A number of issues and regulation proposals relating to Southeast Alaska fisheries will require joint Board/Council consideration during the January 4-6 meeting.

I. Proposed U.S./Canada Salmon Treaty

A draft proposed treaty prepared by the negotiators since the November 1982 negotiations will be available for review and approval. The Board will receive briefing materials from ADF&G prior to the meeting. Lee Alverson, the U.S. negotiator, will publicly present and discuss the proposed treaty at the joint Board/Council meeting.

II. Southeast Alaska Troll Fishery Proposals

I would suggest the following order for proposals relating to the troll fishery:

1. Proposals 218 - chinook salmon harvest ceiling. (staff will make recommendations for inseason management.)

2. Proposal 210 - Proposed daily fishing periods for troll fishery.

3. Proposal 214 - Additional spring closure in Icy Straits - Chatham Straits corridor to protect Taku chinook stocks. Note: Council action not required but will be of direct interest because of stock conservation action.


5. Proposal 219, 220 - 10-day coho season closure.

6. Proposal 222 - Eliminate Board objective of returning of coho catch in inside areas to pre-1978 levels.

7. Proposal 208 - Yakutat area coho fishing seasons.

8. Proposal 223 - Allow single species fisheries by the troll fishery.

10. Proposals 257, 258 - Proposed extension of troll fisheries to other areas of the state.


III. Southeast Alaska Bottomfish Proposals

1. Proposal 241 - Fishing seasons for sablefish.
MEMORANDUM

TO: Council, SSC, and AP members

FROM: Jim H. Branson
Executive Director

DATE: December 22, 1982

SUBJECT: Salmon Fishery Management Plan

ACTION REQUIRED

Select preferred alternatives for 1983 management.

D-1(a) Salmon Plan Development Team meeting options for the 1983 Southeast Alaska Troll Fishery.

D-1(b) Proposals to the Board of Fisheries pertaining to 1983 troll salmon management.

BACKGROUND

In 1982 the Council and Board approved nearly identical harvest guidelines and established consistent regulations for the Southeast troll fishery in State and FCZ waters. The current summer fishing season is May 15 through September 20 for chinook and June 15 through September 20 for coho. In-season management for chinook is designed to achieve a harvest guideline of 255,500 fish. In 1981 an early closure of the FCZ for all species was required, as well as periodic closures throughout the season. In 1982 an early closure of both State waters and the FCZ was required for chinooks again, but continued fishing for coho was allowed.

The only active coho management in the FCZ has been an August closure which provides time for assessment of run strength and allows coho stocks to move towards inside waters. This closure was 10 days in 1981 and 1982.

Gear Regulations

Current regulations allow four lines and gurdies for power troll vessels south of Cape Spencer and six lines and gurdies north of there. Treble hooks are not allowed in either State waters or the FCZ. Hand troll vessels are allowed two gurdies or four sport poles.

Trolling is allowed east of Cape Suckling only.

PROPOSALS TO THE BOARD

The Board of Fisheries has received proposals regarding seasons, boundaries, gear, harvest limits, and size limits for the Southeast Alaska troll salmon fishery. Many of these pertain to the FCZ and should be discussed jointly by the Council and Board at the January meeting. Board proposals are identified and discussed below. The actual proposals are attached as agenda item D-1(b).
Statewide Trolling

Proposals 257 and 258 address the question of allowing fishermen to troll for salmon west of Cape Suckling. Fishermen feel that historically troll fishing was allowed in these areas and faced with reduced harvest limits in Southeast, fishermen need these areas to be re-opened in order to survive economically.

Harvest Guidelines

Six public proposals (all included in #218) were received by the Board regarding harvest guidelines. These all suggest liberalizing the "quota" or establishing a more "flexible" management system. The Council's consideration of the 1983 harvest guideline/OY will be in light of the tentative agreement from the U.S.-Canada salmon interception negotiations. That agreement states that the total chinook catch in Southeast Alaska (including the sport catch) will not exceed 263,000 fish. This translates to a commercial catch by all gear types of 243,000 chinooks, which is the lower end of the OY range.

One potentially critical point which should be discussed by the Council and the Board pertains to the harvest of hatchery-produced chinooks. Current state regulations [5AAC 33.365 (b)(8)] add the hatchery surplus to the harvest guideline. The Council should discuss with the Board the appropriateness of this addition.

Season and In-season Closures

Three proposals address in-season closures. ADF&G staff proposes (#219) that the 10-day coho closure be more firmly established and to always occur in August. The two public proposals (#220 - 2 options) would eliminate or restrict the use of in-season closures.

Three options (#208) deal with the Yakutat troll area and season and may pertain to FCZ management as well.

Proposal 210 would establish a summer season opening of April 15 and a standardized fishing day of 5:00 a.m. - 7:00 p.m.

Proposal 222 would repeal the Board of Fisheries objective of returning inside district coho troll catches to pre-1978 levels by 1984.

Proposal 223 would require season closures to be for individual salmon species, and fishing would be allowed for all other troll species.

Gear

Line limits are addressed in Proposals 229 and 230. Proposal 229 would allow two additional lines to be fished if two limited entry power troll permits are being fished from one power troll vessel.

Proposal 230 (2 options) address hand troll line limits and would allow (a) four lines, two of which may be gurdies; or (b) four lines, or one gurdy and one fishing rod.
Proposal 232 provides for a playing reel aboard troll vessels.

Proposal 233 would allow the use of treble hooks.

Other

Proposal 224 would allow retention of any unavoidably mortally wounded king salmon to be retained and reported as subsistence catch.

Proposal 259 would change the Board's mixed stock salmon fisheries policy.

PDT PROPOSALS

The salmon Plan Development Team proposes that the Council and Board establish a commercial harvest ceiling of 243,000 chinooks in accordance with the U.S.-Canada salmon interception agreement. Three season options have been developed to achieve this ceiling. Careful catch monitoring will be required for each option, and additional in-season all species closures may also be necessary. The options are designed to avoid premature closure of the chinook season and the potential impact on the coho harvest. The PDT feels that a chinook-only closure should be a "last resort" management measure.

The PDT does not propose any changes in gear regulations or other management measures. The PDT proposal package is attached as agenda item D-1(a).
The North Pacific Fishery Management Council's Salmon Plan Development Team (PDT) has prepared this report to address key 1983 salmon management issues. This report deals primarily with season options to achieve an established 1983 chinook salmon harvest guideline. It also includes a discussion regarding standardization of the 10-day coho closure in August, recommendation of a harvest policy for hatchery produced chinook salmon, and appropriate background information on other selected issues. The PDT considered its general guidelines for developing management options to be: (1) to ensure that management of the Southeast Alaska troll fishery insofar as it occurs in the Federal Conservation Zone (FCZ) from 3-200 miles offshore is consistent with the National Standards as specified in Section 301 of the FCMA; and, (2) to coordinate federal management of the troll fishery in the FCZ with management by the State of Alaska in state waters. Management options considered by the PDT include options developed by the Alaska Department of Fish and Game (ADF&G) for presentation to the Alaska Board of Fisheries as well as those proposed by PDT members.

Chinook Salmon

A major factor affecting 1983 chinook salmon management is the proposed U.S./Canada agreement on salmon interceptions which specifically addresses current coastwide chinook salmon conservation problems. This proposed agreement sets the framework for the PDT's chinook salmon management options presented in this report. Chinook salmon stock status, conservation needs and stock distributions are presented in the Team's November 3, 1982 report which serves as the basic background document for this report.

The proposed U.S./Canada salmon interception agreement would commit the United States to a total 1983 all gear catch of no more than 263,000 chinook salmon in Southeast Alaska. A recreational harvest of 20,000 chinook is expected in 1983, thus making the commercial catch ceiling 243,000, consistent with the lower end of the optimum yield range as specified in the FMP. The proposed agreement also commits Canada to major cutbacks in fisheries harvesting depressed natural chinook salmon stocks. Under the terms of the proposed treaty, chinook salmon harvests in British Columbia fisheries, excluding West Coast of Vancouver Island fisheries which harvest predominantly hatchery stocks, would be reduced by 25% from average 1978-81 levels. The intent of these reductions is to immediately stop the continued stock decline and begin the rebuilding process to the full potential of the resource.

Since the troll fishery is the only directed fishery on chinook salmon, accounting for about 80-85% of the total Southeast Alaska all-gear catch in recent years, primary regulatory controls to meet harvest guidelines will be required in this fishery. Although a gradual, increasing trend has occurred in recreational catches, they have not fluctuated more than several thousand fish from year to year. No specific limits are proposed for the recreational catch. Instead an allowance will be made in the all-gear catch ceiling of 263,000 for an expected catch of 20,000 chinook salmon by the recreational fishery.
Chinook salmon catches by Southeast Alaskan net fisheries are nearly all taken incidentally to the harvest of other target species. The 1975-82 average net catch was about 22,000, but a slightly larger than average catch could occur in 1983 as expectations for Southern Southeastern Alaska pink salmon returns are similar to the 1982 return. The 1982 net catch was a record 44,500 chinook salmon. While some in-season time/area regulations may be implemented in 1983 to reduce net fishery chinook catches, the basic approach should be to make an allowance in the all-gear chinook catch ceiling for this incidental catch. For purposes of this discussion, an average (22,000) net catch will be used as a pre-season estimate.

Estimates of the net fishery chinook catch will be updated in-season based on actual observed catch rates and, if possible, adjustments will be made to compensate for deviations from this pre-season expectation of net fishery harvest.

Assuming an all-gear chinook salmon catch ceiling of 263,000 and catches of 20,000 and 22,000 respectively by recreational and net fisheries, a pre-season target ceiling of 221,000 would be established for the troll fishery. A winter season troll catch of about 15,000 chinook salmon is expected leaving 206,000 fish as a pre-season target ceiling for the summer troll season.

The PDT recommends two primary objectives for 1983 chinook salmon management. The first objective should be to control the catch to ensure that the all-gear and/or commercial chinook salmon harvest ceilings are not exceeded. The only deviations anticipated from these values would be due to management inprecision (roughly ± 3% of the harvest ceiling). The second objective should be to distribute the harvest throughout the season to eliminate or at least minimize the need for considering chinook-only closures during the main coho season from mid-July through August. The impacts of any coho-only fishing season should be evaluated relative to the chinook harvest ceiling.

Plan Development Team Season Options

The PDT has developed three alternative regulatory proposals designed to achieve the primary objectives. All three options assume a summer troll season harvest guideline of 206,000 chinooks and a total commercial chinook catch of 243,000 (see calculations below). The three alternatives are all designed to achieve this harvest guideline, but each alternative may have slightly different biological and socioeconomic implications.

Calculation of the summer season harvest guideline is based on pre-season estimates of catches in all the various fisheries. These estimates may be updated during the summer season and the troll fishery harvest guidelines will be revised, if necessary.

<table>
<thead>
<tr>
<th>Calculations of Pre-Season Summer Troll Fishery Harvest Guidelines</th>
</tr>
</thead>
<tbody>
<tr>
<td>263,000</td>
</tr>
<tr>
<td>-20,000</td>
</tr>
<tr>
<td>243,000</td>
</tr>
<tr>
<td>-22,000</td>
</tr>
<tr>
<td>-15,000</td>
</tr>
<tr>
<td>206,000</td>
</tr>
<tr>
<td>32C/K</td>
</tr>
</tbody>
</table>
The three options have both firm and flexible dates. The initial open periods for all three options are firm dates. The remaining open periods (in parentheses ( ) below) are flexible dates based on pre-season estimates of catch rates (i.e., average historical rates). These flexible dates are pre-season guidelines based on historical data and are subject to adjustment based on in-season monitoring. All three options assume a 10-day coho salmon closure from approximately August 1-10. This would be an all-species troll closure.

<table>
<thead>
<tr>
<th>Option 1</th>
<th>Open Dates</th>
<th>Closed Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>May 15 - June 5</td>
<td>(June 6 - June 30)</td>
</tr>
<tr>
<td></td>
<td>(July 1 - July 31)</td>
<td>(August 1 - August 10)</td>
</tr>
<tr>
<td></td>
<td>(August 11 - September 20)</td>
<td></td>
</tr>
<tr>
<td>Option 2</td>
<td>May 22 - June 12</td>
<td>(June 13 - June 30)</td>
</tr>
<tr>
<td></td>
<td>(July 1 - July 31)</td>
<td>(August 1 - August 10)</td>
</tr>
<tr>
<td></td>
<td>(August 11 - September 20)</td>
<td></td>
</tr>
<tr>
<td>Option 3</td>
<td>June 12 - July 31</td>
<td>(August 1 - August 10)</td>
</tr>
<tr>
<td></td>
<td>(August 11 - September 20)</td>
<td></td>
</tr>
</tbody>
</table>

= Open to Fishing

32C/K -3-
Options 1 and 2 follow the recent fishery pattern with an initial open period oriented toward chinook only harvest, a June closure, and a summer open period oriented toward all species harvest (containing a 10-day August closure). Option 3 delays the first opening thereby confining the harvest into a continuous time period (once again with a 10-day August closure). While all three options are estimated to have approximately the same overall harvest impact, a split season (Options 1 and 2) offers the opportunity to evaluate the initial opening catches during the June closure and to make any necessary in-season adjustments before the peak of the coho season. Option 3 has the fewest fishing days prior to July 15, which is about the start of the coho management period. Option 3 may represent a slightly more conservative approach relative to the chinook harvest ceiling than Options 1 and 2. The Team believes that either Option 1 or Option 2 would provide an earlier indication of the abundance or availability of chinook salmon than would Option 3.

The basic approach utilized in developing the three season options is to regulate the early season chinook salmon fisheries in such a manner as to provide for sufficient chinook salmon to carry through the main coho management period. Additional management tools available to respond later in the season if greater than expected catches occur include: (1) closures of certain outer coastal and FCZ areas to all troll fishing after mid-August (might be necessary to protect coho as well); (2) closure of certain selected areas know to produce significant chinook catches but whose closure would not significantly impact coho salmon fisheries; (3) early closure of the summer season for both chinook and coho prior to September 20; and, (4) closure of the troll fishery for chinook only prior to September 20.

**Coho Salmon Management Proposal**

The ADF&G staff is recommending that the 10-day mid-season coho closure implemented the last two years be a standard closure and not dependent on the run being average or below, or being delayed in migrating to inshore waters. ADF&G staff believe the closure, in August, is required as a minimum action in all years to achieve the Board policy of returning inside district catches to pre-1978 levels and increasing the manageability of coho runs by allowing fish to move inshore where greater stock segregation occurs. The Council may wish to consider recommending that the 10-day coho closure be standardized in the FMP as well, with the exact dates to be determined in-season by the Regional Director in consultation with ADF&G. This action appears justifiable on the grounds of better manageability for spawning escapement by allowing, substantial numbers of coho salmon to escape the outside fishery and transfer to inshore waters.

**Other Considerations**

**Selected Species Fisheries**

The Team feels the occurrence of single species closures (such as the July 28 chinook closure in 1982) should be avoided if possible and used only as a last resort to manage chinook salmon catches within the harvest ceiling.
In the future specific criteria or guidelines might be developed for evaluating to what the extent a selected species fishery can be justified. An evaluation process such as the example outlined below might be valuable in deciding on the merits of having a selected species fishery. This example was prepared by the Washington Department of Fisheries and is part of the Pacific Fishery Management Council's draft salmon framework plan which the PFMC will review at its January meeting.

1. Harvestable fish of target species available?
   No - a selective fishery is not justified
   Yes - a selective fishery may be justified

2. Will harvest of incidental species exceed allowable levels determined in management plan?
   No - a selective fishery may be justified
   Yes - a selective fishery is not justified

3. Proven, documented selective gear exists?
   No - only experimental, limited entry (10-boat) fishery should be considered with specific experimental design and complete monitoring -- if selective potential exists
   Yes - a selective "commercial" (full-fleet) fishery may be justified

4. Will significant wastage of incidental species occur?
   No - a selective fishery may be justified
   Yes - a selective fishery could be justified only if: (a) no alternative harvest opportunity exists for the target species; and (b) a written economic analysis demonstrates the landed value of target species harvest exceeds the potential landed value of the wasted species.

5. Will the selective fishery occur in an acceptable time and area (i.e., where the wastages can be minimized and target stocks are maximally available)?
   No - a selective fishery is not justified
   Yes - a selective fishery may be justified

Harvest Ceilings

The PDT recommends that established harvest guideline catch levels for chinook salmon be treated as harvest ceilings. The PDT's working definition of a harvest ceiling is: "a level beyond which the catch is not allowed to rise (within the constraints of management precision)." Therefore, achievement of the ceiling catch level would require closure of the target fisheries for that species.

