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: [signature]
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MINUTES

SCIENTIFIC AND STATISTICAL COMMITTEE
Anchorage, Alaska
March 22-23, 1982

The Scientific and Statistical Committee of the North Pacific Fishery Management Council met in Anchorage on March 22-23, 1982. Members present were:

Donald Rosenberg, Chairman	John Clark
Richard Marasco, Vice-chairman	Larry Hreha
Al Milikan	Steve Langdon
William Aron	Jack Lechner
Bud Burgner	Ed Miles

C-1 Policy of Appointment of SSC Alternates

The SSC reviewed the proposed policy for alternates on the SSC. We concur with the general direction of this proposed policy. We would like to point out that first sentence of the proposed policy is a change in policy on membership on SSC membership. Current membership is not by agency. The SSC concurs with having an alternate for the primary agency representative.

The SSC believes that it is advantageous to our deliberations that at selected times other members be allowed to have alternates. We hope that the policy regarding alternates for other SSC members be liberally interpreted to allow on a case-by-case basis alternates when it is to the advantage to the deliberations of the SSC.

C-3 Election of Officers

The SSC requests confirmation of the following officers for the 1982 year

Chairman - Donald Rosenberg
Vice-chairman - Richard Marasco

C-4 Halibut Limited Entry

The SSC reviewed the draft RFP entitled, "Hook and Line Limited Entry Program for Alaska." The SSC recommends the following minor changes:

(1) that a statement be included in Section 5.0 regarding the availability of data indicating that the completion dates of the contract will be dependent upon the identified agencies providing data; and
(2) that the title be changed to indicate that this is a study of halibut limited entry and not an overall general hook and line limited entry study.

Subject to these minor modifications, the SSC recommends that this RFP be released.

C-7 Other Business

The SSC wishes to thank Mr. Jim Richardson for his assistance to the SSC during his tenure with the Council. The SSC believes that Mr. Richardson fills a very important position within the Council staff. The SSC recommends that the Council should refill this position immediately subject to Council budget constraints.

Steelhead Trout in the Japanese High Seas Salmon Driftnet Fishery

The SSC received Dr. Burgner's review of the information on North American steelhead catches in the Japanese landbased driftnet and salmon mothership fisheries. The Japanese and U.S. data suggest that essentially all steelhead intercepted by these fisheries are of U.S.-Canadian origin, rather than Asian.

The data indicate that steelhead catches of mothership catcherboats, fishing in the U.S. FCZ are presently less than 10,000 fish per year. CPUE of steelhead relative to salmon is very low, and price of steelhead is low relative to salmon in Japanese markets. Therefore, neither the mothership or landbased catcherboats could be expected to target on steelhead in the fishery.

If steelhead are determined by the U.S. to be a prohibited species, not to be retained for any purpose by the mothership fishery within the FCZ, opportunity for U.S. observer collection of coded wire tags and biological sampling aboard motherships will be lost. However, this is not considered to be a major handicap to the INPFC studies concerning impact of the mothership and landbased fisheries on North American steelhead. Sufficient sampling and tagging should be possible from U.S. and Japanese research vessels. Japan is providing steelhead catch statistics, beginning in 1981, by its landbased driftnet fishery.

The Japanese catch of North American steelhead outside the U.S. FCZ is estimated to greatly exceed that within the FCZ.

D-1 Salmon FMP

The SSC has reviewed the various reports and analysis which have been provided regarding the proposed amendments to the Salmon FMP. The SSC provides the following comments and recommendations:

Optimum Yield and Season

I. Origin of Chinook Stocks Caught by the Alaska Troll Fishery

There are as yet no definitive estimates of the relative composition of the various chinook stocks which contribute to the Southeast Alaska troll fishery. However, the information available permits general inferences regarding the relative contribution of Alaskan and non-Alaskan stocks. This information leads us to conclude that at least 80 percent of the chinook caught in the Southeast Alaska troll fishery are of other than Alaskan origin.

This estimate is as yet an approximation and could be modified significantly by further analyses of available data and new stock composition studies. There are, of course, annual variations and general trends dependent on the status of individual stocks, the times and areas of fishing in Alaskan waters and the level of effort in other fisheries competing for these same stocks.

