December 27, 1971

Mr. Gene Kruse, Acting Director
Fish Commission of Oregon
307 State Office Building
1400 S. W. Fifth Avenue
Portland, Oregon 97201

Dear Gene:

It has just come to my attention that the Oregon legislature recently passed a bill which allows private chum salmon farming in Oregon. I also understand that at least one pilot fish farm is now under construction on.

We are inevitably going to be more involved with both public and private mariculture in Alaska in the future. In fact, our Alaska Legislature approved a constitutional amendment relating to the subject which will be on the ballot in the fall election of 1972. For this reason I am interested in the Oregon program and would appreciate very much receiving a copy of the bill in question and any administrative regulations which the Fish Commission (or other agency) may have promulgated to implement the statute. Any information you can supply about the private chum farm under construction will also be appreciated.

Thank you very much for your assistance in providing the requested information.

Sincerely,

E. J. Ruiter
Deputy Commissioner

EJR:hb

STATEMENT ON SALMON AQUACULTURE

Prepared for

Mardela Corporation

by

William J. McNeil
Oregon State University
Marine Science Center
Newport, Oregon

May 20, 1972

Conclusions

A salmon aquaculture industry may be on the threshold of emergence in the Pacific Northwest. California, Oregon and Washington Legislatures have recently passed laws which permit private and local institutions to propagate Pacific salmon, and the fisheries agencies of these states have established administrative guidelines for private salmon aquaculture. Alaska could follow the lead of the other Pacific Coast states.

Research, development, and advisory services are prerequisites for a salmon aquaculture industry. Salmon aquaculture not only offers considerable potential for future economic growth, but is ecologically compatible with other uses of aquatic resources. Recent advances in salmon husbandry show promise of reducing costs and increasing productivity of hatcheries and other propagation systems. If commercial salmon farming enterprises now being tried in the Pacific Northwest should become profitable, rapid expansion of the industry is anticipated. The assistance of government is required to assure the orderly development of a salmon aquaculture industry.

Of the several agencies which might provide technical assistance to a salmon aquaculture industry, NOAA appears to have the capability to implement the most substantive coast-wide program. Independent projects presently supported by NOAA at Oregon and Washington Sea Grant institutions and at National Marine Fisheries Service Laboratories in Washington and Alaska already represent a viable program to support the orderly growth of salmon aquaculture. NOAA should review the ongoing independent projects critically and develop a coordinated plan of research, development, and advisory services which will unite the expertise in its National Marine Fisheries Service laboratories and Sea Grant institutions to achieve the most efficient and orderly development of salmon aquaculture consistent with existing legal, administrative, and social constraints imposed by State governments and the public at large.

Background

Pacific salmon have played a dominant role in U.S. fisheries since before the turn of the century. They are highly prized as food fish and for recreation. Although salmon fisheries remain the most important of all domestic fisheries in the northeastern Pacific Ocean, the annual harvest has declined substantially below historic high levels.

The five species of Pacific salmon native to North America reproduce in fresh water, but they obtain most of their growth in the north Pacific Ocean and the Bering Sea, mostly in international waters. There is no evidence that the capacity of the oceanic nursery grounds has been impaired. There is abundant evidence, on the other hand, that the numbers of juvenile salmon migrating to sea have been reduced through overfishing and destruction of freshwater habitat.

The life histories of Pacific salmon are well understood. Their eggs, larval and early juvenile forms are hardy and highly suited for artificial propagation. Maturing adult salmon return to their stream system of origin to spawn, and this

behavior constitutes a natural "herding" instinct which allows selective harvesting and other manipulations of individual stocks.

Public Salmon Aquaculture

Salmon have been propagated in public hatcheries since the 1800's. Other public propagation systems, including spawning channels, have been developed in more recent times to complement hatcheries. The major emphasis of public salmon aquaculture is on "open ocean ranching" where juveniles are propagated and released to supplement wild stocks for public commercial and recreational fisheries.

Large-scale public salmon propagation has been stimulated by declining abundance of certain stocks. Well-known salmon propagation programs include: 1) Chinook and coho salmon hatcheries in the Pacific Northwest, 2) pink and chum salmon hatcheries in Japan and Sakhalin, and 3) pink, chum, and sockeye salmon spawning channels in British Columbia.

Many of these governmental salmon enhancement programs are generally recognized to be successful. Salmon propagation has received much favorable publicity, and the public appears to favor an expansion of salmon aquaculture.

Private Salmon Aquaculture

State legislatures in California, Oregon, and Washington have in recent years removed certain legal restrictions which have prohibited salmon aquaculture by private companies and local public institutions. Alaska might also liberalize opportunities for salmon aquaculture. Recent developments in private salmon aquaculture have been limited by State administrative agencies and legislatures to a few pilot projects which include a private hatchery in California which releases coho salmon and a private hatchery in Oregon which releases chum salmon. Both of these hatcheries harvest adults returning from the ocean. A company in Puget Sound raises Chinook and coho salmon in salt water pens in a pioneering effort to raise Pacific salmon for market in captivity rather than releasing juveniles into open ocean pastures. Two Indian tribes (Quinault and Lummi) have initiated salmon aquaculture projects in Washington State. Additional salmon aquaculture projects have been proposed by private firms and local public institutions in Oregon and Washington.

All of these projects involve proprietary rights to salmon. Should they be financially successful, a salmon farming industry will most likely emerge over the next several years. Such an industry has the potential of attaining economic importance in coastal communities. Salmon aquaculture might, therefore, assume a new dimension beyond traditional supplementation of public commercial and recreational fisheries. The new industry would, nevertheless, contribute substantially to public fisheries whenever salmon are released into open ocean pastures where they become a public resource until such time that the surviving adults return to their home waters and enter private trapping facilities.

The public harvest of salmon originating from privately operated hatcheries and other propagation systems seemingly would be detrimental to the economic success of open ocean ranching. However, it must be kept in mind that salmon management agencies are responsible for the conservation of wild stocks which cannot in most instances sustain high rates of exploitation. The rate of exploitation of wild stocks must in most instances be held well below the level required to harvest the available surplus from propagated stocks. The surplus adults returning to public hatcheries attest to this. These surplus fish have created a burdensome problem for the management agencies, particularly in the Pacific Northwest. It is conceivable that surplus production of propagated stocks in selected coastal streams will be adequate to provide financially successful operations of private salmon aquaculture facilities.

Another important factor which could favor financial success of private salmon aquaculture is the likelihood of significant economies in capital construction and operation of privately operated hatcheries and other propagation systems. Other factors potentially favoring success include development of new markets for the products of salmon aquaculture and advanced husbandry techniques such as raising fish for market in salt water pens where they are not subject to public fisheries.

The Role of Government

Emergence of a salmon aquaculture industry will require research, development, and advisory services from government. Assistance will be required on biological criteria for propagation systems, genetics and selective breeding, disease control, nutrition, engineering design of hatcheries and other propagation systems, harvesting, processing, transportation, marketing, and social-legal problems.

NOAA, through its on-going programs in Sea Grant and National Marine Fisheries Service, is probably better prepared than any other agency of government to respond to the needs of a salmon farming industry. NOAA presently possesses much of the technical expertise that a salmon farming industry must rely upon. Many of the scientists and technologists now experienced in various facets of salmon farming are presently employed by National Marine Fisheries Service laboratories in Washington and Alaska and at Sea Grant institutions in Oregon and Washington. A coordinated program could include the operation of salmon husbandry experiment stations at selected coastal sites in Oregon, Washington, and Alaska to conduct studies with all five species of salmon native to the Pacific coast of North America as well as salmon hybrids.

State fishery agencies will administer and regulate salmon aquaculture, and it is imperative that they participate in the planning and execution of research, development, and advisory projects. The State agencies should be encouraged to play dominant roles where their staff and facilities are adequate. Detailed coordination between NOAA and State agencies will insure that individual projects supported by NOAA will complement the salmon aquaculture programs of California, Oregon, Washington, and Alaska.

Because salmon aquaculture may have entered a period of transition from strictly public propagation to a partnership between public and private propagation, the desires of the several State legislative and administrative bodies must be served by NOAA. It is prudent for State fishery agencies to proceed with caution as they begin to broaden their salmon management programs to include the assignment of certain proprietary rights to salmon from public to private control. If properly executed, these contractual arrangements between government and private sectors of the economy can greatly broaden the financial base for expansion of salmon aquaculture without making additional demands on public tax dollars. An economically productive salmon aquaculture industry can potentially broaden the tax base of local and state government and provide for an expanded economy at no cost to the environment. Such an industry would also contribute fish to the public commercial and recreational fisheries.

Contact: Don Reed 753-6620
Emmit Glanz 753-6627

February 3, 1972

Regulations authorizing the commercial aquaculture of salmon and other foodfish in Washington state were adopted today by the Department of Fisheries.

The regulations deal with aquaculture in general, but only the commercial culture of salmon will be developed at this time, Fisheries Director Thor C. Tollefson said. Policy on culture of other foodfish will be developed as the need arises, he said.

Salmon may be cultivated under permit from the Department of Fisheries and payment of a $100 annual license. Applicants for a permit must state location and description of project facilities, and demonstrate technical and financial capability.

Surplus salmon eggs may be obtained from the Department of Fisheries. They may not be resold and no eggs or fish may be brought into the state without written approval from the Director of Fisheries.

Fish farm facilities, fish cultural activities, and fish cultural and disease control records are subject to inspection by the Department of Fisheries. Major operation changes and disease outbreaks must be reported to the Department.

Director Tollefson said private culture of salmon, the state's most valuable fishery resource, will be conducted only with fish surplus to public needs, and "in a manner that avoids environmental competition with wild or hatchery-produced fish".

It is also essential, he said, that eggs not be wasted and adequate attention be devoted to nutrition, genetic and disease control.

STATE OF ALASKA

WILLIAM A. EGAN, GOVERNOR

DEPARTMENT OF FISH AND GAME

OFFICE OF THE COMMISSIONER / SUBPORT BUILDING
JUNEAU 99801

February 1, 1973

Honorable Joe McGill
Chairman, House Resources Committee
Alaska State Legislature
Pouch V
Juneau, Alaska 99801

Attention Bob Christensen, Administrative Assistant

Dear Bob:

Attached are copies of the Washington State regulations, policies, permit forms and other information concerning the commercial fish farming program in the State of Washington. I regret that I do not have a copy of the 1971 statute (Chapter 35, Laws of 1971) which establishes a program and delegates responsibility to the director. As discussed on the telephone this morning, the law library might contain a copy of this statute.

Sincerely,

E. J. Huizer
Deputy Commissioner

Attachments

March 4, 1972

Thor C. Tollefson, Director
Washington Department of Fisheries
Room 115
General Administration Building
Olympia, Washington 98502

Dear Thor:

We are aware that the Washington State Legislature has enacted statutes which provide for private aquaculture in Washington utilizing anadromous species and has established a commercial fishing gear moratorium. However, we do not have the specific statutes or administrative regulations developed by your department to implement the statutes.

I would appreciate it, therefore, if you would send me copies of the appropriate statutes and regulations which your department is currently administering regarding private aquaculture and the moratorium on commercial fishing gear.

Thank you for your assistance.

Sincerely,

E. J. Bulzer
Deputy Commissioner

FORM 02-001B

MEMORANDUM State of Alaska

TO: Commissioner Noerenberg
Ben Hilliker
Alex McRea
Robert Roys
Roy Rickey
Rupe Andrews

DATE : April 10, 1972

FROM: E. J. Huizer, Deputy Commissioner

SUBJECT: Washington State gear moratorium and salmon aquaculture program.

Attached for your information and files are copies of recent correspondence from Thor Tollefson in response to my request. The policies and procedures for private salmon aquaculture as authorized by Chapter 35 of the Washington Session Laws--1971 are especially interesting.

Attachment
cf

WASHINGTON
Department of
FISHERIES

DANIEL J. EVANS
GOVERNOR

ROOM 115, GENERAL ADMINISTRATION BUILDING • PHONE 753-6600
OLYMPIA, WASHINGTON 98504

THOR C. TOLLEFSON
DIRECTOR

March 23, 1972

Mr. E. J. Huizer
Deputy Commissioner
Alaska Department of Fish & Game
Subport Building
Juneau, Alaska 99801

Dear Ed:

Regarding your March 4 request for information on private aquaculture and the commercial fisheries gear moratorium bill, the aquaculture package is enclosed as well as a copy of HB 249.

HB 249 did not survive the 1972 emergency session. It had support from the fishing industry but unfortunately became bottled up in committee. No doubt it will be re-introduced at the next regular session.

Sincerely,

Thor

Thor C. Tollefson
Director

Enclosures

HOUSE BILL NO. 249

State of Washington
42nd Legislature
Second Extraordinary Session

by Representatives Martinis, Charette, Wolf and Conner

Read first time January 18, 1972, and referred to Committee on Natural Resources and Ecology.

AN ACT Relating to food fish and shellfish; adding new sections to chapter 12, Laws of 1955 and to chapter 75.28 RCW; and providing an effective date.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF WASHINGTON:

NEW SECTION. Section 1. There is added to chapter 12, Laws of 1955 and to chapter 75.28 RCW a new section to read as follows:

This act is in exercise of the police powers of the state for the protection of the welfare and economic good of the commercial salmon fishing industry and the people of the state. It is hereby found that scientific advancement has increased the efficiency of fishing gear. It is further found that there presently exists a dangerous overabundance of salmon fishing licenses with the consequent overabundance of pressure on the salmon fishery resource. This situation results not only in great economic waste to the state, but in a circumstance that makes conservation programs difficult of achievement. It is further found and declared that the public welfare requires that the number of commercial salmon fishing licenses issued by the state be limited and gradually decreased in number to facilitate a more advantageous economic atmosphere in the commercial salmon fishing industry and to insure that sound conservation programs can be scientifically carried out.

NEW SECTION. Sec. 2. There is added to chapter 12, Laws of 1955 and to chapter 75.28 RCW a new section to read as follows:

During the year 1973, the department of fisheries of the state of Washington shall not issue commercial salmon fishing licenses for all types of fishing gear in a number greater than the number of such licenses issued in the years 1970, 1971, or 1972: PROVIDED, That all

those individuals who held a commercial salmon fishing license for any type of fishing gear in 1970, 1971, or 1972 shall be entitled to a commercial salmon fishing license in 1973, if such holder applies therefor.

