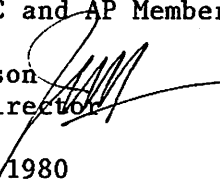


M E M O R A N D U M

TO: Council, SSC and AP Members
FROM: Jim H. Branson 
Executive Director
DATE: December 3, 1980
SUBJECT: Appointment of new Advisory Panel and SSC

ACTION REQUIRED

Appoint new Advisory Panel and Scientific and Statistical Committee.

BACKGROUND

The membership terms of both committees have expired. Members were asked if they cared to serve another term and a call for nominations was announced.

The SSC will present recommendations to the Council at this meeting.

Attached is a list of current Advisors who expressed a desire to serve another term. Also attached is a list of seventeen nominees received from the public.

At the October, 1980 meeting, the Council agreed to grant the Chairman authority to fill interim AP vacancies by appointment with the stipulation that all appointments be ratified by the Council. The Chairman will fill these vacancies from nominees on file from the current call plus other names received during the current two-year term.

CURRENT ADVISORY PANEL MEMBERS WILLING TO SERVE ANOTHER TERM

Robert Alverson
Robert Blake
Bud Boddy
Alvin Burch
Truman Emberg
Jessie Foster
Sigfryd Jaeger
Joseph Kurtz
Weaver Ivanoff
Charles Jensen
Eric Jordan
Rick Lauber
Ray Lewis
Sharon Macklin
Dan O'Hara
Ken Olsen
Alan Otness
Don Rawlinson
Jack Phillips
Tony Vaska
Jeff Stephan

NEW NOMINATIONS TO
ADVISORY PANEL

Forbes G. Baker
P.O. Box 813
Sitka, Ak 99835

Charles Parsons
Box 796
Homer, Ak 99603

Patricia Barker
Box 556
Bethel, Ak 99559

Bruce Rettig
Dept. of Agricultural Economics
Oregon State Univ.
Corvallis, Ore. 97330

Larry Cotter
C/O ILWU
222 Willoughby Ave.
Juneau, Ak 99801

Roy A. Rickey
1612 Glacier Ave.
Juneau, Ak 99801

Paula Easley
Resource Development
444 W. 7th
Anchorage, Ak 99501

Marjorie Schmiege
1800 Evergreen Ave.
Juneau, Ak 99801

Arthur F. Ballagher, Jr.
1220 S.W. 66th Ave. Apt. #2234
Portland, Ore. 97225

Lewis Schnaper
205 N. Franklin Street
Juneau, Ak 99801

Richard J. Goldsmith
Bldg. C-3, Room 218
Fishermen's Terminal
Seattle, Wa 98119

James L. Strichartz
1515 Dexter Ave. North
Suite 300
Seattle, Wa 98109

Steven Haavig
P.O. Box 1186
Juneau, Ak 99802

Konrad Uri
3419-16th Ave. West
Seattle, Wa 98119

Kristy Long
Univ. of Alaska
S.E. District
7th & Madison
Ketchikan, Ak 99901

Marliyn Wilson
Box 479
Sitka, Ak 99835

Rosalie Moore
C/O Alan Otness
Box 317
Petersburg, Ak 99833

AGENDA ITEM C-1
ADVISORY PANEL APPOINTMENTS

The Advisory Panel member nominating committee met Wednesday to consider applicants for the AP for the next two year term, which will begin at the next Council meeting, January 5-9 in Juneau.

In doing so, the committee used those members of the present AP who have indicated they are willing to serve another term and a slate of 18 applicants who submitted applications prior to October 15, 1980.

The committee recommends the appointment of the following people.

Robert Alverson
Robert Blake
A. W. Boddy
Al Burch
Larry Cotter
Paula Easley
Truman Emberg
Jessie Foster
Richard Goldsmith
Weaver Ivanoff
Eric Jordan
Joseph Kurtz
Rick Lauber
Ray Lewis
Rosalie Moore
Dan O'Hara
Ken Olsen
Alan Otness
Charles Parsons
Jack Phillips
Don Rawlinson
Lewis Schnaper
Jeff Stephan
Konrad Uri
Tony Vaska

At the September, 1980 meeting, the Council adopted a policy to allow the Chairman to appoint members to fill vacancies to the Advisory Panel, with confirmation from the Council, from a list derived from nominations received from the public.

The following people will remain on the list for future appointments.

Forbes G. Baker
P.O. Box 813
Sitka, AK 99835

Arthur F. Ballagher, Jr.
1220 S.W. 66th Ave., Apt. #2234
Portland, OR 97225

Patricia Barker
Box 556
Bethel, AK 99559

Steven Haavig
P.O. Box 1186
Juneau, AK 99802

ADVISORY BOARD MEMBERS

The Advisory Board member nominations committee met Wednesday to consider applications for the AB for the next two years which will begin at the next Council meeting, January 29 in January.

In doing so, the committee had also considered of the present AB who have indicated they are willing to serve another term and a list of 11 applicants who submitted applications prior to October 15, 1985.