Tentative stock composition estimates are based in part on the following evidence:

(1) Scale pattern studies of Alaska's chinook populations have determined that all Alaskan stocks are "spring" chinook (i.e. the juveniles spend one or more winters in freshwater before migration to sea). However, approximately 53 percent[1/] of the chinook sampled from the Alaska catch in the years 1974-77 were "fall" chinook (juveniles had not over-wintered in freshwater) and thus were not of Alaskan origin. Of these non-Alaskan fall chinook, a portion would be of British Columbia origin.

(2) Of the spring chinook taken in the Alaska troll fishery, tagging experiments have shown that stocks from British Columbia, Washington, Oregon and Columbia River contribute in varying degrees to the catch. For example, in recent years a significant proportion of coded-wire tagged hatchery spring chinook from the Willamette River were recovered from the Alaska troll catch, and a substantial proportion of recoveries from earlier taggings in the Alaska troll fishery were made in the Fraser River (spring chinooks).

These age composition and tagging data indicate that the great majority of chinooks taken in the Alaska troll fishery are of non-Alaskan origin. The tagging data should be viewed with caution, however, since variable recovery effort could bias conclusions and many natural chinook stocks which may contribute were not the subject of tagging studies.

Although the information available on the relative contribution of British Columbia and Washington/Oregon (primarily Columbia River) chinooks to the Alaska fishery is far from conclusive, we conclude on the basis of the literature and testimony presented to the SSC that these two areas may contribute about equally.

1/ Average percentage, from Davis, Selin and Wood (1978) Alaska Department of Fish and Game, Mimeo, 23 p. w/4 appendices.

Thus, a first approximation of the composition of chinook stocks in the Southeast Alaska troll fishery is:

Area of Origin	Percent Contribution
Alaska	20 (or less)
British Columbia	40
Washington/Oregon	40

II. Status of Chinook Stocks Which Contribute to the Southeast Alaska Troll Fishery

A report from the technical staffs representing agencies in Alaska, British Columbia, Washington and Oregon provides summaries of stock conditions.[2/] The following is exerpted primarily from that report:

A. Southeast Alaska Stocks

The natural (spring) chinook stocks remain the predominant production unit and all are judged to be depressed below target escapement levels set by Alaska Department of Fish and Game. It appears the decline in some of these stocks, in particular those originating in the Taku and Stikine Rivers, has been reversed due to more restrictive regulations for terminal area fisheries since the mid-1970's and 1981 ocean harvest restrictions designed to begin rebuilding consistent with a management plan currently in progress.

B. British Columbia Stocks

Natural stocks remain the predominant production unit and it is reported that almost all are experiencing a greatly depressed stock condition. From the limited tagging information available it appears that Fraser River summer chinook stocks have been the predominant British Columbia component in the Alaska troll fishery catches. In spite of directed fishing closures in terminal areas and other conservation measures, total returns to the Fraser River have declined substantially during the past 11 years. The spawning escapements have faired somewhat better. The estimated escapement in 1981 was only 77% of the 10 year average but within the recorded range of recent years. However, the 1981 escapement was only about 1/3 the number considered by Canadian biologists to be the optimum for the Fraser River.

C. Washington - Oregon - Columbia River

Of the upper Columbia River stocks, the primarily naturally spawning "bright" stock is the chief component contributing to the Alaska fishery. The 1981 escapement of 21,200 past McNary Dam was a record

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2/ December 22, 1981, Generalized Chinook Stock Management Concerns. Results of a joint technical staff meeting on 1981 chinook salmon resource status from Oregon to Southeast Alaska.

low, at 53% of the present escapement goal. It should be noted that the Bonneville Dam escapement count of chinook designated as upper Columbia River "brights" did not change significantly over the five-year period 1977-81, whereas the escapement counted at McNary has dropped due to interdam catches and unexplained losses. Total runs are in a depressed state and below existing production potential as a result of a combination of factors including under-escapement, loss of Snake River components, downstream migrant losses at dams, and unexplained upstream losses between Bonneville and McNary. The production potential of this stock is high if these impacts can be reduced.

Lower Columbia River spring stocks, predominately hatchery stocks, contribute significantly to the Alaska fishery. These stocks returned in sufficient numbers to allow a harvest opportunity and still achieve desired hatchery egg take requirements.

