# North Pacific Fishery Management Council

Clement V. Tillion, Chairman Jim H. Branson, Executive Director

Suite 32, 333 West 4th Avenue Post Office Mall Building



Mailing Address: P.O. Box 3136DT Anchorage, Alaska 99510

Telephone: (907) 274-4563

FTS 271-4064

Certified by: Date: ///9/

NORTH PACIFIC FISHERY MANAGEMENT COUNCIL SCIENTIFIC AND STATISTICAL COMMITTEE MINUTES: January 5-6, 1981

Seattle, Washington

The Scientific and Statistical Committee of the North Pacific Fishery Management Council met in Seattle, Washington, January 5 and 6, 1981. Members present were:

Donald Rosenberg, Chairman
Rich Marasco, Vice-chairman
Al Millikan
Larry Hreha
Ed Miles
Jerry McCrary (alternate for Jack Lechner)
William Aron
Bud Burgner
John Burns

The Salmon Subcommittee of the SSC met in Juneau, January 7 and 8 to complete its consideration of the proposed amendments to the Salmon FMP. Members present were:

Bud Burgner Al Millikan Donald Rosenberg

B-2 CORRECTIONS TO SSC MINUTES OF DECEMBER 8, 9 AND 10, 1980

The minutes to the previous meeting were corrected by adding Mr. John Burns to the list of members present.

E-1 SALMON FMP

The SSC reviewed the proposed amendment dated October 21, 1980, to the Salmon FMP. We received reports and heard testimony from the Alaska Trollers Association and the Washington Department of Fisheries. Additionally, the SSC discussed the proposed amendment with the PDT.

The SSC has received numerous reports containing data and analysis of the various proposed objectives and regulations. These included:

"Proposed Management Plan for Southeast Alaska Chinook Salmon Runs in 1981" prepared by Southeast Region, Fisheries Management Division, Alaska Department of Fish and Game, January 1981.

"Analysis of Alaska Troll Fishery Management Needs and Opportunities for Upper Columbia River 'Bright' Fall Chinook Salmon" prepared by the Salmon Harvest Management Division, Washington Department of Fisheries, December 23, 1980.

"Contribution and Status of Washington Coastal and Columbia River Origin Chinook Salmon Stocks of Importance to the Southeast Alaska Troll Fishery" prepared by Salmon Harvest Management Division, Washington Department of Fisheries, November 1980.

"Development of Washington Department of Fisheries Recommendation for 1981 Alaska Chinook Fishery Management" by Washington Department of Fisheries, January 2, 1981.

"A Model for Salmon Fishery Regulatory Analysis Second Interim Report" prepared by Washington Department of Fisheries, July 10, 1975.

"Draft Fisheries Management Plan for the High Seas Salmon Fishery Off the Coast of Alaska East of 175° East Longitude" prepared by Natural Resource Consultants, November 1980.

"Estimated Total Marks Recovered for Three Releases 1975 Brood Priest Rapid Chinook" prepared by Ron Gowan, Alaska Troller Association.

"Memos to Management" prepared by the Alaska Troll Legal Fund, January 2, 1981.

The SSC was impressed by the amount of data provided and by the analysis undertaken by the management agencies and the fishing industry.

The SSC provides the following comments in the order they were presented in the draft amendment package dated October 21, 1980.

#### PROPOSED MANGEMENT OBJECTIVES

The SSC received the proposed management objectives. We recommend acceptance of these replacement objectives subject to the following changes.

Objective A - The SSC recommends including the word "wild" in the objectives so that the objective would read:

"Manage the troll fishery in conjunction with other Southeast Alaska Fisheries to obtain the number and distribution of spawning fish capable of producing the optimum total harvest on a sustained basis for wild Southeast Alaska salmon stocks."

Objective B - The SSC recommends substituting the words "optimum yield" for total allowable salmon harvest. The objective would then read:

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"Allocate the optimum yield to the various Southeast Alaska user groups as directed by the Alaska Board of Fisheries and the North Pacific Fishery Management Council.