The committee recommends the appointment of the following people:

- Robert Alvarado
- Robert Brown
- A. W. Jacoby
- Al Jurek
- Levy Carter
- Paula Lasker
- Thomas Lasker
- Ursula Lasker
- Richard Coleman
- Lawrence Lasker
- Eric Jordan
- James Lasker
- Bill Lasker
- Ray Lasker
- Joseph Lasker
- Sam Lasker
- Max Lasker
- Alan Lasker
- Charles Lasker
- Jack Lasker
- Don Lasker
- Levy Lasker
- Levy Lasker
- Howard Hill
- Levy Lasker

In the September, 1985 meeting the Council adopted a policy to allow the chairman to appoint members to fill vacancies on the Advisory Board. This provision from the Council has not been revised from the previous meeting from the public.

The following people will represent the AB for future appointments:

Arthur J. Lasker, Jr.
1230 E.W. 5th Ave., Apt. 422A
Berkeley, CA 94702

Norman Lasker
P.O. Box 1182
Berkeley, CA 94702

Robert G. Jones
P.O. Box 813
Berkeley, CA 94702

Paula Lasker
P.O. Box 820
Berkeley, CA 94702

Kristy Long
Univ. of Alaska
S.E. District
7th & Madison
Ketchikan, AK 99901

Bruce Rettig
Dept. of Agricultural Economics
Oregon State University
Corvallis, OR 97330

Roy A. Rickey
1612 Glacier Ave.
Juneau, AK 99801

Margorie Schmiede
1800 Evergreen Ave.
Juneau, AK 99801

Keith Specking
Office of the Governor
Pouch V
Juneau, AK

James L. Strichartz
1515 Dexter Ave. North
Suite 300
Seattle, WA 98109

Marilyn Wilson
Box 479
Sitka, AK 99835

Applicants for membership on the AP received since the previous deadline of October 15, 1980 will be retained and used to fill vacancies that may occur over the next two year term of the Advisory Panel. Applicants who applied and were not selected in the current round of appointments will be kept on the current list for possible appointment to vacancies during the next two years.

In making these recommendations, the committee wishes to recognize the hard work of the AP over the past two years and the invaluable assistance they have been in the Council process. To those members leaving the Panel, our best wishes and heartfelt thanks.

Office of the Governor
Juneau, AK

James I. Smith
1112 West Ave. North
Seattle, WA 98109

Marjorie Wilson
Box 419
Juneau, AK 99801

John Long
State of Alaska
P.O. Box 11000
Juneau, AK 99801

Dept. of Agricultural Economics
Oregon State University
Corvallis, OR 97331

Ray A. Hickey
1012 1/2 1st Ave.
Juneau, AK 99801

University of Oregon
1200 Oregon Ave.
Juneau, AK 99801

Application for membership on the AP received since the previous deadline of October 15, 1980 will be retained and used to fill vacancies that may occur over the next two years of the Advisory Panel. Applications who applied and were not selected for the current round of appointments will be held on file for possible appointment to vacancies during the next two years.

In making these recommendations, the committee wishes to recognize the hard work of the AP over the past two years and the invaluable assistance they have been to the Council's progress. To those members leaving the Panel, our best wishes and best wishes to the new members.

UNIVERSITY OF ALASKA

1790 Evergreen Ave.
Juneau, AK 99801

25 November 1980

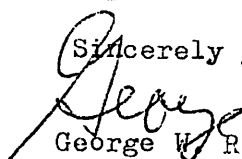
Steve Pennoyer, Chairman
Scientific and Statistical Committee
North Pacific Fisheries Management Council
c/o Alaska Department of Fish and Game
Support Building
Juneau, Alaska 99801

Dear Steve:

I am submitting my resignation from the Scientific and Statistical Committee to be effective as of the close of the December 8, 1980 meeting. As you know, my reasons are simply that time is not available to devote to the SSC and sub-committee meetings and review of the materials we receive for analysis and comment. In filling my position I have two suggestions to make. In the interest of a desirable disciplinary balance and to assure meeting the full intent of the 1976 Act, my replacement should be another economist or social scientist. Secondly, unless the Committee and the Council wish to limit recruitment only to those federal and state agencies prepared to compensate their employees for time devoted to their duties as members, some form of at least partial compensation should be provided by the Council. On State advisory boards on which I am serving or have served, for example, honorariums are paid (in addition to travel and other expenses) ranging from \$ 60 to \$ 400 per day. SSC members are expected to perform functions which exceed the purely advisory and approach those of professional staff.

It has been a personal and professional privilege and pleasure to serve with you and other members of the SSC since its inception in October 1976. It is always rewarding to be part of a movement for reform and expansion of ways of managing resources and I have gained much from this experience for which I am grateful. To the extent that this is possible, I hope you will keep me informed on future developments and keep my name on the Council's mailing list. My regular research will continue to include fisheries, so this resignation does not mean a break in our continuing relationship.

Sincerely yours,


George W. Rogers

COMMISSIONERS:

NEILS M. EVENS
PETERSBURG, A.L.
WILLIAM S. LILBERT
BAINBRIDGE ISLAND, WA.
MICHAEL HUNTER
OTTAWA, ONT.
JOHN A. O'CONNOR
VANCOUVER, B.C.
ROBERT W. SCHONING
CORVALLIS, OR.
PETER C. WALLIN
PRINCE RUPERT, B.C.

