHERMORE, A MYRIAD OF RIVERS AND STREAMS DISCHARGE INTO THOSE FJORDS THUS PROVIDING THE OPPORTUNITY FOR THE DEVELOPMENT OF MULTIPLE SPECIES AS WELL AS MULTIPLE ENVIRONMENT FACILITIES. UNFORTUNATELY, WITH THE EXCEPTION OF SALMON AND TROUT, LITTLE RESEARCH EFFORT BY EITHER THE STATE OR FEDERAL GOVERNMENT HAS BEEN DIRECTED TOWARDS THE DEVELOPMENT OF AQUACULTURE TECHNOLOGY REQUIRED FOR OTHER INDIGENOUS SPECIES, AND ESPECIALLY FOR

THE INVERTEBRATES SUCH AS CLAMS, SCALLOPS, ABALONE AND SEA CUCUMBERS. UNDOUBTEDLY, LACK OF THAT TYPE OF BASIC RESEARCH HAS BEEN A FUNCTION OF MARKET DEMANDS, FUNDS, AND PRIORITIES.

WITH THAT BRIEF BROAD BACKGROUND OF THE POTENTIAL FOR AQUACULTURE IN ALASKA I WILL DIRECT MY TESTIMONY BRIEFLY TO THE PRESENT STATUS OF AQUACULTURE IN ALASKA.

### STATUS OF AQUACULTURE

WITH PASSAGE OF THE STATEHOOD ACT THE PEOPLE OF ALASKA ASSUMED MANAGEMENT CONTROL OVER COMPLEX FRESH WATER, ESTUARINE AND MARINE ECOSYSTEMS IN WHICH A VARIETY OF VALUABLE COMMERCIAL, SPORT, AND SUBSISTENCE SPECIES DWELT. IN SOME INSTANCES, SPECIFIC STOCKS OF CRAB, SHRIMP, TROUT, CHAR, WHITEFISH, STEELHEAD, GRAYLING, SHEEFISH, AND SALMON HAD NOT BEEN OVER UTILIZED.

IN OTHER INSTANCES, PARTICULARLY IN THE CASE OF SALMON, MANY STOCKS HAD BEEN DECIMATED BY OVER-UTILIZATION. CONSEQUENTLY, FOLLOWING STATEHOOD, AND CONTINUING SINCE, EXTREMELY RESTRICTIVE REGULATIONS HAVE BEEN PASSED, WHEN DEEMED NECESSARY, IN AN EFFORT TO REBUILD OR REHABILITATE DECIMATED NATURAL SALMON STOCKS. UNEORTUNATELY MANY NATURAL STOCKS COULD NOT RECOVER IN A TIMELY MANNER THROUGH THE MECHANICS OF EITHER RESTRICTED HARVEST OR THE TOTAL ABSENCE OF HARVEST.

RECOGNIZING THAT PROBLEM, COUPLED WITH THE KNOWLEDGE THAT ALASKA ALSO POSSESSED A TREMENDOUS POTENTIAL FOR ENHANCEMENT OF THE SALMON RESOURCE AND ALSO WAS FACED WITH RAPID ACCELERATION OF TROUT AND SALMON SPORT EFFORT, THE 1971 LEGISLATURE, WITH CONCURRENCE OF THE GOVERNOR, CREATED A SPECIAL DIVISION--THE DIVISION OF FISHERIES REHABILITATION, ENHANCEMENT, AND DEVELOPMENT--WITHIN THE DEPARTMENT OF FISH AND GAME TO TACKLE AQUACULTURE PROBLEMS. THE DIVISION WAS REMOVED FROM THE REGULATION ASPECTS OF HARVEST (A MAJOR DEPARTMENTAL EFFORT) SO THAT THE DIVISION COULD CONCENTRATE ON DEVELOPING AND APPLYING REHABILITATION AND ENHANCEMENT TECHNOLOGY. SPECIFIC STATUTORY OBLIGATIONS WERE ENACTED AND ARE AS FOLLOWS:

SEC. 16.05.090. ORGANIZATION OF THE DEPARTMENT.

(A) THE COMMISSIONER MAY, WITH THE APPROVAL OF THE GOVERNOR, ESTABLISH A DEPARTMENTAL DIVISION OF COMMERCIAL FISHERIES, A DEPARTMENTAL DIVISION OF SPORT FISHERIES, A DEPARTMENTAL DIVISION OF GAME, AND OTHER DEPARTMENTAL DIVISIONS AS ARE NECESSARY.

(B) THE COMMISSIONER SHALL ESTABLISH A DEPARTMENTAL DIVISION OF FISHERIES REHABILITATION, ENHANCEMENT AND DEVELOPMENT (15 ART I CH 94 SLA 1959; AM 1 CH 113 SLA 1971).

SEC. 16.05. 092. DUTIES OF DIVISION OF FISHERIES  
REHABILITATION, ENHANCEMENT AND DEVELOPMENT. THE  
DIVISION OF FISHERIES REHABILITATION, ENHANCEMENT AND  
DEVELOPMENT SHALL:

- (1) DEVELOP AND CONTINUALLY MAINTAIN A COMPREHENSIVE  
COORDINATED STATE PLAN FOR THE ORDERLY PRESENT AND  
LONG-RANGE REHABILITATION, ENHANCEMENT AND DEVELOPMENT  
OF ALL ASPECTS OF THE STATE'S FISHERIES FOR THE PERPETUAL  
USE, BENEFIT AND ENJOYMENT OF ALL CITIZENS AND REVISE  
AND UPDATE THIS PLAN ANNUALLY;
- (2) ENCOURAGE INVESTMENT BY PRIVATE ENTERPRISE IN THE  
TECHNOLOGICAL DEVELOPMENT AND ECONOMIC UTILIZATION OF  
THE FISHERIES RESOURCES;
- (3) THROUGH REHABILITATION, ENHANCEMENT AND DEVELOPMENT  
PROGRAMS DO ALL THINGS NECESSARY TO INSURE PERPETUAL  
AND INCREASING PRODUCTION AND USE OF THE FOOD RESOURCES  
OF ALASKA WATERS AND CONTINENTAL SHELF AREAS;
- (4) MAKE A COMPREHENSIVE ANNUAL REPORT TO THE LEGISLATURE,  
CONTAINING DETAILED INFORMATION REGARDING ITS ACCOMPLISHMENTS  
UNDER THIS SECTION AND PROPOSALS OF PLANS AND ACTIVITIES  
FOR THE NEXT FISCAL YEAR, NOT LATER THAN 20 DAYS AFTER  
THE CONVENING OF EACH REGULAR SESSION. (2 CH 113 SLA  
1971).