Objective D - Delete the words "in outer coastal and offshore Southeast Alaska waters" or substitute the words "in the FCZ."

Objective E - Delete the words "plans and." The objective would then read:

"Develop fishery management techniques which will allow full..."

 $\underline{\text{Objective H}}$  - Delete the entire objective. The SSC believes that this objective is too specific and is a subset of the other proposed objectives.

#### REGULATORY PROPOSALS

#### A. Optimum Yield

The SSC reviewed the proposed decrease in OY (ABC) by an evaluation of current and historic catch levels, and current escapement data and projected escapement goals. The SSC finds that there is a conservation issue with regard to the Southeast Alaska Chinook stocks as indicated by the comparison of the average 1978-1980 escapement data (25,000-34,000) to the minimum escapement goals recommended by ADF&G (66,000-80,000). With regard to the Columbia River stocks we find that there is a lesser conservation issue as indicated by under escapement of the Upper Columbia River "Bright" stock and an under harvest of the Bonneville Pool stock.

The SSC notes that the escapement for Southeast Alaska Chinook stocks appears stable under the current management regulations, but there are indications that escapement is down from historic levels. Average annual historic catch taken during the peak decade of the 1930's was 61,000 fish. Using this average the SSC calculated, using an alternate method, an escapement goal for the Southeast Alaska Chinook stocks. It is unlikely that in the 1930's the Alaska component of the total average annual catch exceeded 30-40%. Thus, the Alaska component of average was 183,000 to 244,000 fish. By applying a catch to escapement ratio of 3 to 1 results in a 61,000 to 81,000 estimated escapement. We consider that this estimated escapement is comparable to the minimum escapement goals proposed by ADF&G. The minimum escapement goals proposed by ADF&G could be appropriately called optimum escapement goals.

The SSC concluded that the escapement goals proposed are reasonable and that the 1978-1980 average escapement was down by over 50%.

The SSC is concerned about both methods used to derive these escapement goals but feel they provide the best estimate at this time.

The PDT and ADF&G proposes a 10% reduction in catch to achieve these escapement goals. ADF&G estimates that the escapement goals would be achieved by the period 1991-1995. The SSC questions, however, whether the proposed incremental increase in escapement will, in fact, result in

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directly proportional increase in run magnitude of Southeast Alaska stocks. The SSC is unable to provide a better rebuilding schedule and only notes that a larger reduction in catch would result in a faster rebuilding.

With regard to the Upper Columbia River "Bright" stock, the SSC feels the issue is one of conservation and allocation. The SSC does note that any reduction in catch to achieve an increased Alaska escapement will benefit this Columbia River stock.

# B. Limited Entry

The SSC has not been provided any data with regard to any of the proposed limited entry options. Therefore, we are unable to provide the Council any analysis or guidance.

## C. Time and Area Closures

## 1. Seasons

a. Chinook - The PDT proposal is to shorten the outer coastal and FCZ troll chinook season from April 15 - December 30 to May 15 - September 20. Their view is that the early season closure would be geared primarily toward saving maturing spring chinooks headed for Southeast Alaska streams. We suspect this may be true, but we have not been provided an analysis of coded wire tag information or age composition data to demonstrate seasonal changes in the Southeast Alaska/non-Alaska stock composition in the offshore fishery. We likewise do not have information on stock or maturity proportions present during the September 20 - December 30 period. Therefore, we cannot verify the predicted increase of Southeast Alaska spawners.

We call attention to the opportunity to obtain improved information in 1981 on seasonal distribution of Taku and Stikine river chinook stocks in the fishery as a result of the recent substantial coded wire tagging effort by ADF&G. Shortening of the 1981 season will result in a loss of opportunity to obtain full seasonal information.

In our opinion this loss of management information may well outweigh in value the savings in fish achieved by shortening the season.

b. <u>Coho</u> - We believe the season should remain unchanged, (June 15 - September 20). The coho catch prior to July 1 and after September 10 is small. If the coho opening were delayed until July 1, it may cause unnecessary coho shaker loss in the chinook fishery.