Southeast Alaska Hatchery Production

The PDT recommends the Council adopt a policy consistent with the chinook conservation language developed at the November 1982, U.S.-Canada Pacific salmon interception negotiations. For as long as major natural stock chinook
conservation problems exist, supplemental production should be utilized not to increase harvest, but as a technique to lower ocean exploitation rates on depressed natural stocks without reducing the harvest ceiling. Thus, the Southeast Alaska chinook salmon OY should not be adjusted upwards in the future to allow harvest of hatchery production in mixed-stock fisheries until depressed natural stocks have been rebuilt. At that time this policy should be re-evaluated. Chinook salmon harvested in non mixed-stock terminal chinook fisheries which are initiated at enhancement sites to harvest fish surplus to hatchery needs should not be included in the OY.

**Mixed Stock Fishing Criteria**

The Pacific Fishery Management Council (PFMC) has directed its Salmon Plan Team to begin developing mixed-stock fishing criteria for the 1983 fishing season. Additionally, the PFMC has directed its Salmon Plan Team to initiate discussions with the NPFMC Salmon Team so that a consistent criteria may be developed for both management areas. The NPFMC Team coordinator will be contacting the PFMC Team to initiate this joint effort.

**Juvenile Chinook in the Seine Fishery for Salmon**

This topic was reviewed and the Team concluded a potential problem may exist. Some ADF&G data presently exist to examine this question in a preliminary manner. These data will be reviewed and potential avenues for future problem identification will be examined and recommended as appropriate.
ADDENDUM - January 3, 1983
TO THE JANUARY 1983 SALMON PLAN DEVELOPMENT TEAM
MANAGEMENT OPTION REPORT

AGENDA D-1(a)

The Council's Salmon PDT has continued its work on additional 1983 chinook salmon management issues. This addendum has been prepared to review these issues and includes (1) additional discussion on selected species fisheries, (2) a more conservative option which reduces the probability of a selected species fishery, (3) a discussion of changing the fishing year for the troll salmon fishery, and (4) a clarification of the definition of a harvest ceiling. Review of the 1982 salmon fishery patterns and computer modeling (Wa. Dept. of Fisheries, January 1983) of the three season options has indicated a potential exists in 1983 for chinook only closures as occurred in 1982.

Selected Species Fisheries

The incidental catch rates of chinook salmon during the 1982 coho-only season are indicative of what could happen in 1983 and future years as chinook stocks are rehabilitated and fish availability increases. The magnitude of the mortality associated with this incidental catch is unknown; however, incidental fishing mortality affects spawning escapements just as an increased harvest ceiling would. This translates into a wastage of chinook salmon both biologically and economically. The PDT has prepared a chart (Figure 1) outlining a decision process which can be used by the Council to evaluate its management choices relative to selected species fisheries.

The PDT feels several levels of Council response to such a potential fishery are appropriate:

1. Any selected species fishery should be considered an experimental management concept requiring full monitoring for undesirable impacts.

2. Selected species fisheries criteria should be adopted (e.g. as outlined on page 5 of the PDT report) to define the nature and extent of such an experiment.

3. If selected species fisheries are considered (e.g. chinook-only closures), harvest ceilings should be defined as chinook landed and chinook killed during coho-only fisheries.

4. If selected fisheries are adopted, there should be adequate justification that the short-term gains of troll coho harvest exceed the long-term gains loss/wastage of chinook mortality.
Single Species Fishery Allowed?

**YES** - Specify Conditions

**NO**

Major Questions

1. Is hook/release mortality included in harvest ceiling or in addition to ceiling?

**Included**

1. Reduce harvest guideline to account for hooking mortality.
2. Evaluate short-term benefits v. long-term costs (economic and biological).

**Not Included**

1. Does this violate the intent of the U.S./Canada agreement.
2. Evaluate short-term benefits v. long-term costs (economic and biological).

Establish criteria for allowing single-species fishery along lines of p. 5 of PDT option report

How important to avoid this situation?

**Very Important**

1. Choose conservative option with lower probability of this occurrence.

**Moderately Important**

1. Choose option with equal probability of oversooting and undershooting.

1. More critical to avoid premature achievement of chinook ceiling.
2. Choose option with lower probability of this situation: reduce spring season; change OY year.
3. Does this apply to chinook-only season if coho conservation problem arises?

Figure 1. Potential decision process
Additional Season Option

The three season options provided by the PDT have all been designed to achieve a commercial harvest of 243,000 chinook and assumes that the development of catches throughout the season will follow more-or-less average conditions. Since average conditions were assumed, no option has been prepared which would offer a higher probability of avoiding single species closures. The modeling work mentioned above has indicated that the three options would exceed the harvest ceiling by as much as 25% - 49% depending on the actual net fishery harvest. This expectation results from proposed 1983 fishing time which did not exist in 1982 (chinook-only closure) and expected population increases resulting from British Columbia and southeast Alaska restrictions. While effort transfers were assumed to not occur, any such fishery response would also cause a higher expectation of early quota attainment. The PDT’s accounting chart (page 2 of the PDT report) makes a 22,000 chinook allowance which is less than half of the actual 1982 catch. Computer analysis has indicated the following seasons would be appropriate under these circumstances:

<table>
<thead>
<tr>
<th>Net Fishery Catch</th>
<th>Open Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>22,000</td>
<td>June 29 - July 31 August 11 - September 20</td>
</tr>
<tr>
<td>45,000</td>
<td>July 7 - July 31 August 11 - September 20</td>
</tr>
</tbody>
</table>

To offer a greater degree of conservatism the PDT recommends consideration of an additional (fourth) season option of:

<table>
<thead>
<tr>
<th>Open Dates</th>
<th>Closed Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>June 29 - July 31 August 11 - September 20*</td>
<td>August 1 - August 10</td>
</tr>
</tbody>
</table>

* Flexible dates

The PDT does not have a preferred option recommendation.

Changing the Fishing Year

Currently the salmon fishing year extends from October 1 to September 30. This was established by Amendment 2 to give priority to the winter troll season. There is an Alaska Department of Fish and Game (ADF&G) proposal to modify the fishing year to July 1 - June 30, which would require a plan amendment. The PDT has not been able to fully evaluate the proposal, but discussed a number of advantages and disadvantages associated with it. The PDT is not ready to conclude that such a change is appropriate for 1983. The pros and cons we have discussed are:
Advantages

1. Under the existing harvest ceiling it eliminates the probability of a single species closure, except during the initial season. If there are lower harvest ceilings, single species closures may once again become a possibility.

2. Allows more complete evaluation of all gear catches, escapements, etc., while remaining under the harvest ceiling.

Disadvantages

1. Changes management intent from harvest ceiling to harvest quota.

2. Potentially requires restriction of the spring and winter troll fisheries.

3. Would have an as yet unquantified biological impact (would move harvest to a different age and maturity category).

4. Does not alleviate potential for single species closures the first year.

The PDT can see operational advantages as described above and proposes evaluation of this concept for Council consideration in 1984. If such a proposal proves desirable, it may be appropriate to begin the new accounting period on July 1, 1983. Such a determination, however, is best deferred until after analysis.

Harvest Ceiling

Some confusion appears to exist over the definition of a harvest ceiling versus a harvest quota and the Council's management intent. We wish to present here the definitions of these and ask for Council clarification of intent. In the November 3, 1982, PDT report a distinction was made between a quota and a ceiling. Although both might be established prior to the season, the accompanying management philosophies differ.

A quota implies management designed to achieve a specific goal. By definition, therefore, non-achievement of a quota in a given time period might trigger liberalization of the season to achieve the quota. Conversely, achievement of the quota would trigger a closure.

A ceiling is not a goal, but a level beyond which the catch would not be allowed to rise. Achievement of the ceiling catch level, therefore, would trigger immediate closure of the fishery for that species. Liberalization of the season would not be appropriate under this concept and any foregone harvest would thus be "saved" for future escapement or catch.

Due to the extremely depressed status of the north-migrating natural chinook stocks, the PDT believes that there is little risk at this time
of underharvesting these stocks under appropriately established catch quota or ceiling management regimes. It should be emphasized that a catch quota or ceiling is only as effective as the management means by which it is implemented. An overall annual catch quota or ceiling, by itself, does not address a potential need to either spread the desired harvest rate evenly throughout time-area strata or, conversely, to focus the desired harvest rate on a time or area strata where it might have maximum impact on the harvest rates of specific stocks. The means by which a quota or ceiling is implemented must also address the desirability of avoiding premature achievement which could result in the continued hooking, releasing, and associated mortality of the species under a ceiling limitations.
5 AAC 30.310. (b)(1) and (4) (New Subsection). FISHING SEASONS. (Regulation page 129) Change the open area and fishing seasons for troll gear in a portion of the Yakutat area.

The proposed regulation reads as follows:

5 AAC 30.310. FISHING SEASONS.

(b) Salmon may be taken by troll gear seven days a week with the following exceptions:

Option 1

(1) in those waters of Alaska west of 139° 38' 30" W. Long. (1 mile west of the Lost River) [139° 18' 30" W. Long. (TERMINUS OF THE DANGEROUS RIVER] and east of 140° 40' 00" W. Long., (Sitagi Bluffs) from August 1 through September 20, the weekly fishing periods for trolling are the same as for set gillnetting in the Situk River.

(4) those waters of Alaska west of 138° 15' 00" W. long. and east of 139° 39' 30" W. Long. are closed to trolling from August 1 through September 20.

Option 2

(4) those waters of Alaska from 1 mile east of the East River to 1 mile west of the Lost River are closed to salmon trolling.

Option 3

(3) repealed / /83;

Justifications:

Option 1: Survivability of the salmon resource and to protect the historical set net fishery.

Proposed by: Yakutat Advisory Committee (300)

Option 2: Allow proper escapement of salmon into the rivers in that area and to better utilize a closure regulation for the Yakutat area.

Proposed by: Yakutat Handtrollers Association (197)

Option 3: This proposal would allow trolling for salmon seven days a week throughout the entire season in the Yakutat area. The present regulation and its expansion through emergency order in 1982 is a measure to virtually prohibit trolling on specific stocks of coho salmon. These cohos have been traditionally fished by the troll fishery and are vital to its continued economic viability. Reallocation to alternative fisheries is being sought through the guise of conservation. Adequate safeguards are available through emergency closures if conservation problems arise; these closures should then be imposed on the entire salmon fishery rather than discriminatorily against specific user groups or area fishermen.

Proposed by: Alaska Trollers Association (144)
SOUTHEAST-YAKUTAT
SALMON

5 AAC 33.310.(b)(1) and (14)(New Subsection). FISHING SEASONS AND WEEKLY FISHING PERIODS. (Regulation pages 137 and 139). Close the inside commercial coho and chinook salmon fishing season until the subsistence uses are met.

The proposed regulation reads as follows:

5 AAC 33.310. FISHING SEASONS AND WEEKLY FISHING PERIODS.

Option 1

(b)(1) coho salmon may be taken only from June 15 through September 20 except that the season will be closed, except for the outside power troll fishery, until the subsistence uses of coho salmon have been met as determined by the Subsistence Section;

Option 2

(b)(14) the king salmon season will be closed, except the outside power troll fishery, until the subsistence uses of king salmon have been met as determined by the Subsistence Section.

Justification:

Option 1: To provide for subsistence priority as required by Federal and State laws.

Proposed by: L. Croxton (203)

Option 2: To conform with the existing State and Federal laws and the December 12, 1981 Attorney General's opinion that all non-subsistence uses must be eliminated before restricting any subsistence uses.

Proposed by: Joe Swift (194)

5 AAC 33.310.(b)(3)-(12) and (13)(New Subsection). FISHING SEASONS AND WEEKLY FISHING PERIODS. (Regulation pages 137-139). To allow an earlier opening of the summer season with standardized daily openings and closures for trollers.

The proposed regulation reads as follows:

5 AAC 33.310. FISHING SEASONS AND WEEKLY FISHING PERIODS.

(b) Salmon may be taken by hand and power troll gear from October 1 through September 20 [APRIL 14 (WINTER SEASON) AND FROM MAY 15 THROUGH SEPTEMBER 20 (SUMMER SEASON)] except as provided in 5 AAC 33.350 and as follows:

(3)-(12) repealed / /83.

(13) From April 15 through September 20, the troll daily fishing period shall be from 5:00 a.m. through 7:00 p.m.
Justification: This will regulate the summer Southeast area and Yakutat area troll fishery by allowing an earlier season with standardized daily openings and closures that will provide more fishing days throughout the season. This will eliminate the present patchwork of closures and provide the fishermen a standardized 14-hour daily fishing period while retaining a 10-hour closure during each 24-hour period. Provides a daily escapement while distributing fishing effort throughout the season. Chinook salmon quotas will be obtained later in the season and thereby eliminate hooking mortality that now occurs during a single species opening.

Proposed by: Dick Eliason (3)

5 AAC 33.310.(b). FISHING SEASONS AND WEEKLY FISHING PERIODS. (Regulation page 137). Change the winter troll fishing season.

The proposed regulation reads as follows:

5 AAC 33.310. FISHING SEASONS AND WEEKLY FISHING PERIODS.

(b) Salmon may be taken by hand and power troll gear from January 1 [OCTOBER 1] through April 30 [APRIL 14] (winter season) and from May 15 through September 20 (summer season) except as provided 5 AAC 33.350 and as follows:

Justification: Preliminary data available from ADF&G shows that the average size king caught from October through December weighed 13.5 lbs. while kings caught in April were 16 lbs. The price difference between medium and large sized fish further magnify the benefit of taking these fish later. If adding 2 weeks in April is undesirable, then I suggest that the fish be taken during the summer season. Having to release kings while coho fishing, results in wasteful fish mortality.

Proposed by: Russell Bartoo (186)

5 AAC 33.310(b)(7). FISHING SEASONS AND WEEKLY FISHING PERIODS. (Regulation page 138) Change the seasons for sections 6-B, C and D.

The proposed regulation reads as follows:

5 AAC 33.310. fishing seasons and weekly fishing periods.

(b)(7) in sections 6-C and those sections 6-B and 6-D north of the northernmost tip of Lincoln Rock salmon may be taken only from October 1 through April 14 and from July 15 through September 20 except in Snow Pass where salmon may be taken from May 15 through September 20.

Justification: This area is comprised of Steamer Point, Big Bend, and Coffman Cove to the northern end of Snow Pass. It was closed from April 14th to July 14th due to large numbers of small kings inhabiting the area. Shaker kings are a problem in most parts of the above area, especially from Steamer Point to Big Bend, but compared to Steamer Point and Big Bend, Snow Pass does not have nearly as many small kings. The opening of Snow Pass would not be any more detrimental to immature kings than the rest of Clarence Strait south of Coffman Cove.

Proposed by: Ronald Merritt and 20 trollers (261, 262)
SOUTHEAST SALMON

5 AAC 33.310.(b)(2). FISHING SEASONS AND WEEKLY FISHING PERIODS.
(Regulation page 137). Provide for a winter chinook salmon troll fishery in portions of district 16.

The proposed regulation reads as follows:

5 AAC 33.310. FISHING SEASONS AND WEEKLY FISHING PERIODS.

(b)(2) in district 16 west of a line from Cape Fairweather to Lituya Bay Point to Icy Point to Cape Spencer and those waters west of the surf line, king salmon may be taken only from May 15 through September 20;

Justification: This proposal would allow winter salmon fishing in the inshore section of district 16. The area was historically open to winter fishing. It is especially important to the villages of Elfin Cove and Pelican during winter weather conditions.

Proposed by: Daniel Rear (152)

5 AAC 33.310.(b)(12)(D) and (13)(New Subsection). FISHING SEASONS AND WEEKLY FISHING PERIODS. (Regulation pages 138-139). Close the Icy-Chatham Strait migration corridor to troll fishing from May 15 to May 31 and eliminate the 8-day on and 6-day off fishing periods during June.

The proposed regulation reads as follows:

5 AAC 33.310. FISHING SEASONS AND WEEKLY FISHING PERIODS.

(b) Salmon may be taken by hand and power troll gear from October 1 through April 14 (winter season) and from May 15 through September 20 (summer season) except as provided in 5 AAC 33.350 and as follows:

(12) from June 1 [MAY 15] through September 20 salmon may be taken in the following locations only during the periods set forth in (D) of this paragraph;

(D) the initial open period will be from July 1 [THE OPENING OF THE SUMMER SEASON AS DESCRIBED IN (B) OF THIS SECTION] through the following Monday; following the initial open period there is a six day closed period which is followed by alternating 8-day open periods from Monday through Monday, and 6-day closed periods from Tuesday through Sunday; the department should attempt to make the open fishing periods coincide with the best fishing tides.

