MINUTES
North Pacific Fishery Management Council
Scientific and Statistical Committee
January 3-4, 1983
Juneau, Alaska

The Scientific and Statistical Committee of the North Pacific Fishery Management Council met in Juneau on January 3-4, 1983. Members present were:

Donald Rosenberg, Chairman
Richard Marasco, Vice-Chairman
William Aron
Bud Burgner
John Clark
Larry Hreha
Steve Langdon
Dennis Austin, alternate for Al Millikan
Don Bevan

C-1 Election of Chairman and Vice-Chairman

The SSC requests confirmation of the following officers for the 1983 year:

Chairman - Donald Rosenberg
Vice-Chairman - Richard Marasco

D-1 Salmon FMP

1983 Southeast Alaska Troll Fishery

The SSC reviewed the report of the PMT management options for the 1983 Southeast Alaska Troll Fishery as developed by the PMT and amended by the January 3, 1983 addendum. Additionally, we received and reviewed the following reports:

1. "Options for the 1983 Southeast Alaska Troll Fishery Season," prepared by the Southeast Regional Staff, Division of Commercial Fisheries, Alaska Department of Fish and Game, January 4, 1983.


1983 Harvest Ceiling

The SSC as reported last year find that a conservation problem exists regarding the chinook stocks which originate to the south. Based upon this finding, the SSC concludes that 243,000 chinook, the lower end of the OY range, is an appropriate 1983 harvest ceiling for the Southeast Alaska commercial salmon fishery, given a reciprocal reduction in the British Columbia chinook fisheries as proposed in the U.S./Canada draft treaty. The Alaska catch distribution, set forth by the PDT, would result in a summer troll catch ceiling of 206,000 chinooks if the 1983 net fishery catch can be held to 22,000 chinooks and if an allowance of 15,000 chinooks is made for the winter troll fishery. The 206,000 summer troll catch ceiling in 1983 would represent a 10% reduction from the actual 1982 summer troll catch.

1983 Summer Season

Five options for the 1983 summer season were presented by the PDT, three in agenda item D-1(a) and two additional in their January 3 addendum to agenda item D-1(a). The fourth option resulted from Washington Department of Fisheries' concerns and a fifth involving change in the chinook fishing year has been proposed by ADF&G. All five options would reduce the troll fishing season below that initially scheduled for 1982. The 1982 allowed for a May 15 - September 20 season with 10-day closures in mid-June and early August. In actuality, the 1982 summer chinook troll fishery had to be closed by July 29 because the catch quota was achieved early, resulting in a single-species (coho-only) fishery in August and September.

In evaluating the five options for the summer chinook season, the SSC examined each for the potential of creating two situations which we considered biologically undesirable. The first is an early chinook closure as occurred in 1982, undesirable because of potentially significant hooking mortality to chinooks that could occur during an ensuing coho-only troll fishery. The second undesirable situation would be a major shift in the seasonal distribution of the troll fishery effort, undesirable because we perceive that as creating conservation problems in terms of shifts in stocks and age groups fished.

Options 1 and 2 of the PDT [see agenda item D-1(a), p. 2] allow for a May - June fishery shortened by about 16 days from the 1982 season and a July 1 - September 20 season broken by a 10-day August closure. These options would allow ample time by July 1 to assess the chinook harvest rate achieved in the spring and thus to anticipate regulatory options for the remainder of the summer season. The SSC's primary concern with these two options is that the reduced spring fishing time may not result in sufficient reduction in catch to avoid an early closure of the chinook fishery and consequently another coho-only fishery situation as in 1982.

The PDT's option 3 seems less desirable since it would eliminate the late May - early June fishing effort by shifting to a June 12 opening and because it provides no closed period before the July fishery during which early season
catch rate trends could be evaluated. As in options 1 and 2, it may not provide sufficient reduction in catch to avoid an early chinook closure.

An additional option, #4, is proposed by the PDT in their January 3 addendum to their agenda item D-1(a) report. This more severe option was prepared in response to the concern of WDF, based on review of the 1982 salmon fishery patterns and computer modeling, that options 1 - 3 would result in an early chinook closure as occurred in 1982. Option 4 would delay the troll season opening to June 29, eliminating a spring fishery. The season would remain open through July 31, close August 1-10, re-open August 11 and continue to September 20 (or close earlier if the combined troll-net fishery catch ceiling was reached). One WDF concern is that the net fishery catch cannot be held down to the 22,000 allocation.