INTERNATIONAL PACIFIC HALIBUT COMMISSION

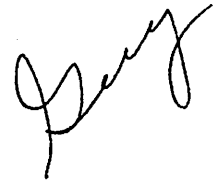
ESTABLISHED BY A CONVENTION BETWEEN CANADA
AND THE UNITED STATES OF AMERICA

DIRECTOR
DONALD A. MC CAUGHAN

P.O. BOX 5009
UNIVERSITY STATION
SEATTLE, WA 98105

TELEPHONE
(206) 634-1838

October 22, 1980



Mr. Jim Branson
North Pacific Fishery Management Council
P.O. Box 3136 DT
Anchorage, AK 99510

Dear Jim:

In a recent telephone conversation between Clarence Patzke and Steve Hoag of our staff, Clarence suggested that I write a letter to you expressing our desire to have membership on the S.S.C. The members of our Commission strongly support a close working relationship with the council and are anxious to have one of our staff on the S.S.C.

We fully realize that work and responsibility in areas other than those affecting halibut management is the major concern of the S.S.C., however, we are willing to fully participate in all S.S.C. matters if desired and have considerable resources which can be applied to S.S.C. problems. We have excellent research facilities at the Commission and we have one of the strongest quantitative groups of any fisheries management agency particularly with the recent addition of Dr. Terrance Quinn and Dr. Richard Deriso. We would offer the use of such resources when needed.

It is the Commission's opinion that I should be the official S.S.C. member. If I am accepted by the council I would propose Steve Hoag as the alternative. I would hope however, that Steve would be able to continue his work with the plan development team.

Sincerely,



Donald A. McCaughran
Director

cc: Steven Pennoyer
Donald H. Rosenberg

UNIVERSITY OF WASHINGTON
SEATTLE, WASHINGTON 98105

Institute for Marine Studies, HA-35
3731 University Way N.E.

M E M O

To: Steve Pennover, Chairman
Scientific and Statistical Committee, NPFMC

From: Ed Miles *EM*

Subject: Consideration of Dr. Bruce Rettig as a Member of the SSC

Date: October 9, 1980

I have only today learned that Bruce Rettig (Associate Professor of Economics in the Department of Agricultural Economics, Oregon State University) has completed four years of service with the SSC of the Pacific Council. In response to a question from me, Bruce indicated that he would have no objection to being considered for membership on the North Pacific SSC. I would strongly urge consideration of his candidacy because I have great respect for Bruce's expertise and breadth of interests and experience. I have also asked Bruce to send you directly a copy of his C. V.

cc: Jim Branson

*10-15-80
Xerox of cover letter
for Jim Branson*

*Jim would you
please circulate package
to all SSC members*

SP.

Department of
Agricultural and
Resource Economics

Oregon
State
University

Corvallis, Oregon 97331 (503) 754-2942

October 9, 1980

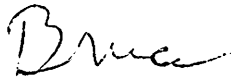
Dr. Steven Pennoyer
Alaska Dept. of Fish & Game
Subport Building
Juneau, AK 99801

Dear Steve:

Ed Miles has suggested that I send you a resume to assist you in considering me for a seat on the NPFMC SSC. I have recently completed two terms on the PFMC SSC and decided not to continue there. My decision was based partly on my perception that the Pacific council should have some turnover on its SSC and partly on my desire to move on to some new and different public service activities. Ed's suggestion reinforced my long-term interest in Alaskan fisheries.

I met some of your committee members at the joint SSC meeting in Seattle this winter and know a few members from other associations. Don Bevan, who has served on the PFMC SSC with me for four years can probably give you the best evaluation of the role I might play on the NPFMC SSC, if selected. Finally, I apologize for the length of the enclosed document. It was prepared for another purpose and I did not have time to condense it.

Sincerely yours,



R. Bruce Rettig
Associate Professor

ds

enclosure

Name R. BRUCE RETTIG
 Department Ag. and Resource Economics
 College/School/Div. Agriculture

A. Education (Colleges and universities attended or equivalent professional study)

<u>Dates (yrs)</u>	<u>Name of Institution</u>	<u>Degree Earned</u>	<u>Major Field(s)</u>
1958-1962	University of Montana	B.A.	Economics
1962-1964	Northwestern University	M.A.	Economics
1964-1968	University of Washington	Ph.D.	Economics

B. Professional Employment (List chronologically each academic rank or position held)

<u>Dates (yrs)</u>	<u>Rank or Position</u>	<u>Institution or Employer</u>	<u>Principal Duties</u>
1968-1973	Asst. Professor	Oregon State University	Research, teaching
1973-present	Assoc. Professor	Oregon State University	Research, teaching
1977-1978	Visiting Associate Professor	University of Washington	Research, teaching

C. Other Professional Experience and Service (Include sabbatical programs, travel abroad, offices in professional societies, public service activities, etc.)

