

# North Pacific Fishery Management Council

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

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

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



Telephone: (907) 274-4563  
 FTS 265-5435

Certified By: \_\_\_\_\_

Chairman

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

*Steve Pennoyer*  
 9/10/79

SCIENTIFIC & STATISTICAL COMMITTEE MEETING  
 August 21-22, 1979  
 Anchorage, Alaska

The SSC met in the Conference Room of the Council Offices beginning at 10:00 a.m. on Tuesday, August 21st and again on August 22nd. The following members were present:

Steve Pennoyer, Chairman  
 Al Millikan  
 Don Bevan  
 George Rogers  
 Don Rosenberg  
 Jim Balsiger as Alternate for Frank Fukuhara  
 Larry Hreha as Alternate for Jack Robinson  
 Jerry McCrary as Alternate for Jack Lechner

NON-AGENDA ITEMS

The SSC discussed several subjects that were not on the Council Agenda. They were as follows:

a. OY Guidelines

The Committee received a memorandum from Mr. Leitzell regarding review of proposed guidelines on OY determination. We also looked at a letter draft from the Pacific Council SSC on this subject.

We feel that the guidelines proposed are not particularly useful in that they do not address the concepts of OY previously suggested by both the Pacific and North Pacific Councils. We suggest that the Council repeat their support for the concept of OY as a long term modification of MSY and TAC as an annual derivation from ABC.

We do wish to point out some concern that the section on options proposed in this memorandum could lead to the inclusion of so many options in a plan that the public could be confused as to areas requiring meaningful comment. It is our feeling that plan options should only refer to alternatives considered meaningful by the PDT's and Council.

b. King Crab FMP

The SSC reviewed a report of its Subcommittee on the King Crab FMP which summarized Committee suggestions to the PDT on the plan. The report is being sent to PDT members for their comment. The Team is being asked to consider these comments and interact with our Subcommittee in an early September meeting.

This meeting will give the PDT an opportunity to clarify any areas of concern and decide on a schedule for completion of the first draft to the Council.

We recommend to the Council that Dave Somerton currently with NORFISH of the University of Washington, be appointed to both the King and Tanner Crab PDT's. Mr. Somerton has considerable expertise in crab population dynamics analysis which will be valuable to Team deliberation.

c. Herring Workshop

The SSC reviewed a proposal for a Bering Sea Herring Workshop presented by the Herring Plan Development Team. The Workshop would draw scientists from Europe, Canada and the U.S. to outline management regimes in other areas and focus their experience on Bering Sea management.

The proposal outlines a 3-day Workshop in Anchorage in February with a budget of approximately \$7,500. The SSC recommends approval of the Workshop. We believe the experiences and perspectives of world wide experts will be valuable to the PDT and the Council in formulating management regimes for this developing herring fishery.

VI-3

The Socioeconomic Data Needs of Fishery Management Plans --- A Report

The SSC reviewed the report of the Working Group on socioeconomic data needs. Dr. George Rogers summarized the report's findings and recommended that the report be adopted by the Council, published and provided to Council advisory bodies and plan development teams as a guideline and also sent back to Washington as our partial answer to the proposed Centaur and Associates study. We concurred with these recommendations. We think the Working Group is to be commended for their efforts in producing a report that is very well written and immediately applicable to plan development.

We did note that the Working Group did not address ways and means to rectify data deficiencies. We suggest that the Working Group be continued and deal with questions of who should collect various data and how to make existing data more available.

Agenda Item VI-6

#### SSC MEMBERSHIP

The SSC recommends that Dr. Richard J. Marasco be appointed to the SSC vacancy created by the resignation of Dr. James Crutchfield.

Dr. Richard J. Marasco received his Bachelor Degree and his Masters Degree in economics from Utah State University, and earned his Doctorate in Agricultural Economics from the University of California, Berkley in 1969. He was on the Department of Agriculture Resource Economic faculty at the University of Maryland from 1970 to 1976 teaching undergraduate and graduate courses in Agricultural Resource Economics and conducting research in a variety of areas including fisheries economics, demand analyses for food items and regional economics.

In 1976 he joined the NMFS working out of the Washington, D.C. Division of Economics and Marketing Research and devoting much of his time to determining economic impacts of various fishing policy alternatives.