Washington coastal stocks contribute to some extent to the Alaskan fishery. Hatchery fall chinook stocks are providing limited harvest opportunity and this condition is stated to be expected to continue. Natural spring, summer and fall stocks on the north Washington coast are reported to be generally returning at levels which should produce small harvestable surpluses and still meet spawning escapement requirements. Grays Harbor natural spring and fall chinook are returning well below escapement goals.

Puget Sound stocks apparently do not contibute significiantly to the Alaskan troll fishery.

Oregon Coastal fall chinook stocks are generally in a favorable status as indicated by spawning ground index counts. Hatchery returns in 1981 appeared to be less than adequate for many coastal stations. The proportionate contribution of these stocks to the Alaska fishery probably is relatively minor.

D. Summary

Conditions of stocks contributing to the Alaska troll fishery vary, but escapements of most natural stocks contributing to the Alaska troll fishery are well below escapement goals set by the management agencies. Hatchery stocks appear to be relatively healthy.

III. Issues

A. Escapement Goals and Rebuilding Policies

1. Columbia River "brights"

(a) Escapement goal. The Washington Department of Fisheries is currently using the value of 40,000 fish over McNary Dam as the escapement goal for the Columbia River "bright" stocks. The goal was derived from the 1964-73 escapement counts over McNary Dam. During this 10-year period the fall chinook escapement ranged between 37,600 and 55,400

(average 45,700). Based on those data the escapement goal was established at 40,000 to 50,000 fish.

This value was further modified to compensate for the lost production from the Snake River, by lowering the escapement goal at McNary to the low end of the range, i.e. 40,000 fish.

As noted above the loss of habitat in the Snake River was compensated for by taking the lower range of the 10-year average. This loss could be compensated for by actually subtracting the average loss in fish from the Snake River (11,000 fish average for the period 1964-73 vs. 1,400 fish for the 1974-81 period). This would give an average escapement of 36,100 fish (45,700-11,000 + 1,400).

(b) Rebuilding. As noted, the escapement goal being used is the average escapement for the period 1964-73 modified by loss of Snake River stocks. This goal is felt by WDF to be the best estimate of the number of spawners necessary to produce MSY. The management practice used by WDF will not allow a fishery until there is a surplus above the escapement goals. This WDF management practice is to provide maximum rebuilding schedule.

It appears that the potential for rebuilding this stock to a higher level of production and return per spawner is high. This can be achieved by (1) reduction of losses during intragravel incubation by improved river flow control at this stage, (2) reduction of downstream losses at dams (now estimated to be approximately 50%), (3) resolution of interdam loss of upstream migrants, estimated at about 50% in 1981, (4) rebuilding of the Snake River component by hatchery production, and (5) regulation of the gauntlet fisheries to obtain target escapements. The potential for restoring high yield to the fisheries depends primarily on success of items 1-4, all of which are receiving intensified attention.

2. Alaska stocks. The management policy for rebuilding Alaska spring chinook stocks to provide desired escapement goals was established in 1981. It differs from that of WDF in that is calls for a multi-year rebuilding plan, taking into consideration economics of the troll fisheries. The situation is obviously much less complex than for the Columbia River "bright" stocks because it does not involve resolution of serious non-fishing mortalities and involves primarily a single fishery situation.

B. Differing Permissible Harvest Rates

As indicated in Council Document #15, prepared by Natural Resource Consultants, the concept of MSY as traditionally defined is not applicable to a fishery such as the Southeast Alaska troll fishery

which exploits an undefined mixture of stocks with different production capacities and trends. The ABC or OY for an individual stock must be the sum of catches allocated to various user groups and gear type fisheries to which a stock is exposed on its migration path. The decision for the Alaska troll fishery is one of allocation, taking into consideration:

(1) the stock condition and trends of the principal component stocks;
(2) the ability of the fishery, through regulation of time and area of fishing, to exert differential harvest rates on these different stocks (e.g. Southeast Alaska springs, upper Columbia River "brights");
(3) the ability to control other fisheries to adjust chinook harvest rates in concert with the Alaska troll fishery;
(4) the causative factors for present stock conditions;
(5) the ability to resolve stock condition problems by reduction in catch alone;
(6) the recovery plan strategy; and
(7) economic impacts on fisheries harvesting the component stocks.