(see attached documentation)

D. Special Honors and Recognitions (for teaching, scholarship or service)

(see attached documentation)

III. PUBLIC SERVICE
(Percent of total effort: 35)

Beginning with 1976, Dr. Bruce Rettig has been increasingly called upon to provide public service at the regional and national levels. This demand for his services to the public sector reflect the increasing stature which he has attained over time as a resource economist.

Of his various public service assignments, three deserve particular attention. They will be discussed in turn.

1. Scientific and Statistical Committee for
the Pacific Fishery Management Council

Dr. Rettig has served on this committee from November 1976 to date and was appointed to his second two-year term on the committee in October 1978.

The Fishery Conservation and Management Act of 1976 totally restructured the management of commercial and recreational fisheries in the water adjacent to the United States. One of the most important aspects of that act was creation of eight regional fishery management councils. The principal responsibility of these councils is to provide the nucleus of a national fisheries conservation and management program through the systematic development of fishery management plans.

Each council maintains a Scientific and Statistical Committee (SSC) to assist in the development, collection, and evaluation of such statistical, biological, economic, social, and other scientific information as is relevant to such council's development or amendment of any fishery management plan. The SSC for the Pacific Fishery Management Council (PFMC) consists of the principal research officer (or his designate) from the states of Washington, Oregon, Idaho, and California, the directors of the Northwest and Alaska Fisheries Center and the Southwest Fisheries Center of the National Marine Fisheries Service, and five at-large scientists. Since the creation of the PFMC, these five have been an internationally famous fishery consultant from southern California, the Associate Dean of Fisheries for the University of Washington, a professor of fisheries at the University of Washington who was technical advisor to the federal court administering Indian fishing decisions, a Seattle lawyer, and Dr. Rettig. Dr. Rettig is the only economist and one of two nonbiologists on this blue-ribbon, interdisciplinary committee.

Dr. Rettig has participated extensively in the activities of the council since its initiation. Several types of these activities are identified below with examples given for each.

A. Review of fishery management plans. Dr. Rettig's major contributions are identified by plan as follows:

(a) Commercial and Recreational Salmon Fisheries Off the Coasts of Washington, Oregon, and California. A plan was implemented on an emergency basis in April 1977. A replacement plan went into effect in March 1978; it

was amended in 1979 and a second amendment was being developed at the time this document was prepared. A more comprehensive plan is under development and is expected to be implemented in 1981. When the planning process began for salmon, no economist was involved in plan development and, not surprisingly, the first plan draft was deficient in economic data and analysis. In addition to critical comments, Dr. Rettig organized a workshop of experts on salmon economics which developed new material for the first salmon management plan. At the present time, an economist has been assigned to the salmon management plan development team and Dr. Rettig supplements his participation in SSC review of salmon plans with one-on-one discussions with that economist of issues needing analysis in the plans.

(b) Northern Anchovy Fishery Management Plan. This plan was implemented in the summer of 1978. The economist who worked on this plan was identified and approved for the project by Dr. Rettig. In the process of developing the management plan, there is considerable exchange between Dr. Rettig and the project economist on questions relating to methodological issues in fishery planning. Dr. Rettig must approve the economic portions of the fishery management plans.

(c) Fishery Management Plan for Jack Mackerel. This plan is expected to be implemented in Winter of 1980. Dr. Rettig's responsibilities here are similar to those described in "(b) Northern Anchovy Fishery Management Plan" above.

(d) Fishery Management Plan for Squid. This plan has progressed through its first review. Dr. Rettig's responsibilities here are similar to those described immediately above.

(e) Pacific Coast Groundfish Plan. This plan is expected to be implemented in 1980. It has gone through numerous drafts and has been in preparation for almost three years. There are several complex features of this plan including the existence of a large foreign fishery (Russians, Poles, and Mexicans), the existence of a joint venture fishery (U.S. boats delivering to Russian processors), and need to establish a new procedure to account for conservation while not unduly hindering domestic industry. Dr. Rettig participated in a subcommittee of the SSC to review all aspects of this plan and in another subcommittee developing a sophisticated definition of optimum yield (the backbone to justification for regulations as well as the allowable harvesting rate). He also works with the planning team's economist on economic sections of the groundfish plan.

(f) Fishery Management Plan for the Pink Shrimp Fishery Off Washington, Oregon, and California. Dr. Rettig was responsible for reviewing the plan with particular attention to economics. Particular assistance to the economist on this planning team dealt with the appropriate evaluation of limited entry, especially given the new Oregon law limiting the number of licenses to be issued for shrimping.

(g) Fishery Management Plan for Billfish and Oceanic Sharks. One draft was reviewed. Dr. Rettig assessed the need for contract research and expansion of the planning team to include a team economist, both recommended and assisted in the selection of the appropriate person.

(h) Fishery Management Plan for the Dungeness Crab Fishery Off Washington, Oregon, and California. Dr. Rettig participated in a subcommittee to evaluate this plan and reviewed two drafts before work on this plan was halted.

(i) Environmental Analysis: Proposed Coral Harvesting. After reviewing a draft document from the Bureau of Land Management, Dr. Rettig and others recommended that the PFMC not develop such a plan.

(j) First Draft of Fishery Management Plan for Herring. The first draft of this plan is due in 1980. Dr. Rettig developed guidelines on economic research needed and identified the economist to work on a planning team.