IN 1974, RECOGNIZING THAT THE FISHERMEN SHOULD BECOME DIRECTLY INVOLVED IN THE REHABILITATION AND ENHANCEMENT EFFORT, THE LEGISLATURE PASSED THE PRIVATE NON-PROFIT HATCHERY LOAN ACT. BY AMENDMENT IN 1977 OF THE 1974 ACT, REGIONAL PLANNING TEAMS COULD BE ESTABLISHED THROUGHOUT THE STATE. REGIONAL PLANNING TEAMS ARE COMPRISED OF DEPARTMENT PERSONNEL AND MEMBERS OF REGIONAL FISHERMEN'S ASSOCIATIONS. REGIONAL FISHERIES ASSOCIATIONS CONSIST OF A CROSS SECTION OF USER GROUPS INCLUDING COMMERCIAL, SPORT, AND OTHER INTERESTED USERS.

REGIONAL PLANNING TEAMS ARE CHARGED WITH DEVELOPING AND RECOMMENDING TO THE COMMISSIONER OF FISH AND GAME A COMPREHENSIVE REGIONAL PLAN FOR THE REHABILITATION AND ENHANCEMENT OF THE SALMON RESOURCE. FOUR REGIONAL PLANNING TEAMS PRESENTLY ARE FUNCTIONING IN THE STATE: TWO IN SOUTHEASTERN ALASKA, ONE IN PRINCE WILLIAM SOUND, AND ONE IN COOK INLET. (I HAVE FOUR COPIES OF A RECENTLY DRAFTED PROCEDURES MANUAL THAT I WILL LEAVE FOR YOUR REVIEW.)

CONCURRENT TO THOSE DEVELOPMENTS, THE CAPABILITIES OF THE DIVISION OF FISHERIES REHABILITATION, ENHANCEMENT AND DEVELOPMENT (FRED) WERE EXPANDED TO INCLUDE PATHOLOGY, GENETICS, AND ENGINEERING AS WELL AS FISH CULTURE AND BIOLOGY. A MODERN FISH PATHOLOGY LABORATORY HAS BEEN CONSTRUCTED IN ANCHORAGE WITH FULL DIAGNOSTIC CAPABILITIES. A REGIONAL PATHOLOGY

LABORATORY WAS OPENED RECENTLY IN JUNEAU. THE JUNEAU PATHOLOGY LABORATORY ALSO SERVES AS THE GENETICS LABORATORY FOR STATEWIDE WORK.

STATE REGULATIONS AND POLICIES HAVE BEEN ESTABLISHED THAT PROHIBIT MOVEMENT OF ALL LIFE HISTORY STAGES OF FISH AND WILDLIFE INTO, WITHIN, OR OUT OF THE STATE UNLESS APPROVED BY THE COMMISSIONER. INSPECTION FOR DISEASE IS MANDATORY PRIOR TO ANY TRANSPORT.

SINCE 1971, OVER 50 MILLION DOLLARS HAVE BEEN APPROPRIATED TO THE FRED DIVISION FOR THE CONSTRUCTION OF MULTI-SPECIES HATCHERIES AND FISH PASSES, HABITAT IMPROVEMENT, RESEARCH, AND DISEASE PREVENTION RESEARCH AND CONTROL.

THE STATE OF ALASKA'S LONG RANGE SALMON PLAN CALLS FOR ACHIEVING AN AVERAGE ANNUAL HARVEST OF A HUNDRED MILLION SALMON. IT IS DOUBTFUL THAT THAT LEVEL OF HARVEST MAY BE ACHIEVED WITHOUT ASSISTANCE FROM THE FEDERAL GOVERNMENT. BENEFITS FROM THE STATE'S PROGRAM ARE SHARED WITH NON-RESIDENTS. IN ADDITION, THE PRIVATE-NON PROFIT HATCHERY LOAN ACT ESTABLISHED A 200 MILLION DOLLAR REVOLVING LOAN FUND. SALMON PRODUCED BY THAT LOAN FUND WILL YIELD BENEFITS TO RESIDENTS AND NON-RESIDENTS.

THUS, MR. CHAIRMAN, SINCE 1971, THE STATE OF ALASKA HAS ACTUALLY ESTABLISHED THROUGH ITS MAJOR COMMITMENT TO THE

SALMON RESOURCES THE FRAMEWORK FOR A RATIONAL APPROACH TO ALL AQUACULTURE WITHIN THE STATE THAT COULD EASILY DOVETAIL WITH SENATE BILL 2762.

I CAN MAKE THAT STATEMENT BECAUSE:

PLANNING TEAMS ARE ALREADY BEING ESTABLISHED CONSISTING OF USERS AND RESOURCE MANAGERS. FINANCIAL ASSISTANCE EXPANSION TO SPECIES OTHER THAN SALMON IS A MINOR TRANSITION.

MATCHING MONIES WILL BE OR ARE AVAILABLE IN THE PUBLIC AS WELL AS THE PRIVATE-NON PROFIT SECTOR AS EVIDENCED BY THE LOAN PROGRAM AND CATCH ASSESSMENT PROGRAM.

EXISTING ALASKA STATUTES PERMIT THE DEVELOPMENT OF AQUACULTURE.

A SPECIAL FISHERIES DIVISION HAS ALREADY BEEN CREATED TO CARRYOUT SUCH A PROGRAM AND IS STAFFED BY ALL PREREQUISITE DISCIPLINES.