NEW SECTION. Sec. 3. There is added to chapter 12, Laws of 1955 and to chapter 75.28 RCW a new section to read as follows:

Any holder of a commercial fishing license in 1970, 1971, or 1972 who does not apply for a license in 1973, shall not thereafter be entitled, as a matter of right, to a commercial salmon fishing license in any subsequent year.

NEW SECTION. Sec. 4. There is added to chapter 12, Laws of 1955 and to chapter 75.28 RCW a new section to read as follows:

The provisions of this act shall become effective January 1, 1973, and shall remain effective until January 1, 1978, or until the results of the act can be evaluated and further courses of action recommended to the legislature as a phase II approach to limited gear entry in the commercial salmon fisheries.

NIEL J. EVANS
GOVERNOR

ROOM 115, GENERAL ADMINISTRATION BUILDING • PHONE 753-6600
OLYMPIA, WASHINGTON 98504

THOR C. TOLLEFSON
DIRECTOR

POLICIES AND PROCEDURES PERTAINING TO SALMON AQUACULTURE IN THE STATE OF WASHINGTON

The 1971 legislature, through SB 142 (Chapter 35, Laws of 1971), gave the Director of Fisheries the authority to provide for the culture of food fish, shellfish, or other aquatic animals by private interests for commercial purposes, also known as fish farming or aquaculture, under such regulations as the Director may prescribe to safeguard the interest of the fisheries of the State.

The law further provided that:

1. A permit is required which shall be obtained from the Director of Fisheries and which shall be issued subject to the restrictions he deems necessary to safeguard the interest of the fisheries of this State. A separate permit is required for each fish farm site.

2. A $100 annual license is required for each county of the State in which a fish farm is operated for commercial purposes by the same person, corporation, or other entity.

3. The Department may supply, at a reasonable charge, salmon eggs for use in aquaculture to a person, corporation, or other entity for use in aquaculture for a period not to exceed 6 years from the date of initial delivery. Subject to considerations of disease control or importation of exotic species, the law allows discretion in authorizing eggs or animals from other than Department sources.

Pursuant thereto, the following policies and procedures pertaining to salmon aquaculture have been adopted. These policies and procedures are new, and may be amended from time to time as the Director deems desirable to safeguard the interest of the fisheries of the State and to provide greater flexibility in meeting changing conditions in fish stocks and the state of the art.

Salmon Aquaculture Policy

It shall be the policy of the Department of Fisheries to encourage private commercial aquaculture in the State of Washington. To this end, the policy for salmon aquaculture will embrace the following:

1. Any salmon aquaculture operation requires possession of a permit (hereafter called a "Salmon Aquaculture Permit") issued without charge by the Director, is renewable annually, non-transferable, and which may be revoked at the discretion of the Director if terms of the permit are not complied with. The aquaculture farm license will not be issued until the aquaculture permit has been issued.

2. Any salmon aquaculture operation requires possession of a valid annual license as provided in the Department of Fisheries Code (RCW 75.16.100).

3. The Director, after assuring that natural and artificial fish production needs of the State have been met, may provide salmon eggs for use in aquaculture at reasonable cost to any permit holder properly licensed. Eggs will be supplied to any one aquaculture operation for a period not to exceed 6 years from the date of initial delivery, depending upon the available supply.

4. Priority among permit holders to purchase eggs from the State shall be according to date application was received by the Director (first come - first served). To be honored, all requests for eggs of a specific brood year must be received by August 1 of that brood year.

5. Up to one (1) million eggs, subject to prevailing availability of eggs surplus to Department needs, will be sold to the first permit holder before selling any to the holder next on the list. If permit holders do not want to buy the entire 1 million eggs reserved for them, the State may sell the remainder to the permit holder next in line as part of his 1-million-egg quota. If eggs are still available after each permit holder has had a chance to buy 1 million eggs, the procedure will be repeated until all available eggs have been sold. Eggs may not be resold without written permission of the Director.

6. No salmon shall be released into waters of the State of Washington without written approval of the Director, and prior to any release, all propagated fish shall be inspected by a qualified fish pathologist approved by the Director.

7. Commercial salmon aquaculture may be approved principally as an egg-to-market or fry-to-market operation, and cultured salmon may be marketed at any stage of development. *In certain limited situations, culture may be allowed utilizing locations where no natural or artificially produced runs now exist, and this culture may in part be based on return of adults which have matured at sea. (NOTE: Ownership of private salmon stocks can only be assured while stocks are in direct control of the culturist. Salmon while maturing at sea are a common property resource.)

8. Through the information set forth in the Salmon Aquaculture Permit application, the Director will ascertain, before any salmon eggs are provided the applicant or any non-Department of Fisheries egg source is approved, that the proposed operation will achieve efficient use of the eggs.

9. A sales invoice shall accompany each shipment of cultured product while within the boundaries of the State of Washington and will show the aquaculturist's name, license number, the numbers of each species, weights, sizes sold, name and address of purchaser, and origin of shipment.

Requirements for a Salmon Aquaculture Permit

Applicant will submit a completed permit application form supplied by the Department which describes the following:

1. Name and address of the applicant, location of project facilities including a legal description and location map.

2. Description of facilities and equipment, operational plans and procedures including plans for disease control, marketing of product, and source of eggs.

3. Applicant's capability to conduct salmon cultural operations as proposed, including egg taking, fertilization, incubation, rearing techniques by stages of development in fresh and salt water, particularly of brood stock.

4. Applicant's financial capability to carry out the cultural operations as proposed.

Terms of the permit will also require that:

1. The Department shall have the right of access to all salmon-cultural facilities, fish cultural activities, and fish cultural and disease control records for the purpose of inspection at any reasonable time of day.

2. A quarterly report of salmon cultural activities shall be submitted to the Department in accordance with a prescribed format, which will include such information as mortalities, growth rates, feeding rates, water quality, disease control, stock on hand, and other pertinent cultural information.

3. Any major change in operations from that initially approved will require written approval from the Director.

4. Outbreaks of disease shall be reported immediately to the Department. If such outbreaks represent a serious threat to the well-being of the State's fisheries, the Department may immediately order such actions as deemed necessary to protect the State's fisheries, including quarantining or destruction of stock, sterilization of enclosures and facilities, cessation of activities, and disposal of dead fish in a manner satisfactory to the Department.

Issuance of a Salmon Aquaculture Permit does not relieve the applicant's responsibility to secure the necessary leases, permits, and approvals of Federal, local, and other State government agencies for project facilities and operations. Activities conducted over or on beds of navigable waters will require a lease from the State Department of Natural Resources.

WASHINGTON DEPARTMENT OF FISHERIES AQUACULTURE REGULATIONS

WAC 220-76-001 ---------- AQUACULTURE

It shall be unlawful for any person, firm, or corporation to cultivate food fish, shellfish, or other aquatic animals for commercial purposes except as follows in WAC 220-76.

WAC 220-76-010 ---------- PERMITS

(1) It shall be unlawful for any person, firm, or corporation to engage in cultivation of food fish, shellfish, or other aquatic animals for commercial purposes without first having obtained from the Director of Fisheries an aquaculture permit, and it shall be unlawful for any person, firm, or corporation to fail to comply with the provisions of said aquaculture permit.

(2) Aquaculture permits are non-transferable. In the event there is a change of ownership of a fish farm established under WAC 220-76 and RCW 75.16.100, the aquaculture permit issued to the previous owner shall be invalid.

(3) Applications for aquaculture permits shall be submitted on forms supplied by the Department setting forth the following:

(a) Name and address of owner and operator.

(b) Location of project, including legal description and location map.

(c) Proposed layout of facilities, equipment, operation plans and procedures including disease control, and such other pertinent data as may be required.

WAC 220-76-015 ---------- SEED STOCK -- IMPORTATION

It shall be unlawful for the operator of a fish farm to import into the State of Washington any food fish, shellfish, or aquatic animal, eggs, fry, or fingerlings without prior written approval of the Director of Fisheries.

WAC 220-76-016 ---------- SALMON EGGS -- RESALE

It shall be unlawful for any person, corporation, or other entity to sell, offer for sale, trade, or barter, fertilized salmon eggs previously purchased from the Department of Fisheries without prior written approval of the Director.

WAC 220-76-020 ---------- INSPECTION -- FACILITIES AND RECORDS

Fish farm facilities, fish cultural activities, and fish cultural and disease control records shall be open to inspection by authorized Department personnel at any reasonable time, and the Director may revoke the aquaculture permit of any person, firm, or organization who refuses to submit such facilities and records for inspection to authorized Department personnel.

WAC 220-76-025 ---------- SALE OF PRODUCTS -- INVOICES

Any sale of food fish, shellfish, aquatic animals, or eggs thereof made by licensed aquaculture fish farmer shall be accompanied by an invoice. This invoice shall show the fish farmer's name, his address, date of sale, number of each species, weights, and sizes sold, and name and address of purchaser. Said invoice shall be retained by the purchaser during the time such species are in his possession or under his control.

WAC 220-76-030 ---------- DISEASE -- CONTROL

Outbreaks of disease affecting food fish, shellfish, and aquatic animals in fish farm facilities shall be reported immediately to the Department. If such outbreaks represent a serious threat to fisheries resources of the State, the Director may immediately order such actions as deemed necessary to protect the fisheries resource of the State such as, but not limited to, quarantining, destruction of stock, sterilization of facilities, and disposal of mortalities.

ANIEL J. EVANS
GOVERNOR

ROOM 115, GENERAL ADMINISTRATION BUILDING • PHONE 753-6600
OLYMPIA, WASHINGTON 98504

THOR C. TOLLEFSON
DIRECTOR

BRIEF SUMMARY OF STEPS REQUIRED TO ENGAGE IN SALMON AQUACULTURE

This brief summary is presented to set forth, for anyone interested in salmon aquaculture, the steps necessary to initiate and engage in private salmon culture. Details of each step are provided in the Department's Aquaculture Policy and Regulations.

1. Secure from the Department of Fisheries a copy of all laws and policies pertaining to salmon aquaculture and become familiar with these. Note that both a Salmon Aquaculture Permit and Aquaculture Farm License are required.

2. Develop preliminary plans for operations and find desired sites for carrying out egg incubation, fresh-water rearing, and salt-water pen-rearing phases of the operation.

3. Write to the Director of Fisheries, outlining preliminary plans, proposed sites of operations, and describing training and background of person(s) who will be the culturist(s).

4. Upon approval of the sites for salmon aquaculture, acquire the necessary physical facilities through purchase, lease, or use-permit; and acquire the necessary water right for fresh-water withdrawal from the Department of Ecology. If plans include occupation of tide, shore, or bed lands, a State Department of Natural Resources lease should be obtained. At this point, applications for Corps of Engineers and local government shoreline management permits should be made.

5. Submit completed application form provided by the Department of Fisheries for a salmon aquaculture permit and obtain from the Department the necessary hydraulic permits for construction within the perimeter of fresh- or salt-water bodies.

6. Arrange for preliminary inspection of operational facilities by the Department of Fisheries.

7. Upon approval of facilities, provide detailed cultural plans for the number of fish desired and the actual operational level planned.

8. The aquaculture permit will be issued at no charge upon approval of the cultural plans and facilities. The $100 Aquaculture Farm License can be purchased at any time after the permit is issued, but it must be in effect prior to the acquisition of the egg or fish stocks.

9. Obtain eggs or fry and initiate rearing procedures.

10. Maintain rearing procedures, record the required cultural data, and report step-by-step results at the required intervals on a form provided by the Department of Fisheries.

11. Initiate the development of a brood stock reserve and develop procedures for holding throughout their life cycle, or take steps to obtain stocks from sources other than Department of Fisheries by the seventh year of operation.

12. Salmon reared to appropriate size may be harvested and disposed of in the manner provided for in WAC 220-76-025. No salmon shall be released into open waters without obtaining approval from the Director.

If you sell salmon to a wholesale fish dealer, you will only be required to obtain the Aquaculture Farm License. However, if you are going to wholesale or retail the fish yourself, a $37.50 Wholesale Fish Dealer License and/or a $5.00 Retail Fish Dealer License will be required. Sale and transportation of harvested fish will require that each shipment be accompanied by an invoice providing the necessary descriptive details as required in the permit.

AQUACULTURE PERMIT APPLICATION
Washington State Department of Fisheries
Room 115, General Administration Building
Olympia, Washington 98504

License No. _____

Name (Company or Individual): _____

Title: _____

Address: _____
Street or Box Number City State Zip Code

Fish Farm Operator or Culturist: _____

Address: _____
Street or Box Number City State Zip Code

Telephone Number: _____

Location of project (legal description of property) (attach location map): _____

Owner of property: _____

If leased, duration of lease: _____

Lease reference or number: _____

Proposed layout of facilities, equipment, operational plans and procedures, including disease control (Use additio pages for detail if necessary): _____

roposed stock, source, and number: _____

_____

_____

escription of operator's (or culturist's) previous experience in aquaculture or related

ork (Use additional pages for detail if necessary): _____

_____

_____

_____

_____

arket source or other disposition: _____

_____

_____

ail direct to Department of Fisheries, Room 115, General Administration Building, Olympia, ashington 98504.)

Permit No. _____

WASHINGTON DEPARTMENT OF FISHERIES SALMON AQUACULTURE QUARTERLY REPORT

Owners Name: _____ Species: _____

County Located: _____ Year of Egg Take (Brood Year): _____

Nearest Town: _____ Origin of Stock: _____

Geographic Area (Bay or Stream): _____ Date Covered (check one):

_____ Jan-March _____ Apr-June _____ July-Sept _____ Oct-Dec

OPERATIONAL PROCEDURES

Numbers Handled	Numbers	Pounds
1. Fish (or eggs) received during quarter:		
2. Fish (or eggs) on hand at end of quarter:		
3. Fish dying in ponds during quarter:		
4. Fish sold during quarter:		
Pounds Produced		
5. Pounds of fish on hand at end of previous quarter:		
6. NET POUNDS GAIN - add lines 2 and 4 and subtract line 6:		

Food

10. Type used (brand name if any): _____
11. Amount of food used (in pounds): _____
12. CONVERSION - divide line 11 by line 9: _____

Disease

13. Diagnosis of type: _____

_____

_____

14. Treatment: _____

_____

15. Drug or medication used - amount: _____

_____

_____

Water

16. Weekly maximum-minimum temperature during quarter:

Week No.	1	2	3	4	5	6	7	8	9	10	11	12	13
Max.Temp.													
Min.Temp.													