C. Allocation Problems in the Alaska Troll Fishery

1. Southeast Alaska stocks. Manipulation of escapements for these stocks can be achieved to some extent by adjusting overall OY in the fishery, by time openings and closures to control catch of mature or immature fish, by adjustment of effort between inside and outside fisheries, control of terminal area fisheries, and other area adjustments. Success of these manipulations depends on the degree of time/area segregation of Alaskan and non-Alaskan stocks, the accuracy of present knowledge as to those segregations, and the control that can be achieved, particularly in view of the fact that the Alaska stock component of the overall catch is relatively small and in view of Alaska fisheries targeting on coho and other salmon species.

2. British Columbia stocks. Clearly the economic health of the Alaska troll fishery is dependent to a significant degree on the biological health of British Columbia stocks contributing to the Alaska catch. Achievement of desired escapement goals obviously depends primarily on control of fishing intensity in the British Columbia fisheries, and to a lesser extent in the Alaska troll and Washington fisheries (Fraser stocks in particular). Benefits of reduction of OY in the Alaska troll fishery to British Columbia stocks cannot be effected without commensurate reductions in British Columbia fisheries.

3. Washington-Oregon. In stocks of importance to the Alaska fishery, the effectiveness of OY reduction is dependent on transfer rates through the British Columbia fisheries, the allocations to fisheries enroute to spawning grounds or hatcheries, and the effectiveness of fish passage by dams in the case of some stocks.

IV. Recommendations

A. Alaska Stocks

With regard to the Southeast Alaska chinook stocks, the conservation issue which was identified last year seems to be addressed by the current management regime. Preliminary escapement data for the major Southeast streams indicates that escapement levels have increased. The total increase is estimated to be between 10,000 and 15,000 fish. The 15-year rebuilding plan proposed last year provides for an estimated average increase in escapement of 7,500 fish annually during the first 5 years. The 1981 management measures appear to have met the needs of most of these stocks. These management measures are an optimum yield of 243,000 to 272,000 fish with outer coastal and FCZ chinook season from May 15 to September 20, with additional in-season closures as required to prevent exceeding OY. The Alaska Department of Fish and Game has proposed specific management measures within state water for 1982 designed to specifically address areas where the escapement level did not indicate any rebuilding.

B. British Columbia Stocks

Because of the partial dependence of the Alaska troll fishery on certain British Columbia stocks, any improvement in escapements would benefit the Alaska fishery. A reduction in the Alaska OY in itself may have little effect on escapements to British Columbia streams unless accompanied by reduced effort in Canadian waters. A combined effort reduction is needed for effective rebuilding.

C. Columbia River "Brights"

With regard to this stock there is a conservation issue because natural stock escapements are below the established optimum escapement goal. The escapement has been below this goal for the past 8 years. Because several factors amenable to some control have been identified as contributing to the present stock condition, rebuilding of the stock may be best achieved by combined courses of action, some of which are expected to be increasingly effective with time. Although escapements are presently below the optimum, the productivity of the natural stock still has high potential.

The courses of action which are being considered or activated by various agencies include:

(1) better flow control to improve survival of eggs and alevins during incubation in the Hanford Reach area;
(2) hatchery production of lower Snake River chinooks to compensate for spawner loss resulting from dam construction. (The Lyons Ferry hatchery is scheduled to come on line soon for this purpose.);
(3) improvement of downstream passage techniques to decrease present high dam losses, estimated to be approximately 50%;

(4) reduction of unexplained interdam loss of fish between Bonneville and McNary dams (about 50% in 1981); and
(5) reduction in harvest, primarily in Alaskan and British Columbia fisheries.

It is necessary that a coordinated plan for increasing the return per spawner and for rebuilding the stocks to an identified escapement goal be developed and adopted by the agencies having fishery resource or fishery management responsibilities. The plan should be based upon a time frame taking into consideration the social and economic requirements of the resource users and existing fisheries.

The relative effectiveness of various controls in providing improvement in Columbia River "bright" chinook stocks necessarily will need to be considered. For example, a reduction of 36 chinook in the Alaska harvest would provide 1 fish to the escapement. The alternative of 1 fish reduction in the inter-dam loss provides 1 fish to the escapement.

Given the available Columbia River "brights" in the Alaska fishery, the maximum transfer of spawners to the escapement resulting from the complete closure of the Southeast Alaska chinook fishing is approximately 7,500 fish. It should be noted that the transfer of this number of fish is not predicted to provide for achievement of the escapement goal in 1982. On the other hand, the expected interdam loss based on 1981 rates would be approximately 32,000 fish, all of which could transfer to the escapement if that problem were solved. Thus, neither the North Pacific Council or the Alaska Board of Fisheries, either singly or in combination has the ability to completely resolve this conservation issue without the cooperative support of other agencies.