B. Assess the need for fishery management plans and recommend personnel for planning teams. The economists chosen to participate on fishery management plan development teams were all identified by Dr. Rettig and, in certain cases, he convinced them to accept that responsibility.

C. Develop priorities for research conducted using PFMC programmatic funds and assess the research programs of the National Marine Fisheries Service. Dr. Rettig assisted in developing several requests for proposals and evaluation of bids for contracts to conduct socioeconomic data collection and/or analysis. He also worked closely with council staff on award of three socioeconomic contracts, using "sole source" contracts.

D. Definition of operational terms to be used in fishery management plans. Most of this activity took place during the first year of activity, although Dr. Rettig participated in a special subcommittee in 1979 aimed at creating a more sophisticated, scientific approach to optimum yield.

E. Advice to the council on reaction to proposed regulations by the National Marine Fisheries Service. This activity was most demanding during the first year of operation when so many new regulations were being developed. The major recent activity has been a critical evaluation of regulations growing out of amendments of the Fishery Conservation and Management Act covering the processing sector and joint ventures.

F. Chairman of an ad hoc committee on economic data. Dr. Rettig brought together economists associated with the PFMC a year after planning began to define common approaches. In 1977-78, Dr. Rettig followed up by assisting in a clearinghouse effort to reduce the number of interviewers seeking industry data. In 1978-79, the National Marine Fisheries Service released a major contract to identify socioeconomic data priorities and asked Dr. Rettig to reconstitute his group of economists and add other social scientists. That group met in February 1979; the consultant's report is due in 1980.

2. Committee on Aquaculture, Board of Agriculture and Natural Resources, National Research Council

From November 1976 through January 1980, Dr. Rettig served as a member of the Committee on Aquaculture, Board of Agriculture and Natural Resources,

National Research Council. During part of this time, he also served as the chairman of the Economic Panel for the committee.

As noted in the letter by C. O. McCorkle, Jr., the aquaculture committee's report "is considered to be the most comprehensive and useful document on the subject to date." The chairman of that committee further noted that a Senate committee printed the complete report as a committee print. In addition to Dr. Rettig's membership on the committee as its only economist, he was asked to chair an economics panel for the committee and draft the economics chapter for the report.

3. National Conference on Limited Entry to Fisheries

While on sabbatic leave at the Institute for Marine Studies (IMS) at the University of Washington, Dr. Rettig assumed principal responsibility for a national conference on limited entry as a tool in fisheries management. This conference was held in Denver, Colorado, July 17-19, 1978. Dr. Rettig and the Head of IMS, Professor Donald McKernan, selected a distinguished national steering committee and worked with that committee to identify authors of background papers. Dr. Rettig enlisted those authors in writing their background papers and handled logistics for a meeting in May of 30 scientists to discuss early drafts of papers. He also handled logistics for a conference in Denver which drew over 200 people from government, the fishing industry, and academia. Both workshop and conference have been widely praised by participants (see letter by Lee Anderson which is attached -- page 33) and in the press. Written communications indicate that the printed papers and proceedings are being eagerly awaited. At least one seminar has been scheduled for 1980 using that volume as its text. Dr. Rettig is editor of this volume.

IV. RESEARCH, SCHOLARSHIP, AND CREATIVE ENDEAVOR
(Percent of total effort: 55)

1. Past and Current Research Activities

Dr. Rettig's research program is aimed at improving public policy dealing with natural resources. To achieve this goal, he has identified needed data and analysis, developed natural resource planning methodologies, and has analyzed public policies in the following subject areas:

A. Ocean Fishery Management

While Dr. Rettig has had some level of research commitment to issues of ocean fishery management since he joined the Oregon State University faculty, his major involvement began early in 1975 when it became clear that Congress was going to extend coastal jurisdiction over fishery resources seaward to 200 miles.

This research has been both applied and fundamental in nature. The applied research has resulted in advice to state and federal agency personnel about ways to fill information gaps and specific consequences to be expected from alternative management policies. This thrust resulted in publications listed in "IV. RESEARCH, SCHOLARSHIP, AND CREATIVE ENDEAVOR, 2. Publications" [specifically, B. 5, 7; D. 1; G. 1, 3, 4, 5, 6; H. 1], the activities described in "III. PUBLIC SERVICE," and those described in "VII. GENERAL INFORMATION, 1. Evidence of Regional and National Reputation" [specifically, A, B, C, D].

Among the more basic research results, new methodologies have been developed for estimating the extent to which domestic fisheries will harvest available resources and for analysis and display of the optimum yield to be taken in each fishery. Two doctoral theses, one complete and one in progress, deal with these issues. Two unpublished papers (IV. 2. Publications [G. 3, 5] and one published paper (IV. 2. Publications [B. 7]) deal with these issues with other publications to follow completion of the theses. Both methodologies are fundamental to the new planning system for ocean fisheries and are expected to help alleviate severe difficulties in implementing extended fishery jurisdiction.

Dr. Rettig's research program is shifting to examine the interrelationships between ocean salmon management, salmon "ranching," and public policies toward "wild" fish. The underlying issues include current management problems which have been discussed extensively with staff of the Oregon Department of Fish and Wildlife, as well as highly basic issues related to the economic value of genetic pools.