17. Water used - estimate maximum and minimum water used as expressed in average cubic feet per second (cfs)

Minimum _____ cfs _____ cfs _____ cfs

Minimum _____ cfs _____ cfs _____ cfs

REMARKS: Please comment on any facets of your operation which may be of interest, such as predation, biological observations, etc.

Return completed report to Hatcheries Division, Washington Department of Fisheries, Room 115, General Administration Building, Olympia, Washington 98504, within 10 days of the end of each calendar quarter.

NMFS RESEARCH LEADS TO WORLD'S NO. 1 PILOT SALMON FARM

Salmon research by scientists of the NMFS Northwest Fisheries Center (NFC) has led to establishment of the world's largest pilot commercial salmon farm near Seattle, Wash. The farm's winter-spring (1971-72) production is approaching 100 tons.

NFC has conducted research in marine aquaculture (mariculture) for 2 years at its Manchester, Wash., station, which opened July 1969. The station's most prominent research is on one NMFS mariculture program--the saltwater rearing of Pacific salmon in floating pens.

The research station is situated ideally for its mariculture research. It is about 10 miles from Seattle on Clam Bay along Puget Sound's west shore. The area boasts a variety of habitats: Beaver Creek, a freshwater stream; exposed tidal flats; and deep, well-circulated salt water.

The Researchers

Dr. Timothy Joyner is program supervisor. The salmon research is conducted by Conrad Mahnken, oceanographer; Anthony Novotny, fishery biologist; and James S. Johnson and Gunnar Salsten, fishery technicians. In 2 years, these researchers showed that it was economically feasible to rear coho and chinook salmon in saltwater pens. They grew coho in pens resting on the bottom in about 40 feet. They raised many coho through maturity. They cooperated with Washington State's Department of Fisheries to increase the number of salmon for Puget Sound's recreational fisheries.

Two-Phased Studies

There were 2 phases in the Manchester studies on the feasibility of rearing salmon for market. The first was pioneering research of NFC's salmon-culture project to develop an economical system for raising salmon from hatching to market size or maturity. The second was an experimental pilot farm financed partly by NOAA's Office of Sea Grant.

Scientists of the salmon-culture project concentrated on rearing coho salmon. In 1969, they put 10,000 fingerlings in a plastic, meshed cage and floated it in Puget Sound. The fish grew well in salt water; their survival was high. The food conversions were excellent: 1.5 lb of feed for 1 lb of fish weight on the Oregon Moist Pellet (OMP) diet until the fish reached 1 lb.

Would the market and consumer accept the larger coho? The NMFS Marketing Division studied this. It received enough favorable comment to justify a closer look at the commercial feasibility of raising on a large scale 8 to 12 oz salmon (dressed weight).

Many Firms Interested

This initial NMFS research stimulated interest by many firms in commercial culture of salmon. Ocean Systems, Inc. (OSI), a subsidiary of Union Carbide, asked support from NOAA's Office of Sea Grant for a pilot project in Puget Sound. It received $100,000 in matching funds for a 1-year study. The principal objective was to encourage the development of mariculture in Washington State by demonstrating the technical and economic feasibility of such an operation.

OSI purchased 700,000 coho salmon eggs from Washington State in November 1970. "The eggs were incubated and hatched, using water from Beaver Creek, at a small building donated to NMFS by the U.S. Navy. Incubation was accelerated by holding the temperature at 10°-12° C with an oil-fired furnace."

About 400,000 eggs hatched in the winter. In early February 1971, the fry were moved from the hatchery to a freshwater pond. An adjoining pond was stocked with about 464,000 fall chinook salmon fry obtained from the University of Washington. The coho were fed only dry diets; the chinook were fed dry and moist (OMP) diets.

Saltwater Nursery Pen

The chinook salmon at 80/lb were trucked back to Clam Bay in late May and placed directly into a saltwater nursery pen. The pen was 30 x 30 x 15 ft deep and held 385,000 fall chinook. The diet was OMP. Treatments with medicated (terramycin) feeds became necessary in early June when mortalities from Vibriosis, a bacterial disease, began to increase. In June, 10.5% of the fish were lost.

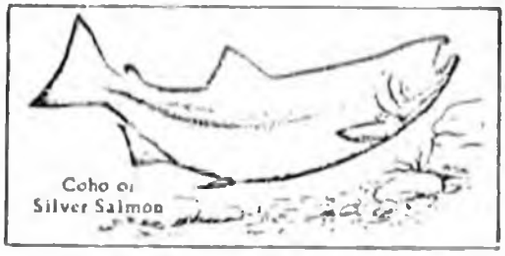
The coho salmon were graded in early July, when about 60% were smolted and weighed 25/lb. Then the coho were transferred to 4 growing pens (50 x 50 x 30 ft deep) designed for larger fish. In one pen, 158,000 coho reached a density of 1.8 lb/cu ft just before harvest began in late December; there were no adverse effects on survival, food conversion, or growth rate. The researchers say that at this density 700,000 lb of coho could be grown in 1 year in 1 surface-acre of water (30 ft deep), including the large raft support system; at harvest, their total weight would be about 2.5 million lb.

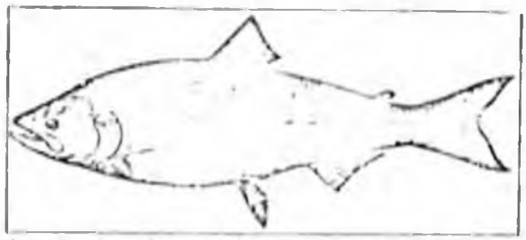
Conversion of feed by the coho salmon has averaged 1.1:1 (including mortalities) on a dry diet. Chinook salmon have not grown as rapidly. Conversion of feed by chinook throughout the study has averaged 1.7:1 (including mortalities) on mixed dry and moist feeds. Nearly a year after hatching (350 days) the coho are getting too large for market. During the peak growing period, September through November, a feed ration of 3% of body weight per day produced a 3% increase in weight per day. Many fish 13-14 inches long that weigh about 1.5 lb have been set aside for future brood stock.

Ready for Market

In December 1971, the first coho from the pilot farm were ready for market at a dressed weight of 11-12 oz. The chinook were expected to be ready in March 1972. The coho are being harvested at rate of 8,000 to 15,000 lb/week. The fish are killed in -1.5° C water and transported to Marysville, Wash., for processing by Pan-Alaska Fisheries, Inc. All fish are sold through Swiftsure Fisheries in Seattle. They bring $1.35-$1.70 per lb wholesale. Fish quality is excellent. There has been substantial interest among U.S. and foreign markets in 11-12 oz salmon. On Dec. 24, 1971, for example, Swiftsure received an order from a food service for international airlines for 5,000 lbs of salmon to be delivered as soon as possible, and for 10,000 lbs to be delivered each month thereafter.

In December 1971, also, Union Carbide announced plans to form a new subsidiary for its sea farming operations, effective Jan. 1, 1972. Dom Sea Farms, Inc., will operate independently of Ocean Systems, Inc., and concentrate exclusively on mariculture. Over 2 million salmon eggs purchased from Washington State are now hatching at Dom Sea's new freshwater facilities near Silverdale, Wash. Saltwater rearing schedules and past experience indicate a projected harvest of 400-500 tons in 1 year.





Oncorhynchus tshawytscha. King salmon in California, chinook in Alaska.

EH

FISH COMMISSION

RESEARCH HEADQUARTERS

ROUTE 2, BOX 31A • • • CLACKAMAS, OREGON • • • 97015

TOM McCALL
GOVERNOR

COMMISSIONERS
EDW. G. HUFFSCHMIDT, Chairman
McKEE A. SMITH, Vice Chairman
JOSEPH I. EOFF, Member

ROBERT W. SCHONING
State Fisheries Director

AIR MAIL

January 3, 1972

Mr. E. J. Huizer, Deputy Commissioner
Alaska Department of Fish and Game
Subport Building
Juneau, Alaska 99801

Dear Ed:

Your letter to Gene concerning private chum hatcheries in Oregon was forwarded to me. I am rapidly becoming our "chum" man, through no particular effort on my part!

I have enclosed (1) a copy of Chapter 203, 1971 Oregon laws. This is the new law that allows private chum hatcheries in Oregon; (2) policies and procedures developed by our agency to handle applications; and (3) a copy of our application form.

We have received seven applications (each with $100 fee) to date and have issued one permit. The second application received will be reviewed next month and I expect a permit will be granted.

Also enclosed is a copy of the one permit we have issued. It gives you some idea of what is involved and how we responded.

I will be seeing you in Sacramento in January if you attend the PMFC meeting called by Dr. Harville. If you have any questions, we can talk them over at this time.

Sincerely,

Wallace F. Hublou
Director of Research

cc: Kruse

H-5 (15)

the provisions of the contract shall be awarded to one of the parties, the prevailing party, whether he is the party specified in the contract or not, at trial or on appeal, shall be entitled to reasonable attorney fees in addition to costs and necessary disbursements.

(2) Attorney fees provided for in a contract described in subsection (1) of this section shall not be subject to waiver by the parties to any such contract which is entered into after the effective date of this Act. Any provision in such a contract which provides for a waiver of attorney fees is void.

(3) As used in this section "prevailing party" means the party in whose favor final judgment or decree is rende[illegible].

(4) As used in this section "contract" includes any instrument or document evidencing a debt.

Approved by the Governor May 19, 1971.
Filed in the office of Secretary of State May 19, 1971.

CHAPTER 203

AN ACT

[HB 1328]

Relating to privately operated chum salmon hatcheries.

Be It Enacted by the People of the State of Oregon:

SECTION 1. (1) The commission may issue a permit, subject to such restrictions and regulations as the commission deems desirable, to any person to construct and operate a chum salmon hatchery.

(2) The application for a permit to construct and operate a chum salmon hatchery shall include an application fee of $100.

SECTION 2. (1) Prior to issuance of any permit by the commission, a public hearing shall be held. Notice of the hearing shall be published at least once and at least 10 days prior to the hearing in a newspaper of general circulation in each of the counties in which the hearing is to be held, or if no such newspaper is published in that county or counties, then such a newspaper in an adjoining county.

(2) The hearing shall be conducted by either the commission or a representative designated by the commission.

(3) The commission shall notify the State Game Commission prior to any public hearing and shall obtain their recommendation on the proposed private hatchery.

SECTION 3. No permit shall be issued:

(1) Which may tend to deplete any natural run of anadromous fish or any population of resident game fish.

(2) Which may result in waste or deterioration of fish.

(3) If the proposed operation is to be located on the same stream or river or tributary thereof on which a state or federal fish culture facility is established or is planned to be established.

(4) If the proposed operation is not consistent with sound resource management and is not in close proximity to the ocean.

(5) If the commission determines the applicant does not have the financial capability to successfully construct and operate the hatchery or may not properly conduct the operation authorized under the permit.

SECTION 4. All fish released under this 1971 Act during the time they are in the wild will be the property of the state and may be taken under angling or commercial fishing laws of this state until they return to the private hatchery.

SECTION 5. Any permit granted by the commission pursuant to this 1971 Act shall contain at least the following conditions:

(1) All propagated fish released into state waters shall as far as the commission determines practical be marked.

(2) Prior to release into state waters, the fish must be subject to examination by a qualified fish pathologist approved by the commission to determine that they are not diseased or infected with any disease which in the opinion of the commission may be detrimental to the state fishery resources. Cost of such examination shall be paid by the permittee. No fish shall be released without written approval from the commission. The commission may require diseased fish to be destroyed. The commission shall not suffer civil or criminal liability for any fish destroyed under this section.

(3) The permittee may be authorized by the commission to divert all fish returning to the stream to an inspection area, the location of such area to be approved by the commission, to examine all fish for the purpose of identifying propagated fish.

(4) Notwithstanding the provisions of ORS chapters 509 and 511, the permittee shall have the right to take for commercial purposes, only those fish the commission determines were propagated by the permittee, and the commission's decision is final.

(5) It shall be unlawful for the permittee to conduct any activity not authorized by the permit or fail to conduct activities required by the permit without approval of the commission.

(6) The permittee shall pay all reasonable costs incurred by the commission as a result of the operation of the private hatchery.

SECTION 6. (1) If the commission finds that the operation described in the permit is not in the best public interest, it may alter the conditions of the permit to mitigate such adverse effects or may cause an orderly termination of the operation under the permit. Proceedings to cause such operation or termination shall be conducted in accordance with ORS chapter 183. An orderly termination shall not exceed a four-year period and shall culminate in the revocation of the permit in its entirety. During this period the permittee may continue to examine and take specified propagated chum salmon according to the provisions of the permit but may not release additional fish.

(2) If the commission finds the operation has caused deterioration of natural run of anadromous fish or any population of resident game fish in the waters covered by the permit, it may require the permittee to return the fish populations to the same condition that existed prior to issuance of the permit. The State Game Commission may require the permittee to return the resident game fish population to the same condition that existed prior to issuance of the permit. If the permittee fails to take appropriate action, the Fish Commission of the State of Oregon or the State Game Commission may take such action and the permittee shall bear any cost incurred by either commission.

SECTION 7. The commission, after first assuring all natural and artificial fish production needs of this state have been met, including the needs of all federal and other state fish culture facilities located on the Columbia River and its tributaries, may provide at a reasonable fee chum salmon fish or the sexual products therefrom to any person granted a permit the commission pursuant to this 1971 Act.

SECTION 8. The provisions of ORS chapter 508 shall apply to the taking and sale of chum salmon artificially reared under any permit granted by the commission pursuant to this 1971 Act.

SECTION 9. Nothing in this 1971 Act is intended to give the permittee any equity in any of the waters or fish of the state.

SECTION 10. Nothing in this 1971 Act shall imply an intent to permit commercial fishing in any rivers south of the mouth of the Columbia River except as provided in subsection (4) of section 5 of this Act.

SECTION 11. All moneys received by the commission under this 1971 Act except those under section 8 of this Act shall be paid over to the State Treasurer to be held in a suspense account established under ORS 293.445. After the payment of costs of administration incurred by the commission in carrying out the provisions of this 1971 Act, that portion of the balance of the moneys in this suspense account as of the end of each fiscal year shall be deposited to the General Fund for general governmental purposes.

Approved by the Governor May 19, 1971.
Filed in the office of Secretary of State May 19, 1971.

CHAPTER 204

AN ACT

(SB 345)

Relating to workmen's compensation benefits; amending ORS 656.210; and declaring an emergency.