The main concern of the SSC to option 4 is that the troll fishery would be shifted to a July - August fishery that would tend to concentrate on stocks most in need of conservation, e.g. Columbia River "brights." The spring fishery which tends to intercept Alaska chinook stocks, would be eliminated by option 4. Since Alaska chinook escapements are showing satisfactory signs of rebuilding toward escapement goals, they do not appear to need the additional protection of a spring fishing closure. A further problem with option 4 is that the recreational chinook fishery would not be affected as in the past by a competing spring commercial troll fishery and would probably exceed the 20,000 projected catch.

A fifth option is proposed by ADF&G Southeast Regional Staff on page 8-10 of their January 4 submission (as their option 3), and is discussed on page 3-4 of the PDT addendum. This option would establish the chinook fishing year as July 1 - June 30 instead of October 1 - September 30 as previously established by the FMP Amendment #2. Under this option chinook catches in the net and recreational fisheries would continue to be compiled on a calendar year basis, with the January 1 - June 30 catches included in the current season (July 1 on) catch ceiling. This proposed change in fishing year would be implemented for the summer troll fishery as proposed in options 1 or 2.

The new accounting system starting July 1 would eliminate the probability of a coho-only fishing period except during the initial season. However, the SSC does not recommend the new accounting year system because it potentially requires restriction of the winter troll fishery and the spring fishery would bear the brunt of curtailment (or complete closure) when the chinook catch ceiling is reached. As indicated in our comment on option 4, we believe the resultant shift in seasonal distribution of troll effort could add to conservation problems. We note also that application of an accounting date beginning January 1. Restriction or closure of the spring troll fishery would probably result in an increase of the recreational catch beyond the 20,000 estimate.

In view of the reservations the SSC has regarded each of the five options, we propose a modification of options 1 or 2 for consideration by the Council. We prefer the seasonal effort distributions provided by options 1 and 2 over options 3 - 5 because only options 1 and 2 assure a spring fishery and the least chance of undesirable shifts in stocks and age groups fished. However, we are concerned that an early attainment of the chinook catch ceiling will
result in a prolonged coho-only fishery as in 1982. To reduce this possibility we propose that the presently scheduled 10-day August closure be increased to 15 days by beginning 5 days earlier. This, we believe, would have two desired effects. First, it would delay any needed closure of the chinook fishery resulting from catch ceiling attainment. Second, it would assist management of the coho fishery by allowing additional time for movement of coho stocks into inside waters where there is better opportunity to manage on a stock-by-stock basis.

**Hatchery Production**

The SSC concurs with the PDT that the Council should adopt a policy on hatchery production which is consistent with the chinook conservation policy adopted by the Council at the December meeting and the draft U.S./Canada treaty. The SSC concurs that as long as conservation problems exist in the major stocks which supply the Alaska fishery, supplemental production should be utilized to lower exploitation rates on depressed natural stocks. Thus, the Southeast Alaska chinook salmon harvest ceiling should not be increased to allow harvest of hatchery production in the mixed-stock fisheries. The SSC does note that specific arrangements must be made to allow for the select stock terminal hatchery harvest and not have those fish counted under the harvest ceiling.

**Board Proposals**

The SSC reviewed the specific Board proposals. We have no specific recommendation on the individual proposals which potentially effect the FCZ.

**Draft U.S./Canada Treaty**

The SSC reviewed the proposed treaty (dated December 22) between the Governments of the United States of America and Canada concerning Pacific salmon. While the discussions of the details of the treaty were not completed, the SSC reached a consensus on a number of key points regarding chinook salmon that should be considered in the critical examination of the treaty:

1. The chinook salmon is the most migratory of the Pacific salmon. The species ranges nearly coastwide from northern California to northwestern Alaska. Fish origination in the streams and rivers of Washington and Oregon are regularly taken in the commercial and recreational fisheries of the Pacific states and British Columbia. At the January 1982 Council meeting the SSC pointed out that a conservation issue existed regarding the chinook stocks which originate to the South and that to address this conservation issue a plan for rebuilding the stocks to identified escapement goals should be developed. Additionally, we noted that to manage these stocks effectively there must be a coastwide management program involving all of those interested in the fishery. The proposed treaty provides a basis for such a management program.