B. Water Resources

Working as a research assistant at the University of Washington, Dr. Rettig developed forecasts for water-intensive industries and aided

in translating that work into an analysis of water diversion from Washington to the Southwest. Soon after coming to Oregon State University, parts of this work were drawn upon in a jointly authored analysis of natural water policy (see IV. RESEARCH, SCHOLARSHIP, AND CREATIVE ENDEAVOR, 2. Publications [specifically, F. 1]). In 1979, Dr. Rettig has synthesized some of those earlier analyses with his fishery economics program to aid the Water Resources Council in new procedures for analyzing fishery resources.

C. Coastal Zone Management

From 1970 to 1975, Dr. Rettig's major research activity lay in developing models to synthesize economic and ecological consequences of coastal zone development. The basic methodology was developed in a study of a proposed aluminum plant in Clatsop County (see IV. RESEARCH, SCHOLARSHIP, AND CREATIVE ENDEAVOR, 2. Publications [specifically, B. 3, C. 2, D. 2, and G. 2]) and was later used in an analysis of development options in Tillamook County. Dr. Rettig also assisted in a study of coastal campgrounds, participated in a conference in coastal development (see IV. RESEARCH, SCHOLARSHIP, AND CREATIVE ENDEAVOR, 2. Publications [specifically, B. 4]), helped extend an OSU humanities program on community development to Newport, and developed counsel for Janet McLennan (Governor Straub's natural resources aide) on the role of Oregon in multi-state marine programs. Other aspects of coastal zone management arose in a brief research paper with Emery Castle on land use planning (see IV. RESEARCH, SCHOLARSHIP, AND CREATIVE ENDEAVOR, 2. Publications [specifically, D. 1]).

2. Publications

In the following list of publications, Dr. Rettig is considered the senior author, unless another author is identified with an asterisk (*). Publications of an interdisciplinary nature are identified with a double asterisk (**).

A. Books (edited)

Dr. Rettig has edited a book on Limited Entry as a Tool in Fishery Management. The book grows out of a conference discussed under "III. PUBLIC SERVICE." All editing work on this book was concluded in December of 1979. The manuscript (approximately 1,600 typewritten pages in length) has gone to the publisher (U of Washington Sea Grant) and has been accepted for publication. Publication of the book is expected by May 1980. Orders for the book have already been placed by professionals at high marine resource policy levels both in the United States and overseas.

B. Book Chapters

1. "Multiple Use Relationships in Estuaries," Water Studies in Oregon, seminar conducted by Water Resources Research Institute, Oregon State University, Fall 1969, pp. 87-93.

2. "Multiple Objectives for Marine Resource Management," in Ocean Fishery Management: Discussions and Research, NOAA Technical Report NMFS CIRC-371, Seattle, Washington, April 1973, pp. 23-27.

3. "Economic Impact of Outdoor Recreation: What Have We Learned?" with H. H. Stoevener* and S. D. Reiling, in Water and Community Development, Donald R. Field, James C. Barron, and Burl F. Long (eds.), Ann Arbor Science, 1974, pp. 235, 255.

4. "Anadromous Species and Extended Jurisdiction," with Richard S. Johnston in Economic Impacts of Extended Fisheries Jurisdiction, Lee G. Anderson (ed.), Ann Arbor Science, 1977, pp. 133-137.

5. "Balancing the Coastal Zone Interests: Comment," The Future Management of the Oregon Coast, Oregon State University Sea Grant College Program Publication No. ORESU-W-74-001, 1974, pp. 106-109.

6. "The Economics of Salmon Aquaculture," in Proceedings: Salmon Aquaculture Seminar, Cooperative Extension Service, College of Agriculture, Washington State University, Pullman, Washington, October 4, 1977, pp. 29-35.

7. **"Managing Fisheries for Optimum Yield: The Need for Integrated Research in Physical, Life, and Social Sciences," in Multidisciplinary Research Related to the Atmospheric Sciences, Michael H. Glantz, et. al., (ed.), National Center for Atmospheric Research, Boulder, Colorado, June 1978, pp. 50-63.

8. "Summary of Workshop Discussion," in Limited Entry as a Fishery Management Tool, R. B. Rettig and J. J. C. Ginter (eds.), University of Washington Sea Grant. In press, chapter was 19 pages typed.

9. "Limited Entry Revisited," with J. J. C. Ginter, in Limited Entry as a Fishery Management Tool, R. B. Rettig and J. J. C. Ginter (eds.), University of Washington Sea Grant. In press, chapter was 30 pages typed.

10. "The Economics of Open Access Resources: Ocean Fisheries," in Conflict in Use of Ocean Resources, Susan Hanna, Kwang Im, and Larry Rogers (eds.), Oregon State University Sea Grant Report. In press.

C. Refereed Journal Articles

1. "Land Use Conflicts and Their Resolution," with Emery N. Castle*, Journal of Soil and Water Conservation, Volume 27, Number 5 (September-October 1972), pp. 207-210.