Be It Enacted by the People of the State of Oregon:

Section 1. ORS 656.210 is amended to read:

656.210. (1) When the total disability is only temporary, the workman shall receive during the period of that total disability compensation equal

POLICIES AND PROCEDURES PERTAINING TO THE OPERATION OF PRIVATE CHUM SALMON HATCHERIES IN OREGON

Fish Commission of Oregon
September 1971

The following policies and procedures have been adopted by the Fish Commission under the authority of Chapter 203, 1971 Oregon Laws, pertaining to private chum salmon hatcheries. The policies apply to all permit holders and will be amended or changed as the Commission deems desirable to protect the resource or to uphold the best public interest.

General

1. Permits are not transferable. If a permit holder sells his hatchery the new owner must apply for a new permit.

2. The private hatchery operator is responsible for obtaining his own eggs. Source of the eggs must first be approved by the Fish Commission.

3. Eggs at the state hatchery on Whiskey Creek, tributary to Netarts Bay, may be available for purchase by permit holders. We expect a few eggs to be available in 1972 and perhaps up to 3 million in 1973.

4. Eggs, and the resulting alevins, sold to permittees by the state shall not be resold.

5. Under no conditions are eggs and fish to be transferred in any way to waters other than specified in the permit.

6. Surplus chum salmon gametes from fish returning to private hatcheries may be made available to the state and/or authorized operators of other private hatcheries in Oregon. Eggs transported to other locations shall be treated as specified by the Fish Commission pathologist to prevent disease transmission.

7. Pathology examinations shall be conducted by Fish Commission pathologists.

Purchase of Eggs from Netarts Hatchery

1. Priority among permit holders to purchase eggs from the state shall be according to date application was filed with the Commission (first come - first served). In the case of persons expressing interest before the law was in effect, priority shall be according to date of written interest as filed with the Commission.

2. Term of priority for purchasing eggs will generally be 3 consecutive years. The Commission will make exceptions as it deems desirable.

3. Up to one (1) million eggs will be sold to the first permit holder before selling any to the holder next on the list; and so on down the list. If permit holders do not wish to buy the entire 1 million eggs reserved for them, the state may sell the remainder to the permit holder next in line as part of his 1 million egg quota. If eggs are still available after each permit holder has had a chance to buy 1 million eggs, the procedure will be repeated until all available eggs have been sold.

4. The charge for eggs from Netarts Hatchery shall be $5.00 per female spawned. The basis for this is $2.00 per thousand eggs and an average of 2,500 eggs per female. The eggs will not be counted.

5. Only "green" (newly spawned) eggs will be made available at Netarts Hatchery. Buyers must be willing and prepared to take small lots (10,000 or more) of eggs on a daily basis.

Services Charges

In compliance with Section 5 (2) and (6) of Chapter 203, 1971 Oregon Laws, permit holders shall be charged for "reasonable costs" for services incurred by the Fish Commission as a result of the operation of private chum salmon hatcheries. The following services are anticipated; others may arise of an unforeseen or emergency nature.

1. Biologist services for inspecting fish racks and fish sorting devices and procedures.

2. Pathologist services for examining fish prior to release.

3. Costs resulting from problems requiring Commission action; i.e., the hatchery operation causes a deterioration of the natural run of anadromous or resident populations which requires investigation and revision of the permit.

4. An overhead charge of 15% will be assessed against direct costs to cover administrative costs.

The amount charged will be the actual wages (including other personnel expenses), travel expenses, and required supplies. Permit holders will generally be informed of necessary service charges before such services are rendered.

PRIVATE CHUM HATCHERY APPLICATION

Fish Commission of Oregon
307 State Office Building
1400 S.W. 5th Avenue
Portland, Oregon 97201

Name _____
Last Middle Initial First

Address _____ _____ _____
Street or Box No. City Zip

Phone _____ _____
Office Home

Business (Give name and nature) _____

_____

Location of Proposed Hatchery

Stream name _____

Tributary of (Name of major stream or bay) _____

County _____

Description of Property (Legal description, landmarks, miles from stream mouth) _____

_____

_____

_____

_____

_____

Owner of Property _____

If leased, duration of lease _____

Proposed Methods (Describe what you plan to do and how you are going to do it.)

Proposed Stock Source

Previous Experience in Fisheries Related Work

What do you expect to do with returning adults? (Describe any agreements you have with fish buyers or other industry representatives.)

Financial Statement

Condition at close of business _____, 19____

ASSETS

		Amount
1.	Cash: On hand $_____ In Bank $_____ Elsewhere $_____	
2.	Notes receivable: Due within 90 days	
	Due after 90 days	
	Past due	
3.	Accounts receivable	
4.	Deposits for bids or other guarantees: Recoverable within 90 days	
	Recoverable after 90 days	
5.	Interest accrued on loans, securities, etc.	
6.	Real Estate: Used for business purposes	
	Not used for business purposes	
7.	Stocks and bonds: Listed--present market value	
	Unlisted--present value	
8.	Materials in stock	
9.	Equipment, book value	
10.	Furniture and fixtures, book value	
11.	Other assets	
	Total Assets*	

LIABILITIES

1.	Notes payable: To banks regular	
	To banks for certified checks	
	To others	
2.	Accounts payable: Not past due	
	Past due	
3.	Real estate encumbrances	
4.	Other liabilities	
5.	Reserves	
6.	Capital stock paid up: Common	
	Preferred	
7.	Surplus (net worth)	
	Total Liabilities*	

* The amounts shown as "Total Assets" and "Total Liabilities" must be identical.

I declare that I have examined this application, including the financial statement, and to the best of my knowledge and belief it is true, correct, and complete.

(Signature of Applicant) _____

Xc - Engineering, Records, McKie
12/9/71 mlc

December 1, 1971

PRIVATE CHUM SALMON HATCHERY PERMIT

In accordance with the provisions of Chapter 203, Oregon Laws 1971, Kota Corporation, an Oregon corporation, is authorized to construct and operate a chum salmon hatchery on Sand and Jewell Creeks, Tributaries of Sand Lake, in Tillamook County.

The following restrictions shall apply to the construction and operation of the Kota Corporation's private chum salmon hatchery:

1. All of the provisions of Chapter 203, 1971 Oregon laws shall apply.
2. The permit shall be contingent upon getting an approved water right for withdrawing water from Jewell Creek to operate the hatchery.
3. The design of the fish rack and trap, as well as location shall be approved by the commission before the rack and trap are installed.
4. The rack must be attended and the fish trap emptied daily during the entire period the rack and trap are operated. Attention must be given to operation of the facility to prevent theft of fish, to adjust for changing water conditions, and to otherwise prevent damage to fish which might be blocked or trapped.

5. All species of fish caught in the trap, other than chum salmon, shall be placed upstream as promptly and carefully as possible.

6. For three years starting in 1971 chum salmon from the Sand Creek system shall be allowed to be used for hatchery stock as per the following directions:

   a. The first 25 female and 25 male chum salmon which appear at the rack(s) shall be placed upstream.

   b. The next 50 female and 50 male chum salmon may be spawned.

   c. The next 50 female and 50 male chum salmon are to be released upstream for natural spawning.

   d. The next 50 female and 50 male chum salmon may be spawned. This is all the fish that can be spawned and will provide an estimated 250,000 eggs.

   e. If any more chum are trapped they shall also be placed upstream for natural spawning.

   f. During the three years natural stocks are being utilized as hatchery brood stock the fish rack(s) shall be opened on December 1 and no more fish of that run trapped after that date.

7. All carcasses of chum salmon spawned from native stock in 1971, 1972, and 1973 shall be delivered promptly to the Fish Commission for state disposal.

8. A record shall be maintained for the commission of the species, number, and date fish are placed above the trap and of the number of fish which die in the trap or are spawned.

9. One dollar per thousand shall be paid to the State of Oregon for eggs collected from native fish spawned from the Sand Creek system in 1971, 1972, and 1973. To avoid the necessity of counting eggs, a charge of $2.50 per female will be imposed (calculated by estimating that, on the average, each female will have 2,500 eggs).

The amount charged will be the actual wages (including other personnel expenses), travel expenses, and required supplies. The permit holder will generally be informed of necessary service charges before such services are rendered.

Adopted and signed this first day of December, 1971.

FISH COMMISSION OF OREGON

CHAIRMAN

VICE-CHAIRMAN

COMMISSIONER

10. Beginning in 1974 all chum salmon returning to the Sand Creek rack in excess of the greatest number of chum handled during 1971, 1972, and 1973 will be considered as fish produced by the hatchery and may be killed and disposed of by the Kota Corporation.

11. Beginning in 1974 the greatest number of chum salmon that were handled at the Sand Creek rack in 1971, 1972, and 1973 shall be placed above the rack before any fish are claimed and killed by the Kota Corporation.

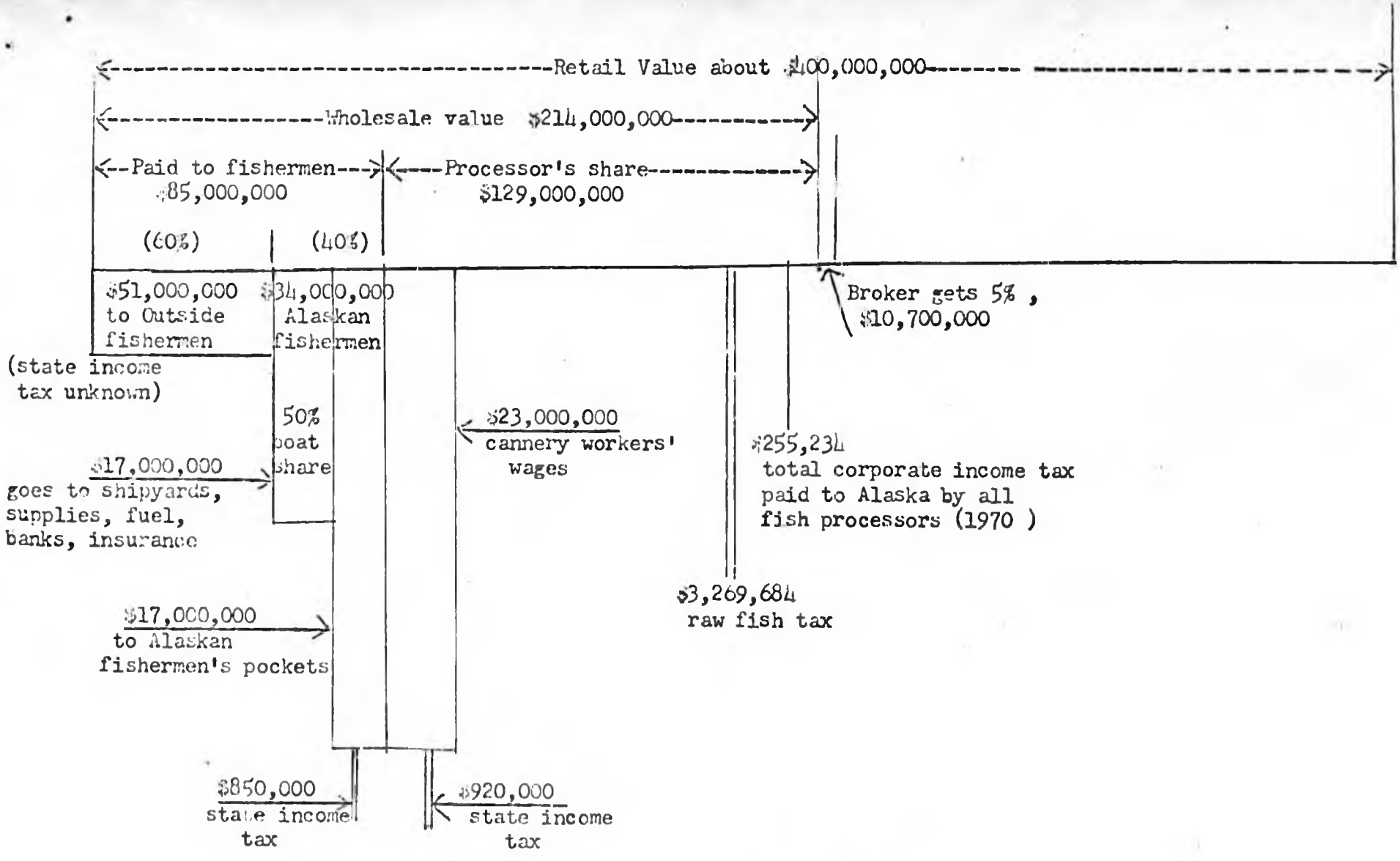
12. The above restrictions will be reviewed annually by the Fish Commission and desired modifications will be made after consultation with the permittee.

SERVICE CHARGES

In compliance with Subsections(2) and (C) of Section 5 of Chapter 203, 1971 Oregon Laws, the permit holder shall be charged for "reasonable costs" for services incurred by the Fish Commission as a result of the operation of this private chum salmon hatchery. The following services are anticipated; others may arise of an unforeseen or emergency nature.

1. Biologist services for inspecting fish racks and fish sorting devices and procedures.
2. Pathologist services for examining fish prior to release.
3. Costs resulting from problems requiring commission action, i.e., the hatchery operation causes a deterioration of the natural run of anadromous or resident populations which require investigation and revision of the permit.
4. An overhead charge of 15 percent will be assessed against direct costs to cover administrative costs.