In 1977 he moved to the NWAFC in Seattle where he has been involved with a number of projects including economic analyses of multi-species fisheries and the development of regulatory analysis for the aborted halibut plan and for the Bering Sea Groundfish Plan.

The SSC also recommends that Dr. Robert L. (Bud) Burgner be appointed to replace Dr. Donald Bevan on the Committee. Dr. Burgner received his PhD from the University of Washington in 1958. He is Director, Fisheries Research Institute and a Professor of Fisheries at the University of Washington. He has 33 years experience in Alaska fishery research and is a scientific advisor on INPFC.

#### Clam Plan Subcommittee

The SSC nominated a Subcommittee of Jack Robinson, Donald Rosenberg and James Balsiger to review the Bering Sea Clam Plan with the PDT in early September.

Bering Sea/Aleutian Islands Groundfish FMPEstimates of Domestic Annual Harvest (DAH)

We have reviewed the comments provided by NMFS regarding the estimate of DAH in the plan. We do not find any scientific basis for modification of the DAP portion of that estimate. The DAH (DAP) in the plan (24,600 mt) is based upon a survey of processors made in March, 1978. That was and still is the best scientific data available for estimating the DAP portion of DAH. The Council should note that the actual performance by the industry does indicate that the estimate may be high but there is no scientific data to determine how much DAP should be lowered.

We do take exception to the reviewer's inference that DAH should be based on only historical catch data. In a developing fishery, DAH must also include an industry estimate of expansion. One of the objectives of this plan is the orderly development of the domestic fishery and therefore we believe that greater weight must be given to the industry estimate than to the historic catch data. For example, if the Council had used only the historic catch data for C. opilio in the estimation of DAH in the Tanner Crab FMP, the plan would have greatly underestimated the catch and processing which did take place.

It should also be noted that the amendment for release of DAH will allow OY to be achieved (assuming foreign fishing) even if the DAH estimate is too high.

We did enquire if catch for bait and subsistence had been included in the original DAH. We find that it was not and agree that an estimate should be included. We have no reason to disagree with the Council staff that the best estimate for DNP is 1,500 mt.

We reviewed the data presented by the Council staff regarding estimates of the joint venture portion (JVP) of DAH. We found no grounds for modification of this industrial estimate of 104,600 mt. We do believe that this estimate can be largely taken care of by the reserve should the joint ventures actually perform at the estimated level. Therefore we recommend that the JVP be set at 32,300 mt (104,600-72,300).

In summary, we recommend that DAH be now estimated as 58,400 mt. This is based on an estimate of 24,600 mt for DAP, 1,500 mt for DNP and 32,300 mt for JVP.

We reviewed the proposed increase in OY for "Other Species" from 55,500 mt to 72,200 mt. Mr. Larkins described the means by which the original OY was established and the rationale for the increase. We agree to the proposal noting that we will have observer data which will indicate any major changes in the species composition of the category.

The Committee also reviewed the addition of the fourth category, "Non-Specified Species", which would eliminate the problems encountered in the "Other Species" category. We find this addition to be in accordance with the recommendation of the Council's Committee on Incidental Species and concur with its conclusion. We did note that where possible the scientific name should be included in the list and that U.S. observer data should continue to be gathered on the amount and makeup of the category.

The Committee studied the recommendations of the DAH Working Group for the reassessment and possible release of RESERVE and DAH at six and eight months and concurred with the idea of establishing a mechanism in the plan to periodically review and, if appropriate, release DAH as well as RESERVE to TALFF. The Committee noted that a bi-monthly review schedule during the first 8 months would not restrict the Council's flexibility as much as the proposed 6 and 8 month schedule. The Committee recommends that the DAH and RESERVE review schedule be handled bi-monthly through the eighth month and at other times as needed. The Committee adopted the following language from the errata which says, page 6, Section 611.92 (b) (ii) reserves and DAH (A) apportionment of RESERVES and DAH amounts. As soon as practicable after each of the following dates and on other dates as required the Regional Director shall review and if appropriate, allocate to the TALFF a percentage of the reserve and DAH amount set out in Table 1 of this section for each species in each fishing area: January 2, March 2nd, May 2nd, and July 2nd.