(13) in that portion of district 14 east of a line from the southernmost tip of Point Dundas to the northernmost tip of Swanson Point salmon may be taken only from October 1 through April 14 and from June 1 through September 20.

Justification: Chinook salmon returns to the Taku River are expected to be lower than the returns experienced from the last two seasons. A delay in the opening of the District 14 troll fishery for approximately two weeks (from May 15-June 1) would allow more of the mature spawning
SOUTHEAST
SALMON

run chinook salmon to escape to the spawning grounds. This action will
enhance the rebuilding of the Taku River chinook salmon run. After June
1 most of the mature chinook salmon should be through District 14.
Since the chinook salmon fishery is managed on a guideline harvest level
strategy, there is no conservation need to maintain the 8-day on and 6-
day off troll fishing periods once the mature chinook salmon have migra-
ted through until the time period that early northern coho salmon are
expected to be available.

Proposed by: Staff (1-3)

215
5 AAC 33.310(b)(12)(A) and (B). FISHING SEASONS AND WEEKLY FISHING
PERIODS. (Regulation page 138) Repeal the 8 on - 6 off fishing periods
for districts 12 and 14.

The proposed regulation reads as follows:

5 AAC 33.310. FISHING SEASONS AND WEEKLY FISHING PERIODS.

(b)

(12) from May 15 through September 20 salmon may be taken in
the following locations only during the periods set forth in (d) of this
paragraph;

(A) repealed / /83; [IN THAT PORTION OF DISTRICT 12
NORTH OF THE LATITUDE OF THE WESTERNMOST TIP OF POINT HEPBURN]

(B) repealed / /83; [DISTRICT 14, EXCEPT FOR THAT
PORTION OF THE DISTRICT WEST OF A LINE FROM THE SOUTHERNMOST TIP OF
POINT DUNDAS TO THE NORTHERNMOST TIP OF SWANSON POINT, THOSE
WATERS OF GLACIER BAY NORTH OF 58°27'54" N. LAT. AND DURING THE
PERIOD MAY 15 THROUGH JULY 31 FOR THOSE WATERS OF PORT FREDERICK
DESCRIBED IN 5 AAC 33.350(o)(5)]

Justification: With the advent of limited entry on the hand troll
fishery, the 8 and 6 is no longer necessary as there will be lesser
number of vessels. Additionally, the 10 day closure is already avail-
able to the Department, as is emergency order authority for season or
area adjustments.

Proposed by: Petition from Alaska Native Brotherhood, Grand Camp (248-258)

216
5 AAC 33.310.(b)(10)(A)(New Subsection). FISHING SEASONS AND WEEKLY
FISHING PERIODS. (Regulation page 138). Allow trolling in section 11-B
during gillnet openings.

The proposed regulation reads as follows:

5 AAC 33.310. FISHING SEASONS AND WEEKLY FISHING PERIODS.

(b)(10) in district 11, salmon may be taken [ONLY] in sections
11-C and 11-D [AND] only from October 1 through April 14 and from June
15 through September 20;

(A) in section 11-B, salmon may be taken only from the
third Monday in June through September 20 and the weekly fishing
periods for trolling are the same as for gillnetting.
SOUTEAST
SALMON

Justification: This would help to alleviate concentrations of gear in areas of districts 12, 14 and 15. A similar system has worked successfully in district 8.

Proposed by: Christopher Pace (74)

5 AAC 33.310. (11) and (13)(New Subsection). FISHING SEASONS AND WEEKLY FISHING PERIODS. (Regulation page 138). Close section 15-B to salmon trolling.

The proposed regulation reads as follows:

5 AAC 33.310. FISHING SEASONS AND WEEKLY FISHING PERIODS.

(b) Salmon may be taken by hand and power troll gear from October 1 through April 14 (winter season) and from May 15 through September 20 (summer season) except as provided in 5 AAC 33.350 and as follows:

(11) in that portion of district 12 north of the latitude of the southernmost tip of Point Couverden [AND SECTIONS 15-A AND 15-C], salmon may only be taken from October 1 through April 14 and from June 15 through September 20;

(13) in district 15, salmon may only be taken only in sections 15-A and 15-C and only from October 1 through April 14 and from June 15 through September 20.

Justification: The Alaska Board of Fisheries adopted regulations effective in 1979 closing the section 15-B terminal fishing area to commercial trolling all year. The area was closed because it is a major feeding and milling area for immature chinook salmon and as a conservation measure for coho salmon stocks which are subjected to heavy fishing pressure in districts 12, 14 and 16. When the commercial trolling regulations were restructured the closure of section 15-B was omitted by error. This proposal is being submitted to clarify existing regulations by correcting an error that was introduced when the troll regulations were restructured.

Proposed by: Staff (1-9)

5 AAC 33.365.(b)(8)(9) and (10)(New Subsection). SOUTHEASTERN ALASKA-YUKUTAT CHINOOK AND COHO SALMON TROLL FISHERIES MANAGEMENT PLAN. (Regulation page 156). Change or eliminate the chinook salmon guideline harvest level.

The proposed regulation reads as follows:

5 AAC 33.365. SOUTHEASTERN ALASKA-YUKUTAT CHINOOK AND COHO SALMON TROLL FISHERIES MANAGEMENT PLAN.

Option 1:

(b)(8) to limit the total commercial king salmon harvest by all gear types in the Southeastern and Yakutat areas to a guideline harvest range of 292,000 to 312,000 [243,000 to 288,000] fish (plus the estimated annual Alaska hatchery production of harvestable king salmon);
SOUTHEAST-YAKUTAT
SALMON

Option 2:
(b)(8) to limit the total commercial king salmon harvest by all
gear types in Southeastern and Yakutat areas to a minimum guideline
harvest level of 320,000 [RANGE OF 243,000 TO 288,000] fish (plus the
estimated annual Alaska hatchery production of harvestable king salmon);

Option 3
(b)(8) to limit the [TOTAL] commercial king salmon harvest by
troll [ALL] gear [TYPES] in the Southeastern and Yakutat areas to a
guideline harvest level [RANGE] of 300,000 [243,000 TO 288,000] fish;
[(PLUS THE ESTIMATED ANNUAL ALASKA HATCHERY PRODUCTION OF HARVESTABLE
KING SALMON)];

Option 4
(b)(8) repealed / /83;

Option 5
(b)(8) to limit the total commercial king salmon harvest by all
gear types in the Southeastern and Yakutat areas according to stock
availability during season with flexibility to conserve resource and
optimize catch [TO A GUIDELINE HARVEST RANGE OF 243,000 TO 288,000 FISH
(PLUS THE ESTIMATED ANNUAL ALASKA HATCHERY PRODUCTION OF HARVESTABLE
KING SALMON)];

Option 6
(b)(8) repealed / /83;
(b)(9) repealed / /83;

(b)(10) a directed troll fishery for chinook salmon shall occur
throughout the season provided in 5 AAC 33.310.(b)

Justification:

Option 1: To restore an equitable balance between the major harvesters
of chinook salmon on the Pacific coast. This harvest figure represents
the historic average for troll gear over the last 40 years. The 30-day
closure in April-May and the 10-day closure later in the season provide
adequate protection for Southeastern and transient stocks. On a coast-
wide basis, the restrictive quotas of 1981 and 1982 discriminate against
Alaskan fishermen in favor of Canadian-and Southside interests.

Proposed by: Gary Slaven (105)

Option 2: (1) The catch of 320,000 represents an average of the catch
the ten years prior to implementing the optimum yield system. (2) A
catch figure of 320,000 will provide a more viable troll fishery while
further stock assessments are made, and the State of Alaska takes an
active role in protecting Alaskan interests with regard to foreign
interception, high Canadian catches, and the problems of the Columbia
River.

Proposed by: Elfin Cove Advisory Committee (109)
Angoon Advisory Committee (208)
Option 3: Net fisheries are targeting on king and coho salmon more every year. This year's 15¢ humpies in Southeast were not a seine fishery target fish. The king salmon (target fish) was the largest take on the record by seine fishermen.

Proposed by: Maurice Ingman (191)

Option 4: (1) Fishermen cannot selectively troll for coho, when the fish are feeding they will bite almost any lure; (2) the troll quota does nothing to protect the chinook stocks that are harvested in May, June, and July; (3) the troll quota forces heavier effort on weak stocks and relatively lighter effort on years when chinook are abundant; (4) coastwide chinook catches are regulated according to relative abundance but Alaska regulates for guideline harvest goal so in years of high abundance of chinook salmon, Alaska troller's catches are reduced and other fisheries' catches increase.

Proposed by: Barton Sollars, Sr. (16 and 315)

Option 5: Southeast Alaska trollers feel the present system failed because of its lack of flexibility to adapt to stronger resource than anticipated with subsequent economic losses to trollers. Trollers request a different more flexible management system details of which the industry, fisheries board, advisory committees, and North Pacific Fisheries Management Council should work out before next season.

Proposed by: Sitka Advisory Committee (312)

Option 6: This proposal would establish a specific salmon season, replacing the present harvest guideline. The guideline harvest range and quota are not appropriate mechanisms for management of chinook salmon stocks. The fluctuating nature of this fishery demands a more flexible management strategy that allows a more even level of fishing effort on varying stock sizes. In 1982, we saw a total chinook closure in Alaska when we were experiencing a higher abundance than at any time in recent history; this occurred in spite of dismal forecasts. The outcome was a reallocation of benefits to southern fishermen in Canada and the "lower 48." An established season will provide increased catches during years of high abundance and correspondingly decrease catches during years of low abundance. Mechanisms for additional safeguards can be built in by pre-established season limitations, such as the thirty-day closure from April 15 to May 15.

Proposed by: Alaska Trollers Association (137)

5 AAC 33.365. (b)(3). SOUTHEASTERN ALASKA-YAKUTAT CHINOOK AND COHO SALMON TROLL FISHERIES MANAGEMENT PLAN. (Regulation page 155). Establish a set midseason coho salmon troll fishery closure.

The proposed regulation reads as follows:

5 AAC 33.365. SOUTHEASTERN ALASKA-YAKUTAT CHINOOK AND COHO SALMON TROLL FISHERIES MANAGEMENT PLAN.

(b)(3) during the month of August [EARLY PORTION OF THE COMMERCIAL COHO FISHING SEASON] the department [SHALL EVALUATE THE SIZE AND DISTRIBUTION OF THE COHO SALMON RUN AND] shall close the Southeast-
SOUTHEAST-YAKUTAT SALMON
ern and Yakutat Area's salmon troll fishery for approximately 10 days; the board recognizes that even on years of high coho salmon abundance a closure of the troll fishery is still needed to ensure adequate movement of coho to the inside fishing districts [UNLESS THE DEPARTMENT DETERMINES THAT THE COHO SALMON RUN IS LARGER THAN THE LAST 10-YEAR AVERAGE AND THAT ACCEPTABLE NUMBERS OF COHO SALMON ARE MOVING INTO THE INSHORE SALMON FISHING AREAS];

Justification: The increasing fishing power of the troll fishery in recent years and the movement of troll fishing effort to the coastal and outer coastal fishing areas makes it necessary that even in years of high coho salmon abundance a closure of the troll fishery is needed to obtain adequate movement of coho salmon in the inside areas to ensure that Board allocation objectives and spawning escapement goals are obtained.

Proposed by: Staff

5 AAC 33.365.(b)(3) and (5). SOUTHEASTERN ALASKA-YAKUTAT CHINOOK AND COHO SALMON TROLL FISHERIES MANAGEMENT PLAN. (Regulation page 155 and 156). Eliminate in-season closures on coho salmon.

The proposed regulation reads as follows:

5 AAC 33.365. SOUTHEASTERN ALASKA-YAKUTAT CHINOOK AND COHO SALMON TROLL FISHERIES MANAGEMENT PLAN.(b)

Option 1
(3) repealed / /83;
(5) repealed / /83;

Option 2
(3) during the early portion of the commercial coho fishing season the department shall evaluate the size and distribution of the coho salmon run and shall close the Southeastern and Yakutat Areas' salmon troll fishery for approximately 10 days, unless the department determines that the coho salmon run is larger than the last 10 year average and that the occurrence of coho salmon in the inshore salmon fishing areas is above the ten-year average catch in catch-per-boat-day of fishing in those areas where fishing has continued in a manner that allows for comparison; [AND THAT ACCEPTABLE NUMBERS OF COHO SALMON ARE MOVING INTO THE INSHORE SALMON FISHING AREAS;]

Justifications:

Option 1: Salmon will not move into inside waters until they are ready to move in. Salmon could be physically carried to inside waters and would just swim back to the ocean if conditions weren't right for them to be inside. Trade the end of July or August closure for the last 10 days in September. Close all fishing commercial and sport till October 1st. Then the fish will be in and able to get to their spawning streams.

Proposed by: Maurice Ingman (192)
Option 2: The Board of Directors of the Alaska Trollers Association recognizes that in certain years a ten-day coho closure may be required to prevent conservation problems with our natural coho stocks. However, as written, the present regulation seeks to alleviate this potential problem by requiring "acceptable" numbers inshore. This allows for a purely subjective management decision without adequate guidelines. A given manager's actions could prove detrimental to the runs, given his personal interpretation of the term "acceptable." The proposed amendment would establish a predetermined standard that would adequately protect both the salmon stocks and the economic viability of the fishery from potential arbitrary management decisions.

Proposed by: Alaska Trollers Association (138)
SOUTHEAST-YAKUTAT
SALMON

5 AAC 33.365.(b)(6). SOUTHEASTERN ALASKA-YAKUTAT CHINOOK AND COHO SALMON TROLL FISHERIES MANAGEMENT PLAN. (Regulation page 156). Eliminate the 80% power troll and 20% hand troll coho salmon allocation policy.

The proposed regulation reads as follows:

5 AAC 33.365. SOUTHEASTERN ALASKA-YAKUTAT CHINOOK AND COHO SALMON TROLL FISHERIES MANAGEMENT PLAN.

(b)(6) repealed / /83;

Justification: With the number of hand troll permits being limited and the gear limitations, we feel this regulation is no longer necessary.

Proposed by: Elfin Cove Advisory Committee (110)

5 AAC 33.365.(b)(7). SOUTHEASTERN ALASKA-YAKUTAT CHINOOK AND COHO SALMON TROLL FISHERIES MANAGEMENT PLAN. (Regulation page 156). Eliminates the Board's objective of returning inside district coho salmon troll catches to pre-1978 levels by 1984.

The proposed regulation reads as follows:

5 AAC 33.365. SOUTHEASTERN ALASKA-YAKUTAT CHINOOK AND COHO SALMON TROLL FISHERIES MANAGEMENT PLAN.

(b)(7) repealed / /83;

Justification: This regulation presently seeks the return of inside district coho salmon troll catches to pre-1978 levels by 1984. The myriad of inshore management regulations occurring since 1978 precludes the attainment of this goal without serious dislocation of presently existing fisheries.

Proposed by: Alaska Trollers Association (142)

5 AAC 33.365.(b)(10)(New Section). SOUTHEASTERN ALASKA-YAKUTAT CHINOOK AND COHO SALMON TROLL FISHERIES MANAGEMENT PLAN. (Regulation page 156).

To allow species-specific fishing when particular species of salmon are closed to trolling for conservation or allocation purposes.

The proposed regulation reads as follows:

5 AAC 33.365. SOUTHEASTERN ALASKA-YAKUTAT CHINOOK AND COHO SALMON TROLL FISHERIES MANAGEMENT PLAN.

(10) The Department shall manage the salmon fishery to allow species-specific fishing when particular species of salmon are closed to trolling for conservation or allocation purposes.

Justification: Single species fisheries are feasible with a hook and line fishery, although incidental hooking of non-targeted species may occur; for the most part, gear and area regulations can minimize impact
to stocks. Economic impacts to fishermen will also be minimized. The key to effective single species fishing is the continued education of fishermen in the necessary techniques. Workshops or instructional manuals developed by the Department, or by ATA in conjunction with the Department, could alleviate problems and educate individual fishermen. Pink, coho and chinook salmon should be considered species which can be fished individually.

Proposed by: Alaska Trollers Association (141)

5 AAC 33.392. (a)(New Subsection). SIZE LIMIT AND LANDING OF KING SALMON. (Regulation page 156). Allow the retention of injured chinook salmon landed by trollers when the chinook salmon season is closed.