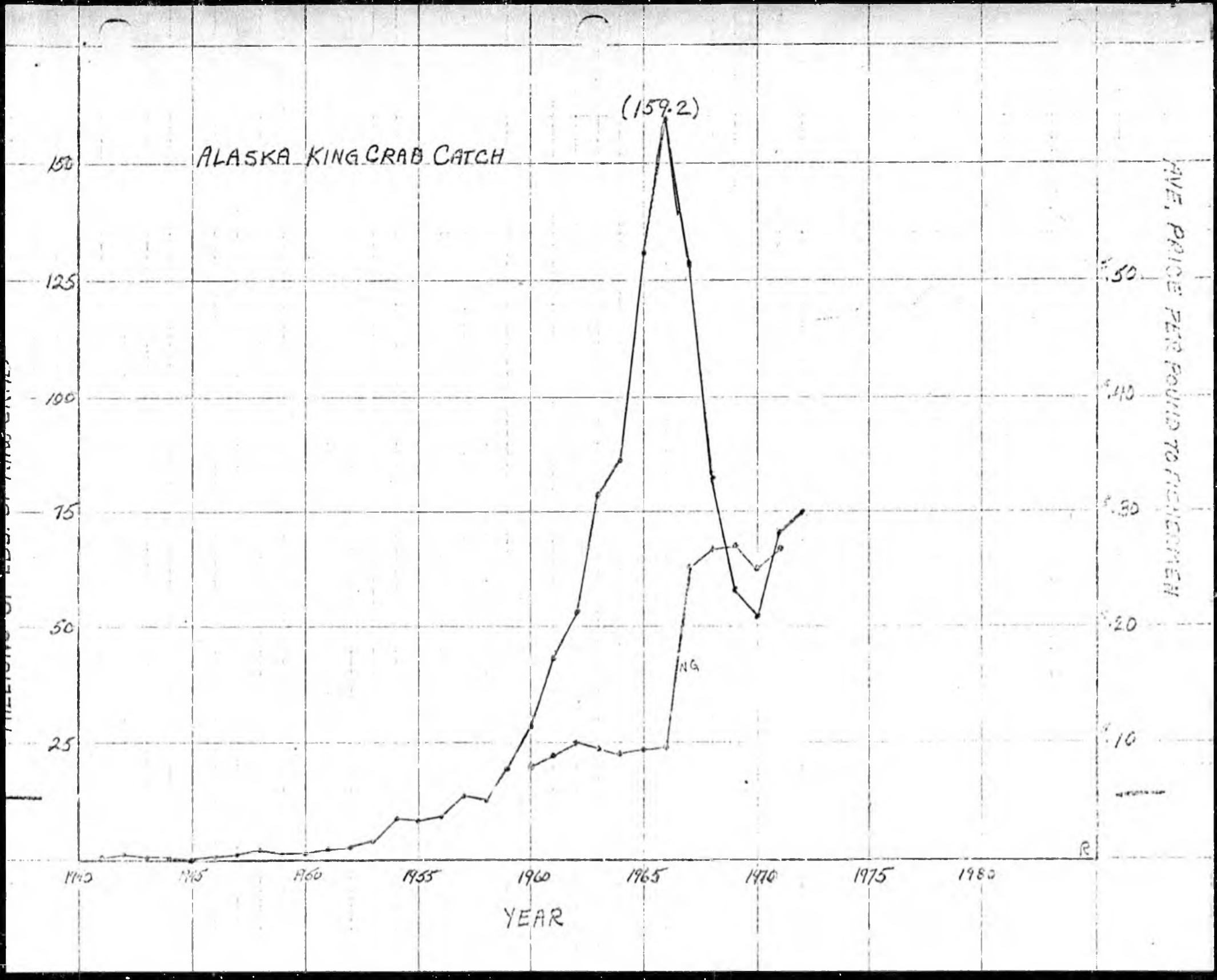
HB294



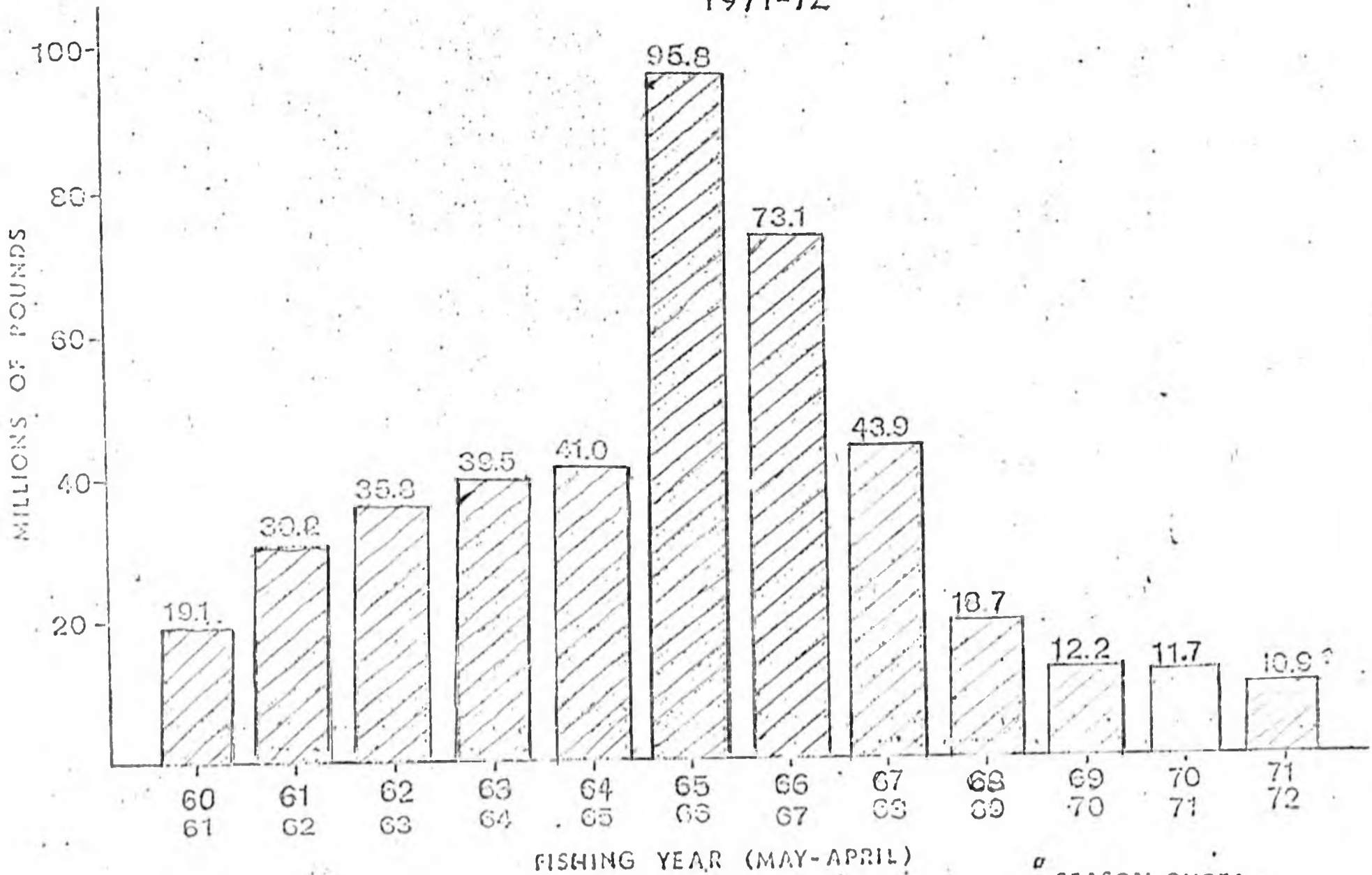
FLOW OF FUNDS---ALASKA SEAFOOD INDUSTRY 1971

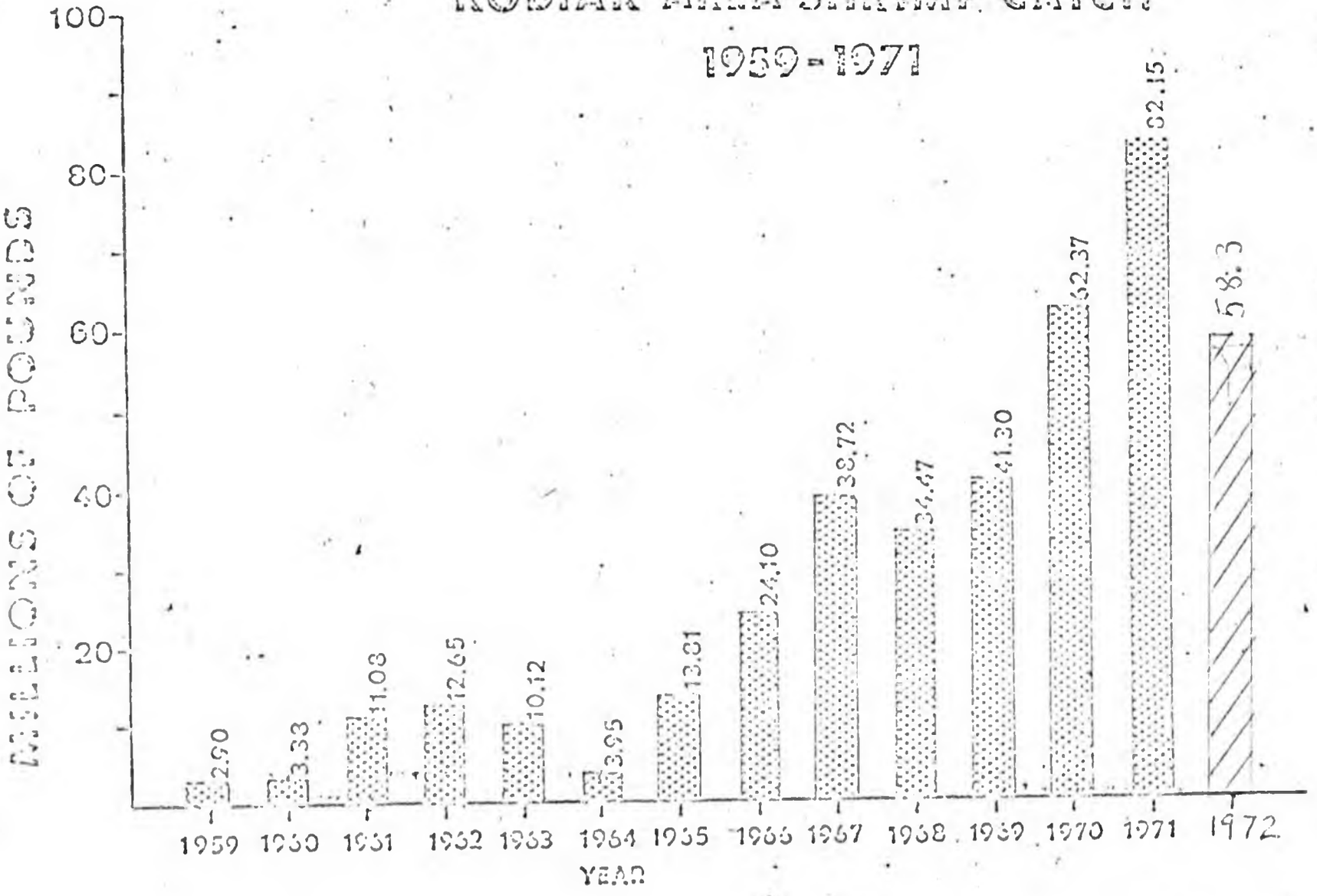
Note: The wholesale value may be greater than indicated. Much of the industry is vertically integrated, with many processors having substantial interests at the fishing level as well as in brokering, labeling, and further distribution.

Compiled by Dave Herrnsteen


ALASKA KING CRAB CATCH
(159.2)
150
125
100
75
50
25
1940
1945
1950
1955
1960
1965
1970
1975
1980
YEAR
AVE. PRICE PER POUND TO FISHERMEN
$.50
$.40
$.30
$.20
$.10
NG

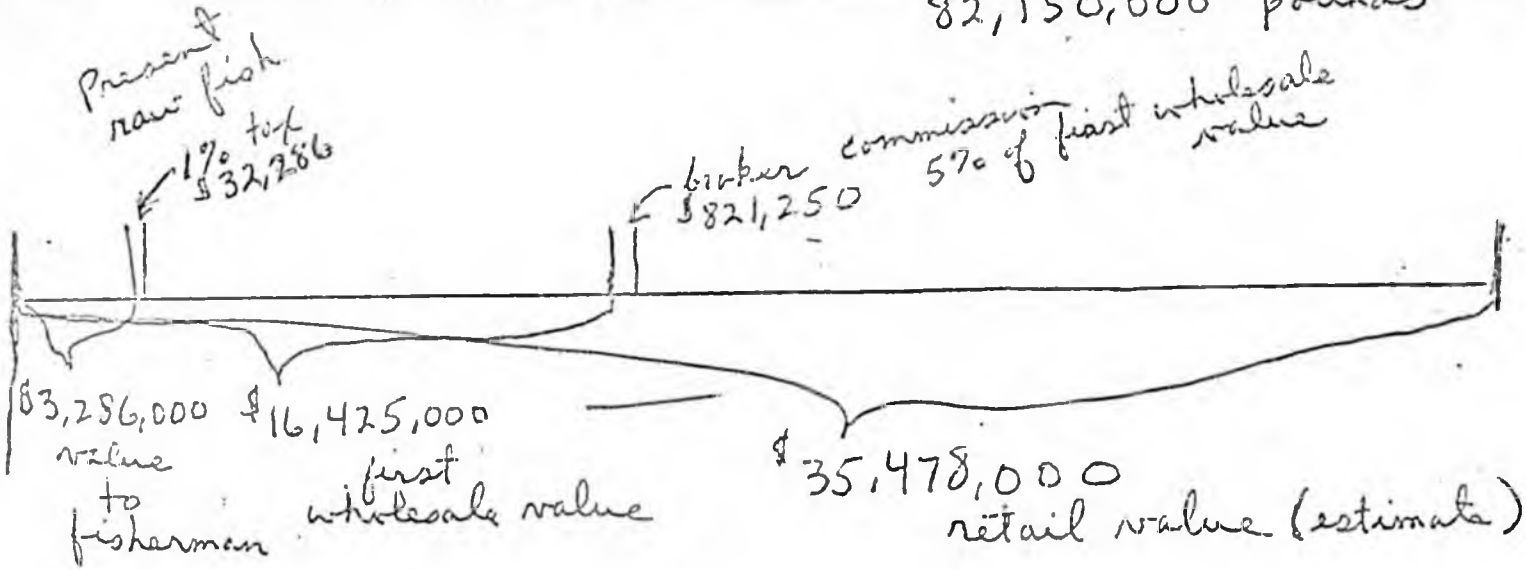
KODIAK AREA KING CRAB CATCH 1960-61 TO 1971-72




KODIAK AREA SHRIMP CATCH
1959-1971
MILLIONS OF POUNDS
100
80
60
40
20
2.90
3.33
11.03
12.65
10.12
3.95
13.31
24.10
38.72
34.47
41.30
62.37
82.15
58.3
1959
1960
1961
1962
1963
1964
1965
1966
1967
1968
1969
1970
1971
1972
YEAR

1971 KODIAK SHRIMP HARVEST

82,150,000 pounds



82,150,000 pounds at price to fisherman of $.04 per pound

$.04

$3,286,000 value to fisherman

82,150,000 pounds of raw shrimp at recovery rate of 16% produces

.16

13,140,000 pounds of processed shrimp valued at $1.25 per pound at first wholesale level

1.25

$16,425,000 first wholesale value

$35,478,000 estimated retail value

The State of Alaska allowed serious overfishing of our king crab stocks during the past decade. Predictions based on guess-timates proved too rosy, and management techniques and quota systems have improved, and the king crab catch is on the upswing again. It was an expensive lesson, for if we hadn't seriously depleted some of the stocks back in the sixties, we would likely have a higher sustained yield harvest level today.