2. "Some Economic Aspects of Conflicts Over Land Use in the Coastal Zone," Coastal Zone Management Journal, Volume 1, Number 3 (1974), pp. 291-305.

D. Other Refereed Publications

1. "The Commercial Seafood Industry of Oregon--A Comparison with Other Regions of the United States," with Kenneth J. Roberts, Special

Report 331, July 1971, OSU Sea Grant, Agricultural Experiment Station, Oregon State University, Corvallis, 11 pages.

2. "Linkages Between the Economy and the Environment: An Analysis of Economic Growth in Clatsop County, Oregon" with Kenneth J. Roberts*, Oregon State University Sea Grant College Program Publication No. ORESU-T-74-005, May 1975, 32 pages.

3. "A Citizen's Guide to Employment, Inflation, Income, and the Oregon Economy," with D. Darr, L. Eisgruber, J. Farrell, G. Nelson, and G. Sorenson, Special Report 450, February 1976, Agricultural Experiment Station and Extension Service, Oregon State University, Corvallis, 23 pages.

E. Reviews

Book Review: Anderson, Lee G., The Economics of Fisheries Management, in American Journal of Agricultural Economics, Volume 60, Number 3 (1978), p. 562.

F. Other Publications

1. "Proposed New Procedures for Evaluating Water and Land Resources: Some Comments from an Academic Viewpoint," State of Washington Water Research Center, Pullman, Washington, June 1971, with Walter R. Butcher* and Gardner M. Brown, 15 pages.

2. **Committee on Aquaculture, Board on Agriculture and Renewable Resources, Commission on Natural Resources, National Research Council, Aquaculture in the United States: Constraints and Opportunities, National Academy of Sciences, 1978, 123 pages. Also available as a committee report of the Senate Committee on Agriculture, Nutrition, and Forestry. (Principal author cannot be identified in this publication.)

G. Papers Read (but not formally published)

1. "Economic Considerations in Fish and Wildlife Resource Decision-Making Today," presented to American Fisheries Society, Oregon Chapter, January 26, 1975.

2. "Relevancy of Input-Output and Related Models to Resource Allocation Problems and Policies--The Oregon Experience," presented with H. H. Stoevener to the Economic Models for Management of Natural Resources Workshop held at Big Sky, Montana, June 10, 1974.

3. "Problems of Implementing Public Law 94-265: Findings of Capacity and Optimum Yield," presented to the Western Association for the Valuation of Ecosystems at Lake Arrowhead, September 15, 1976.

4. ***"The Role of the Technical Advisor in Managing the Extended Jurisdiction Range of Ocean Fisheries," presented at the meeting of the American Fisheries Society, Oregon Chapter at Kahneeta, Oregon, January 28, 1977.

5. "The Application of Resource Economics in the Development of Management Plans," presented at a California Department of Fish and Game Biologists Training Meeting held in Fresno, California, on May 20, 1977.

6. "Comments" on paper entitled, "The Economics of Fisheries Regulation: Lessons to be Learned from Existing Programs," presented at a symposium on policies for economic rationalization of commercial fisheries held at Powell River, British Columbia, August 23-29, 1978.

H. Publications in Process

1. "Estimating Direct and Indirect Environmental Impacts with Small Region Input-Output Models," with B. A. Weber*, in Small Area Input-Output Models: Some Experiments and Extensions, H. H. Stoevener (ed.). Publication being negotiated with professional publishers for release late in 1980.

2. "The Economics of Long-Run Decision Making by Fishermen: The Oregon Otter Trawl Fishery," with S. F. Herrick, Jr.* To be submitted to the Journal of the Fisheries Research Board of Canada.

3. Thesis and Dissertation Research Supervised

A. Primary responsibility for supervision (as major professor)

	<u>Name</u>	<u>Degree</u>	<u>Title</u>	<u>Year of Completion</u>
1.	Kenneth J. Roberts	Ph.D.	Economic and Environmental Trade-offs in an Estuarine Based Economy: A Modified Input-Output Analysis of Clatsop County, Oregon	1971
2.	Samuel F. Herrick	Ph.D.	Investigation of Supply Response in the Oregon Otter Trawl Fishery	1979
3.	Christopher N. Carter	Ph.D.	Variations in Capacity for the Oregon Trawl Fishery	in progress
4.	Nik M. Raja Abdullah	M.S.	Economic Analysis of Public Policies Affecting the Sablefish Fishery in the Northeastern Pacific Ocean	in progress
5.	Kevin Walker	M.S.	Economics of Public Salmon Hatchery Operation in the Pacific Northwest	in progress