## PROBLEMS ASSOCIATED WITH AQUACULTURE DEVELOPMENT IN ALASKA

FIRST, THE STATE DOES POSSESS MANY VALUABLE NATURAL STOCKS OF A VARIETY OF SPECIES. THUS AQUACULTURE SHOULD BE INTEGRATED INTO THE EXISTING ECOSYSTEMS WITHOUT DAMAGE TO VALUABLE NATURAL STOCKS. AS LONG AS THE STATE MAINTAINS CONTROL OVER THE MANAGEMENT OF HER NATURAL FISH POPULATIONS AND IS ABLE TO INTEGRATE THE DEVELOPMENT AND APPLICATION OF AQUACULTURE TECHNOLOGY INTO THE NATURAL PRODUCING ECOSYSTEMS REGARDLESS OF LAND OWNERSHIP, WE ARE CONFIDENT THAT NATURAL STOCKS WILL BE ADEQUATELY PROTECTED. IF OTHER LAND OWNERS ASSUME CONTROL FOR MANAGEMENT OF AQUATIC RESOURCES WITHIN THEIR BOUNDARIES, WE CANNOT GUARANTEE PROTECTION OF WILD STOCKS THAT MAY PASS THROUGH NON-STATE CONTROLLED ECOSYSTEMS.

WITH THE DIVERSE FEDERAL AND PRIVATE LAND AND WATER OWNERSHIP PATTERNS EVOLVING IN THE STATE AS A RESULT OF ACTIONS UNDER THE ALASKA NATIVE CLAIMS SETTLEMENT ACT, SUCH AS THE PROPOSAL "D-2" LEGISLATION, IT IS DIFFICULT TO ENVISION A RATIONAL APPROACH TO AQUACULTURE IN ALASKA UNLESS ONE AGENCY IS RESPONSIBLE FOR THE DEVELOPMENT AND FINAL ADMINISTRATION OF A PLAN. THE STATE OF ALASKA, IN PARTNERSHIP WITH THE FEDERAL GOVERNMENT, IS IN THE BEST POSITION TO DEVELOP THAT PLAN AS WELL AS CONTROL ITS APPLICATION. THAT PARTNERSHIP SHOULD NOT ABROGATE THE STATE'S RIGHT TO MANAGE HER FISHERIES

RESOURCES BUT SHOULD REFLECT THE FEDERAL GOVERNMENT'S RESPONSIBILITY TO ASSIST THE STATE WHEN IT IS IN THE BEST INTERESTS OF THE PEOPLE OF THE UNITED STATES. SINCE MANY NONRESIDENT COMMERCIAL AND SPORT FISHERMEN FISH THE WATERS OF THE STATE, THE FEDERAL GOVERNMENT HAS AN OBLIGATION TO SUPPLEMENT STATE EFFORTS, NOT CONTROL.

ALASKA IS THE LAST STATE IN THE UNION TO POSSESS VAST ACREAGES OF PUBLIC-OWNED, UNEXPLOITED TERRESTRIAL AND AQUATIC ECOSYSTEMS. MANY OF THOSE PUBLIC-OWNED AQUATIC ECOSYSTEMS ARE HIGHLY PRODUCTIVE, OTHERS ARE NOT. MANY POTENTIAL AQUACULTURE SITES LIE WITHIN FEDERAL LANDS, WHETHER IT BE HATCHERY OR FISH-LADDER SITES OR UNDERUTILIZED LAKE SYSTEMS. WE HAVE ATTEMPTED TO IDENTIFY MANY OF THOSE POTENTIALS IN OUR TESTIMONY REGARDING PROPOSED "D-2" LEGISLATION. MANY POTENTIAL ESTUARINE AND MARINE AQUACULTURE SITES MAY LIE WITHIN BOUNDARIES NOW BEING ESTABLISHED BY CONGRESS. WITHOUT SPECIFIC KNOWLEDGE THESE SITES ARE DIFFICULT TO IDENTIFY, BUT THE BOUNDARIES ARE BEING DRAWN ANYWAY. WE BELIEVE AQUACULTURE IS A VERY REAL PART OF MULTIPLE USE. IT IS IMPERATIVE THAT THOSE WILDERNESS, REFUGE, AND PARK AREAS NOW UNDER CONSIDERATION BY CONGRESS WILL NOT PRECLUDE A RATIONAL APPROACH TO AQUACULTURE IN THE FUTURE.

ONE OF THE MAJOR PROBLEMS THAT WE FACE IS LACK OF KNOWLEDGE REGARDING POTENTIAL AQUACULTURE SITES, WHETHER IT BE FRESH-WATER, ESTUARINE, OR MARINE. FURTHERMORE, MUCH BASELINE DATA MUST BE COLLECTED IF AQUACULTURE IS TO BE INTEGRATED WITH

NATURAL STOCK MANAGEMENT. DEVELOPMENT OF AQUACULTURE AT THE EXPENSE OF NATURAL STOCKS IS IRRESPONSIBLE, BOTH ECONOMICALLY AND ECOLOGICALLY.

ANOTHER MAJOR PROBLEM THAT WE HAVE AS RESOURCE MANAGERS IN ALASKA RESULTS FROM COLD WATER TEMPERATURES AND HIGHLY SEASONAL FOOD AVAILABILITY. MANY OF OUR VALUABLE NON-ANADROMOUS SPORT SPECIES ARE VERY SLOW GROWING AND EXHIBIT OLDER MATURITY SCHEDULES THAN OBSERVED IN THE LOWER-48. THUS, IF EFFORT INCREASES SUBSTANTIALLY IN THE STATE BECAUSE OF AN INFLUX OF SPORT ANGLERS, MANY TROPHY NATIVE STOCKS COULD BE HARVESTED QUICKLY AND IMPACTED ADVERSELY. WE HAVE OBSERVED THIS PROBLEM ADJACENT TO MAJOR POPULATION CENTERS IN ALASKA. THUS, THE CREATION AND ADVERTISING OF REFUGES, PARKS, AND WILDERNESS AREAS, WITH THE ATTENDANT INCREASED INTEREST IN ALASKA ANGLING, COULD HAVE A SIGNIFICANT DETRIMENTAL IMPACT ON PRESENTLY UNEXPLOITED FISH POPULATIONS.