One would hope that Alaska had learned, but apparently we haven't, for the same pattern of overfishing and undermanagement of our shrimp and tanner crab stocks is taking place today. The shellfish program of Fish and Game is underfunded, while at the same time the lucrative resource is undertaxed.

Alaska produces about 25% of our nation's shrimp harvest. Kodiak's 1971 shrimp harvest produced 82,000,000 pounds of shrimp with a value of $16,000,000 when leaving town, yet the state spent only $90,000 'managing' the resource, and collected only $32,000 in fish tax revenues. This year's production dropped thirty per cent to 58,000,000 pounds, and some of the grounds have already been seriously overfished. Fish and Game has developed the basic management techniques, but it doesn't have the funds to implement them.

Now some of the fishing pressure is moving westward to the Chignik-Sand Point area where the expected harvest this year will be 30,000,000 pounds, about a third of the entire American Pacific Coast catch. Yet due to lack of funding there is no management program at all, and the valuable stocks are being subjected to the familiar free-for-all.

And the same destructive development pattern is taking place with the booming tanner crab fishery, except that with the greatly increased fishing capacity it's happening at an accelerated rate. Fish and Game has no tanner crab program. At the request of the Cordova fishermen a quota was guessed at for the Prince William Sound area, but the Kodiak area has no quota, and along with the entire state, no size or mesh limits. No attempt is being made to inventory the tanner crab stocks or to derive the needed basic management data.

The management of our fisheries is the responsibility of the State. No one else can do this with our competitive, unlimited entry, free enterprise system, unless the federal government should step in and take over fisheries management, and I'm sure then we would squeal. It is the task of the legislature to provide the funds for adequate management of our fisheries, deriving the funds through realistic taxation of the resource if necessary. Crab and shrimp fishermen are making a good living. I feel a major concern is that our resources are being so under-managed that we won't be able to make a living in the future.

Fishermen have a saying that goes, 'you can't make a season on the grub bill'. It sort of tells the cook not to be too penny-pinching on the food, because the payday is going to be determined primarily by the amount of fish caught, and good food can be particularly desirable when the fishing is heavy. The same type of concept holds true with management--if the fishing industry isn't willing to spend the few dollars necessary to properly take care of our fish, then we very likely won't have enough fish to catch in the future.

Dave Herrnsteen

1971 ALASKA SEAFOOD VALUES AND TAX REVENUES

	VALUE TO FISHERMEN	FIRST WHOLESALE VALUE	PROCESSOR TAX
Canned salmon	$51,411,428 total	$107,981,152	$2,670,560
Frozen salmon		11,966,575	99,568
Fresh salmon		921,415	
Salmon roe		27,000,000	
Salmon Total	$51,411,428	$147,869,142	$2,770,128
King Crab	$19,077,253	$32,351,952	$349,393
Dungeness Crab	609,924	1,478,775	6,099
Tanner Crab	1,363,544	2,893,827	13,685
Shrimp	3,909,045	15,780,163	39,090
Clams	70,152	107,487	701
Scallops (shucked)	990,385	1,206,593	9,903
Shellfish Total	$26,025,303	$53,818,797	$418,871
Halibut	$7,236,812	$10,178,125	$72,368
Misc. Fish	831,777	2,169,255	8,317
TOTAL SEAFOOD	$85,505,320	$214,035,319	$3,269,684

Compiled from ADF&G and NMFS statistics

SECTION II

DETAIL OF STATE REVENUES
FISCAL YEARS 1972-78

CODE	REVENUE SOURCES	ACTUAL F.Y. 1972	ESTIMATED F.Y. 1973 Budget Estimate	F.Y. 1973 Revised Estimate	F.Y. 1974 Revised Estimate	F.Y. 1975 Revised Estimate	F.Y. 1976 Revised Estimate	F.Y. 1977 Revised Estimate	F.Y. 1978 Estimate
				GENERAL FUND - UNRESTRICTED REVENUE					
INCOME, EXCISE AND OCCUPATION TAXES									
101	Alcoholic Beverage Excise Tax	$ 4,837.8	$ 6,301.1	$ 5,124.2	$ 5,636.7	$ 5,862.2	$ 6,069.6	$ 5,994.7	$ 6,234.5
102	Cigarette Tax (3¢ General)	1,209.2	1,357.0	1,224.8	1,447.3	1,592.1	1,751.3	1,821.3	1,894.2
104	Insurance Premium Tax	3,475.9	4,364.3	3,927.8	4,438.4	5,015.4	5,667.4	6,404.2	7,236.8
105	Alaska Business License Tax	6,069.1	6,321.0	6,433.2	7,015.1	8,062.7	8,794.2	9,124.0	8,920.2
Income Taxes									
106	Individual Income Tax	39,076.3	42,962.7	41,039.4	49,822.4	57,142.8	59,735.3	55,398.3	55,508.2
107	Fiduciary Income Tax	47.6	40.0	50.0	50.0	55.0	55.0	55.0	60.0
108	Corporation Income Tax	6,458.0	6,906.9	6,886.8	7,594.7	8,007.1	8,643.2	10,673.1	21,160.7
	Total Income Taxes	$45,581.9	$49,909.6	$47,976.2	$57,467.1	$65,204.9	$68,433.5	$66,126.4	$76,728.9
109	Mines and Mining Taxes	30.7	17.0	32.0	40.0	40.0	60.0	80.0	80.0
110	Inheritance Tax	59.2	20.0	17.2	10.0	4.0	-0-	-0-	-0-
111	Estate Tax	39.3	8.0	42.0	50.0	55.0	60.0	65.0	70.0
Commercial Fish Taxes									
112	Raw Fish Tax	2,714.4	2,816.8	1,570.4	1,647.3	2,342.0	2,633.8	3,162.5	2,791.9
113	Fish Tax - Cold Storage	339.8	305.0	340.0	340.0	350.0	360.0	370.0	380.0
114	Fish Tax - Freezer Ship	228.5	140.0	230.0	230.0	230.0	230.0	230.0	230.0
	Total Commercial Fish Taxes	$3,282.7	$3,261.8	$2,140.4	$2,217.3	$2,922.0	$3,223.8	$3,762.5	$3,401.9
117	Disaster Relief Tax	1.8	-0-	-0-	-0-	-0-	-0-	-0-	-0-
118	School Tax	1,491.5	1,455.3	1,533.9	1,654.3	1,718.1	1,772.5	1,742.8	1,760.2
120	Electric & Telephone Coop Tax	469.0	455.0	500.0	520.0	540.0	570.0	590.0	610.0
Fuel Taxes									
131	Highway Fuel Tax	8,898.8	9,928.9	9,431.3	10,621.2	11,429.0	11,570.8	12,010.8	12,621.2
132	Aviation Fuel Tax	1,476.6	1,840.0	1,386.8	1,577.3	1,665.0	1,740.0	1,591.2	1,623.0
133	Watercraft Fuel Tax	1,026.5	1,100.6	1,041.3	1,083.0	1,126.3	1,171.3	1,218.2	1,266.9
	Total Fuel Taxes	$11,401.9	$12,869.5	$11,859.4	$13,281.5	$14,220.3	$14,482.1	$14,820.2	$15,511.1
	Total Income, Excise and Occupation Taxes	$77,950.0	$86,339.6	$80,811.1	$93,777.7	$105,236.7	$110,884.4	$110,531.1	$122,447.8
OIL & GAS PRODUCTION TAX									
115	Oil & Gas Production Tax	11,400.8	9,535.0	10,947.0	8,826.0	7,989.0	7,269.0	87,593.0	147,934.0

1973 ALASKA SEAFOOD VALUES AND TAX REVENUE PROJECTIONS

	Value to fishermen	First wholesale	Existing tax	Proposed tax
Canned salmon		$66,000,000	$1,570,400	$1,570,400
Frozen salmon	$32,000,000	8,000,000	60,000	60,000
Fresh salmon		700,000		
Salmon roe		12,000,000		1,000,000
Sub total	$32,000,000	86,700,000	1,630,400	2,630,400
King crab				
shore-based	13,600,000	26,000,000	136,000	680,000
floater	9,700,000	23,000,000	388,000	1,940,000
Sub total	23,300,000	49,000,000	524,000	2,620,000
Shrimp				
shore-based	4,300,000	20,000,000	43,000	215,000
floater	900,000		36,000	180,000
Sub total	5,200,000	20,000,000	79,000	395,000
Tanner crab	6,000,000	16,000,000	60,000	300,000
Dungeness crab	2,000,000	4,500,000	20,000	100,000
Scallops	1,400,000	1,700,000	14,000	70,000
Halibut	14,000,000	18,000,000	140,000	420,000
Herring	270,000	2,000,000	2,700	13,500
Herring roe				200,000
Total Seafood	$84,170,000	$197,900,000	$2,470,100	$6,748,900

1973 PROJECTED FISH PROCESSOR TAX REVENUES

Revised Budget Estimate		$2,200,000
20% Revenue Sharing(actually 13%)		286,000
Net to state		1,914,000
Proposed Increases		
King Crab	2,096,000	
Shrimp	316,000	
Halibut	280,000	
Others	387,000	
Roe	1,200,000	
Total Increases		4,279,000
Total Proposed Revenues		6,193,000
40% Revenue Sharing(actual 25%)		1,548,000
Net to State		4,645,000
Net Increase to State		2,731,000

In 1971 under 20% revenue sharing only 13% was actually shared with the communities. Less than 40% of proposed revenues would be actually shared. The $1,000,000 collected at Adak, for instance, would go solely to the state.

SALMON

The present tax on canned salmon is 3% of the value of the pack, with the value determined as the average wholesale price over the preceding five years. This is roughly equivalent to 6% of the value to the fishermen. Shore-based processors purchasing salmon for purposes other than canning, such as fresh or frozen production, pay a tax of 1% of the value to the fishermen. Freezerships and other floating cold storages pay a tax of 4% of the value to the fishermen, except that if they remain in the same location for more than one year, they pay at the shore-based rate of 1%. SB169 does not change these rates.

CRAB

Crab canneries, both shore-based and floating, presently pay a tax of 2% of the value of the raw crab. Crab purchased for fresh or frozen production, as most crab are, is taxed at the rate of 1% for shore-based and 4% for floaters. SB169 proposes taxing all crab at the rate of 5% for shore-based processors and 20% for floating processors.

There are several reasons for taxing the floating processors at the considerably higher rate. Unlike the past, when floaters were needed, the crab processing industry today has more than adequate capitalization. A shore-based plant makes significant contributions to the local economy through property taxes, construction and maintenance costs, providing more steady jobs, etc. A floater has the competitive advantage of being able to locate closer to the grounds than a shore-based plant, and so is able to purchase crab at a considerably lower price during a quick season. For instance, the town of Kodiak is on the norrth end of the island while the heavy king crab fishing the last few seasons has been at the south end. Last year crab was selling for as little as 32 cents at the south end while at the same time it was as high as 40 cents in town. The 15% differential, about 4½ cents, would tend to diminish these advantages.

But probably the most important reason for the higher tax on floaters is that they traditionally move into the new or more distant grounds first and get the 'cream of the crop'. It is at these times, before the stocks are fully- or over-harvested, that an impact of management dollars is needed to inventory the stocks and find the right sustained yield harvest levels. This is presently lacking. Protection is also needed in these areas, where it is particularly expensive.

King crab is Alaska's one monopoly and our most lucrative fishery, and it makes sense to use a small part of this wealth for better management of our present and developing fisheries.

SHRIMP

Shore-based shrimp processors presently pay a tax of one per cent of the value to the fishermen, while a floating processor pays 4%. SB169 proposes raising this to 5% for shore-based and 20% for floaters.

New floaters have recently been moving into the Chignik-Sand Point area, yet the state has no management or protection program.

The proposed tax on shrimp is actually quite low since the value to the fishermen is such a relatively low percentage of the first wholesale value. An amount equal to all the additional tax revenues from shrimp is very badly needed for the neglected resource.

HALIBUT

The present tax on halibut purchases by cold storages is 1% of the value to the fishermen. SB169 proposes raising the rate to 3%.

In the past there were good arguments for a low tax on halibut, but these are no longer valid with today's high prices. The large halibut boat will fish steadily until he has a load or up to three weeks before selling his fish. Roundtrip running time from the Kodiak area, which is in the midst of the major grounds, to Seattle is 10 to 12 days. Back in 1967 when the price was 18 cents in Kodiak and 25 cents in Seattle, a boat running to Seattle would receive 40% more money for his catch. Last year, with a price of say 70 cents in Kodiak and 77 cents in Seattle, he would receive only 10% more for his catch, while the increased running time would lengthen the time of his trip by maybe 50%. Seattle, formerly the major American buyer, has had a sharp decrease in landings the past several years, and in 1972, when the halibut price was 100% above 1971 prices, Seattle's already small landings decreased 300%.

Many halibut fishermen had very lucrative seasons this year. Additionally, halibut fishermen, unlike all other fishermen, do not have to pay Alaska income tax on any earnings from fish caught outside three miles, as most halibut reportedly are.

ROE PROCESSOR TAX

SB169 proposes that the roe processor pay a tax of 25 cents per pound of roe processed. The value of the salmon presently taxed as determined by the canned salmon tax does not include the value of the roe. Salmon roe processors reported to Fish and Game that they received $1.25/lb from the 1971 roe pack. Japanese market reports show that when the roe reached the Tokyo wholesale market in the fall of 1971, it was worth about $3.25/lb. Freight and market fees are only about $.25/lb, so I reckon that the roe was worth about $3.00/lb when leaving Alaska.

People's opinions differ as to where the burden of this tax will fall. Twenty-five cents per pound on roe would produce revenues equal to about 1½% of the first wholesale value of the entire salmon production. This burden would be on all processors equally--cold storages and canners alike. The next question is how much of the tax will be passed back onto the fishermen. The vast majority of salmon are sold by the fishermen in the round. When the roe became extremely valuable instead of a waste product, fishermen did not see a corresponding raise in prices. I see no reason why when these extra profits are taxed that the burden should fall completely back onto the fishermen. I feel it will probably be shared by all segments of the industry.