The proposed regulation reads as follows:

5 AAC 33.392. SIZE LIMIT AND LANDING OF KING SALMON.

(a) During any chinook salmon closures imposed on troll fishing those king salmon regardless of size, which have unavoidably been mutilated or killed while being removed from the hook shall be considered subsistence fish and reported to ADF&G as subsistence.

Justification: During 1982 salmon season, the troll fleet in southern S.E. had a dismal chinook harvest. When chinook arrived it was past-August 8 and therefore illegal to sell them. All chinook were to be returned to the water unharmed. That is much easier said than done. Many of the fish were bleeding prior to being handled. Many more were injured while the fishermen attempted to retrieve gear. Many thousands of chinook were thrown back. Hundreds upon hundreds were thrown back dead. Making these fish available for subsistence use (canning onboard, etc) or for distribution to charities and the needy would solve this problem. Closing the outside to seiners would solve another problem - that of chinook and coho escapement.

Proposed by: Valerie Brooks (63 and 65)

5 AAC 33.392. SIZE LIMIT AND LANDING OF KING SALMON. (Regulation page 156). Require gillnet and purse seine fisheries to adhere to the size limit and handling regulations for king salmon required of the troll fishery.

The proposed regulation reads as follows:

5 AAC 33.392. SIZE LIMIT AND LANDING OF KING SALMON. King salmon taken must measure at least 28 inches from tip of snout to tip of tail (in its natural open position) or 23 inches from the midpoint of the cleithral arch to the tip of the tail. The heads of all fin clipped king salmon must remain attached to the fish until sold. Undersized king salmon which are taken must be returned to the water without injury, except those having a tag attached or a healed adipose fin clip. Tags and heads of undersize adipose fin clipped king salmon must be submitted, along with the date and location of taking, to the department. Troll caught king salmon under 28 inches may not be sold. The size restrictions in the section [DO NOT] apply to gill net and purse seine fishing. No king salmon may be mutilated or otherwise disfigured in any
manner which prevents determining the minimum size set forth in this paragraph. No salmon troll vessel may be used to take salmon when king salmon are aboard in an area closed to the taking of king salmon by troll gear.

Justification: During 1982 commercial fishing season the troll fleet was forced to cease harvesting chinook salmon. Record numbers of chinook, many still "hooked" or showing hook marks were caught by gillnet and seine fishermen. Also, these gillnet and seine fishermen are not restricted to over 28" chinook salmon as the troll fleet is I feel that some means must be found whereby the gillnet and seine fleet shall be held responsible for the decreasing number of chinook salmon, rather than being favored as they now seem to be. These fisheries should be instructed to return chinook under 28" to the water, unharmed. Those chinook mutilated or killed should then be made available to subsistence programs or charity organizations for distribution rather than wasted as they were from August 8, 1982 until the close of the season in September 1982.

Proposed by: Valerie Brooks (65 and 66)

226
5 AAC 39.120. (g)(2)(4) and (7)(New Subsection). REGISTRATION OF COMMERCIAL FISHING VESSELS. (Regulation page 166). Allow a registered troll vessel to change between hand and power troll, establish the registration gear on a calendar year basis and change the registration deadline.

The proposed regulation reads as follows:

5 AAC 39.120. REGISTRATION OF COMMERCIAL FISHING VESSELS.

(g)(2) No fishing vessel may be registered simultaneously as both a hand troll and power troll vessel; a validly registered troll vessel may change its registration from hand to power troll or vice versa during the season, if the request to do so is made in writing and verified by the department;

(4) any vessel that is to be used as a salmon troll fishing vessel must be registered before the opening of the summer season [APRIL 15] of each calendar year;

(7) registration is valid for the entire calendar year in which a vessel is registered.

Justification: The current deadline for completion of troll registration is April 15. Since the registration requirements were adopted the opening of the summer trolling season has been delayed until May 15. A more appropriate registration deadline would be one that corresponds to the new opening date. The existing regulation needs to be clarified as to what is considered a registration year. Many people own both hand and power troll permits. This proposal allows the Board to address the issue of allowing individuals to change their registration from one troll gear type to the other during the season.

Proposed by: Staff (1)
SOUTHEAST-YAKUTAT
SALMON

5 AAC 39.120. (g)(2). REGISTRATION OF COMMERCIAL FISHING VESSELS, 5 AAC 39.240.(a). GENERAL GEAR SPECIFICATIONS AND OPERATION, and 5 AAC 39.270.(f). TROLL SPECIFICATIONS AND OPERATION. (Regulation pages 166, 173 and 175). Allow a vessel to hand and power troll.

The proposed regulation reads as follows:

Option 1

5 AAC 39.120. REGISTRATION OF COMMERCIAL FISHING VESSELS.

(g)(2) repealed / /83; [NO FISHING VESSEL MAY BE REGISTERED AS BOTH A HAND TROLL AND A POWER TROLL VESSEL]

5 AAC 39.240. GENERAL GEAR SPECIFICATIONS AND OPERATION. (a) A salmon fishing vessel shall operate, assist in operating, or have aboard it or any boat towed by it, only one legal limit of salmon fishing gear in the aggregate except as otherwise provided in this title. This section does not apply to troll vessels.

5 AAC 39.270. TROLL SPECIFICATIONS AND OPERATION.

(f) repealed / /83; [NO SALMON POWER TROLL VESSEL MAY BE USED TO TAKE SALMON WITH HAND TROLL GEAR ONCE THAT VESSEL HAS BEEN LICENSED AND MARKED AS REQUIRED IN (c) OF THIS SECTION]

Option 2

5 AAC 39.120. REGISTRATION OF COMMERCIAL FISHING VESSELS.

(g)(2) no fishing vessel may be registered as both a hand troll and a power troll vessel unless the vessel permit holder has a unseverable combined troll permit. An unseverable combined troll permit may be obtained by a person who owns a fully transferable power troll permit and a fully transferable hand troll permit.

Justifications:

Option 1: The present regulation is discriminatory in that it applies to power troll only.

Also, the regulation does not serve any biological or conservation purpose. On the contrary, it forces one to use 20 plus hooks instead of 4 and eventually if the regulation is not repealed, the permit will be sold and in all probability, to a full-time user. If the concern is that such an allowance will distort hand troll and power troll landings, the following should help.

For the years 1978 and 1979, the Limited Entry Commission did a study on dual permit holders holding hand troll permits, (this was all boats, seine, gillnet-power troll) and they slanted the study by assuming that all holders caught fish on their primary gear and sold on hand troll. This was done in order to show the worst possible condition. The results were as follows:
1978 Total vessels with dual holdings: 161 of which 63 were power troll.

Percent of total troll catch by the 161 - 9/10 % (.9)
Percent of total troll catch by power troll only - six-tenths
Percent of hand troll catch by all boats - 3.4% (3.4)
Percent of hand troll catch by power troll - 2.0% (2.0)

1979 Total boats - 134. Power troll only - 60

Percent of total catch by these 134 - 1.2%
Percent of total catch by the 60 power troll - .6%
Percent of total hand troll catch - all boats - 4.9%
Percent of total hand troll catch by power troll only - 2.4%

For 1978 - cohos only - trollsers only made a 1.8% change
For 1978 - cohos only - all vessels (the 161) - .8%

In light of the above, does it really make sense to discriminate, to take away rights, to cause litigation problems, and expense and costly enforcement problems?

Proposed by: Chuck Porter (34-42)
Gastineau Channel Advisory Committee (80-84)

Option 2

A person that has in his possession a fully transferable power troll permit and a fully transferable hand troll permit will at their discretion turn over to the Commercial Fisheries Entry Commission those permits and will be issued a fully transferable "TROLL PERMIT." This would allow this person to use any troll gear they want. Such as power gurdies, hand gurdies, sport rods, or any combination thereof. This would decrease troll effort and reduce the number of gear units in the fishery. It would eliminate some of the outstanding permits.

Proposed by: Kenneth C. Proctor (304)

228

5 AAC 39.270.(a)(1) and (3). TROLL SPECIFICATIONS AND OPERATION.
(Regulation page 174). Limit the number of lines that may be operated from troll vessels to two in the Yakutat area.

The proposed regulation reads as follows:

5 AAC 39.270. TROLL SPECIFICATIONS AND OPERATIONS. (a) The maximum number of trolling lines that may be operated from any salmon troll vessel is as follows:

(1) from power troll vessels: four lines, except that no more than six lines may be operated in that portion of the Seaward Biological Influence Zone north of the latitude of the southernmost tip of Cape Spencer and no more than two lines may be operated in the waters described in 5 AAC 30.100.

(3) an aggregate of four fishing rods or an aggregate of two hand troll gurdies may be operated from a hand troll vessel except that not more than two lines may be operated from hand troll vessels in the waters described in 5 AAC 30.100;
SOUTHEAST-YAKUTAT
SALMON

Justification. The local salmon resource is not able to sustain the unlimited pressure of the combined commercial fishing effort. Restricting gear effort maximizes the number of users harvesting the resource as well as the time they are able to do so.

Proposed by: Yakutat Hand Trollers Association (298)

5 AAC 39.270.(a)(1)(A)(New Subsection). TROLL SPECIFICATIONS AND OPERATIONS. (Regulation page 174). Allows two additional lines to be fished if two limited entry power troll permits are being fished from one registered power troll vessel.

The proposed regulation reads as follows:

5 AAC 39.270. TROLL SPECIFICATIONS AND OPERATIONS.

(a)(1)(A) Two limited entry permits may be fished from a single vessel registered for the troll fishery. In this case, an additional two lines to those permitted in 5 AAC 39.270(a)(1) will be allowed. Such vessels shall paint a distinctive horizontal orange stripe on their house for recognition.

Justification: This regulation would allow more than one troll permit to be fished from the same vessel, providing, in effect, a self-imposed buy-back program on the part of the fishermen. In this manner, a troller would be allowed to reap the benefits of increased individual efficiency while total fleet effort would decrease; hence, there would be an increase in the total available stock of salmon. As an example, suppose Fisherman A caught 1,000 fish and Fisherman B caught 1,000 fish. Fisherman A could relocate with a partner the permit of Fisherman B on his (A's) vessel and, with two additional lines, might catch 30%-40% more fish. Fisherman A and his partner would have a catch of 1,300 to 1,400. The 600 to 700 fish previously caught by Fisherman B would be available for the remainder of the fleet or for increased escapement.

Proposed by: Daniel Rear (153)

5 AAC 39.270(3). TROLL SPECIFICATIONS AND OPERATION. (Regulation page 174). Allow the use of fishing rods and hand troll gurdies at the same time and change the line limits for hand troll vessels.

The proposed regulation reads as follows:

5 AAC 39.270. TROLL SPECIFICATIONS AND OPERATION.

Option 1

(3) [AN AGGREGATE OF FOUR FISHING RODS OR AN AGGREGATE OF TWO HAND TROLL GURDIES MAY BE OPERATED FROM A HAND TROLL VESSEL.] The line limit for a hand troll vessel will be a maximum of four (4) lines of which no more than two (2) lines can be attached to hand gurdies.

Option 2

(3) an aggregate of four fishing rods or an aggregate of two hand troll gurdies or one hand troll gurdy and one fishing rod combination may be operated from a hand troll vessel.
Justification:

Option 1: Additional combinations of hand troll gear would be possible, i.e., two gurdies and two fishing rods, or one gurdy and three fishing rods. The proposed regulation will not increase the CPUE and is but the combining of already legal hand troll gear. The proposed regulation will remove from ADF&G Protection the unnecessary and unwarranted burden of enforcing present regulation. The adoption of this proposal is logical and will be an asset to the gear type and protection-management policies.

Proposed by: Bill Stokes (303)

Option 2: By adding an additional combination of hand troll gear to the regulation, a traditional combination will be recognized. This combination will not add any additional pressure to the salmon stocks, but only make legal a combination which has been used for one-half century.

Proposed by: Ketchikan Advisory Committee (150)

\[231\]
5 AAC 39.270.(4)(c) and (d). TROLL SPECIFICATIONS AND OPERATIONS. (Regulation pages 174 and 175). Require the same marking requirements for both hand and power troll vessels.

The proposed regulation reads as follows:

5 AAC 39.270. TROLL SPECIFICATIONS AND OPERATIONS.

(4)(c) Each registered [POWER] troll vessel must display its permanent vessel license plate number in permanent symbols of black on white background. Each number must be at least twelve inches in height, with lines at least one inch in width and must be permanently affixed on both sides of the cabin or hull so as not to be obscured. The numbers must be displayed at all times until the end of the calendar year.

(4)(d) repealed //83;

Justification: The identification of troll vessels should be the same or remove the identification system from the vessels completely. The HT does not identify a specific troll vessel and serves no real purpose. An identification system should allow enforcement to positively identify a singular vessel or it has no value.

Proposed by: Bill Stokes (305)

\[232\]

The proposed regulation reads as follows:

5 AAC 39.270. TROLL SPECIFICATIONS AND OPERATIONS.
SOUTHEAST-YAKUTAT
SALMON

(e)(1) Playing line reel(s) may be employed for landing large
king salmon in addition to the number of gurdies allowed above.

Justification: No provision has been made for this additional sport
reel used as a "slug" playing line in the current regulations. Enforce-
ment personnel have interpreted this reel as a gurdy and written tickets
to this effect. If this reel is considered as a gurdy, what about a
halibut reel or a gillnet reel - should they not be considered as a
gurdy?

Proposed by: Ketchikan Advisory Committee (149)

5 AAC 39.270(g) TROLL SPECIFICATIONS AND OPERATION. (Regulation page
175). Allow the use of treble hooks.

The proposed regulation reads as follows:

5 AAC 39.270. TROLL SPECIFICATIONS AND OPERATION.

(g) repealed / /83. [ONLY SINGLE HOOKS MAY BE ON BOARD ANY
SALMON TROLL VESSEL OR USED IN THE TAKING OF SALMON.]

Justification: Results of the ATA-ADF&G joint troll test fishery this
past spring indicate a significant difference between injury rates of
sublegal chinook salmon caught on single and treble hooks. Under test
conditions it was found that single hooks caused a higher rate of signifi-
cant injury on sublegal fish. Treble hooks caused a more superficial
wound and small fish were seldom hooked back in the oral cavity. We are
aware that these results occurred under controlled test conditions, but
we feel that most professional fishermen are aware and capable of similar
low-mortality releasing of sublegal fish. Furthermore, assumed lower
mortality under test conditions may be neutralized by a greater degree
of physical damage due to onboard handling during tagging experiments.

The only other published studies between single and treble hooks were
conducted using sport fishing gear where higher mortality may occur due
to a blood lactate buildup during "playing" of the fish. Both these
studies showed no significant difference in mortality rates between
single and treble hooked salmon.

Proposed by: (1) Petition from Alaska Trollers Assoc. (230)
(2) Gary Slaven (104)
(3) Elfin Cove Advisory Committee (113)

5 AAC 39.270.(h)(2). TROLL SPECIFICATIONS AND OPERATION. (Regulation
page 175). Define a hand troll gurdy.

The proposed regulation reads as follows:

5 AAC 39.270. TROLL SPECIFICATIONS AND OPERATION.

(h) For purposes of this section:

(2) a hand troll gurdy is a troll gurdy powered by hand
or hand crank; [THAT IS NOT MOUNTED ON OR USED IN CONJUNCTION WITH A
FISHING ROD;]
SOUTHEAST-YAKUTAT
SALMON

Justification: By removing the extra wording additional combinations of hand troll gear are possible.

Proposed by: Bill Stokes (303)

5 AAC 33.310. (c)(2),(3),(4)(A) and (5)(A). FISHING SEASONS AND WEEKLY FISHING PERIODS. (Regulation page 139). Provide for a weekly drift gillnet fishing period commencing on Sunday.

The proposed regulation reads as follows:

5 AAC 33.310. FISHING SEASONS AND WEEKLY FISHING PERIODS.

(c) In the drift gillnet fishery, salmon may be taken only in open waters of the districts and sections listed in this subsection with the closing dates to be made by emergency order and with weekly fishing periods from 12:01 p.m. Sunday [MONDAY] through 12:00 noon Wednesday [THURSDAY] except as follows:

(2) district 6 opens on the third Sunday [MONDAY] of June;

(3) district 8 opens on the third Sunday [MONDAY] of June;

(4) district 11

(A) section 11-B, opens on the third Sunday [MONDAY]
in June;

(5) district 15

(A) section 15-A opens on the third Sunday [MONDAY]
in June;

Justification: The weekly drift gillnet fishing period was started on Sunday in all areas during the 1982 season. This was accomplished by emergency order to promote the development of the Southeast Alaska salmon resources. The concept was endorsed by the Board of Fisheries and the United Southeast Alaska Gillnetters Association. This proposal is being presented to allow public comment on the issue and to allow a review of the Sunday opening concept by the Board of Fisheries.