SOUND PLANNING BASED UPON CAREFULLY DEVELOPED HARVEST STRATEGIES DERIVED FROM RELIABLE INVESTIGATIONS IS ESSENTIAL, OR OLD-AGED TROPHY FISH AREAS COULD DISAPPEAR RAPIDLY. WITHOUT CAREFUL PLANNING AND PREREQUISITE DATA, PUT-AND-TAKE FISHERIES WILL BE DEMANDED. OBVIOUSLY, AQUACULTURE PLANNING MUST CONSIDER THE NEEDS OF TROPHY ANGLERS AS WELL AS THE LESS ESTHETICALLY INCLINED ANGLERS. TROPHY AREAS SHOULD NOT BE OPENED UP TO HIGH RATES OF EXPLOITATION OR ALTERED BY SUPERIMPOSITION OF HIGH PRODUCTION AQUACULTURE SYSTEMS.

SPECIFIC COMMENTS ON AQUACULTURE  
BILLS NOW BEFORE THE SUBCOMMITTEE

MR. CHAIRMAN, WE HAVE REVIEWED CAREFULLY AQUACULTURE BILLS HR 9370, S 1043, S 2582, AND S 2762. THERE ARE BASIC SIMILARITIES IN ALL THOSE BILLS, BUT WE FEEL S 2762 MOST NEARLY COINCIDES WITH OUR VIEWS OF DEVELOPMENT OF AQUACULTURE IN ALASKA BECAUSE OF:

- (1) THE TREMENDOUS RANGE OF ENVIRONMENTAL CONDITIONS IN ALASKA;
- (2) OUR KNOWLEDGE OF THE DIVERSITY OF USER GROUPS' NEEDS, RESIDENT AND NONRESIDENT ALIKE;
- (3) THE STATE'S MANAGERIAL AUTHORITY AND RESPONSIBILITY FOR MAINTAINING AND DEVELOPING THE AQUATIC RESOURCES;
- (4) THE KNOWLEDGE THAT RESIDENTS AND STATE AGENCIES POSSESS REGARDING THE STATE'S WIDE-RANGING ENVIRONMENTAL CONDITIONS AND COMPLEX HARVEST PROBLEMS;
- (5) THE INITIAL ESTABLISHMENT OF A COORDINATED PUBLIC-RESOURCE MANAGER PLANNING SYSTEM;

(6) THE DIVERSE STATE-FEDERAL-PRIVATE LAND OWNERSHIP WHICH ENCOMPASSES POTENTIAL AQUACULTURE SITES; AND

(7) RECOGNITION BY THE STATE OF NATIONAL INTERESTS.

THEREFORE, MY TESTIMONY AS COMMISSIONER OF THE ALASKA DEPARTMENT OF FISH AND GAME IS DIRECTED TOWARDS SPECIFIC CHANGES IN S.2762 THAT WILL YIELD THE BEST AQUACULTURE PLAN FOR ALASKAN ECOSYSTEMS. THAT PLAN MUST BE DERIVED INITIALLY FROM DATA SOURCES AND FROM PUBLIC AND PRIVATE NEEDS AS CLOSE TO THE RESOURCE AS POSSIBLE. THUS THE STATE AND HER PEOPLE SHOULD TAKE THE LEAD IN ESTABLISHING PRIORITY SPECIES, DATA-BASE NEEDS, POLICY GUIDELINES, AND REGULATIONS THAT WILL PRODUCE AND IMPLEMENT AN ACCEPTABLE PLAN.

MR. CHAIRMAN, AS POINTED OUT EARLIER, MY DEPARTMENT IS DEVELOPING A VERY CLOSE WORKING RELATIONSHIP WITH ALASKAN AQUACULTURE ASSOCIATIONS. WE HAVE CAREFULLY REVIEWED COMMENT ON S.2762 TRANSMITTED IN A LETTER OF MARCH 31 TO SENATOR GRAVEL FROM MR. A.W. HALL, BUSINESS MANAGER OF THE PRINCE WILLIAM SOUND AQUACULTURE CORPORATION. WE ENDORSED THOSE COMMENTS. WE ALSO HAVE REVIEWED A LETTER OF APRIL 6, 1978, TRANSMITTED TO SENATOR GRAVEL FROM DR. DEREK POON, GENERAL MANAGER OF THE NORTHERN SOUTHEAST REGIONAL AQUACULTURE ASSOCIATION, AND WE ENDORSE THOSE COMMENTS ON S.2762 ALSO. I WILL LEAVE A COPY OF THESE TWO LETTERS FOR THE COMMITTEE'S PERUSAL AND FOR THE RECORD.

IN ADDITION TO THOSE DEPARTMENTALLY ENDORSED COMMENTS, I  
OFFER THE FOLLOWING FOR YOUR CONSIDERATION:

UNDER "SEC. 4. NATIONAL AQUACULTURE DEVELOPMENT PLAN  
(A)(2)(C) MEMBERSHIP OF REGIONAL ADVISORY SUBCOMMITTEES...."  
WE SUGGEST THE ADDITION OF FISH PROCESSORS TO THE LIST  
OF REPRESENTATIVES.

UNDER "SEC. 5. FUNCTIONS AND POWERS (A)(3)" WE DO NOT  
BELIEVE, MR. CHAIRMAN, THAT IT IS IN THE BEST INTERESTS  
OF THE RESOURCES OF ALASKA FOR THE SECRETARY TO PRODUCE  
AND SELL SEED STOCK WITHOUT STATE CONTROL. THE STATE  
NEEDS CONTROL OVER THE SALE AND MOVEMENT OF SEED STOCK  
INTO, WITHIN, OR OUT OF THE STATE IN ORDER TO CARRY OUT  
ITS MANAGEMENT RESPONSIBILITIES FOR PROTECTING NATURAL  
STOCKS AND FOR MAINTAINING DISEASE AND GENETIC CONTROL.  
WE CONSIDER THIS AUTHORITY AS BEING ABSOLUTELY NECESSARY  
BECAUSE OF THE PRESENT LACK OF FEDERAL CONTROLS IN THIS  
AREA OF CONCERN.