D. Other Washington - Oregon Stocks

The escapement needs of other stocks contributing to the Alaska troll fishery are not all clearly defined, but certain hatchery stocks such as the Willamette springs appear to be in satisfactory condition.

E. Conclusion

The SSC recommends that the OY for 1982 remain the same as for 1981.

The effectiveness of the proposed OY will depend considerably on the overall trend in level of combined stocks being fished and actions taken elsewhere to increase survival. If a commensurate reduction in effort is agreed upon with Canada for British Columbia chinook fisheries, we recommend a target OY for the Alaska chinook fishery at the lower end of the OY range (i.e. 243,000 chinook). This should help to provide escapements that should substantially increase future yields in the Alaska troll fishery. A reduction in catch from 268,000 in 1981 to 243,000 should result in an increase in escapement of about 700 upper Columbia River brights, other factors being unchanged. However, a reduction in the Canadian effort and resolution of in-river upstream migration losses would substantially increase this benefit.

A catch of 243,000 would represent a 39% reduction from the recent peak Southeast chinook catch in 1978, a 24% reduction from the 1980 OY of 320,000, and a 9% reduction from the 1981 catch of 268,000.

The SSC considered the PDT's recommendations as to timing of closed periods to limit the Alaska catch to 243,000 chinook. The SSC recommends that Option 3, with a May 15 opening and a June 1-14 Southeast Alaska troll closure combined with a northern British Columbia troll fishing closure for two weeks in mid-June would probably be more effective in passing chinook southward than Options 1 and 2.

Sub-legal Tagged Chinook Salmon

The SSC reviewed a letter from the Washington Department of Fisheries objecting to the retention of sub-legal tagged (adepose marked) chinook salmon. WDF was concerned that existing tagging studies could be biased if a change in recovery procedures occurred during those experiments.

Alaska Department of Fish and Game on the other hand believes the results of some of its tagging studies could be enhanced by the recovery of sub-legal tagged chinook from the fishery. Neither agency provided technical information or experimental designs to support their position.

The SSC recommends that WDF, ADF&G and any other concerned agencies attempt to resolve the issue and to recommend a resolution to the Council.

In the absence of a multi-agency consensus or strong supporting evidence documenting the need for sub-legal retention, the SSC cannot support retention of sub-legal tagged salmon.

D-4 Tanner Crab FMP

The SSC reviewed the report from the PMT regarding the Status of the Tanner Crab FMP and of the proposed changes to the management of this resource. Members of the ADF&G staff indicated that the differences between the FMP and the State's regulations are causing problems in the management of the resource. At our May 1981 meeting the SSC recommended the following regarding the Tanner Crab FMP:

(1) that the FMP be fully updated to reflect the current regulation and
(2) that the Council consider the development of a new plan or amending the existing plan to create a multi-year plan and/or
(3) that the Council consider developing a management scheme similar to that proposed for the king crab resource.

The SSC strongly recommends that the Council instruct the PMT to proceed with the update of the current plan and that the Council also proceed with the development of a multi-year or King Crab type FMP. The SSC does not recommend that the Council delay any longer in this matter.

D-5 Gulf of Alaska Groundfish FMP

The SSC reviewed the data and reports which have been provided regarding Amendment #11 to the Gulf of Alaska Groundfish FMP. Additionally, the SSC received and discussed the PMT report on the amendment package and discussed the various reports with the authors. The SSC would like to compliment all of those which have provided this information and especially the PMT for the information and analysis they have provided on this very complex issue.

Sablefish EY

The SSC recommends that the new EY value for sablefish in the Gulf of Alaska be accepted by the Council. This value is 10,965 mt Gulf-wide and is to be allocated in the various management areas as follows:

Western	2,225 mt
Central	4,075 mt
Yakutat W of 140°W	2,240 mt
Yakutat E of 140°W	1,135 mt
Southeast	1,290 mt

Sablefish OY

The amendment package provides seven alternatives for OY. These alternatives are detailed in the December 16, 1981 additions to the October 2, 1981 amendment package. The SSC evaluated each of these alternatives in light of the information available and the recommendation of the PMT. The SSC rejects the following of these alternatives.