2. The present status of most of the chinook stocks are well below desired escapement levels. Southeast Alaska escapements are about 23% below desired levels but rebuilding is presently ahead of the established 15-year schedule.
British Columbia escapements are less than 50% of the interim management goals. In Washington some coastal natural runs are in reasonable condition, but Columbia River and Puget Sound stocks are below escapement goals. We concur with the PMT that many of the natural stocks that contribute to the Alaska fishery are experiencing extreme conservation problems and immediate action is necessary. The proposed treaty takes steps to correct this identified conservation problem.

Failure to take positive action in response to this identified conservation problem will lead inevitably to further reduction in the catch. Such reductions are apt to be substantially greater than those which are proposed in the treaty. Without a reversal in the escapement trends to the south, Southeast Alaska catches cannot be maintained at their present levels even if Alaska stream escapements are rebuilt to optimum levels.

3. The current status of the chinook salmon can be mitigated by rebuilding natural runs through careful management and/or through enhancement by hatchery production. In some cases enhancement is necessary to overcome the losses of spawning areas that have resulted from human activities, particularly the construction of power dams.

Restoration of natural runs can only occur by the reduction of current catch levels. However, unless such reductions are coordinated between all of the participants in the fishery, substantial inequities are likely, thus making it difficult to implement necessary changes on a state-by-state basis.

Likewise, proposed enhancement programs are expensive and will almost certainly not be undertaken unless there is assurance of a coastwide management program. Under the proposed treaty arrangement one may anticipate that both Canada and the United States (as part of the Columbia River work of the Northwest Power Council) will undertake major enhancement programs that will benefit fishermen all along the coast. In the absence of a treaty arrangement such enhancement programs are unlikely to occur, or if they do occur they are apt to be restricted to those actions that will only benefit local fishermen.

4. Any consideration of the desirability of the treaty should compare the short-term reductions with the long-term increases in catch. The 1983 decrease in catch under Annex 4 of the treaty is a reduction of 12,500 from the 1982 harvest level or 44,000 fish below the actual 1982 catch.

The long range benefits from obtaining escapement goals in 10 years can optimally be expected to be over one million additional catch for the United States and Canada combined, an increase of about 30% above present harvest levels.

Estimates of enhancement fish are more difficult to make because of the uncertainty of many proposed projects. We consider it possible to obtain on the order of 2,100,000 fish, 200,000 from Alaska; 740,000 from British Columbia phase one; 560,000 from British Columbia phase two; 100,000 from Puget Sound and 500,000 from the Columbia River.
A coastwide management program provides another short-term benefit. If new enhancement can be rapidly brought online as a result of a U.S./Canada agreement, the enhancement chinooks can be counted in catch allocation, permitting a greater escapement of natural runs and thus an accelerated rebuilding to escapement goals. This would achieve the long-term benefits of increased natural production in a shorter period of time.

**D-2 Tanner Crab FMP**

The SSC reviewed Amendment #9 to the Tanner Crab FMP and the PMT review of the amendment. This amendment addresses a problem which has been identified in the setting of fishing seasons.

The SSC does have recommendations regarding the wording of specific positions of the amendment. These changes have been provided to the Council staff. In summary our major recommendation is in regard to the considerations to be used in setting closed seasons. The SSC recommends that closed seasons be set to maximize the reproduction potential of the Tanner crab populations be based on the following considerations:

1. Closed seasons should include molting and post-molting periods until the shells have hardened enough to permit handling with minimal mortality and damage.

2. Closed seasons should possibly include other sensitive periods of the life cycle of the crab when they become known.

The SSC was also informed that the Team plans an expansion of the section regarding how the Council and Regional Director will interact. The SSC concurs with the expansion of that section. Additionally, we have recommended the list for factors in this section be identified as socioeconomic factors that the Regional Director must consider in addition to biological factors and that an item 8 be added to the list, that of "development of a fishery."

The SSC realized that the Regional office has indicated that the apparent need for this amendment has been reduced. The SSC still believes that this amendment answers an identified operational problem. We believe that it lays out the procedure which the Council wished to have used in the establishment of fishing seasons. The SSC therefore, subject to the above modifications and those proposed by the PDT, recommends that the Council forward the proposed amendment to the Secretary for review.