UNDER "SEC. 5.(A)(4)" BECAUSE ALASKA HAS SUCH A COMPLEX  
LAND OWNERSHIP PROBLEM, AND BECAUSE ANADROMOUS STOCKS  
OF SALMON, TROUT, SHEEFISH, AND CHAR MAY PASS THROUGH  
SEVERAL LAND OWNERS, WE BELIEVE IT IS TO THE BEST INTERESTS

OF THE RESOURCES OF ALASKA THAT FEDERAL ENCOURAGEMENT FOR THE IMPLEMENTATION OF REHABILITATION AND ENHANCEMENT TECHNOLOGY BE GIVEN ONLY AFTER APPROVAL BY STATE REGULATORY AGENCIES. WITHOUT ADDITION OF THAT LANGUAGE IT WOULD BE POSSIBLE FOR A FEDERAL AGENCY TO ENCOURAGE THE CONSTRUCTION OF A HATCHERY OR OTHER FACILITIES THAT MAY HAVE A NEGATIVE IMPACT ON SIGNIFICANT NATURAL STOCKS PASSING THROUGH THE SAME WATERS.

UNDER "SEC. 5.(A)(5)" WE SUGGEST THE ELIMINATION OF THE WORDS "IN AREAS WHERE MULTIPLE LAND AND WATER USES EXIST" AND THE SUBSTITUTION OF THE WORDS "ON ALL FEDERAL AREAS, NOTWITHSTANDING PRESENT LAWS TO THE CONTRARY, AQUACULTURE..." ALASKA'S FISHERIES ARE OF SUCH TREMENDOUS VALUE TO THE STATE AND TO THE NATION AS A WHOLE THAT WE CANNOT AFFORD TO PRECLUDE FISHERY ENHANCEMENT WORK ON ALL OF THE RELATIVELY FEW ACCEPTABLE SITES IN ALASKA SIMPLY BECAUSE OF PRESENT CLASSIFICATIONS, E.G. "WILDERNESS" OR "WILDLIFE REFUGE".

UNDER "SEC. 5. (B)(1)(A)" WE BELIEVE IT IS TO THE BEST INTERESTS OF THE STATE'S FISHERY MANAGEMENT PROGRAM THAT RESEARCH AND DEVELOPMENT FACILITIES BE PERMITTED ONLY AFTER CONSULTATION AND APPROVAL BY THE STATE'S REGULATORY AGENCIES. ADDITION OF THAT LANGUAGE, MR. CHAIRMAN, WILL HELP TO PREVENT NEEDLESS DUPLICATION OF EFFORTS AND AGENCIES WORKING AT CROSS PURPOSES.

THANK YOU FOR THE OPPORTUNITY TO PRESENT THIS DEPARTMENT'S  
VIEWS. MY STAFF AND I WILL BE AVAILABLE FOR CONSULTATION  
AS MIGHT BE NECESSARY DURING THE COMMITTEE'S DELIBERATIONS.  
PLEASE LET ME KNOW IF YOU WISH OUR HELP AT ANY TIME.

**Northern Southeast Regional  
Aquaculture Association, Inc.**

P.O. BOX 786 SITKA, ALASKA 99835

(907) 747-6850

RM. 205 OLD CITY HALL BLDG.

6 April 1978

The Honorable Mike Gravel  
United States Senate  
3121 Dirksen Senate Office Bldg.  
Washington, D.C. 20510

Dear Senator Gravel:

After reviewing the "National Aquaculture Organic Act of 1978", S-2762 received from your office, I have the following comments for your consideration.

Your aide, Mr. Tom Roach, contacted me last fall at which time we briefly discussed national aquaculture legislation and the possibility of your action. Since that time, Mr. Roach has kept me informed, and I have followed the progress of the legislation with interest. Your efforts to improve the legislation which passed the House are greatly appreciated. Your bill will be much better for Alaska and our fishermen than the House bill.

I have discussed the bill with Mr. Bill Hall of the Prince William Sound Aquaculture Corporation, and I have read his comments and recommendations. I am supportive of Mr. Hall's comments and recommendations for amending the bill.

Additionally, I would like to add some comments.

- (1) I am especially supportive of the regional subcommittee concept in your bill and believe funding and any other support to maximize its effectiveness should be promoted. By developing the plan close to the people, the end product will reflect their interests, experience and expertise. I know that in Southeast Alaska the Forest Service and the National Marine Fisheries Service have personnel very knowledgeable about the potential for aquaculture development. Hopefully, these people, state biologists and local fishermen will be able to either serve on a regional subcommittee or provide input directly to the subcommittee.
- (2) The NSRAA Board of Directors has taken a strong position in favor of rehabilitation of natural salmon

6 April 1978

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stocks. The preferred emphasis is on cost-effective projects which complement and enhance rather than conflict with or replace natural production. A matching federal, state or local grant program to stimulate the efforts of fishermen and other groups to this area would greatly benefit Alaska.


- (3) I am requesting, in a separate letter, that your Juneau office send copies of your comments in the Congressional Record prefacing introduction of S-2762 to each NSRAA Board member to keep them informed of developments on the national legislation. You may receive some additional comments from them.

Enclosed are copies of our latest informational brochures which were sent to fishermen explaining our program. These materials may give you some ideas on how to coordinate our plans with the national aquaculture plan and possibilities for our Association to work in partnership with the federal and state governments through a combination of grants, loans and insurance to enhance our fisheries.

Finally, I would like to restate my support for your bill S-2762, and the proposed changes recommended by Mr. Bill Hall. S-2762, especially with the suggested changes, will benefit Alaska more than Mr. Leggett's bill HR 9370.

Thank you for keeping us informed.