## 2. Area

We see no valid biological reason for changing from the status quo.

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#### D. Gear Restrictions

# 1. Number of Gurdies

The SSC has not been provided justification for the hand troll gurdy restrictions. Although we agree with the PDT that standardizing effort is a desired goal, limiting gurdies in itself does not result in standardization in number of lines fished. The catch control is achieved by other means. We are in favor of the status quo.

#### 2. Treble Hooks

The SSC has seen no data that show that treble hooks are biologically more detrimental than single hooks as used in the troll fishery.

## E. Reporting Requirements

The SSC agrees with the PDT that catches should be reported as soon as possible for purposes of in-season management, and therefore should be reported by fishermen before leaving Alaska waters. The method of reporting should be convenient to the fishermen.

# F. Heads-on Landing Requirements

The SSC has not been shown that the heads-on landing requirement has resulted in improvement in tag recoveries. Therefore, we believe that heads need be retained only on fin-clipped fish. Suggestions made by fishermen for improvement in data handling appear to have merit.

## E-2 OTHER FMPS

#### A. King Crab

The SSC Subcommittee on king crab met to discuss the Natural Resources Consultants' report on red king crab size limits and the North Pacific Fishing Vessel Owners Association comments on the draft FMP. The Subcommittee's comments are as follows:

#### B. NRC Report

The review group feels that the NRC report is a very useful document. The data summarization and analyses contained in the report will be useful in the formulation of management measures. Several statements in the report however, caused concern. The first statement was made on page 48 of the text and related to the effect of different size limits on fuel requirements. The statement made was "...fuel requirements per unit of effort increase while the average catch per unit of effort decreases." This statement is incorrect. Fuel requirements per unit of effort will remain constant. Cost per pound will vary, since CPUE will change. The second statement was made in the conclusion section, page 55, C19. There was disagreement with the recommendation of a 6.25 inch size limit and a 0.6 fishing rate for all areas. In light

of either low or depressed stock sizes and lack of information concerning stock/recruit relationships, this approach to management might not be appropriate, for example for areas such as Kodiak and Adak.

It should be pointed out that following a strict yield-per-recruit approach to management should be undertaken with caution due to uncertainties associated with critical population parameters, particularly natural mortality, and the stock/recruitment relationship. Further, the approach is devoid of economic considerations.

## C. NPVOA Public Comment

The report contains legal opinions and management recommendations. Therefore, it was concluded that the drafting of formal comments was unnecessary. Review of the document did indicate that the NRC report was misquoted on page 19. The 0.6 fishing rate is an annual rate as opposed to an instantaneous rate.

## D. Bering Sea/Aleutian Island Groundfish FMP

The SSC received an update from the prohibited species/incidental catch of salmon/herring ad hoc subgroup. The final report on prohibited species is to be completed by January 10. On January 12 the ad hoc subgroup will meet to prepare its final recommendation. On January 14 the PDT will meet to prepare its final comments on the total amendment package.

The SSC Subcommittee on the Bering Sea/Aleutian Island Groundfish FMP has arranged that individual SSC comments on the prohibited species report will be due the chairman of the Subcommittee (Burns) by February 10, 1981.

The SSC also received the preliminary outline of the Japanese program for research on the incidental catch problem from the Far Seas Fisheries Research Laboratory. This preliminary outline was provided to our Subcommittee for review and comment, if necessary, by our next meeting.

#### E. Gulf of Alaska Groundfish FMP

The SSC requested and received a presentation from the scientists of the Northwest and Alaska Fisheries Center on the results of their study on the abundance of sablefish in the Southeast Alaska Management Area. We will receive by the end of this month the final report on this study. Additionally, we discussed briefly with members of the groundfish team the status of Pacific Ocean Perch in the area.