The SSC earlier discussed the reporting requirements amendment for the Bering Sea Groundfish Plan. We wish to adopt the recommendation we made for the Bering Sea Groundfish Plan for the Gulf of Alaska FMP.

Reports - All processors of groundfish and buyers of groundfish whose purchases enter non-processed fish markets except fishermen buying for their own bait needs and persons delivering U.S. caught groundfish to foreign processor vessels shall report information required for periodic reassessment of DAP. The regulations implementing this plan specify the information to be reported and the time schedule for reporting.

## Incidental Salmon Catches in Foreign Trawl Fisheries of the Bering Sea

The SSC reviewed information on incidental catches of salmon taken in the Bering Sea by foreign trawl fisheries. A new report (August 15) by Loh-Lee-Low suggested that a winter (November to February) closure of Bering Sea Area II would protect about 90% of all incidentally caught salmon. Other possible time/area combinations were not evaluated in this most current review.

The value of the winter foreign trawl fishery in Area II in the Bering Sea was approximately \$33,000,000 in 1978 (based on a weighted average of DOC fees for 1978). The value of incidentally caught salmon in the same time/area was about \$500,000. The Hokuten Trawlers and Japan Deep Sea Trawlers estimated that if they were closed out of Area II in the winter they would be able to recoup only about 25% of the last catch by a reallocation of effort over other times and areas. The mothership fleets do not operate here in the winter so the net loss accruing to foreign trawl fleets would be about \$25,000,000.

Clearly, the impact on foreign fisheries of a winter closure in Area II far exceeds the value of the potential salmon, and the SSC recommends that the closure not be implemented.

The SSC suggests that a further analysis of incidental salmon catches be undertaken to determine if a smaller time/area closure could be identified which would have a lesser impact on the foreign trawl fisheries while simultaneously providing some protection for salmon. Specifically, the impacts on these two fisheries of those time/area closures considered as options for herring protection in the herring FMP should be examined.

A discussion of the relative precision and accuracy of incidental catch estimates as projected from observer data collections should be made. Between year variation (1977 vs 1978 vs 1979) in salmon incidence rates should be summarized to provide information on the validity of applying, by time/area blocks of various dimensions, previous years incidental catch rates to current and future fisheries.

The Hokutan Trawlers provided the SSC with data suggesting that incidence rates of salmon are much greater in water deeper than 200 m compared with water shallower than 200 m. The analysis of observer data should include the evaluation of salmon incidences and trawl operations by depth if sufficient data exists to stratify the Bering Sea in this manner.

Gulf of Alaska Groundfish FMP

The Scientific & Statistical Committee addressed the Gulf of Alaska Groundfish amendment package and also discussed the proposed Secretarial amendment. We wish to encourage the Secretary to extend the plan year through October 31, 1980 using a Secretarial Amendment if that is the only means of extending the plan in a timely manner. No other part of the Secretarial amendment was addressed, rather the Committee recommends adoption of the Council amendment package with the following comments:

Part 1

The Committee adopted the amendment to extend the FMP through October 31, 1980 as an expedient means of not allowing the plan to expire. They noted this was not the most desirable way of dealing with a plan year and expect that the series of spring amendments will address a multiple-year concept.

Part 2

The Committee reviewed the four subparts to the amendment implementing the provisions of the Processor Preference Amendment with the following comments:

- a. Redefine DAH and RESERVE - The Committee did not disagree with any formula presented but did expand the definition for DAH and JVP. DAH, they felt, was the expected domestic annual harvest that will be utilized. JVP, they felt, is that portion of DAH which is available and expected to be delivered to foreign processing vessels by U.S. ships. Essentially the comments focused on the relationship of fishing intent with processing intent and the need to consider each in the derivation of the other. For example, they felt that DAP estimates must be closely linked with known fishing intent.
- b. Redefine Procedures - Again the Committee felt that DAH was an estimate of the expected domestic annual harvest that will be utilized and can be comprised of three elements, DAP, DNP and JVP. They felt that DAH must be reevaluated bi-monthly through the eighth month to determine whether reserves would be needed to handle excessive DAH or whether surplus DAH would be available to TALFF. The Committee felt that the reserve should also be assessed bi-monthly through the eighth month to determine if amounts in DAH will be adequate for the year.
- c. New Estimates - DAH and Reserve - The Committee discussed at great length the formula  $DAH = DAP + DNP + JVP$ . They agreed that JVP is only allowed if the estimated U.S. harvesting capacity exceeds the estimates of DAP and DNP. They were