Sincerely,



Derek Poon, Ph.D.  
General Manager

DP/EJ/vf

cc: Bob Palmer, Office of the Governor  
Keith Specking, Office of the Governor  
Dr. Ronald A. Skoog, Commissioner, ADF&G  
John A. Sandor, Regional Forester, U.S.F.S.  
Dr. Bill Smoker, Sr., NMFS  
Jack Milnes, Southern Southeast Regional Aquaculture Assn.  
Armin Koernig, Prince William Sound Aquaculture Corp.  
Floyd E. Heimbuch, Cook Inlet Aquaculture Assn.  
Senator Ted Stevens  
Senator Henry Jackson  
Senator Warren Magnusson

Enc.

United States Senate

WASHINGTON, D.C. 20510

March 28, 1978

Honorable Jay Kerttula  
Alaska State Senate  
Pouch V  
Juneau, Alaska 99811

Dear Jay:

Last week I sent to you a copy of my recently introduced Aquaculture bill, S 2762.

The accompanying letter stated that hearings on this bill will be held on April 18, 1978. That is a mistake. The hearings are scheduled for April 17, 1978 in the Senate Commerce Committee hearing room. I apologize if this may have caused you any inconvenience.

With best regards,

Sincerely,



Mike Gravel

MG/tr

*File  
Aquaculture*

# United States Senate

WASHINGTON, D.C. 20510

April 19, 1978

Honorable Jay Kerttula  
Alaska State Senate  
Pouch V  
Juneau, Alaska 99811

Dear Jay:

Activity on the several Aquaculture bills has picked up considerably this past week in the Senate. Hearings were held on Monday and Wednesday of this week before Senate Magnuson of the Senate Commerce Committee. Hearings were also held on Tuesday and Thursday before Senator Stone of the Senate Agriculture Committee.

The Commerce Committee considered the Leggett bill (HR 9370), the Weiker Bill (S 2582) and my bill, S 2762. The Agriculture Committee focused on the Stone bill (S2218), the Bentsen bill (S 1043), which I co-sponsored last year, and my bill, too.

I have enclosed a copy of my testimony here for your interest. It seems that the two Committees are receptive to the three proposals I have initiated. General acceptance is growing for the necessity to include (1) regional input in the National Plan, (2) rehabilitation and enhancement measures, and (3) aquaculture as a coastal activity deserving of consideration along with all other competing activities.

The next step will probably be a single bill written by the staffs of both the Commerce Committee and the Agriculture Committee working together. Hopefully this cooperative Committee print will include our proposals.

Honorable Jay Kerttula  
April 19, 1978  
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This should bring you in the State up to date on where the legislation stands down here. I'll keep you informed of further developments.

Sincerely,



Mike Gravel

MG/tr  
Enclosure

STATEMENT OF SENATOR MIKE GRAVEL  
BEFORE THE  
COMMERCE, SCIENCE, AND TRANSPORTATION  
COMMITTEE  
UNITED STATES SENATE  
APRIL 17, 1978

MR. CHAIRMAN, MEMBERS OF THE COMMITTEE, I THANK YOU FOR THE OPPORTUNITY TO APPEAR BEFORE YOU TODAY TO COMMENT ON THE SEVERAL PIECES OF AQUACULTURE LEGISLATION WHICH ARE PRESENTLY UNDER CONSIDERATION BY THE SENATE COMMERCE COMMITTEE. AQUACULTURE IS PRACTICED IN VARYING DEGREES OF INTENSITY THROUGHOUT THE WORLD AND I BELIEVE THE TIME IS NOW RIGHT TO PROVIDE LEGISLATIVE ENCOURAGEMENT FOR AQUACULTURE ACTIVITY IN THE UNITED STATES.

AQUACULTURE - AN OVERVIEW

THE WORLD ACTIVITY IN AQUACULTURE IS WIDE AND VARIED. CHINA HAS BEEN CULTIVATING FISH FOR OVER 2000 YEARS. JAPAN NOW PRODUCES MORE THAN TEN PER CENT OF ITS SEAFOOD NEEDS THROUGH AQUACULTURE. AND RUSSIA HAS BEEN GIVING AQUACULTURE INCREASED ATTENTION.

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THE UNITED STATES HAS BEEN DABBLING IN VARIOUS FORMS OF AQUACULTURE FOR A CONSIDERABLE PERIOD OF TIME, BUT A LIBRARY OF CONGRESS REPORT INDICATES THAT AQUACULTURE IN THE U.S. HAS GROWN INSIGNIFICANTLY COMPARED TO SUCH ACTIVITIES IN OTHER PARTS OF THE WORLD.

MY HOME STATE OF ALASKA HAS BEEN INVOLVED IN THE CULTIVATION OF FIN FISH SINCE THE LATE 1890s. WITH MORE THAN 50% OF THE ENTIRE U.S. COASTLINE LOCATED WITHIN THE STATE OF ALASKA, ONE CAN UNDERSTAND WHY MY INTEREST IN AQUACULTURE IS GREAT. THE POTENTIAL FOR MARINE AQUACULTURE DEVELOPMENT WITHIN ALASKA IS TRULY INCREDIBLE, NOT TO MENTION THE VAST POSSIBILITIES FOR FUTURE FRESH-WATER CULTIVATION.

#### AQUACULTURE - MARKET POTENTIAL

WORLD FISHERY RESOURCES WERE ONCE THOUGHT TO BE PRACTICALLY UNLIMITED. THIS HAS BEEN CLEARLY SHOWN NOT TO BE THE CASE. THE WORLD FISHERY RESOURCES ARE NOW ESTIMATED BY SOME EXPERTS TO BE

PAGE THREE

CAPABLE OF YIELDING A MAXIMUM GLOBAL HARVEST OF 100 TO 150 MILLION METRIC TONS PER YEAR. MORE CONSERVATIVE ESTIMATES RARELY EXCEED 100 MILLION METRIC TONS, INCLUDING THAT OF THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION, WHICH ESTIMATES THAT THE 100 MILLION METRIC TON FIGURE WILL BE MET BY 1980. THIS SUGGESTS THAT A WORLD SHORTAGE OF FISH PRODUCTS IS POSSIBLE IN THE FORESEEABLE FUTURE.