B. Secondary Responsibility for Supervision (as member of student's advisory Committee)

	<u>Name</u>	<u>Degree</u>	<u>Year of Completion</u>
1.	David Klemperer	Ph.D.	1971
2.	Michel Thevenon	Ph.D.	1971
3.	Sandra S. Batie	Ph.D.	1972
4.	Jose E. Fernandez	Ph.D.	1972
5.	Kenneth N. Johnson	Ph.D.	1972
6.	Robert N. Shulstad	Ph.D.	1973
7.	J. William Currie	Ph.D.	1974
8.	Basil Copeland	M.S.	1975
9.	D. Kenneth Ford	M.S.	1975
10.	Gary R. Vieth	Ph.D.	1975
11.	Stephen D. Reiling	Ph.D.	1976
12.	John Schoffner	Ph.D.	1976
13.	Stanley D. Wang	Ph.D.	1976
14.	R. Thomas Schotzko	Ph.D.	1977
15.	Marut Muangkoe	M.S.	1978
16.	Jerachone Sriswasdilek	Ph.D.	1979
17.	Garry Stephenson	MAIS	1979-1980
18.	Jerry Clark	Ph.D.	in progress
19.	Mary Lewis	MAIS	in progress
20.	Susan Hanna	Ph.D.	in progress
21.	Grant Thomphson	M.S.	in progress
22.	John J. Baker	M.S.	in progress
23.	Jim Richardson	M.S.	in-progress-1980

4. Research Grants and Contracts

<u>Granting Agency</u>	<u>Title (dates)</u>	<u>Approximate Amount per Year</u>
A. Principal Investigator		
Sea Grant	Marine Economics--Education and Training 1968-1974	\$ 8,000
Sea Grant	Economics of Coastal Areas, 1968-75	\$40,000
Sea Grant	Economic Analysis of Extended Jurisdiction by the U.S. over Coastal Resources: Fisheries from Washington to California, 1975-1977	\$69,000
Sea Grant	Refining Calculations in Fishery Management Plans: Capacity and Optimum Yield, 1977-1979	\$64,000
Sea Grant	Economic Analysis of the Interrelationships Between Wild and Hatchery Salmon	\$75,000

O. Member, Scientific and Statistical Committee for the Pacific Fishery Management Council, November 1976 to date.

P. Member, Committee on Aquaculture for National Research Council, 1976-1978.

2. Evidence of Interdisciplinary Activity

Practically every assignment described under "1. Evidence of Regional and National Reputation" was carried out in an interdisciplinary setting. In some instances, such as membership on the Scientific and Statistical Committee for the Pacific Fishery Management Council, Dr. Rettig is the only economist and social scientist.

3. Evidence of Continued Professional Improvement

A. Attendance at Western Agricultural Economics Association annual meeting, Corvallis, Oregon, 1969.

B. Attendance at American Assembly on "Uses of the Seas," Newport, Oregon, May 8-11, 1969.

C. Attendance at Land Use Planning Workshop, Seattle, Washington, October 1971.

D. Attendance at National Discussion forum on Marine Fisheries Resources, Portland, December 13-15, 1971.

E. Attendance at Fisheries Resource Management Seminar, Portland, Oregon, January 23, 1972.

F. Attendance at American Agricultural Economics Association annual meeting, Toronto, Ontario, December 28-30, 1972.

G. Attendance at Western Agricultural Economics Research Council, Economics of Natural Resource Development Committee meeting, San Francisco, California, October 22-24, 1975.

H. Attendance at Land Use Planning Workshop, Seattle, Washington, December 16-18, 1974.

I. Attendance at the American Agricultural Economics Association annual meeting, San Francisco, California, December 28-30, 1974.

J. Attendance at NOAA Conference on Marine Recreation, Newport Beach, California, October 1-3, 1975.

K. Attendance at Western Forestry Economists annual meeting, Wemme, Oregon, May 4-6, 1976.

L. Attendance at University Council on Water Resources annual meeting, Honolulu, July 26-29, 1976.

M. Attendance at the International Water Resources Educational Workshop, Honolulu, July 30, 1976.

N. Attendance at Western Association for the Valuation of Ecosystems annual meeting, Lake Arrowhead, California, September 15-17, 1976.

O. Attendance at Sociocultural Data for Fisheries Workshop, Seattle, October 21-22, 1977.

P. Sabbatic leave taken at the University of Washington, 1977-78.

Q. Attendance at Western Association for the Valuation of Ecosystems annual meeting, Qualicom, British Columbia, September 5-7, 1979.

4. Membership in Professional, Academic, and Scholarly Societies

A. American Economic Association, 1964 to date.

B. American Agricultural Economics Association, 1969 to date.

C. Nominated to full membership in the Society of the Sigma Xi, Winter 1979.

D. Western Association for the Valuation of Ecosystems, 1976-77, 1979 to date.

5. Awards, Honors, and Recognition

University of Montana Merit Scholarship, 1958-59

6. Professional Experience Outside Oregon State University

A. Teaching Assistant, Economics Department, University of Washington, 1964-65. Handled four "quiz" sections per week for basic course in American Economic History.

B. Research Assistant, Economics Department, University of Washington, Summer 1965. Collected and analyzed data on percentage of gasoline which was retailed in Washington state and used in boats.

C. Research Assistant, Economics Department, University of Washington, 1965-66. Collected economic data and developed economic forecasts to be used in a multi-disciplinary study of water resources in Washington state.

D. Teaching Associate, Economics Department, University of Washington, 1966-68. Taught one course each term on principles of economics (seven terms).

E. Research Assistant, Economics Department, University of Washington, Summer 1967. Collected and analyzed economic data on anti-trust action case against manufacturers of large-diameter concrete pipe.