Many salmon fishermen are interested in rehabilitation of the runs, improved management, and hatcheries of some type. With the lack of oil money, I feel the industry should be willing to pay for the investment in the resource. It seems reasonable to 'tax eggs to hatch eggs'. It should all pay off many times over in the long run.

REVENUE SHARING

Under the existing law, 20% of the fish tax revenues are shared with the local governments in which they are collected. In 1971 only 13% of gross revenues were shared, because considerable amounts are collected in unorganized areas. SB169 proposes sharing 40% with the local governments. This would work out to actually sharing only about 25%. For instance, the million dollars collected from the Adak king crab catch with the increased floater tax would go only to the state.

Fishing communities have special tax problems. Our industry produces much wealth, but usually so little of it stays in the local community. Fishing boats and floating processors are difficult to tax. Sales and property taxes are paid largely by the resident, while the transient makes his money and heads South. Ninety-five percent of Alaska's fish are processed by Outside-owned corporations, so their profits don't stay in the community. It is difficult to tax a salmon boat, for only the local boat can be taxed, and the tax could be the last straw on a bad year.

Seafood money flows into the local economy mainly through the local fishermen and cannerywork̃ers, and these two groups have a difficult time passing on direct taxes. It is more fair to get the same number of dollars by taxing the fish, for then the local tax burden is shared by the whole industry, including the Outsiders.

Other areas of the state have industries that provide buildings, heavy equipment, pipelines, oil platforms, steadier payrolls, etc, that can be more easily taxed with local taxes. Fishing communities spend money trying to provide the services for an industry which is difficult to tax locally. The help of the state through revenue sharing of the fish tax is needed in order for our fishing communities to tax the wealth of our industry.

Foster and Marshall recently did a tax study for Kodiak to determine how the town can raise the money needed to pay for the new high school addition and swimming pool. It recommended raising the sales tax from 3% to 5% and taxing the fishing boats full value. The increased shared revenues under SB169 would provide about the same amount of dollars. It's an 'either-or' situation for Kodiak.

SUMMARY

'Tax' is too often considered a dirty word---everybody wants to avoid it, particularly politicians. But taxes are a necessary part of democracy and capitalism. They are the way of appropriating part of the wealth to serve those needs of industry and society that cannot be served by free enterprise alone. It's easy under socialism or communism, for then all the revenues from production go directly to the government, but I don't think we are interested in that.

Completely unrestricted free competition in the harvesting of fish doesn't work. Even though to a few fishermen at times management may seem to be an evil, management is absolutely necessary, and we should work to make sure that it's as effective as possible.

In eight years time in Kodiak I have lived through inadequate management of two major fish stocks, king crab and shrimp, and have twice experienced the results of overfishing, and now it's happening all over again with tanner crab. For several years I fished tremendously rich shrimp and king crab grounds--the prices were low, but the volume was great, and we did well. But now some of those grounds are seriously depleted or practically barren. The prices went up to help compensate for the lower volumes, but think how much richer we would all be if we had had adequate management.

I don't put all the blame on Fish and Game. Some of their managers probably made some mistakes, but they can't work without tools. The king crab and shrimp budgets have been terribly small. It costs money to gather the research data and inventory the stocks.

The blame lies with all of us--processors, fishermen and the state--we've neglected management until the resource gets in trouble. Our fisheries have fantastic potentials if we only pay them the necessary attention. The responsibility of management rests with the state. I love fishing--it's my way of life--but I enjoy it much more when I feel I'm harvesting, rather than raping, the resource.

Table 1. Commercial Fisheries Values and Budgets (Thousands of $)

Year	Fishermen	Value Wholesale	Budget Management	Research	88-309	89-304	Misc.	Total	% of Wholesale
1960	40,934	96,674	511	200				711	0.74
1961	46,470	128,687	914	264				1,178	0.92
1962	58,436	131,938	900	284				1,184	0.90
1963	46,859	109,038	913	327				1,240	1.14
1964	56,843	140,921	1,147	498	20			1,665	1.18
1965	70,083	166,572	1,037	257	290		50	1,634	0.98
1966	81,902	197,299	1,073	361	328		20	1,782	0.90
1967	48,777	126,696	1,165	384	333	166		2,048	1.62
1968	79,900	191,686	1,275	375	328	425		2,403	1.25
1969	71,024	144,200	1,317	692	328	425		2,762	1.92
1970	98,390	213,932	1,502	746	304	425		2,977	1.39
1971	85,505	198,658	1,989	980	304	388		3,661	1.84
1972			2,095	1,052	304	388	383	4,222	
							Avg.		1.18

Table III - Pacific Coast Halibut Landings (drsd., hds-off, weights) 1971 and 1972*

	Total 1971		Total 1972	
	U. S. Vessels 1,000 lbs	Canadian Vessels 1,000 lbs	U. S. Vessels 1,000 lbs	Canadian Vessels 1,000 lbs
Alaska:				
Juneau	1,220.0	13.0	1,017.0	-
Ketchikan 1/	2,742.0	23.0	1,242.9	-
Kodiak	4,425.0	4,792.0	5,167.0	3,246.0
Pelican	865.0	581.0	683.0	459.0
Petersburg	2,528.0	61.0	2,504.0	48.0
Sand Point	276.0	408.0	654.0	314.0
Seward 2/	2,442.0	1,169.0	3,401.0	1,577.0
Sitka	1,139.0	124.0	1,159.0	70.0
Wrangell	417.0	-	342.0	-
Other Central Alaska	648.0	38.0	920.0	-
Total Alaska	16,702.0	7,209.0	17,089.0	5,714.0
Prince Rupert 3/	1,568.0	11,514.0	1,300.0	10,842.0
Vancouver 4/	-	4,719.0	-	4,181.0
Seattle	1,875.4	120.6	631.0	-
Bellingham	724.0	1,940.4	510.0	1,320.0
Other Washington Ports	219.6	-	233.3	-
Oregon	69.0	3.0	45.0	-
Total	21,158.0	25,496.0	19,808.3	21,657.0
GRAND TOTAL	46,654.0		41,465.3	

1/ Includes Craig, Tokeen and Metlakatla. 2/ Includes Seldovia and Cordova: 3/ Includes Ketchikan.
4/ Includes Vancouver Island and Naiu.

Table 2.--Japan's wholesale price for imported chum and pink salmon roe, September 1971-72.

Grade	Price per pound	
	September 1971	September 1972
First:		
Chum salmon roe	3.41 to 3.79	3.99 to 4.80
Pink salmon roe	3.15 to 3.41	3.99 to 4.28
Second:		
Chum salmon roe	3.16 to 3.41	3.69 to 4.36
Pink salmon roe	2.90 to 3.03	3.69 to 3.84
Third:		
Chum salmon roe	2.91 to 3.03	3.39 to 3.92
Pink salmon roe	2.65 to 2.65	3.39 to 3.40

("Suisan Tsushin," September 25, 1972).

It is important when discussing taxes to keep in mind the magnitude of the dollars involved, and to relate the rates to the tax base on which it is applied. It means little to say that a tax is doubled or tripled unless we know the amount of dollars that is doubled or tripled. Three times nothing is nothing. Three times one is three, which is something. But three times three is nine, which may be a lot. Some of the existing tax collections are so low that to double or triple them isn't a lot.

Take the 1972 Kodiak king crab catch as an example:
First wholesale value was about $10,000,000.
15,000,000 lbs @ $.35/lb equals $5,250,000 value to fishermen

present tax rate of 1% produces $52,500
proposed rate of 5% produces $262,500

Tax as related to price: 1% of $.35 is $.0035/lb , about a third of a cent
5% of $.35 is $.0175/lb , a cent and three-fourths
increase is $.014/lb , a little less then a cent and one half

That means if the tax increase were to be completely passed back onto the fishermen, that it would decrease the price of king crab by $.014/lb. If the processor and/or the consumer were to absorb half of the increase, then the amount it would cost the fishermen would be $.007/lb , or ~~xxxxx~~ about three quarters of a cent. It would take only a 2% increase in future king crab harvests as a result of improved management and protection from the investment of the tax dollars in the resource, in order to pay the fishermen back for the increased taxes. Lower local taxes and/or community improvements as a result of the revenue sharing would be an added bonus.

Some other rates as related to price:

1972 Kodiak shrimp harvest(first wholesale value about $11,000,000)
50,000,000 lbs @ $.0525/lb = $2,625,000 value to fishermen

	Tax as related to price
Present rate 1% = $26,250	1% of $.0525 = $.000525
Proposed rate 5% = $131,250	5% of .0525 = .002625

1972 Kodiak halibut landings
about 9,000,000 lbs @ $.60/lb = $5,400,000 value to fishermen

	Tax as related to price
Present rate 1% = $54,000	1% of $.60 = $.006
Proposed rate 3% = $162,000	3% of .60 = .018

HB 363

"An Act providing for a community water and sewer revolving loan fund; and providing for an effective date."

COMMITTEE REPORT

HOUSE

Mr. Speaker: Date _____

The Committee on _____ has had _____

under consideration. A Majority of the members of the Committee

( ) 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 THAT CS FOR _____ DO PASS

( ) "and" recommends it BE REFERRED TO THE _____ COMMITTEE

( ) reports it back WITHOUT RECOMMENDATION

( ) "other"

Members signing the Majority report:

_____ _____ _____

_____ _____ _____

_____ _____ _____

_____ _____ _____

Members NOT concurring in the Majority report:

_____ recommends:

_____ recommends:

_____ recommends:

_____ recommends:

_____ recommends:

_____ Chairman

HOUSE RESOURCES COMMITTEE WORK SHEET

BILL NO.	DATE	PAGE	TITLE	SPONSOR	FURTHER REFERRALS

This Bill If Enacted Would: House Bill 363 by Chance

3/26/73

Dept CRAF to Dept of N. AF

When Bill Considered by RA Committee:

Action Taken by Committee:

Amendments: Amended to Provide That:

Degnan -

Witnesses Testifying Before Committee: (summary of testimony)

STATE OF ALASKA

WILLIAM A. EGAN, GOVERNOR

DEPT. OF ENVIRONMENTAL CONSERVATION

POUCH O — JUNEAU 99801

March 26, 1973

The Honorable Joseph McGill
Chairman, House Resources Committee
Alaska State Legislature
Pouch V
Juneau, Alaska 99801

Dear Representative McGill:

The Department of Environmental Conservation, presently responsible for administering AS 46.03.030, the statute providing State financial assistance for municipal water supply and sewerage systems, as well as the Village Safe Water Act, has reviewed House Bills 363 and 364 and provides the following information for Committee consideration in evaluating this proposal for a "community water and sewer revolving loan fund."

Although the two bills specify administration of the new loan funds by the Department of Community and Regional Affairs, I have discussed the matter briefly with Commissioner Byron Mallott of that Department, and Commissioner Mallott concurs that if the new program is created, it should reside in the Department of Environmental Conservation as being complementary to the water and sewer system support programs presently under Environmental Conservation jurisdiction.

As you may know, the original State statute providing for financial assistance to Alaska municipalities was prepared in 1970 to take advantage of certain federal funding programs which have since been modified or eliminated. In addition to a completely revamped Federal Water Pollution Control Act passed by the Congress in October 1972, we have seen in recent months the termination of all federal grants by departments other than the Environmental Protection Agency. The Farmers Home Administration of the Department of Agriculture, however, continues to make federal loans at rates almost as favorable as those shown in House Bill 363, to municipalities of under 10,000 population. It is our understanding that approximately $340 million has been requested for this purpose during FY 74. Most Alaska municipalities are aware of this loan fund and are taking advantage of its provisions when they are prepared to sell local bonds for water and sewer system improvements. The present FHA rate of interest is five percent for a maximum 40-year period.

Significantly, the Water Pollution Control Act Amendments of 1972 no longer permit State and municipal prefinancing of sewage treatment projects as was authorized under the old Public Law 660. You will recall that our Alaska law was designed to permit State loans of the federal share in any year in which the federal allocation to Alaska had been exhausted. Now that Alaska citizens have voted a substantial $32 million bond issue last November, the Department no longer is able to lend this federal share and advises municipalities that they must await firm federal commitments before initiating sewage interceptor and treatment plant projects.

Summary

In summary, the Department respectfully suggests to the Committee that House Bills 363 and 364 be not favorably considered because:

(1) Since federal sewage treatment grants can no longer be prefinanced by state and municipal governments, this new revolving loan fund essentially could apply only to collection sewer and water system improvements.

(2) An almost identical federal program with adequate funding for all Alaska needs is in existence and has been most helpful to Alaskan municipalities.

(3) The sum of $1 million appropriated in House Bill 364 is grossly inadequate even if the federal program did not exist. Several Alaska projects being considered by municipal officials have a local 75 percent share in excess of the $1 million contemplated.

(4) All Alaska municipalities except the four with populations of over 10,000 could continue to have access to Farmers Home Administration loan funds as well as those created by this bill. Thus, HB 363 would provide real assistance only to Anchorage, Fairbanks, Juneau and Ketchikan.

Sincerely yours,

James A. Anderegg, Director
Division of Water and Air
Quality Control

STATE OF ALASKA

DEPT. OF ENVIRONMENTAL CONSERVATION

WILLIAM A. EGAN, GOVERNOR

POUCH O — JUNEAU 99

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Chairman, House Resources Committee
Alaska State Legislature
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Although the two bills specify administration of the new loan funds by the Department of Community and Regional Affairs, I have discussed the matter briefly with Commissioner Byron Mallott of that Department, and Commissioner Mallott concurs that if the new program is created, it should reside in the Department of Environmental Conservation as being complementary to the water and sewer system support programs presently under Environmental Conservation jurisdiction.

As you may know, the original State statute providing for financial assistance to Alaska municipalities was prepared in 1970 to take advantage of certain federal funding programs which have since been modified or eliminated. In addition to a completely revamped Federal Water Pollution Control Act passed by the Congress in October 1972, we have seen in recent months the termination of all federal grants by departments other than the Environmental Protection Agency. The Farmers Home Administration of the Department of Agriculture, however, continues to make federal loans at rates almost as favorable as those shown in House Bill 363, to municipalities of under 10,000 population. It is our understanding that approximately $340 million has been requested for this purpose during FY 74. Most Alaska municipalities are aware of this loan fund and are taking advantage of its provisions when they are prepared to sell local bonds for water and sewer system improvements. The present FHA rate of interest is five percent for a maximum 40-year period.