WORLD PER CAPITA FISH CONSUMPTION HAS INCREASED OVER THE PAST SEVERAL YEARS AND IN THE U.S. ALONE HAS RISEN TO A PRESENT LEVEL OF 12.9 POUNDS PER PERSON PER YEAR. RELIABLE ESTIMATES PROJECT AMERICAN CONSUMPTION TO INCREASE TO 15.2 POUNDS BY THE YEAR 2000. A LIBRARY OF CONGRESS STUDY HAS PREDICTED THAT IN THE SAME PERIOD OF TIME OVERALL DEMAND FOR SEAFOOD PRODUCTS IN THE U.S., BOTH EDIBLE AND INDUSTRIAL, IS EXPECTED TO INCREASE BY A FULL 80%.

ALL THESE INDICATORS SUGGEST THAT THE DEMAND FOR FISH

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PRODUCTS WILL ONLY CONTINUE TO INCREASE IN THE YEARS TO COME. WITH WILD FISH STOCK EXPLOITATION REACHING MAXIMUM LEVELS, PER CAPITA CONSUMPTION OF FISH PRODUCTS ON THE RISE AND THE WORLD POPULATION EXPECTED TO INCREASE FROM A LEVEL OF 4 BILLION TODAY TO 6 BILLION BY THE TURN OF THE CENTURY, AQUACULTURE MUST BE VIEWED AS A PROMISING POSSIBILITY IN HELPING TO MEET THESE FOOD DEMANDS.

AQUACULTURE - ECONOMIC POTENTIAL

FOR A NATION PRACTICALLY SURROUNDED BY WATER AND REplete WITH POSSIBLE SITES FOR RAISING INLAND FISH SPECIES, FISHERY IMPORTS INTO THE U.S. ARE SURPRISINGLY HIGH. IN 1976 THE U.S. IMPORTED 6.2 BILLION POUNDS OF FISHERY PRODUCTS VALUED AT \$2.2 BILLION. THE U.S. FISHERY EXPORTS IN 1976 AMOUNTED TO 241 MILLION POUNDS, VALUED AT ONLY \$330 MILLION.

THIS LEAVES A NET ANNUAL TRADE DEFICIT OF PRACTICALLY \$2 BILLION FOR FOREIGN FISH PRODUCTS WHERE CLOSE TO 65% OF FISH

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CONSUMED IN THE U.S. IS IMPORTED FROM FOREIGN COUNTRIES.

THE STUDIOUS APPLICATION OF AQUACULTURE TECHNIQUES COULD HELP TO REVERSE THIS UNFAVORABLE BALANCE OF TRADE SITUATION. A PROMOTION OF AQUACULTURE WILL RESULT IN THE CREATION OF MANY NEW JOBS, FISHERY EMPLOYMENT ON A YEAR-ROUND RATHER THAN A SEASONAL BASIS, AND AN OVERALL STABILITY TO THE HISTORICAL BOOM OR BUST FISHERY ECONOMY.

NATIONAL AQUACULTURE ORGANIC ACT - INTENT

MR. CHAIRMAN, THE NATIONAL AQUACULTURE ORGANIC ACT OF 1978 WILL PROVIDE LONG OVERDUE IMPETUS TO THE PROMOTION OF AQUACULTURE IN THE UNITED STATES. MY DESIRE IS TO ENCOURAGE THE DEVELOPMENT OF AQUACULTURE OF ALL TYPES IN ALL PARTS OF THE U.S. THIS WOULD INCLUDE ENCOURAGING AQUACULTURE FOR MARINE, AS WELL AS FRESH WATER, SPECIES: FOR AQUATIC PLANTS, AS WELL AS AQUATIC ANIMALS: FOR PRESENTLY CULTURED SPECIES, AS WELL AS SPECIES AS YET UNTESTED BY THE TECHNIQUES OF AQUACULTURE: AND FOR THE

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REHABILITATION AND ENHANCEMENT OF PUBLIC FISHERIES, AS WELL AS THE PROMOTION OF COMMERCIAL ENTERPRISES.

TO ACCOMPLISH THESE GOALS, MY LEGISLATION DESIGNATES THE DEPARTMENT OF COMMERCE AS THE AGENCY WITH ULTIMATE RESPONSIBILITY. THE COMMERCE DEPARTMENT WILL, HOWEVER, OPERATE IN CLOSE CONJUNCTION WITH THE DEPARTMENTS OF AGRICULTURE AND INTERIOR, AS BOTH THOSE DEPARTMENTS HAVE PROVEN THEMSELVES EXPERT IN MANY IMPORTANT ASPECTS OF AQUACULTURE. THERE ARE MANY FACETS TO AQUACULTURE, AND I BELIEVE NO SINGLE AGENCY CAN OR SHOULD BE NAMED THE EXCLUSIVE AUTHORITY. THE BETTER APPROACH IS TO TAP THE EXISTING EXPERTISE OF THE SEVERAL DEPARTMENTS AND COORDINATE ALL AQUACULTURE EFFORTS THROUGH THE DEPARTMENT OF COMMERCE.

AN INTERAGENCY COMMITTEE ON AQUACULTURE WILL BE FORMED TO FACILITATE AND COORDINATE INFORMATION AND ACTIVITIES AMONG THE THREE DEPARTMENTS, AS WELL AS ALL OTHER AGENCIES AND PARTIES INVOLVED.

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MY LEGISLATION ALSO PROVIDES FOR THE FORMULATION OF A NATIONAL AQUACULTURE DEVELOPMENT PLAN. THIS PLAN, TO BE DRAWN UP IN THE YEAR FOLLOWING ENACTMENT, WILL EMBODY CONCRETE SUGGESTIONS ON SPECIFIC DIRECTIONS AND PRIORITIES TO PURSUE IN THE DEVELOPMENT OF AQUACULTURE IN THE U.S.