Proposed by: Board of Fisheries

236

A RESOLUTION URGING CONSERVATION CONSIDERATIONS IN REGARD TO SALMON SEINING IN TENAKEE INLET

WHEREAS, many Tenakee Springs residents are dependent on sport, commercial, and subsistence fishing and

WHEREAS, the continuation of the salmon population in the Inlet depends upon adequate escapement in the rivers and streams of the Inlet and
STATEWIDE
SALMON

5 AAC 39.240. GENERAL GEAR SPECIFICATIONS AND OPERATION. (f) (Regulation page 173). Require that all salmon net gear have painted or colored corks at 25 fathom intervals.

The proposed regulation reads as follows:

5 AAC 39.240. GENERAL GEAR SPECIFICATIONS AND OPERATIONS.

(f) All salmon net gear must have spaced at every 25 fathom interval a float painted in a color contrasting to that of the other floats.

Justification: To make it easier for Fish and Wildlife Protection to enforce net length regulations.

Proposed by: Ole Harder (332)

5 AAC 39.260. SEINE SPECIFICATIONS AND OPERATION. (b) (Regulation page 174). Eliminate fish traps and trapping of salmon by purse seines.

The proposed regulation reads as follows:

5 AAC 39.260. SEINE SPECIFICATIONS AND OPERATION. (b) Purse seines and leads may not be used for taking salmon in such a manner as to form what is termed hammerhead, heart, or arrowhead traps and the licensed seine vessel must be directly attached to either end of the seine also the vessel may not be anchored.

Justification: These seine traps are as effective, if not more effective because of their mobility, than the chicken wire and piling traps which were outlawed years ago by the State. The use of these traps has been increasing greatly since the repeal of 5 AAC 39. 260 (b) in 1976. It is foreseeable that streams could be completely blocked off with traps and quickly reduce, if not eliminate a salmon system. Alaska statute Sec. 16 10 .070 makes it unlawful to trap fish on or over lands or waters in the State, and these are traps.

Proposed by: Frank Dillon (325)

5 AAC 39.270 (i). TROLL SPECIFICATIONS AND OPERATION. (Regulation page 175). Allow troll gear statewide.

The proposed regulation reads as follows:

5 AAC 39.270. TROLL SPECIFICATIONS AND OPERATION.

(i) Troll gear may be used to take salmon in all areas of the state.

Justification: 1. Troll caught fish are a quality product having a greater dollar value. 2. The troll fishery uses a large and extensive network of support and supply businesses. 3. The Alaska troll permits are issued as statewide permits. 4. Gives the fishing industry an option of diversifying in the event of poor cycle years thus alleviating heavy pressure on specific stocks. 5. Areas of maximum utilization of the resource could still be protected by area/time closures as is done in southeast.
Many Alaskans living westward would utilize power troll permits to augment their present fishing incomes.

The percentage of Alaskans (as compared to non-residents) owning and fishing Alaska troll permits would probably increase.

Improve locale econimics of westward communities. The reopening of the westward waters to statewide power trolling would:

(a) increase the income and profits of the following local groups:

1. the local fishermen;
2. the processing plants and their employers; and
3. the various support businesses and their employees.

(b) increase economic incentive for processors to invest in westward Alaskan plants.

Proposed by: Richard Lundahl (174,175)

§ 258
5 AAC 39.270.(i)(New Subsection). TROLL SPECIFICATIONS AND OPERATION. (Regulation page 175). Allow the use of troll gear in all state waters.

The proposed regulation reads as follows:

5 AAC 39.270. TROLL SPECIFICATIONS AND OPERATION.

(i) Troll gear may be used in all waters of the State.

Justification: Open salmon troll fishing north and west of Cape Suckling by using only the migration of existing hand and power troll permits. The permit holders would apply for a northern area or southern area permit that would require them to fish that area for the entire season. Establish a separate OY for that area north of Cape Suckling. This action would spread out the existing fishing fleet and take the pressure off of the OY. It would also allow the northern people to enter in the troll fisheries without putting undue hardship on the northern salmon stocks.

Proposed by: Ken Procter and Bill Stokes (309)

§ 257
POLICY STATEMENT ON MANAGEMENT OF MIXED STOCK SALMON FISHERIES. (Add New Paragraph)(Regulation page 13). Change the mixed stock salmon fishery policy.

5. These policies do not apply in the case of individual stocks where natal streams have been so impacted by human development that non-natural factors beyond the control of the Board may cause the loss of more than 50% of spawning stocks between entering the river and reaching the spawning ground, or may cause the loss or permanently impede the travel of more than 50% of the downstream migrants.

Justification: By adopting this policy the Board would recognize the serious problems that exist in many streams outside Alaska and ensure that these non-fisheries-related impacts are not considered to the detriment of Alaska's fishermen when management programs are developed.
STATEWIDE
SALMON

Certain watercourses have been significantly impacted by human development; some in an irreversible manner. These rivers, and stocks of salmon originating therein, should be of limited concern to agencies involved in coastwide salmon management programs.

ATA is not advocating the abandonment of a strong policy of enforcement, conservation and rehabilitation to preserve and reestablish natural salmon resources nor are we advocating elimination of a problem by non-recognition. What ATA is advocating is a realistic appraisal of the present situation which will permit a management program allowing the Alaskan troll industry to benefit from its own conservation and enhancement undertakings. Outside influences over which the Board has not control cannot continue to be allowed to bankrupt the troll fishery.

Proposed by: Alaska Trollers Association (140)

STATEWIDE
SALMON HATCHERIES

The Board and the Department will discuss, during the December 1982 meeting, various issues relating to the administration of Private Non-profit Salmon Hatcheries and management of hatchery donor brood stocks and harvest of returning hatchery stocks. A discussion paper on this subject will be available to the public before the meeting. The public is invited to comment in writing or orally on this subject.

5 AAC 40.005(h). GENERAL. (New subsection) Establish procedures that will assist in ensuring that hatchery operators will be able to recover their cost by harvest of surplus fish produced by their hatchery.

The proposed regulation reads as follows:

5 AAC 40.005. GENERAL. PNP operators shall take all reasonable steps necessary to ensure that hatchery-produced fish harvested in their designated special harvest area are surplus fish produced at that facility. Reasonable steps may include (but not be limited to): marking or tagging programs, species separation, migration studies, test fishing and sampling. Should substantial interceptions occur, the operator intercepting another operator’s fish shall compensate the fish producers according to prevailing fish prices at the time of harvest. Reasonable steps shall be defined by the department.

Justification: Existing regulations do not appear to protect the rights of hatchery operators to harvest surplus fish if a neighboring hatchery operator is capable of intercepting the return. We believe that once fish are through the common property fisheries, the harvest of surplus fish should be conducted in an orderly and fair manner to allow each hatchery operator the right to harvest fish produced by his/her hatchery. This clarification should help to minimize conflict between hatcheries.

Proposed by: Northern Southeast Regional Aquaculture Assoc. (97, 98)
AP Considerations on Salmon for December Meeting

The AP is requested to address the following questions from the PDT in preparation for the January meeting. The AP also may wish to review the policy questions put to the SSC above.

(1) With respect to the troll industry, is the economic impact of in-season closures the same as shorter seasons? Which is preferable?

(2) With respect to the salmon processing sector, are in-season troll closures less or more disruptive than shorter troll seasons? Does either system have a smaller economic impact than the other?

(3) Given that the OY/harvest guideline for chinooks stays the same or is reduced in 1983, are there ways fishery managers can lessen the economic impacts on the industries?

(4) Is a daily troll fishing period (example, Proposal 210 to the Board: 5 am - 7 pm) realistic and/or reasonable?

(5) Does the AP have a position on the allocation of the available chinook harvest between northern U.S. and southern U.S. interests?
Table 2. Reduction proposed during November 1982 U.S.-Canada salmon interception negotiations for 1983 chinook salmon harvests in selected fisheries in Southeast Alaska and British Columbia with comparisons for recent years. (ADF&G 12/7/82).

(Numbers of fish in 1000's)

<table>
<thead>
<tr>
<th>Period</th>
<th>Southeast Alaska Fisheries</th>
<th>Total Commercial &amp; Sport</th>
<th>Commercial Troll &amp; Net</th>
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<td>Average Catch</td>
<td>Proposed 1983 Catch</td>
<td>Reduction</td>
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<td>Ceiling</td>
<td>Number Percent</td>
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<td>Catch</td>
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<td>Approx, 1983</td>
<td>Reduction</td>
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<tr>
<td></td>
<td></td>
<td>Ceiling</td>
<td>Number Percent</td>
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<tr>
<td>1978-81 (Base</td>
<td>357</td>
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<td>period)</td>
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<tr>
<td>1981-82</td>
<td>295</td>
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<td>32</td>
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<tr>
<td>1982 Actual</td>
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<td>1982 Target</td>
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<th>Period</th>
<th>British Columbia Fisheries</th>
<th>Total Commercial &amp; Sport</th>
<th>Commercial Troll &amp; Net</th>
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<td>Average Catch</td>
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<td>Number Percent</td>
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<td>Catch</td>
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<td>Reduction</td>
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<tr>
<td></td>
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<td>Ceiling</td>
<td>Number Percent</td>
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<tr>
<td>1978-81 (Base</td>
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<td>858</td>
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<td>Period)</td>
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<tr>
<td>1981-82</td>
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<td>176</td>
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<tr>
<td>1982 (Prelim)</td>
<td>(1,059)</td>
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<td>185</td>
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</table>

1/ Include all commercial and recreational fisheries in the Southeast Alaska region. Harvest ceilings applied only to commercial fisheries in 1980-82. The 1982 target shown for commercial and sport fisheries including an estimated 20,000 sport catch. A similar sport catch is expected in 1983. Catch data provided by ADF&G.

2/ Includes all commercial and recreational fisheries in British Columbia except troll and net fisheries along the west coast of Vancouver Island in statistical areas 26-27. Catch data provided by CDFO.

3/ 1982 catch data for Canadian fisheries is very preliminary. Upward revision of this figure is expected.

4/ Approximate target ceiling required for commercial fisheries if Georgia St. recreational harvest were limited to recent levels but not reduced. Canadian estimate of average 1981-82 sport harvest is 400,000 fish. Canada has not indicated exactly how the reduction will be allocated to the various fisheries.
Table 1. Southeast Alaska Commercial and Recreational Chinook Salmon Harvest, 1965–82. (ADF&G 11/3/82)

(Number of fish in thousands.)

<table>
<thead>
<tr>
<th>Year</th>
<th>Commercial Fisheries</th>
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<th></th>
<th>Recreational Fisheries</th>
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<td>(13)</td>
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<tr>
<td>66</td>
<td>282</td>
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<td>(14)</td>
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<td>314</td>
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<td>(14)</td>
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<td>(328)</td>
</tr>
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<td>1970</td>
<td>305</td>
<td>18</td>
<td>323</td>
<td></td>
<td>(14)</td>
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<td>(18) 3/</td>
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2/ Preliminary data.

3/ Projection equal to average of 1980–81 catches.
<table>
<thead>
<tr>
<th>YEAR</th>
<th>NORTH</th>
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<td>TROLL</td>
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<td>SUBTOTAL</td>
<td>TROLL</td>
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<td>SPORT</td>
<td>SUBTOTAL</td>
<td>TOTAL</td>
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<td>515</td>
<td>152</td>
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<td>238</td>
<td>102</td>
<td>340</td>
<td>657</td>
<td>166</td>
<td>91</td>
<td>914</td>
<td>1,254</td>
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<td>224</td>
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<td>362</td>
<td>575</td>
<td>193</td>
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<td>846</td>
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*PRELIM. 1982*


NOTE: North Troll Areas are 1-11, 30. South Troll All Other Areas.
North Net Areas are 1-10. South Net All Other Areas.
| YEAR | TOTAL COMMERCIAL AND RECREATIONAL CATCH | WEST COAST VANCOUVER IS. CATCH | "DIFFERENCE = ALL B.C. FISHERIES EXCEPT W. COAST VANCOUVER."
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Figure 2. Schematic diagram of July 1 - June 30 catch counting year for implementing chinook salmon catch limits in Southeast Alaska fisheries (ADFG 1/83).

243,000 - (10/1 - 12/31/82 catch)

Troll Fishery

Troll Fishery except troll fishery.
April 14
Total Carta All Genre
242,000

+ 15,000 - Minority Carta
227,000

+ 15,000 - Segl 1-20 Troller Carta
212,000

Troller Carta

+ 147,000 - Max July-August (less 10-day)
65,000

+ 45,000 - Net Carta
20,000 - Recreational Carta

Under July 1 - June 30 Calendar Year
Expected Distribution of Maximum Carta

[Note: The text appears to be incomplete or contains errors.]

(continued)
BASED ON CODED WIRE TAG RECOVERIES (CDFG 12/81)
RIVER BRIGHT FALL CHINOOK SALMON BY SOUTHEAST ALASKA FISHERIES

FIGURE 7. APPROXIMATE TIME DISTRIBUTION OF 1981 CATCH OF COLUMBIA

MONTHS

PERCENT
In the southeastern Alaska troll fishery.

Figure. Average seasonal distribution of Chinook salmon catch.

Percent of Season Catch

Chinook

Coho

Apr May Jun Jul Aug Sept Oct

20

40

60
REPORT TO THE BOARD OF FISHERIES

1982 SOUTHEAST ALASKA SALMON TROLL FISHERY

By:

Region I Staff

Southeast Region
Alaska Department of Fish and Game
Commercial Fisheries Division
November 1982
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INTRODUCTION

The salmon troll fishery in Southeast Alaska occurs in State and Federal waters from Cape Suckling southeast to Dixon Entrance (Figure 1). Target species are primarily chinook and coho salmon although in recent years catches of pink salmon have increased. Catches of chinook for the period 1971-1981 have averaged 297,000 annually (Figure 2). The 1982 season chinook salmon troll catch was 241,000 calculated from October 1, 1981 through September 30, 1982. The troll coho catch was 1.3 million fish. Catches of other species by troll gear in 1982 included 534,000 pinks, 6,700 chums and 4,900 sockeyes. Annual salmon catches by the troll fishery since 1970 are shown in Table 1. Fishing periods for the 1982 season are shown in Table 2. Eighteen percent of the chinook catch and 6% of the coho catch was reported taken in Federal waters (FCZ).

The Alaska Commercial Fisheries Limited Entry Commission currently issues 939 permanent power troll permits and 2,150 hand troll permits. In 1982, preliminary estimates indicate that 840 power troll gear units and 970 hand troll gear units were actually fished. Hand troll gear permit holders accounted for about 15% of the chinook troll catch and 21% of the coho troll catch.

In recent years several changes have occurred in the troll fishery that have affected management decisions and consequently the conduct of the fishery. First, chinook production from all Southeast Alaska river systems has been depressed since the 1950's. In spite of restriction of the terminal area net fisheries, recreational
fisheries bag limits, and inside troll fishery restrictions through the late 1970's escapements did not improve. In 1981 the Board of Fisheries adopted a fifteen year rebuilding program for Southeast Alaska's chinook salmon stocks. This has resulted in closures of the troll fishery at the start of the season, when the availability of mature Alaskan spawning run fish is high. For 1981 and 1982, the entire troll fishery was closed from April 15 through May 14 and in 1982 an additional month of closure through June 14 was implemented in portions of District 1. This was complemented by an accompanying reduction in 1981 in the overall level of harvest from 320,000 to 268,000 so that saving made early in the season would not be made up out of immature fish later in the season. As a result of those efforts escapements to rivers in Southeast Alaska have been increasing over previous years, although they are still below optimum.

Second, escapements for many of the non-Alaskan chinook systems that contribute to the Southeast Alaska troll fisheries are also currently below optimum levels. The exact contribution that these depressed stocks make to the Alaskan troll fishery is not known, but it is significant. In cooperation with coastwide management of these stocks the Board adopted a reduced guideline harvest level of 255,500 fish for the 1982 season, a reduction of 13,000 fish from the 1981 level. In making this reduction, the Board of Fisheries particularly stated that they wanted to see the conservation actions of the Alaskan fishery matched by the Canadian fisheries before they decided if any further action on the Alaskan fisheries was
warranted. The Board also wanted to see some resolution to the interdarn losses in the Columbia River as a major step toward solving the conservation problems in that river.