Significantly, the Water Pollution Control Act Amendments of 1972 no longer permit State and municipal prefinancing of sewage treatment projects as was authorized under the old Public Law 660. You will recall that our Alaska law was designed to permit State loans of the federal share in any year in which the federal allocation to Alaska had been exhausted. Now that Alaska citizens have voted a substantial $32 million bond issue last November, the Department no longer is able to lend this federal share and advises municipalities that they must await firm federal commitments before initiating sewage interceptor and treatment plant projects.

Summary

In summary, the Department respectfully suggests to the Committee that House Bills 363 and 364 be not favorably considered because:

(1) Since federal sewage treatment grants can no longer be prefinanced by state and municipal governments, this new revolving loan fund essentially could apply only to collection sewer and water system improvements.

(2) An almost identical federal program with adequate funding for all Alaska needs is in existence and has been most helpful to Alaskan municipalities.

(3) The sum of $1 million appropriated in House Bill 364 is grossly inadequate even if the federal program did not exist. Several Alaska projects being considered by municipal officials have a local 75 percent share in excess of the $1 million contemplated.

(4) All Alaska municipalities except the four with populations of over 10,000 could continue to have access to Farmers Home Administration loan funds as well as those created by this bill. Thus, HB 363 would provide real assistance only to Anchorage, Fairbanks, Juneau and Ketchikan.

Sincerely yours,

James A. Anderegg

James A. Anderegg, Director
Division of Water and Air
Quality Control

Sec. 46.03.030. Grants and loans for water supply and sewerage systems. (a) The department may pay, as funds are available, 25 per cent of the estimated reasonable cost, as determined by the Secretary of the Interior, of each waste treatment works project approved for a federal grant by the Federal Water Quality Administration or its predecessor, the Federal Water Pollution Control Administration, and on which construction was initiated after June 30, 1967. As funds are available, the department may lend on an interest-free basis for a project approved after June 30, 1970, any part of an anticipated federal grant. Money received from the Federal Water Quality Administration for the project after the loan is given must be used to repay the loan, but the loan need be repaid only to the extent of this federal assistance.

(b) The department may pay to a municipality, as funds are available, up to the lesser of 25 per cent of the estimated cost or 50 per cent of the estimated cost not borne by the federal government, if there is federal assistance, of water systems, including collection and impounding facilities, and of those portions of sewerage systems not covered by (a) of this section. The estimated cost of any part of a system will be as determined by the federal agency which gives the most monetary assistance or, if none, by the department. Systems shall be constructed according to plans and specifications approved by the federal agency which gives the most monetary assistance or, if none, by the department.

(c) There is a water supply and sewerage systems fund created in the department to carry out the purposes of this section. (§ 3 ch 120 SLA 1971)

HB 499

"An Act relating to the boards of fisheries and game; and providing for an effective date."

COMMITTEE REPORT

HOUSE

Mr. Speaker: Date _____

The Committee on _____ has had _____

under consideration. A Majority of the members of the Committee

( ) 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 THAT CS FOR _____ DO PASS

( ) "and" recommends it BE REFERRED TO THE _____ COMMITTEE

( ) reports it back WITHOUT RECOMMENDATION

( ) "other"

Members signing the Majority report:

_____ _____ _____

_____ _____ _____

_____ _____ _____

_____ _____ _____

Members NOT concurring in the Majority report:

_____ recommends:

_____ recommends:

_____ recommends:

_____ recommends:

_____ recommends:

_____ Chairman

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277-9403 • 344-1123

THREE BOARD CONCEPT OF THE FISH AND GAME

The reasons for such new Legislation is as follows:

We believe that the present board is to cumbersome as a group and consequently cannot comsistently resolve all proposals, public testimony, staff information and come up with proper answers.

Further, we feel there is a waste of manpower because the board has to have staff people ready to question for days at a time while the board discusses unrelated problems. Such as the staff Bioligest on bear stands by while the board discuse moose season in the Matanuska Valley. This problem will get much worse as our natural resourses are developed fully.

Following figures are from the Board meeting that concluded in Anchorage in December:

21 DAY MEETING:

10 MAN BOARD	210 MAN DAYS
12 MEN FROM STAFF IN ATTENDANCE	252 MAN DAYS
6 MEN FROM STAFF IN ATTENDANCE (50%) of time	63 MAN DAYS
TOTAL	525 MAN DAYS
ESTIMATED SPRING MEETING	300 MEN DAYS
TOTAL MAN DAYS A YEAR	825 MAN DAYS

ESTIMATED FIGURES FOR THREE DIFFERENT BOARDS: EACH BOARD 8 DAYS:

19 BOARD MEMBERS	152 MAN DAYS
12 STAFF MEMBERS IN ATTENDANCE	96 MAN DAYS
6 STAFF MEMBERS IN ATTENDANCE (50%) of time	24 MAN DAYS
3 ATTORNEYS	24 MAN DAYS
TOTAL	296 MAN DAYS A YEAR

We also feel the present board much of the time are delinquent in it's information due to such a wide range of consideration and such a vast area to cover. These ten men cannot be expected to manage all of the game in an area 586,400 square miles, 1/5 the size of the South 48, and manage it properly. These industries are much to important to each and every Alaskan to allow such a shotgun approach.

Another important fact to take into consideration is the economical impact on Alaska.

ANNUAL AVERAGE:

COMMERICAL FISHING	145.6 MILLION
GUIDING & HUNTING	30.4 MILLION
SPORT FISHING	17.9 MILLION
TRAPPING & FURS	6.4 MILLION

To perpetrate the animals and the economics of each industry, we believe 3 boards with separate studies and consideration for each is the only answer.

BOARD NO. 1
COMMERICAL FISHING BOARD

7 MEMBERS
THREE LAYMEN
ONE CANNERY REPRESENTIVE
TWO COMMERICAL FISHERMEN
ONE DIRECTOR OF COMMERICAL FISHERY DEPT.

BOARD NO. 2
GAME AND TRAPPING BOARD

7 MEMBERS
THREE LAYMEN
ONE TRAPPER OF KNOWLEDGE
TWO PROFESSIONAL OUTFITTERS
ONE DIRECTOR OF GAME DEPT.

BOARD NO.3
SPORT FISHING BOARD

5 MEMBERS
THREE SPORT FISHERMEN
ONE COMERICAL SPORT FISH OPERATOR
ONE DIRECTOR OF SPORT FISHING DEPT.

(1) Governor appoints members of each board which must be ratified by the State Senate and State House of Representatives.

(2) One meeting a year for each board held in November.

(3) Legal counsel for each Board meeting available from the State Attorney GeBeral's Office.

(4) Due to unusal circumstances a joint meeting can be called by any one Board to consider any problem revelant to two Boards.

December 22, 1968

This is the 3 board concept of the Dept. of Fish and Game.

The reasons for such legislation is many fold.

We believe that the present board is to cumbersome as a group and consequently cannot consistently dissolve all proposals and public testimony and staff information to come up with the best answers possible.

Further, we feel there is a waste of manpower because the board has to have staff people ready to question for days at a time while they (the board) are on other unrelated problems. This problem will get much worse as our natural resourses come more into play. The present board much of the time is delinquent in its informations due to such a wide range of consideration and a vast area to cover. This 10 man board would be the same as 10 men governing Fish and Game in a 5 or 6 state area in the south 48. This we think is not in good sense.

Our commercial fish is much to important not to receive every consideration of management possible. The same holds true for Big and Small Game along with trapping. Equally important is sports fish which is fast coming to State and National attnetion. Further, commercial fishermen do not like any sport fish orientated people sitting on a commercial fish board. The following is examples of manpower considerations.

Following figures are from meeting just concluded in Anchorage.

10 man board - 21 days	210 man days
12 men from staff in attendance	252 man days
6 men from staff in attendance 50%	63 man days
For one meeting	525 man days

Spring meeting est. 40% of above figure.
Total yearly man days for a poor job almost 800 man days.

The3board concept of 6 men on each board with the directors of each divisions voting in case of ties also the commissioner along with the vote of the directors vote could veto any action.

Each board meets only once a year. All boards meet the same time. By splitting the present board actions could be considered much faster. It would focus attention where attention is needed. Fish and Game are already split into 3 divisions.

The amount of time each board would use yearly would be 8 days or less figuring 8 days the following would hold true.

12 staff members full time	96 man days
6 staff members half time	48 man days
18 board members	144 man days
	288 man days

The big difference in time results mainly from a much better utilization of everyones time and no sitting around. Our renueable resourses deserves the best considerations possible.

Commercial fish board

3 Comm. fishermen
2 lay men
1 biologist(Fish and Game)

Directorsof Commercial Fisherys breaking tie votes

Big and Small Game & Trapping Board

2 professional hunters
1 trapper of knowledge
2 lay men
1 biologist

Director of Game breaking tie vote

Sport Fish Board

2 Commercial Sport fishermen
3 lay man
1 biologist

Director Sport fish breaking tie votes

Commissioner with the vote of Director concerned could veto any board action but would have to give reasons for veto.

PLEASE USE IN PAPER.

The need for a code of Ethics for the guiding industry has been apparent for many years. This set of guidlines is not designed to put anyone out of business, it is designed to keep the guiding industry in business, in a manner that will promote better relations between guides and clients, administrators and guides, between law enforcement agencies, state and federal, and guides and between the general public and guides.

It is the responsibility of every guide to see that the code is honored and reflected in every guiding operation in the State of Alaska.

GUIDING CODE OF ETHICS

1. I will fully cooperate with State and Federal Wildlife officials and will abide by and advise my Clients and Personel of all applicable conservation and game laws, statutes, regulations and will not condone there violation.

2. Rates, accommodations and services will be clearly defined to prospective Clients prior to booking and acceptance of deposit. I will not misrepresent rates, services, accomodations nor otherwise mislead prospective Clients through false or fictitious advertising. I will be willing and capable of making financial restitution to a Client for any breach of contract by myself, owing to no fault of the Client.

3. I will honestly advise my Clients of game regulations to the best of my ability and base my past performances in hunting areas and its chances of encountering the species he desires in the time alotted. However, I will make no "guarantees" as to the success of a hunt or the number of pieces of game to be collected.

4. I will maintain and/or provide stock, mechanical equipment, gear, food supplies andfacilities of a quality and condition to provide services equal to or better than described in my advertising, correspondence, verbal declaration or contractual agreement.

5. I will maintain a neat, orderly and sanitary camp at all times. I will provide reasonably well prepared, palatable and balanced camp meals for Clients and personel in keeping with the conditions of the hunt.

6. I will not contract for a hunt, more hunters, at anyone time, than I and my hired guides can adequately facilitate rendering services for. These hired guides must be properly licensed, well trained in the art of woodsmanship, judging trophies, cooking, first aid , photography, firearms, trophy preparation and caring for Clients.

7. I will, while guiding a Client take all precautions in the event an animal is wounded. It is my duty and responsibility to use everything at my disposal to bag any wounded animal while it is in danger of escaping or if in a serious emergency, human life or well being is endangered. I will never fill a Clients game tag or bag limit.

8. I will, barring unforseen conditions, properly prepare, according to prescribed procedures all antlers, horns, hides and capes to be delivered to the taxidermist or to the Client at the conclusion of the hunt in a satisfactory and unspoiled condition. I will endeavor to salvage all meats of trophies taken by my Client, in accordance with existing State law.

9. ~~I will accept as valid another established guides prior rights to hunt that area, either legal or moral.~~

10. I will promote hunting and the taking of trophies by fair chase; the pursuit of a trophy in a legal and sportsmanlike manner, without herding, driving or chasing of trophies with the use of any mechanically powered equipment.

11. I will practice sound wildlife conservation and endeavor to create an awareness of conservational needs and practices during my associations with the public.

William R. Martin ✓
Alaska Sport Fishing Guides Inc.
P.O. Box 1871
Anchorage

Clark Engel
Ak. Prof. Hunters Assoc. (Pres.) ✓
Anc., Ak.

Bob (Robert) Curtis
Pres. of Ak. Sport ✓
Anchorage, Ak.

Pete Nelson ✓

Nick Gregory ✓

Mark Jensen

L AND S OUTFITTERS

ALASKAN BIG GAME OUTFITTING
AND GUIDE SERVICE

P.O. Box 1616
Fairbanks, Alaska 99707

February 21, 1974

Mr. Joe McGill
Chairman, House Resources Committee
Alaska House of Representatives
Juneau, Alaska 99801

Dear Mr. McGill,

I am writing about House Bill 499, and act relating to the boards of fisheries and game, and providing for an effective date.

I am a full-time Alaskan guide and outfitter, and for over ten years have been soley dependent upon professional hunting for my livlihood. During this time I have been quite active with, and attentive to, the actions of the Board of Fish and Game. In fact, I have attended every Fish and Game board meeting concerning game and guide management since 1962, when I was just finishing up my degree in wildlife management from the University of Alaska prior to entering the outfitting business.

I feel very strongly that we need to split the functions of the existing Game and Fish board if we are ever to properly "manage" our fisheries resource and our game resource. You are undoubtedly aware of the conflicts of interests that so often arise at the Fish and Game board meetings. In such situations our resources are damaged just as badly as through blatant violations.

Today, more than ever before, Alaska needs resource leaders that will properly, and conscientiously look after our game resources. I think that such leadership has been lacking in the past, and will continue to lack in the future if we cannot establish a board whose primary function is manage of game, and another to look after our fisheries resource.

I urge you to support the House Bill 499, and thank you for this chance to express my views.

Sincerely,

Lynn M. Castle
Wood River, Alaska

My name is William Waugaman. I have been a resident of Alaska for the past thirty-four years and a big game guide since 1947. I have guided in practically every guide district of Alaska and have hunted on guided hunts in many foreign countries.

I am in favor of House Bill 499 for many reasons of which I will mention several of the most important:

1. I have attended several of the Fish & Game board meetings throughout the years and have observed: that the board has much too much work than any non-paid board should be expected to accomplish. In other words the work load of the board should be considerably lessened.
2. The present board consists of eleven commercial fish members and one game member.
3. I don't think commercial fish people should be making the game regulations nor do I think that game people should be making Fish regulations.
4. We have had very serious game problems in the interior for the past five years and todate the board nor the Fish & Game Dept. has done anything to change the trend. The problem being: serious reductions in game population, no control of predators, great increases in hunting pressure.

I think the hunters and guides of this state should be given the opportunity to guide the destiny of their resource and I hope you legislators see fit to give them a voice instead of a whisper.

William I. Waugaman