A GRANT PROGRAM WILL ENCOURAGE PARTICIPATION IN WHAT IS GENERALLY CONSIDERED A RATHER EXPENSIVE ENTERPRISE. THESE GRANTS WILL ALLOW THE PRIVATE ENTREPRENEUR TO GET INVOLVED IN A VENTURE THAT WOULD OTHERWISE, BY VIRTUE OF PROHIBITIVE START-UP COSTS, BE RESERVED FOR LARGE CORPORATIONS OR THE INDIVIDUAL OF GREAT WEALTH.

A FEDERAL AQUACULTURE ASSISTANCE FUND IS CREATED FOR THREE PURPOSES: (A) TO FACILITATE AQUACULTURE FINANCING BY GUARANTEEING LOANS MADE TO AQUACULTURE OPERATIONS SINCE SUCH LOANS HAVE HISTORICALLY BEEN UNREASONABLY DIFFICULT TO OBTAIN; (B) TO MAKE DISASTER LOANS FOR AQUACULTURE STOCKS WHICH ARE DESTROYED BY

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UNAVOIDABLE DISEASES: AND (C) TO PROVIDE INSURANCE COVERAGE TO AQUACULTURE OPERATIONS IN THOSE INSTANCES WHERE INSURANCE IS NOT OTHERWISE AVAILABLE.

NATIONAL AQUACULTURE ORGANIC ACT -  
COMPARISON TO OTHER AQUACULTURE LEGISLATION

MR. CHAIRMAN, MY AQUACULTURE BILL, S.2762 IS IN MANY RESPECTS SIMILAR TO THE OTHER TWO PIECES OF AQUACULTURE LEGISLATION UNDER CONSIDERATION BY YOUR COMMITTEE TODAY. H.R.9370, THE HOUSE AQUACULTURE BILL, AND S.2582, THE WEICKER AQUACULTURE BILL, BOTH CONTAIN NUMEROUS POINTS WHICH COINCIDE WITH THE PROPOSALS I MAKE IN S.2762.

THERE ARE, HOWEVER, THREE IMPORTANT NEW AREAS WHICH MY BILL EMPHASIZES, AND I SHOULD LIKE BRIEFLY TO EXPLAIN THEM:

FIRST, UNLIKE THE OTHER AQUACULTURE LEGISLATION, I WOULD REQUIRE THAT THE NATIONAL AQUACULTURE DEVELOPMENT PLAN BE FORMULATED ONLY AFTER INFORMATION IS SYSTEMATICALLY GATHERED FROM ALL PARTS OF THE UNITED STATES. TO ENSURE ADEQUATE INPUT FROM INTERESTS AS DIVERSE AS

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SHRIMP FARMERS IN FLORIDA, SALMON RANCHERS IN ALASKA, OYSTER RAISERS IN MAINE AND CATFISH FARMERS IN THE MID-WEST, INFORMATION MUST BE GATHERED ON A REGIONAL BASIS. ONLY AFTER THESE SUGGESTIONS ARE RECEIVED FROM ALL PARTS OF THE COUNTRY SHOULD A NATIONAL PLAN BE DRAWN UP. THIS WILL GUARANTEE THAT THE PLAN WILL BE TAILORED TO THE VARIED INTERESTS AND NEEDS OF AQUACULTURISTS THROUGHOUT ALL 50 STATES.

SECOND, I ADD THE ENHANCEMENT AND REHABILITATION OF TRADITIONAL PUBLICLY OWNED FISH STOCKS AS A MAJOR GOAL TO BE ADDRESSED BY THIS LEGISLATION. IT SEEMS OBVIOUS THAT IN ADDITION TO ENCOURAGING DEVELOPMENT OF COMMERCIAL AQUACULTURE FOR THE PRIVATE SECTOR, WE SHOULD NOT OVERLOOK THE DESIRABILITY OF REHABILITATING THE NUMEROUS DEPLETED FISH STOCKS WHICH ARE OF VITAL IMPORTANCE TO THE PUBLIC SECTOR.

THE THIRD AND FINAL ISSUE OF IMPORTANCE MY BILL ADDRESSES IS THE PROBLEM OF LAND AND WATER ACCESS FOR AQUACULTURE FACILITIES.

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I BELIEVE THE CONTRIBUTIONS WHICH AQUACULTURE CAN MAKE IN HELPING TO MEET NUTRITIONAL NEEDS, STIMULATING COMMERCIAL ACTIVITY, AND ENHANCING EXISTING FISHERIES WARRANT ITS BEING GIVEN DUE CONSIDERATION IN LAND AND WATER USE MANAGEMENT DELIBERATIONS.

CONCLUSION

MR. CHAIRMAN, AQUACULTURE IS CERTAINLY AN ACTIVITY THAT HAS BEEN NEGLECTED IN THIS COUNTRY FOR TOO LONG. THE NUMEROUS BENEFITS TO BE GAINED -- COMMERCIAL, NUTRITIONAL AND CONSERVATIONAL, TO NAME BUT THREE, -- HAVE NOT YET BEEN FULLY APPRECIATED. PASSAGE OF THIS LEGISLATION WILL BE A POSITIVE STEP TOWARDS TRANSLATING THESE NUMEROUS POTENTIAL BENEFITS INTO TANGIBLE REALITIES.

# TELEGRAM

ALASKA COMMUNICATIONS CO  
PHONE 583-8640  
JUNEAU, ALASKA 99901

1978 APR 24 PM 8 10

20059 NL KENAI ALASKA 50 04-24 0300P AST

PMS SEN KAY PLAND

JUNEAU

CIAA AGREES WITH SJR49 BY SEN KERTTULA. HIS IS A REASONABLE APPROACH FOR HELPING SALMON RETURNS IN CONTRAST TO THOSE WHO WOULD CURTAIL ALL AQUACULTURE EFFORTS UNTIL THEY WERE ASSURED OPPORTUNITY TO HARVEST NOW REGARDLESS OF CONSEQUENCES. PLEASE SUPPORT THIS RESOLUTION AND HELP SALMON, NOT VESTED INTEREST GROUPS.

COOK INLET AQUACULTURE ASSN FLOYD E HEIMBUCH, MANAGER