Third, increased fishing effort in outer coastal and offshore fishing areas is increasing the mixed stock nature of the coho salmon fishery. This has resulted in more of the harvest occurring before run strength can be assessed and effective inseason management measures implemented. Additionally, the Board has recognized that the increase in landings from the coastal and offshore fishing areas is affecting the allocation of coho salmon to inside user groups.

CHINOOK SALMON FISHERY

At a joint meeting in March 1982, the Alaska Board of Fisheries and the North Pacific Fisheries Management Council established a 1982 season chinook salmon catch limit of 255,500 for all commercial fisheries in the Southeast Alaska region. (This limit did not include an estimated 1,500 fish produced by Southeast Alaska hatcheries.) The 1982 season catch limit was adjusted downward from the 1981 catch limit range of 272-288,000 in response to continuing coastwide chinook salmon conservation problems.

In addition to the overall catch limit established for all commercial fisheries, two region-wide closures were established by the Board and Council for the troll fishery during the 1982 chinook salmon season:
- A one-month spring closure April 15 - May 14
  (This closure was also in effect during the 1981 season)

- A 10-day closure in early June (implemented June 7-16)

**Troll Fishery Winter Season**

The 1982 winter season extended from October 1, 1982 through April 14, 1982. Beginning and ending dates were the same as for the 1981 season. Fishing during the winter season is restricted to those areas of Southeast Alaska lying inside (east of) the surfline. All outer-coastal areas including the FCZ are closed during the winter fishery.

As shown in Table 2, approximately 12,600 chinook salmon were harvested by the troll fishery during the 1982 winter season with 4,800 (38%) being landed prior to January 1, 1982 and 7,800 (62%) after January 1. The 1982 winter season catch increased over that of 1981 by about 3,000 fish or 31 percent as a result of increased catches during the late fall-early winter period from October 1 through December 31. For comparison, troll fishery winter season chinook salmon catches since 1970 are shown in Figure 3.

**Troll Fishery Summer Season**

The pre-season management plan for the 1982 summer season included a target harvest of 224,500 chinook salmon. This target was determined by subtracting a winter catch of 12,500 and a pre-season
Preliminary data indicates that approximately 198,000 or 82 percent of the 1982 season troll chinook salmon catch was taken in State waters with about 42,500 or 18 percent being reported from the Federal Fishery Conservation Zone (FCZ).

**Total Commercial Chinook Salmon Catches by All Gear**

Preliminary in-season data indicates a total commercial chinook salmon harvest by all fisheries of approximately 285,800 fish. This includes a total season (winter plus summer) troll fishery harvest of 241,300 and an incidental net fishery harvest of 44,500, approximately 26,000 (58%) of which occurred after closure of the troll fishery to the taking of chinook salmon on July 28 (Figure 5). Comparative troll and total all gear chinook catches since 1960 were shown in Figure 2.

The large late season incidental net catch occurred as a result of an apparent increase in chinook abundance and/or availability coupled with large middle and late pink salmon returns which necessitated extensive purse seine fishing to harvest these runs. The incidental purse seine harvest of approximately 28,500 fish accounted for about 66 percent of the total incidental net harvest and represented an all time record catch (Figure 6). The previous high catch was 24,000 in 1945. Comparative net catches since 1970 are shown in Table 3.

The major part of the seine chinook salmon catch occurred in the District 4 - Noyes Island fishery where approximately 20,000 or two-
estimated net fisheries catch of 20,000 from 257,000 (255,500 plus an estimated 1,500 fish harvest from Southeast Alaska hatcheries).

The Southeast Alaska troll fishery began the summer season as scheduled on May 15. Following a 23-day fishing period, the fishery was closed for 10 days from June 7 through June 16. The primary purpose of the closure, which was designed in part to compliment a June 10-23 closure of the Canadian troll fishery in northern British Columbia waters (north of Cape Caution), was to help increase coastwide spawning escapements of depressed natural chinook salmon stocks.

Following the 10-day closure, June 7-16, the fishery reopened on June 17 and continued for 42 days through July 28 when the fishery was again closed. This closure was announced when in-season catch projection information indicated that the chinook salmon catch limit would be achieved by approximately July 28.

As shown in Table 1, the most current estimate of the troll summer season chinook catch to the closure beginning July 29 is approximately 228,700 fish. This includes an estimated 84,200 fish harvested during the 23-day period from May 15 through June 6 and an estimated 144,500 during the 42-day period from June 17 through July 28. For comparison, weekly cumulative chinook salmon catches beginning mid-May for the years 1978-82 are shown graphically in Figure 4.
thirds of the total seine catch of chinook salmon occurred. Catches of pink, chum, sockeye and coho salmon by the seine fishery in District 4 totaled about 4.9 million fish. Thus, chinook salmon represented about 0.4 percent of the all species weekly salmon catches by species for this fishery in 1982 as shown in Table 4 and Figure 7.

**Chinook Salmon Escapements to Southeast Alaska Systems**

Data on 1982 chinook salmon spawning escapements in Southeast Alaska systems indicates that although total escapements were slightly below those of 1981, they remained well above average escapements during 1975-1980 (Table 5). The major weakness in 1982 occurred in the Taku River system where index escapement counts were about half of those in 1981. Although reduced returns to the Taku River had been anticipated as a result of a slide which occurred in that drainage in 1978, the magnitude of the impact was not known. Some weakness is expected to continue throughout 1983 and 1984 returns.

Chinook salmon escapements in 1982 to the Behm Canal systems near Ketchikan showed strong improvement over 1981 with increases ranging from 21 to 127% in the four index systems. An additional one month closure from May 15 - June 14 was implemented in 1982 in a portion of District 1 through which these stocks are thought to migrate because of the lack of increased escapements in 1981 in response to the one month region-wide closure.
Based on regulations originally proposed for the 1981 season to implement an intensified stock rebuilding plan, it was estimated that 3 cycles or about 15 years would be required to rebuild stocks to the level where current management escapement goals would be achieved. Final regulations adopted for the 1981 season by the Alaska Board of Fisheries and the North Pacific Fisheries Management Council were actually more restrictive than those initially proposed, with the result that the rebuilding period now appears to be substantially shorter than the 15 years originally projected.

As seen in Figure 8, estimated total escapements for both 1981 and 1982 were actually above the level which would have been expected in the second cycle of a 3-cycle rebuilding plan beginning at average 1975-80 escapement levels and building to current escapement goals. In fact, current management goals were achieved in 1982 for three of the nine index systems - the Stikine, Keta and King Salmon Rivers.

These projections apply to average escapements for all systems and it is expected that either yearly and/or trend escapements to some individual systems will be weaker or stronger than the average. Refinement of current regulations may be required to provide additional protection for stocks not responding as expected due to poor survival conditions and/or differential harvest rates by one or more fisheries.

COHO SALMON FISHERY

The troll coho salmon season occurs from June 15 through September
20 although a major portion of the catch normally occurs from mid-July through early September with outer coastal troll catches peaking near mid-August. Southeast Alaska coho salmon fisheries are not managed under a pre-season catch limit as used for the chinook salmon fisheries. Instead coho salmon run strength is assessed in-season and fisheries regulated accordingly to achieve Board established allocation policies and conservation objectives.

The staff was directed to implement a 10-day closure during the early part of the coho season to move more coho into inshore and terminal areas unless the coho run was above the recent 10-year average and adequate numbers of fish are moving into inshore and terminal areas. The primary purpose of this closure is to allow coho to segregate into more distinct stock units to facilitate run strength assessment and to reverse trends in decreasing percentage harvest by inside fisheries (Figure 9).

Preliminary catch data indicates that approximately 525,000 coho salmon were harvested by the troll fishery from June 17 through the beginning of the 10-day closure on July 29. Data available through July 23 when the Department announced the July 29 troll fishery closure because the chinook catch limit was being reached, indicated that a 10-day coho salmon closure was also needed. To facilitate orderly landing and processing of chinook and coho salmon, the 10-day coho season closure was moved forward from the August 10-19 closing dates announced in the 1982 Troll Fishery Management Plan.
Following reopening of the troll fishery on August 8 to all species except chinook salmon, an estimated 814,500 coho salmon were harvested through September 20 for a total season harvest of approximately 1.3 million coho salmon. Combined with an estimated harvest of 714,200 coho salmon by the net fisheries, the 1982 season yielded a total commercial harvest of approximately 2.1 million coho salmon by all gear types in Southeast Alaska. This represents the largest coho salmon harvest since 1951 when 3.3 million coho were harvested; approximately 1.7 million fish were harvested in 1978 and almost 1.8 million in 1954.

Preliminary data indicates that approximately 1,258,500 or 94 percent of the 1982 season troll coho salmon catch was taken in State waters with about 84,000 or 6 percent being reported from the Federal Fishery Conservation Zone.

SPECIAL PROBLEMS

Hook and Release of Chinook Salmon from August 8 through September 20

With the reopening of trolling August 8 to the taking of all species of salmon except chinook, fishermen were required to return to the water all chinook caught incidentally. Fishermen were encouraged by ADF&G and Alaska Trollers Association biologists to avoid areas of chinook abundance and to carefully release chinook hooked while fishing for other species. In an attempt to document the incidence of occurrence of hook and release of chinook as well as to collect
data concerning the feasibility of avoiding chinook while fishing for coho salmon, the Department arranged for biologists to observe onboard fishing vessels between August 28 and September 20. However, due to short notice, only three onboard trips were completed for a total of 8 fishing days during this time period. Observers were instructed to record numbers of chinook hooked and released, estimate size of chinook and make an assessment of hooking injury.

Additionally, samplers at cold storages interviewed fishermen to determine numbers of chinook hooked and released. Results of these observations indicate that catch and release of chinook was greatest for the first week following the reopening of trolling on August 8. Onboard observers indicated catches up to 40 per day. However, some fishermen reported very low incidence of chinook catches; 1-3 per day, which is what would normally be expected for the period August-September.

Preliminary analysis indicates that numbers of chinook hooked were unrelated by area, depth, gear or other factors. Immediate chinook mortality incurred as a result of hook and release appears to have been low (2-3%). However, the value of these fish as potential spawners as well as the value lost to the commercial fishing industry (approximately $50-60/fish) increases the significance of this mortality and raises doubts about the advisability of selective single species closures for troll gear. It should be noted that the small numbers of onboard observation precludes conclusive evaluations of a single species fishery from the data gathered.
Incidence of Scarred Chinook and Coho Salmon

For the past several years the Department has observed that a small percentage of chinook and coho caught by troll gear bore external scars of various types. In 1981 the Department began documentation of the incidence of these sars and the various types of scars observed. In 1982 the Department expanded the sampling effort to obtain a more detailed analysis of the incidence of these scars. A special report was prepared on these studies; results are summarized below.

During the 1982 season approximately 54,000 chinook and 165,000 coho salmon were randomly selected from Southeast Alaska troll fishery landings and examined for scars and marks. These samples represented 23 and 13 percent respectively of the summer troll chinook and coho salmon catches.

Scars and marks of the six categories established for this study were recorded for 2.03 percent of the chinook and 1.50 of the coho salmon sampled. Approximately 0.71 and 0.76 percent respectively of the chinook and coho salmon sampled were recorded with marks in Categories 1-3 considered representative of marks possibly inflicted by encounters with different types of fishing gear. An estimated 1,600 chinook salmon and 9,900 coho salmon in the 1982 summer troll fishery had marks of this type.

The scope to the 1982 study does not allow determination of the
causes of the fishing gear type marks observed on salmon harvested in the Southeast Alaska troll fishery. Potential sources are thought to include domestic net fisheries in Southeast and other areas and northern British Columbia and foreign and/or domestic ocean fisheries operating in the Gulf of Alaska.

**Sampling the Winter Troll Fishery for Incidence of Coded-Wire Tags**

During last year's Board of Fisheries meeting some question was raised regarding the level of troll fishery sampling for coded-wire tags during the winter portion of the fishery. Sampling is normally conducted primarily during the summer fishery, May 15-September 20, when the majority of the catch occurs because of budget limitations. The Department expanded sampling of the winter fishery using permanent staff as available and seasonal employees as fishery effort increased during the spring of 1982.

Of the 7,800 chinook reported caught during the period January 1 to April 14, Department personnel sampled 3,601 or 46%. This sample rate was made possible through excellent cooperation from fishermen and processors who notified the Department when landings were made or when salmon were being airfreighted out of the region. Twenty-five to thirty percent of the samples were taken at airports in Southeast Alaska.

During the period January 1-April 14, 1982, 262 landings were sampled from which 104 adipose clipped salmon were recovered. These samples produced 81 readable tags. Expansion of tag recoveries to
compute contribution estimates by tag code/agency is expected to be completed in February 1983.

The Department plans to continue sampling the winter troll fishery during 1982-83 season as budgetary limitations allow.
Figure 1. Southeast Alaska Commercial Fishing Statistical Areas
FIGURE 2. SOUTHEAST ALASKA COMMERCIAL CHINOOK SALMON CATCHES, 1960-82. (ADF&G 9/82)
NOTE: WINTER SEASON DATES OCT. 1 - APRIL 14

CATCH IN THOUSANDS

CATCH  
EFFORT

LANDINGS

FIGURE 3. SOUTHEAST ALASKA REGION WINTER TROLL FISHERY ANNUAL CHINOOK SALMON CATCHES AND EFFORT, 1970-82. (ADF&G 11/82)
FIGURE 5. COMPARATIVE WEEKLY CHINOOK SALMON CATCHES IN 1982 BY SOUTHEAST ALASKA TROLL AND NET FISHERIES. (ADF&G 11/82)
Figure 6: Historical Chinook salmon catches by the Southeast Alaska purse seine fishery, 1910-present. (ADF&G 11/82)
FIGURE 7. COMPARATIVE WEEKLY TOTAL SPECIES AND CHINOOK SALMON CATCHES IN 1982 BY SOUTHEAST ALASKA NOYES ISLAND (DIST. 4) SEINE FISHERY. (NOTE: DIFFERENT SCALES FOR TOTAL SPECIES AND CHINOOK SALMON CATCHES!)
FIGURE 8. CURRENT STATUS OF SOUTHEAST ALASKA NATURAL CHINOOK SALMON ESCAPEMENTS COMPARED TO 15-YEAR REBUILDING SCHEDULE. (ADF&G 10/82)
FIGURE 9. PERCENT OF TOTAL SOUTHEAST ALASKA REGION COMMERCIAL COHO SALMON HARVEST TAKEN BY PURSE SEINE, DRIFT GILLNET AND TROLL GEAR, 1970-82. (ADF&G 11/82)
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<td>305431</td>
<td>267763</td>
<td>477</td>
<td>70076</td>
<td>2804</td>
<td>646551</td>
</tr>
<tr>
<td>1971</td>
<td>333738</td>
<td>391569</td>
<td>936</td>
<td>104633</td>
<td>7672</td>
<td>838548</td>
</tr>
<tr>
<td>1972</td>
<td>242095</td>
<td>791668</td>
<td>1068</td>
<td>166853</td>
<td>11680</td>
<td>1213364</td>
</tr>
<tr>
<td>1973</td>
<td>307815</td>
<td>540104</td>
<td>1222</td>
<td>134585</td>
<td>10466</td>
<td>994192</td>
</tr>
<tr>
<td>1974</td>
<td>322208</td>
<td>846620</td>
<td>2606</td>
<td>263603</td>
<td>13819</td>
<td>1448856</td>
</tr>
<tr>
<td>1975</td>
<td>287348</td>
<td>214254</td>
<td>1103</td>
<td>77207</td>
<td>2825</td>
<td>582737</td>
</tr>
<tr>
<td>1976</td>
<td>231282</td>
<td>524992</td>
<td>1274</td>
<td>193777</td>
<td>4635</td>
<td>955960</td>
</tr>
<tr>
<td>1977</td>
<td>271777</td>
<td>506927</td>
<td>5701</td>
<td>281286</td>
<td>11617</td>
<td>1077308</td>
</tr>
<tr>
<td>1978</td>
<td>375624</td>
<td>1102066</td>
<td>2804</td>
<td>617817</td>
<td>26211</td>
<td>2124522</td>
</tr>
<tr>
<td>1979</td>
<td>338219</td>
<td>918596</td>
<td>6455</td>
<td>629192</td>
<td>24703</td>
<td>1917165</td>
</tr>
<tr>
<td>1980</td>
<td>299930</td>
<td>706521</td>
<td>2902</td>
<td>267465</td>
<td>12213</td>
<td>1289031</td>
</tr>
<tr>
<td>1981</td>
<td>252425</td>
<td>862208</td>
<td>7551</td>
<td>579412</td>
<td>9028</td>
<td>1710624</td>
</tr>
<tr>
<td>1982 (PRELIM.)</td>
<td>242,000</td>
<td>1,343,000</td>
<td>4,900</td>
<td>534,000</td>
<td>6,700</td>
<td>2,130,600</td>
</tr>
</tbody>
</table>