Alternative 1 - This alternatives reduces OY from the current level (13,000 mt) to no more than 9,000 mt Gulf-wide with the final OY being based upon the preferred domestic market size. The SSC was not provided any OY values based solely upon the preferred market size fish and therefore was unable to evaluate the alternative.

Alternatives 3 and 4 - These alternatives proposed to reduce the Gulf-wide sablefish OY from 13,000 mt to 3,500 mt and 500 mt respectively. The SSC felt that these proposed alternatives would have a drastic impact upon the existing fisheries and the developing domestic trawl fishery and therefore believes that the costs associated with implementing these alternatives would likely exceed the benefits that might accrue from the low OYs.

Alternative 7 - This alternative provides for the status quo, that of a Gulf-wide OY of 13,000 mt. The SSC is unable to support this alternative as it could allow the sablefish harvest to exceed the best available estimate of EY. The SSC feels this would create a conservation issue.

The SSC provides the following comment on the remaining alternatives:

Alternative 6 - This alternative establishes a Gulf-wide OY of 10,435 mt based upon the current OY for the Western and Central area and the establishment of a new OY for the Yakutat-west of 140°W sub-management area. It recognizes the new EY values for the region east of 140°W. The SSC recommends that this alternative be modified to recognize the new EY

value Gulf-wide and that OY be set equal to EY in all management areas. This would establish a Gulf-wide OY of 10,965 mt.

Alternative 2 and 5 - These alternatives reduce the proposed EY values by 25% in recognization of the need to rebuild the stocks and to take care of uncertainties associated with growth and migration data. Alternative 5 differs in that it does not provide for this 25% reduction in the area of the domestic fishery. These alternatives provide for an OY of 8,200 mt to 8,840 mt. The SSC found that these alternatives are very similar and only differ in the degree of protection offered to the stocks east of 140°W.

Alternative 8 - The SSC also reviewed the new alternative proposed by the team in their report dated March 11, 1982. This alternative will be referred to as Alternative 8. This alternative establishes a Gulf-wide OY of 6,100 mt. This value is developed by the team based upon the analysis presented in the bioeconomic model. It is that value which the model predicts would provide the greatest incentive for further domestic utilization of the Gulf-wide sablefish resource while providing for required by-catch. The SSC notes in the alternative that the Eastern managment area OY is not divided into sub-management areas.

The reference point for the evaluation of each of these options is the objectives specified in the June 1981 version of the Gulf of Alaska FMP. These objectives are:

(1) rational and optimal use, in both the biological and socio-economic sense, of the region's fishery resources as a whole;
(2) protection of the Pacific halibut resource...;
(3) provision for orderly development of domestic groundfish fisheries, consistent with (1) and (2) above, at the expense of foreign participation; and
(4) provision for foreign participation in the fishery consistent with (1), (2) and (3) above, to take portion of the optimum yield not utilized by domestic fishermen.

The SSC was unable to reach agreement on which of these alternatives we could recommend. We were unable to reach agreement because members were unable to resolve differences in their opinion on growth, migration or the economic consequences of the OY levels. These differences lead the SSC to provide the Council with what the SSC considers as the Pro's and Con's of the three alternatives.

Alternative 6 OY = 10,965 mt Gulf-wide

Pros	Cons
1. maintains stock at status quo level	1. doesn't provide for sablefish stock rebuilding
2. would accommodate operation of foreign fisheries at current levels	2. Since this is a Gulf-wide OY, there was a feeling that it may not provide adequate protection for stocks in the Eastern regulatory area.
3. would accommodate expansion of a domestic trawl groundfish fishery	

Alternative 2 and 5 OY = 8,840 to 8,200 mt Gulf-wide

Pros	Cons
1. responds to the low abundance of domestically marketable size fish by reducing fishing mortality	1. its uncertain that this action will result in a rapid rebuilding of sablefish stocks
2. permits continuation of the foreign fishery at lower levels	
3. would accommodate expansion of the domestic trawl groundfish fisheries	

Alternative 8 OY = 6,100 mt Gulf-wide

Pros	Cons
1. responds to the low abundance of domestically marketable size fish by reducing fishing mortality	1. it's uncertain that this action will result in a rapid rebuilding of sablefish stocks
2. could accommodate the current foreign trawl and cod longline fisheries at near current levels	2. given the uncertainty associated with the outcome of this action, it may not be consistent with objective 1 of the FMP
3. could accomodate limited expansion of the domestic longline fishery for sablefish	3. would eliminate a directed foreign longline fishery without adequate justification
4. could accommodate limited development of a domestic trawl fishery for groundfish	