mostly concerned that DAP was not tied to the actual number of vessels that would be fishing for a processor. The Committee chose to accept an Advisory Panel recommendation that the JVP estimate be lowered to 25,000 tons. They noted that the resultant 49,000 ton DAH did fall within a survey range of likely U.S. harvesting intent and capacity. The reduction in JVP, they felt, did not diminish the overall DAH capability as 74,000 tons were still in reserve and fully capable of handling all estimates of DAP, DNP and JVP. They noted that this recommendation unilaterally reduced the JVP estimates to 26% of the original estimate.

The Committee listened to Mr. Paul MacGregor representing the North Pacific Longline Gillnet Association who asked the Committee to carefully consider the total DAH request for sablefish, especially in the eastern district. Mr. MacGregor pointed out that the DAH appeared unattainable in light of this year and last year's catch data. He asked the Committee to consider placing an amount of DAH in reserve. The Committee noted that the Advisory Panel action to reduce the JVP for sablefish in all areas placed additional amounts to TALFF. We noted that foreign longlining is prohibited east of 140° West longitude, that that proportionate amounts of OY and DAH may not, be available for any release to TALFF. The SSC asked the Plan Drafting Team to look at the matter and consider what changes may be necessary to the plan to accommodate areal divisions of OY, DAH, RESERVE and TALFF. We feel that the release of sablefish reserves in other areas should be carefully considered in view of the U.S. catches to date. The Committee took no action on the request by Mr. MacGregor but noted the Drafting Team will be working on the problem.

- d. Provisions for Review - The Committee studied the recommendations of the DAH Working Group for the reassessment and possible release of RESERVE and DAH at six and eight months and concurred with the idea of establishing a mechanism in the plan to periodically review and, if appropriate, release DAH as well as RESERVE to TALFF. The Committee noted that a bi-monthly review schedule during the first 8 months would not restrict the Council's flexibility as much as the proposed 6 and 8 month schedule. The Committee recommends that the DAH and RESERVE review schedule be handled bi-monthly through the eighth month and at other times as needed. The Committee adopted the following language from the errata which says, page 6, Section 611.92 (b) (ii) reserves and DAH (A) apportionment of RESERVES and DAH amounts. As soon as practicable after each of the following dates and on other dates as required the Regional Director shall review and if appropriate, allocate to the TALFF a percentage of the reserve and DAH amount set out in Table 1 of this section for each species in each fishing area: January 2, March 2nd, May 2nd, and July 2nd.



### Part 3

The Committee reviewed, with Dr. Balsiger from the Management Plan Drafting Team, the recommended changed OY's and concurred with the recommendation to increase the Atka mackerel OY to 28,700 metric tons and to increase the Pacific cod OY to 60,000 tons. Both estimates were based on new survey information.

### Part 4

The Committee studied the recommendation to create a new category for idiot rockfish (*Sebastolobus*) and establish an OY of 3,750 metric tons. The Committee listened to Mr. Jay Hastings who discussed the problems associated with the areal division of an incidental species, the further division for the allocations to each foreign country and the further division of the allocation within internal fishing groups. Because the creation of the new category for idiot rockfish is a direct result of the large incidental catch by the foreign longliners fishing sablefish not enough is known of the distribution of *Sebastolobus* to assign the OY to any particular area. Therefore, the SSC recommends that the OY for *Sebastolobus* be for the entire Gulf.

### Part 5

The Committee adopted the amendment to establish a policy statement in the plan as proposed in the Council's amendment. They felt that it was an obvious and very straight-forward expression of the Council's intent to consider the request of any U.S. processor for some kind of time and/or area protection.

### Part 6

The SSC earlier discussed the reporting requirements amendment for the Bering Sea Groundfish Plan. We wish to adopt the recommendation we made for the Bering Sea Groundfish Plan for the Gulf of Alaska FMP.

- (b) Reports - All processors of groundfish and buyers of groundfish whose purchases enter non-processed fish markets except fishermen buying for their own bait needs and persons delivering U.S. caught groundfish to foreign processor vessels shall report information required for periodic reassessment of DAP. The regulations implementing this plan specify the information to be reported and the time schedule for reporting.