Footnotes: (1) Most recent years data should be considered preliminary.
### Table 2  Preliminary 1982 Chinook and Coho Salmon Catches by the Southeast Alaska Troll and Net Fisheries. (ADF&G 11/82)

<table>
<thead>
<tr>
<th>Troll Fishery</th>
<th>Chinook</th>
<th>Coho</th>
</tr>
</thead>
<tbody>
<tr>
<td>1982 Fishing Periods</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Winter Season</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oct. 1-Dec. 31, 1981</td>
<td>4,800</td>
<td></td>
</tr>
<tr>
<td>Jan. 1-April 14, 1982</td>
<td>7,800</td>
<td></td>
</tr>
<tr>
<td>Winter Season Subtotal</td>
<td>12,600</td>
<td></td>
</tr>
<tr>
<td>Summer Season</td>
<td></td>
<td></td>
</tr>
<tr>
<td>May 15-June 6 (23 days)</td>
<td>84,200</td>
<td>--</td>
</tr>
<tr>
<td>June 17-July 28 (42 days)</td>
<td>144,500</td>
<td>528,000</td>
</tr>
<tr>
<td>August 8-Sept. 20*</td>
<td>*</td>
<td>814,500</td>
</tr>
<tr>
<td>Summer Season Subtotal</td>
<td>228,700</td>
<td>1,342,500</td>
</tr>
<tr>
<td>Troll Fishery Subtotal</td>
<td>241,300</td>
<td>1,342,500</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Net Fisheries</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Gillnet</td>
<td>15,400</td>
<td>343,100</td>
</tr>
<tr>
<td>Seine</td>
<td>28,500</td>
<td>366,500</td>
</tr>
<tr>
<td>Trap</td>
<td>600</td>
<td>4,600</td>
</tr>
<tr>
<td>Net Fisheries Subtotal</td>
<td>44,500</td>
<td>714,200</td>
</tr>
</tbody>
</table>

All Gear Season Total  
285,800**  
2,056,700

* Troll fishery closed to chinook salmon fishing July 29-Sept. 30

** Note this total includes troll fishery chinook salmon catches from October 1, 1981 through September 30, 1982.
Table 3  Annual Chinook Salmon Catches by Southeast Alaska Net Fisheries, 1970-82 (ADF&G 11/82)

<table>
<thead>
<tr>
<th>Year</th>
<th>Purse Seine</th>
<th>Drift Gillnet</th>
<th>Set Gillnet</th>
<th>Gillnet Subtotal</th>
<th>Trap &amp; Misc.</th>
<th>Total Net</th>
</tr>
</thead>
<tbody>
<tr>
<td>1970</td>
<td>5,957</td>
<td>9,460</td>
<td>2,299</td>
<td>11,759</td>
<td>55</td>
<td>17,771</td>
</tr>
<tr>
<td>1971</td>
<td>4,800</td>
<td>15,734</td>
<td>2,041</td>
<td>17,775</td>
<td>12</td>
<td>22,587</td>
</tr>
<tr>
<td>1972</td>
<td>16,997</td>
<td>25,142</td>
<td>2,467</td>
<td>27,609</td>
<td>135</td>
<td>44,741</td>
</tr>
<tr>
<td>1973</td>
<td>8,751</td>
<td>24,471</td>
<td>2,733</td>
<td>27,204</td>
<td>72</td>
<td>36,027</td>
</tr>
<tr>
<td>1974</td>
<td>6,759</td>
<td>15,481</td>
<td>2,214</td>
<td>17,695</td>
<td>17</td>
<td>24,471</td>
</tr>
<tr>
<td>1975</td>
<td>2,056</td>
<td>9,076</td>
<td>2,224</td>
<td>11,300</td>
<td>3</td>
<td>13,359</td>
</tr>
<tr>
<td>1976</td>
<td>1,426</td>
<td>7,222</td>
<td>1,831</td>
<td>9,053</td>
<td>45</td>
<td>10,524</td>
</tr>
<tr>
<td>1977</td>
<td>5,243</td>
<td>5,600</td>
<td>2,549</td>
<td>8,149</td>
<td>51</td>
<td>13,443</td>
</tr>
<tr>
<td>1978</td>
<td>13,998</td>
<td>8,304</td>
<td>3,057</td>
<td>11,361</td>
<td>410</td>
<td>25,769</td>
</tr>
<tr>
<td>1979</td>
<td>10,080</td>
<td>13,846</td>
<td>4,299</td>
<td>18,145</td>
<td>260</td>
<td>28,485</td>
</tr>
<tr>
<td>1980</td>
<td>12,508</td>
<td>5,638</td>
<td>2,800</td>
<td>8,438</td>
<td>643</td>
<td>21,589</td>
</tr>
</tbody>
</table>

Average 1970 to present: 8,052 12,725 2,592 15,317 155 23,524

1981: 10,286 7,074 2,109 9,143 442 18,853
1982: 28,480 13,956 1,424 15,380 555 44,415

Note: Data for last two years should be considered preliminary.
Table 4. Preliminary 1982 weekly salmon catches by the purse seine fishery in District 4 (Noyes Island), Southeast Alaska. (ADF&G 11/82)

<table>
<thead>
<tr>
<th>District</th>
<th>week</th>
<th>ending date</th>
<th>Catch - Weekly to date in this district</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>(4)</td>
<td>18</td>
<td>May 1</td>
<td>Chinook 0, Sockeye 0, Coho 0, Pink 0, Chum 0</td>
<td>0</td>
</tr>
<tr>
<td>(4)</td>
<td>19</td>
<td>May 8</td>
<td>Chinook 0, Sockeye 0, Coho 0, Pink 0, Chum 0</td>
<td>0</td>
</tr>
<tr>
<td>(4)</td>
<td>20</td>
<td>May 15</td>
<td>Chinook 0, Sockeye 0, Coho 0, Pink 0, Chum 0</td>
<td>0</td>
</tr>
<tr>
<td>(4)</td>
<td>21</td>
<td>May 22</td>
<td>Chinook 0, Sockeye 0, Coho 0, Pink 0, Chum 0</td>
<td>0</td>
</tr>
<tr>
<td>(4)</td>
<td>22</td>
<td>May 29</td>
<td>Chinook 0, Sockeye 0, Coho 0, Pink 0, Chum 0</td>
<td>0</td>
</tr>
<tr>
<td>(4)</td>
<td>23</td>
<td>Jun 5</td>
<td>Chinook 0, Sockeye 0, Coho 0, Pink 0, Chum 0</td>
<td>0</td>
</tr>
<tr>
<td>(4)</td>
<td>24</td>
<td>Jun 12</td>
<td>Chinook 0, Sockeye 0, Coho 0, Pink 0, Chum 0</td>
<td>0</td>
</tr>
<tr>
<td>(4)</td>
<td>25</td>
<td>Jun 19</td>
<td>Chinook 0, Sockeye 0, Coho 0, Pink 0, Chum 0</td>
<td>0</td>
</tr>
<tr>
<td>(4)</td>
<td>26</td>
<td>Jun 26</td>
<td>Chinook 0, Sockeye 0, Coho 0, Pink 0, Chum 0</td>
<td>0</td>
</tr>
<tr>
<td>(4)</td>
<td>27</td>
<td>Jul 3</td>
<td>Chinook 0, Sockeye 0, Coho 0, Pink 0, Chum 0</td>
<td>0</td>
</tr>
<tr>
<td>(4)</td>
<td>28</td>
<td>Jul 10</td>
<td>Chinook 637, Sockeye 28971, Coho 9061, Pink 18105, Chum 4767</td>
<td>61541</td>
</tr>
<tr>
<td>(4)</td>
<td>29</td>
<td>Jul 17</td>
<td>Chinook 1022, Sockeye 118084, Coho 26314, Pink 75565, Chum 40322</td>
<td>261307</td>
</tr>
<tr>
<td>(4)</td>
<td>30</td>
<td>Jul 24</td>
<td>Chinook 1075, Sockeye 51274, Coho 10084, Pink 45194, Chum 16062</td>
<td>123689</td>
</tr>
<tr>
<td>(4)</td>
<td>31</td>
<td>Jul 31</td>
<td>Chinook 489, Sockeye 5448, Coho 2394, Pink 8215, Chum 3392</td>
<td>19938</td>
</tr>
<tr>
<td>(4)</td>
<td>32</td>
<td>Aug 7</td>
<td>Chinook 2421, Sockeye 12754, Coho 10788, Pink 165668, Chum 14007</td>
<td>205638</td>
</tr>
<tr>
<td>(4)</td>
<td>33</td>
<td>Aug 14</td>
<td>Chinook 6539, Sockeye 24880, Coho 31291, Pink 815933, Chum 48627</td>
<td>927270</td>
</tr>
<tr>
<td>(4)</td>
<td>34</td>
<td>Aug 21</td>
<td>Chinook 3365, Sockeye 11462, Coho 13402, Pink 741212, Chum 52048</td>
<td>821489</td>
</tr>
<tr>
<td>(4)</td>
<td>35</td>
<td>Aug 28</td>
<td>Chinook 3508, Sockeye 7317, Coho 14373, Pink 1232700, Chum 62053</td>
<td>1319951</td>
</tr>
<tr>
<td>(4)</td>
<td>36</td>
<td>Sep 4</td>
<td>Chinook 757, Sockeye 2990, Coho 12666, Pink 1111717, Chum 69869</td>
<td>1198199</td>
</tr>
<tr>
<td>Totals</td>
<td></td>
<td></td>
<td>Chinook 20013, Sockeye 263160, Coho 130373, Pink 4214309, Chum 311167</td>
<td>4939022</td>
</tr>
</tbody>
</table>

Cautionary note: In season catch data shown above should be considered VERY PRELIMINARY. Changes may occur daily as data is edited and updated. Data is computed in this form primarily for in-season management use and general catch monitoring.
### Table 5. Preliminary estimates of 1982 chinook salmon escapements to selected Southeast Alaska index systems. (ADF&G 9/82)

**Note:** Thirty-three known chinook salmon producing systems exist in Southeast Alaska. However, due to poor surveying conditions in many systems only those included below are currently surveyed in a consistent manner each year to provide a relative measure or index of total chinook salmon escapements to Southeast Alaska systems.

<table>
<thead>
<tr>
<th>Systems - Tributaries</th>
<th>Type of Survey¹</th>
<th>Escapements</th>
<th>Percent change in 1982 compared to 1981</th>
<th>Minimum Escapement Goals²</th>
<th>1981-82 ave. Escapement as Percent of Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Major Systems (3 total)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Alsek - Kluckshu</strong></td>
<td>(2)</td>
<td>2,890</td>
<td>2,640</td>
<td>2,110</td>
<td>2,360</td>
</tr>
<tr>
<td><strong>Taku - Nakina</strong></td>
<td>(1)</td>
<td>2,810</td>
<td>4,500</td>
<td>5,100</td>
<td>2,530</td>
</tr>
<tr>
<td><strong>Nahlin</strong></td>
<td>(1)</td>
<td>780</td>
<td>1,530</td>
<td>2,940</td>
<td>1,250</td>
</tr>
<tr>
<td><strong>Taku Subtotal</strong></td>
<td></td>
<td>3,590</td>
<td>6,030</td>
<td>8,040</td>
<td>3,780</td>
</tr>
<tr>
<td><strong>Stikine - Little Tahltan</strong></td>
<td>(1)</td>
<td>970</td>
<td>2,140</td>
<td>3,330</td>
<td>2,830</td>
</tr>
<tr>
<td><strong>Major Systems Subtotals</strong></td>
<td></td>
<td>7,450</td>
<td>10,810</td>
<td>13,480</td>
<td>8,970</td>
</tr>
<tr>
<td></td>
<td>Medium Systems (8 total)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Situk</strong></td>
<td>(2)</td>
<td>1,490</td>
<td>1,120</td>
<td>810</td>
<td>510</td>
</tr>
<tr>
<td><strong>Behm Canal Systems</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Unuk</strong></td>
<td>(1)</td>
<td>800</td>
<td>1,050</td>
<td>730</td>
<td>1,350</td>
</tr>
<tr>
<td><strong>Chickamin</strong></td>
<td>(1)</td>
<td>220</td>
<td>260</td>
<td>260</td>
<td>340</td>
</tr>
<tr>
<td><strong>Blossum</strong></td>
<td>(1)</td>
<td>100</td>
<td>90</td>
<td>160</td>
<td>340</td>
</tr>
<tr>
<td><strong>Keta</strong></td>
<td>(1)</td>
<td>250</td>
<td>190</td>
<td>330</td>
<td>750</td>
</tr>
<tr>
<td><strong>Behm Canal Subtotals</strong></td>
<td></td>
<td>1,370</td>
<td>1,590</td>
<td>1,560</td>
<td>2,780</td>
</tr>
<tr>
<td><strong>Medium Systems Subtotals</strong></td>
<td></td>
<td>2,860</td>
<td>2,710</td>
<td>2,310</td>
<td>3,290</td>
</tr>
<tr>
<td></td>
<td>Minor Systems (22 total)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>King Salmon River</strong></td>
<td>(1)</td>
<td>80</td>
<td>70</td>
<td>100</td>
<td>260</td>
</tr>
<tr>
<td><strong>All Index Systems Totals</strong></td>
<td></td>
<td>10,040</td>
<td>13,590</td>
<td>15,890</td>
<td>12,520</td>
</tr>
</tbody>
</table>

-Continued-
Table 5. Preliminary estimates of 1982 chinook salmon escapements to selected Southeast Alaska index systems. (ADF&G 9/82) - continued.

1 Type of Survey Codes (1) - Helicopter peak spawning count (primary method).
   (2) - Weir total count.

2 These minimum escapement goals, established in 1980, represent maximum escapements observed since the 1950's (except for the Situk) when Southeast Alaska chinook stocks were seriously depressed. Revision of goals for some systems is expected pending further data analysis.

3 The escapement goal for the Situk River has been revised downward from the previous goal of 5,100 established in 1981 to 2,100 on the basis of escapement-return analysis, maximum observed escapements since the early 1950's and general assessment by management biologists familiar with characteristics of the system.


1982: Alaska Department of Fish and Game management records.
      Canadian Department of Fisheries management records. (Kluckshu weir count.)
POSITION PAPER REGARDING THE PROPOSED
UNITED STATES-CANADA SALMON TREATY

We have recently been presented with a proposal for U.S. and
Canadian salmon management. After a thorough review by both the
Board of Directors and interested membership, the Alaska Trollers
Association has reached the conclusion that this document is
totally unacceptable. The management regime proposed by the
negotiators presents a serious threat to the continued existence
of the troll fishery, Alaska's largest, and to those communities
in Southeastern it supports.

The primary thrust of the agreement as it relates to chinooks
is the recognition of a conservation problem in the fisheries of
Georgia and Johnstone Straits, Central and Northern British
Columbia, and Southeast Alaska. The agreement states that these
stocks cannot maintain present rates of exploitation and that
joint actions should be taken to develop and implement a rebuilding
program.

ATA recognizes Canada's self inflicted problem of overexploi-
tation with resultant depressed spawning stocks. We must however,
point out that Alaskan stocks have been responding well to what
has been a unilateral rebuilding program designed by the Alaska
Department of Fish and Game and implemented by our Board of
Fisheries. Alaska's natural runs have seen significant improve-
ment over the past two seasons at current reduced rates of
exploitation. Outside Alaska our program has been used by the
Canadians to merely increase their catch and thus better their
bargaining position. Management measures contemplated by the
proposed treaty give no credit for actions taken by Alaskan
fishermen. In fact, Alaskan fishermen lose ground by the adoption
of base periods that allow Canadians to gain from unrestricted
fishing while Alaskans reduced their catches pursuant to conser-
vation practices.

With respect to the rebuilding of natural stocks, the treaty
contemplates a mutual 25% reduction in catch for 1983 with a
further Alaskan reduction of 16% in 1984. The Canadian reduction
for 1984 would only amount to 10%. These reductions would continue
throughout a 10 year period and allow an Alaskan troll fishery of
201,000 chinook in 1983 and 179,000 in subsequent years.