Some members of the SSC had difficulty supporting several of these alternatives. With regard to Alternative 6, it was felt by some that setting OY equal to EY was unwise in light of the desire to rebuild the sablefish resource and to encourage the growth of the domestic fishery. Likewise, some members felt that Alternative 8, setting OY = 6,100 mt, represented an excessive reduction in OY in light of the uncertainties associated with current data base.

The SSC did review the reports on the migration and on the economics of the OY options. With respect to the migration papers, the SSC recognizes that there are several migration hypothesis which have been put forth. It is our opinion that the data available make it impossible to verify either one. The SSC does concur with the team that the movement of sablefish is greater than previously recognized.

With respect to the economic model, even though some limitation of the model have been identified, the SSC still feels that it contributes useful information for the examination of the alternative management strategies.

With regard to Alternative 8, the SSC recognizes that the team did not recommend subdividing the OY in the Eastern management area. The SSC in its discussion of this OY level does recommend that OY be so subdivided. This recommendation is based upon the newly recommended EY's for the sub-areas. This apportionment is recommended in order to prevent the actual harvest in any one of the sub-areas from exceeding the EY for that area.

DAH Procedure

The SSC reviewed the December 21, 1981 letter from the National Marine Fisheries Service regarding the proposed procedure for determination of DAH and the Reserve amounts. The SSC still supports our proposed method of determination of DAH and Reserve. We would like to point out that it was not our intention in recommending this procedure that the release of reserves to DAH could only be accomplished at the schedule for release of the Reserves to TALFF. The SSC feels that this release of Reserves to DAH should be accomplished as needed in accordance with the performance of the domestic industry.

Percentage Allocation of OY between Management Areas

The SSC recommends that the Gulf-wide OY value be allocated between management areas and sub-management be in accordance with the latest estimates of EY.

Opening Davidson Bank

The SSC believes this is primarily a gear conflict/fishery development issue and therefore has no recommendation.

Exclusive Longline Fishery

The SSC believe that this proposal may conflict with one of the plan objectives but makes no recommendation.

Winter Closure

The SSC received no new information on the proposed amendment and therefore cannot support this proposed closure.

Reporting Requirements

The SSC supports the need for this information and supports reporting requirements which acquire the information at the least cost to the industry.

D-6 Bering Sea/Aleutian Islands Groundfish FMP

The SSC reviewed the proposed changes to Amendment #1 to the Bering Sea/ Aleutian Islands Groundfish FMP. The SSC just received this proposed changes to the amendment and therefore did not have time to provide an in-depth review. The preliminary review that was undertaken lead the SSC to believe that some

of these proposed changes could be considered to be substantial modification to the amendment package. Since both the public and the SSC have not had sufficient time to review these changes in detail, the SSC recommends that the Council allow a period for public review between now and the next Council meeting. The SSC will then be prepared to provide an indepth review and make recommendations at our next meeting.

The SSC did question the team and the management agencies regarding the urgency of implementing that amendment. They indicated that the resource was being managed under the current FMP and that the additional delay would not cause any management problems.

U.S. Fishing Development Zone

The SSC received a report by Dr. Low on the proposed fishing development zone. The SSC has no comment on this proposed action at this time.

E-2 Programmatic Funding

The SSC reviewed the four proposals received by the Council for consideration for funding with FY83 programmatic funding. With regard to proposals entitled (1) A Domestic Groundfish Fishery Logbook Program, (2) A Symposium on Biology and Management of Sablefish, and (3) The Distribution, Abundance and Some Aspects of the Life History of Golden King Crab in the Eastern Bering Sea, the SSC recommends that the Council send these three proposals out for agency review in accordance with the established Council procedures.

With regard to the proposal entitled, "The International Seafood Trade Conference" the SSC noted that this conference was scheduled for September 1982 and therefore would require funding under the current Fiscal Year. The SSC considers that this conference and the cooperative research being proposed would be a considerable benefit to the activities of the Council. The SSC requests that the Council endorse the concept of the conference and attempt to obtain funding for the Council participation.