The SSC subcommittee on this plan has scheduled to meet prior to our regular February meeting to complete its review of the proposed amendment package. The SSC also received the paper on economic disadvantage of American Fishermen in Eastern Gulf. We have referred this paper to our economist for review and will include our comments in our February report to the Council.

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#### F-1 CONTRACTS

A. Contract 81-3 "A Comparison of Halibut and Crab Catches in: (1) Side-Entry and Top-Entry Crab Pots, and (2) Side-Entry Crab Pots with and without Tanner Boards."

The SSC has provided the contractor with our comments on the draft report. The contractor is expecting to have the final report ready for our review by the February meeting.

B. <u>Contract 80-6</u> "A Study to Determine the Applicability of Limited Entry in the Halibut Fishery Off Alaska."

The SSC has reviewed the draft to final report entitled "The Applicability of Limited Entry to the Alaska Halibut Fishery" to the Council for Contract 80-6. The SSC finds that the contractor has addressed all of the items specified in the statement of work. We did have some specific comments and questions for the contractor. These questions have been provided to the Council staff. The SSC withholds its approval to this report until the contractor has responded to these questions.

C. Contract 80-5 "A Study of the Offshore Chinook and Coho Salmon Fishery Off Alaska."

The SSC has reviewed the draft final report entitled "Draft Fisheries Management Plan for the High Seas Salmon Fishery Off the Coast of Alaska East of 175° East Longitude." The SSC finds that the contractor has not addressed all the items specified in the statement of work and that some of the sections of the report need to be completed. The SSC has drafted for the Council staff our specific comments on the document and withholds our approval of the report until the contractor has responded to these comments.

#### F-2 RFP

#### A. Feeding Habits of Marine Mammals

On January 5, 1981, the SSC again considered the matter of promoting the acquisition of information about feeding habits and trophic relationships of marine mammals in the North Pacific Region.

Drs. Michael Tillman and Bruce McAllister of the National Marine Mammal Laboratory, Seattle, appraised the SSC of the nature and extent of efforts by the Laboratory to compile and update literatrue about marine mammal feeding and trophics, which is available in the English language. A report could be available within 30 to 60 days. Additionally, all available data relative to food habits and trophic relationships of North Pacific fur seals is presently being compiled and will be available by April 1981. The combined results of both efforts will be available in final report form in about 6 months. These efforts by the NMFS will not include an evaluation of the significance or quality of available data.

The NMFS effort amounts to a significant portion of the work envisioned in RFP 80-1. Also, the most productive discharge of a subsequent effort will depend on availability of results of the efforts presently under way.

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In view of the information brought before the SSC, we recommended that:

- Scientists working with Soviet investigators make a concerted and direct effort to obtain a list of Soviet references dealing with marine mammal/fishery interactions in the North Pacific Region. This effort will be facilitated by the US/USSR agreement on Environmental Protection.
- 2. Further action on RFP 80-1 be tabled until the literature search for English language titles and the results of fur seal studies are made available from the NMML.
- 3. A specific effort be made to obtain a compilation of references in the Japanese language. No specific recommendations for accomplishing this is made. Discussion included such options as a contract or reimbursable services agreement with a Japanese national or with a Japanese library, or direct request of such a reference list from a research institute such as the "Whales Research Institute," and/or continued efforts to obtain pertinent references on a scientist to scientist basis.

# B. Incidental Catch of Salmon

The SSC received a draft of the proposed objective for an RFP for a study to determine the stock origins of chinook salmon incidentally caught in foreign trawls in the U.S. eastern Bering Sea and Gulf of Alaska FCZ. The SSC is reviewing and will prepare recommendation on this proposed study. We will be prepared to present a final RFP to the Council at the February meeting.

# C. Herring Stock Data

The SSC received a draft of the proposed objective for an RFP to design an experiment to evaluate the accuracy of herring aerial survey biomass estimates. The SSC is reviewing and preparing its recommendation on this proposed study and will be prepared to present a final RFP to the Council at the February meeting.

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