The Committee considered a request by Mr. Paul MacGregor to carryover unharvested portions of the sablefish OY into the 1980 plan. After conferring with Dr. Balsiger, the Committee, as did Mr. Paul MacGregor, agreed that any new resource estimate would automatically take into account unharvested portions of the OY. The Committee took no action on the request.

Agenda Item VII-4

Bering Sea Herring FMP

The SSC has carefully reviewed the Bering/Chukchi Sea Herring Plan. It is a very readable document and obviously reflects thoughtful and comprehensive work by the Plan Development Team. The SSC commends the Team for its fine effort.

During the plan development process the SSC Herring Review Subcommittee met twice with the Team. Concerns and recommendations expressed at those meetings were fully and satisfactorily addressed by the Team. The plan in its present form incorporates the advice of the Subcommittee.

During the Tuesday (August 21) plan review by the SSC as a whole, some revisions were suggested to clarify the concepts and formulation of Optimum Yield (OY), Total Allowable Catch (TAC), Domestic Annual Harvest (DAH) and the Total Allowable Level of Foreign Fishing (TALFF). We also recommended the Team prepare hypothetical management scenarios to provide examples of how the management regime will operate under differing stock levels, harvest rates and environmental conditions. These improvements have been made and were approved by the SSC but, obviously, could not be included in the Draft Plan.

The SSC recommends that the Council approve the plan for public review and instruct the Team to insert the revisions in the Plan in final preparation for printing and distribution. The SSC feels no need to review the Plan again until the public review is complete.

Agenda Item IX-1

Contract 78-9 The Pilot Troll Salmon Observer Program

The SSC recommended that the Council approve final payment of this contract. They feel that although some comparison of data is still possible at a later stage, it does not warrant financial penalty and recommended the Council approve payment.

Agenda Item IX-2

Contract 78-7: The Salmon Tag Recovery Program

The SSC reviewed the Contract and the final report from the contractor. The Committee recommended the Council approve final payment of this contract. We noted that there is still a need, not adequately addressed in the contract language or funding and therefore not in the report, for analysis of tag recovery data in terms of actual exploitation rates of various stocks in the Alaska troll fishery. These questions and analysis of the importance of pertinent logbook, fish ticket and observer data to management of Alaskan troll fisheries need to be the subject of further research.

Agenda Item IX-3

Contract Proposal for Troll Fisheries Data Analysis

The Committee reviewed a proposal from the Alaska Department of Fish and Game to analyze data on the troll fishery for coho and chinook stocks in and off Southeast Alaska. We felt the proposal has merit but that the objectives and deliverables need further review and possibly some tightening up. We recommended a subcommittee composed of Dr. Burgner, Don Rosenberg and Jim Balsiger meet with the contract in mid-September to accomplish this.

Agenda Item IX-4

Bering Sea Clam Leasing Study Proposal

The Committee felt that some combination of a renegotiation of the University of Washington proposal and the ADF&G/NMFS study should be pursued regarding a study of the legal ramifications of sea bed leasing.

Agenda Item IX-5

Halibut Tickets

Not enough information was presented to the Committee to determine the need for funding a CFEC proposal to keypunch halibut fish tickets. Further information was requested through the Council staff from the Commercial Fisheries Entry Commission.

LIST OF DOCUMENTS REVIEWED

1. Proposed Guidelines on OY Determination
2. Bering Sea Herring Draft FMP and accompanying papers presented.
3. Gulf of Alaska Groundfish FMP - Amendment Package and report of DAH Working Group
4. Bering Sea/Aleutian Groundfish FMP - Amendment Package and report of DAH Working Group and Salmon Savings area documents
5. Socio-Economic Data Needs Report
6. Proposal for Bering Sea Herring Workshop presented by Herring PDT
7. Final Report of Troll Salmon Observer Contract
8. Final Report for Salmon Tag Recovery Contract
9. Contract Proposal from the Alaska Department of Fish and Game to analyze troll salmon fishery data
10. Proposed for a study to analyze the leasing alternatives rposed as management options for the Bering Sea Clam Draft FMP
11. A Proposal to Keypunch Halibut Fish Ticket Data for 1975, 76, 77 and 78 for the Commercial Fisheries Entry Commission