The inequity of this scheme is twofold. The initial reduction
based on 1978-80 catches ignores the fundamental problem that
Canada has been seriously overfishing chinook resources for the past 10-12 years. The proposal that reductions for 1984 on be based on 1981-82 catches adds to Alaska's loss by penalizing us for our own conservation actions taken during those years. In effect, this treaty institutionalizes Canadian overfishing, allowing Canada to benefit from its reckless disregard of the resource while penalizing Alaska for its conservation measures.

Chinook salmon have been historically harvested by Alaskan fishermen at around the 325,000 fish level for the last 25 years. At this level of exploitation the Alaskan troll fishery has been able to prosper as a mixed stock fishery with insignificant impacts on discreet runs. This "lifestyle" fishery had produced a small but active fleet that has brought stability to the Southeast economy. The history of the Canadian fishery, however, does not reflect the stability that has characterized our fishery over the past quarter century. Canada changed its approach to the chinook fishery about 10 years ago when, with freezer boats and crews of 4-5, its historic catch (in waters sought to be controlled by this agreement) jumped from 730,000 ('61-'70 average) to 1,235,000 ('71-'80 average). While overcapitalizing their newly developed chinook fishery the Canadians increased their catch some 69%. To sustain this new giant, the Canadians have sacrificed their escapement. Present levels are at best 1/3 of what was previously observed. Now, at the bargaining table, the Canadians indicate that we all have to share in rebuilding stocks up and down the coast. ATA's position is that since we, in Alaska, were not responsible for the increased fishing effort that destroyed Canadian runs, we should not be equal partners in rebuilding their stocks. Alaska has its own program which we endorse and will continue to follow. It must be noted that next year's fishing regime, which significantly reduces the Alaskan troll fishery to a level where bankruptcy and economic dislocation will be apparent in the Southeastern economy, allows the Canadian fishery to continue far in excess of historical levels. We feel that the Canadian cut will do little more than slow the rate at which reductions to spawning escapement are occurring. To follow a course of equal reduction with Canada guarantees the virtual termination of a directed chinook fishery in Alaska. This is a position we cannot accept.

Apart from our underlying conceptual non-acceptance of this agreement are several technical deficiencies which should be addressed. First, the treaty provides a significant loophole for the Canadians. While actions are to be taken to reduce the catch in 2/3 of the Canadian fishery, the remaining area will be allowed to continue, and possibly to increase, its already extremely high level of exploitation. This poses two problems. First, the question of whether the fish will behave in the way they are expected to (fish from depleted stocks are supposed to bite only outside of this area). And secondly, because there is no lid to this fishery
(only a statement that effort should be made to see that fish saved elsewhere "accrue principally to spawning escapement"), fish which are caught in the restricted area may end up being reported as having come from the unrestricted area in order to keep both areas open as long as possible.

The second major technical problem is that there is no evidence to support the belief that Canada will be able to provide the in-season management which will be required of them under this treaty. Over the past years Canadian catch totals have not been available for 3 to 6 months after the close of the summer fishery. Now we are expected to believe that they will be able to manage in-season for a fixed quota. The Alaskan troll fishery is managed with current data available on a weekly basis. The Canadians, even now, do not have a final catch figure for the 1982 season. We believe our reduction would surely occur while Canadians reductions are questionable.

Additionally, the treaty has generated a great deal of discussion concerning a federal hatchery at Little Port Walter. This facility may alleviate problems with natural stocks in Canada, as well as those in Alaska. Funding for this project, however, must follow the normal budgetary process and its approval is far from guaranteed. ATA believes this sort of project should have been initiated long ago to mitigate for loss of natural habitat. Its inception should not be tied to a treaty.

In summary, the final treaty provisions relating to chinook management create a situation that jeopardizes the continued existence of Alaska's troll fishery. This same agreement acknowledges and sanctions Canada's 10 year program of overfishing which had devastated natural chinook runs coast wide. The Alaska Trollers Association cannot accept a treaty that raises these inequities to the level of international law. We urge you to help stop its ratification in the U.S. Senate.

Attachments
(1) Proposed catches under treaty '83-'84
(2) Canada map
(3) ATA 1983 Management Options
<table>
<thead>
<tr>
<th>Period</th>
<th>TOTAL COMMERCIAL + SPORT</th>
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<th>COMMERCIAL TROLL &amp; NET</th>
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<td>AVERAGE HARVEST</td>
<td>25 PERCENT</td>
<td>REDUCTION</td>
<td>DIFFERENCE</td>
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<td>89</td>
<td>268.5</td>
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<td>1981-82</td>
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<table>
<thead>
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<th>BRITISH COLUMBIA FISHERIES*</th>
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<tbody>
<tr>
<td>Period</td>
</tr>
<tr>
<td>1978-81</td>
</tr>
<tr>
<td>1981-82</td>
</tr>
</tbody>
</table>

* fisheries include: Northern troll area 1-11
Northern net " 1-10
Georgia strait troll 12-19, 28, 29
Southern nets (11-19, 28, 29)
coastal sport.
NOTE:
CHINOOK CATCHES SEAMARK OF
DARK LINE ARE NOT INCLUDED
IN PROPOSED CANADIAN REDUCTIONS

Figure . British Columbia Commercial Fishing Statistical Areas
OPTIONS FOR MANAGEMENT OF THE 1983
CHINOOK SALMON FISHERY IN
SOUTHEAST ALASKA

The Alaska Trollers Association has prepared the following alternatives for chinook salmon management in the commercial fishery off Southeast Alaska. The alternatives recognize the necessity for rebuilding native Alaskan chinook stocks. Option Number 1 contemplates an expanded season yet still addresses conservation concerns. Option Number 2 incorporates a reduced harvest guided by proposed by the Alaska Department of Fish and Game and originally implemented in the 1981 season. This reduction allows for a 15 year rebuilding program that is already in progress.

Alaska's unilateral conservation program has shown excellent returns since 1981. Either policy option below will continue this successful rehabilitation program while limiting interception of the troubled Canadian and Columbia River stocks. This in turn allows Canada, Washington, and Oregon to take their own conservation actions to rehabilitate their devastated natural runs. In the meantime, Alaska's largest commercial fleet will still be able to survive economically and most importantly, Alaska will be permitted to manage biologically rather than politically.

Option Number 1:

The Department of Fish and Game will manage the Southeast Alaskan chinook salmon fishery with a summer season occurring from April 15 through September 20. During this time period the following closures will be imposed to address conservation requirements in Alaska and regions outside the state: 1) April 15 to May 15 the season will remain closed to benefit Alaskan stocks, 2) The season will close 7 days in June to benefit stocks originating in the lower 48, 3) The season will close for 10 days in August to benefit stocks destined for Canadian streams.

Option Number 2:

The Department of Fish and Game will design a season using historical catch data that results in a commercial catch of approximately 285,000 to 288,000 chinook salmon. After the designed season commences, the fishery will proceed, without interruption, through its termination. In this manner fishermen will benefit with higher catches if increased stock availability is observed or correspondingly have lower catches if the run exhibits lower than average availability; thus, providing a built-in
mechanism for protection of the run.

This option would probably require a closure from April 15 to May 15 to benefit Alaskan systems, a closure in June to benefit systems in the lower 48, and a closure in August to benefit Canadian systems.

The catch of 285,000-288,000 chinooks represents a reduction from the 1971-1980 ten year average catch of 325,000. This reduction is pursuant to a management scheduled plan to rebuild Southeast Alaskan stocks without increasing efforts on stocks with origins outside the state. The plan, designed by the Alaska Department of Fish and Game, is already 2 years into its 15 year term with observed progress well ahead of schedule.

We believe both management options address sound conservation practices in the State of Alaska without major effort shifts to stocks originating outside the state. They allow areas outside Alaska experiencing depressed stock conditions to implement their own programs to rebuild runs as they deem appropriate.
TREATY BETWEEN THE GOVERNMENT OF CANADA
AND THE GOVERNMENT OF THE UNITED STATES OF AMERICA
CONCERNING PACIFIC SALMON

The Government of the United States of America and the Government of Canada,

Considering the interests of both Parties in the conservation and rational management of Pacific salmon stocks and in the promotion of optimum production of such stocks;

Recognizing that States in whose waters salmon stocks originate have the primary interest in and responsibility for such stocks;

Recognizing that salmon originating in the waters of each Party are intercepted in substantial numbers by the nationals and vessels of the other Party, and that the management of stocks subject to interception is a matter of common concern;

Desiring to cooperate in the management, research and enhancement of Pacific salmon stocks;

Have agreed as follows:
Article I

DEFINITIONS

As used in this Treaty,

1. "enhancement" means man-made improvements to natural habitats or application of artificial fish culture technology that will lead to the increase of salmon stocks;

2. "fishery" means the activity of harvesting or seeking to harvest salmon;

3. "fishery regimes" means the fishing limitations and arrangements adopted by the Parties pursuant to Article IV, paragraph 6;

4. "interception" means the harvesting of salmon originating in the waters of one Party by a fishery of the other Party;

5. "overfishing" means fishing patterns which result in escapements significantly less than those required to produce maximum sustainable yields;
6. "stocks subject to this Treaty" means Pacific salmon stocks which originate in the waters of one Party and
   (a) are subject to interception by the other Party;
   
   (b) affect the management of stocks of the other Party;
   
   or
   
   (c) affect biologically the stocks of the other Party;
   
   and

7. "transboundary river" means a river that rises in Canada and flows to the sea through the United States.
Article II

COMMISSION AND PANELS

1. The Parties shall establish a Pacific Salmon Commission, hereinafter referred to as "the Commission", to be composed of two national sections, a Canadian Section and a United States Section.

2. The Commission shall have legal personality and shall enjoy in its relations with other organizations and in the territories of the Parties such legal capacity as may be necessary to perform its functions and achieve its ends. The immunities and privileges which the Commission and its officers shall enjoy in the territory of a Party shall be subject to agreement between the Commission and the Party concerned.

3. The Commission shall consist of not more than eight Commissioners, of whom not more than four shall be appointed by each Party. Each Party may also appoint not more than four alternate Commissioners, to serve in the absence of any Commissioner appointed by that Party.
4. The Commissioners and alternate Commissioners shall hold office at the pleasure of the Party by which they were appointed.

5. At the first meeting of the Commission one section shall select from its members a Commission Chairman, and the other section shall select from its members a Vice-Chairman, each of whom shall hold office for the calendar year in which the Treaty enters into force and for such portion of the subsequent year as the Commission may determine. Thereafter the Chairman and Vice-Chairman shall hold office for a term of twelve months and shall be selected by their respective sections. The section which selects the first Chairman shall be determined by lot and thereafter the offices of Chairman and Vice-Chairman shall alternate between the sections. If either office becomes vacant before the end of a term, the appropriate section shall select a replacement for the remainder of the term.

6. Each section shall have one vote in the Commission. A decision or recommendation of the Commission shall be made only with the approval of both sections.

7. Subject to the approval of the Parties, the Commission shall make such by-laws and procedural rules,
for itself, for the Panels established pursuant to paragraph 18, and for the committees established pursuant to paragraph 17, as may be necessary for the exercise of their functions and the conduct of their meetings.

8. The Commission may make recommendations to or advise the Parties on any matters relating to the Treaty.

9. Unless otherwise agreed by the Parties, the seat of the Commission shall be at New Westminster, British Columbia.

10. The Commission shall hold an annual meeting and may hold other meetings at the request of the Chairman or of either Party. The Chairman shall notify the Commissioners of the time and place of meetings. Meetings may be held at the seat of the Commission or at such other place as may be determined in accordance with the by-laws and procedural rules of the Commission.

11. Each Party shall pay the expenses of its own section.

12. The Commission shall prepare an annual budget of joint expenses and submit it to the Parties for approval.
The Parties shall bear the costs of the budget in equal shares unless otherwise agreed, and shall pay their shares as the by-laws may specify after the budget has been approved by both Parties.

13. The Commission shall authorize the disbursement of funds contributed by the Parties pursuant to paragraph 12, and may enter into contracts and acquire property necessary for the performance of its functions.

14. The Commission shall submit to the Parties an annual report on its activities and an annual financial statement.

15. The Commission shall appoint an Executive Secretary, who, subject to the supervision of the Commission, shall be responsible for the general administration of the Commission.

16. The Commission may engage staff or authorize the Executive Secretary to do so. The Executive Secretary shall have full authority over the staff subject to the direction of the Commission. If the office of the Executive Secretary is vacant, the Commission shall determine who shall exercise that authority.
17. The Commission shall establish a Committee on Research and Statistics and a Committee on Finance and Administration. The Commission may eliminate or establish committees as appropriate.

18. The Commission shall establish Panels as specified in Annex I. The Commission may recommend to the Parties the elimination or establishment of Panels as appropriate.

19. The Panels shall provide information and make recommendations to the Commission with respect to the functions of the Commission and carry out such other functions as the Treaty may specify or as the Commission may direct.

20. In cases where fisheries intercept stocks for which more than one Panel is responsible, the appropriate Panels shall meet jointly to carry out the functions specified in paragraph 19. If the Panels cannot agree, each may make an independent report to the Commission.

21. Each Panel shall consist of not more than 6 members from each Party. Each Party may designate alternate Panel members to serve in the absence of any Panel member appointed by that Party.

22. Except as otherwise provided in the Treaty, paragraphs 4, 5, 6, 10 and 11 apply, mutatis mutandis, to each Panel.
Article III

PRINCIPLES

1. With respect to stocks subject to this Treaty, each party shall conduct its fisheries and its salmon enhancement programs so as to:

   (a) prevent overfishing and provide for optimum production; and

   (b) provide for each Party to receive benefits equivalent to the production of salmon originating in its waters.

2. In fulfilling their obligations pursuant to paragraph 1, the Parties shall cooperate in management, research and enhancement.

3. In fulfilling their obligations pursuant to paragraph 1, the Parties shall take into account:

   (a) the desirability in most cases of reducing interceptions;
(b) the desirability in most cases of avoiding undue disruption of existing fisheries; and

(c) annual variations in abundance of the stocks.
Article IV

CONDUCT OF FISHERIES

In order to facilitate the implementation of Articles III, VI and VII:

1. Each Party shall submit an annual report on its fishing activities in the previous year to the other Party and to the Commission. The Commission shall forward the reports to the appropriate Panels.

2. The Panels shall consider the reports submitted pursuant to paragraph 1 and shall provide their views to the Commission. The Commission shall review the reports of the Panels and shall provide its views to the Parties.

3. Each year the State of origin shall submit preliminary information for the ensuing year to the other Party and to the Commission, including:

   (a) the estimated size of the run;

   (b) the interrelationship between stocks;
(c) the spawning escapement required;

(d) the estimated total allowable catch;

(e) its intentions concerning management of fisheries in its own waters; and

(f) its domestic allocation objectives whenever appropriate.

The Commission shall forward this information to the appropriate Panels.

4. The Panels shall examine the information submitted pursuant to paragraph 3 and report their views to the Commission with respect to fishery regimes for the following year.

5. The Commission shall review the reports of the Panels and shall recommend fishery regimes to the Parties.

6. On adoption by both Parties, the fishery regimes referred to in paragraph 5 shall be attached to this Treaty as Annex IV.
7. Each Party shall establish and enforce regulations to implement the fishery regimes adopted by the Parties. Each Party, in a manner to be determined by the Commission, shall notify the Commission and the other Party of these regulations and shall promptly communicate to the Commission and to the other Party any in-season modifications.
Article V

SALMON ENHANCEMENT PROGRAMS

1. Salmon enhancement programs that may be established by the Parties shall be conducted subject to the provisions of Article III.

2. Each year each Party shall provide to the other Party and to the Commission information pertaining, inter alia, to:

   (a) operations of and plans for existing projects;

   (b) plans for new projects; and

   (c) its views concerning the other Party's salmon enhancement projects.

The Commission shall forward this information to the appropriate Panels.

3. The Panels shall examine the information and report their views to the Commission in light of the obligations set forth in Article III.
4. The Commission shall review the reports of the Panels and may make recommendations to the Parties.
Article VI

FRASER RIVER

1. This Article applies to Fraser River sockeye and pink salmon harvested in the area specified in Annex II.

2. Notwithstanding the provisions of Article IV, paragraph 7, on adoption by the Parties of the fishery regime for the stocks covered by this Article, the Fraser River Panel shall propose regulations to the Commission for the harvest of salmon referred to in paragraph 1.

3. The Fraser River Panel shall review with other appropriate Panels the fishery regimes and the information provided pursuant to Article IV, paragraph 3, with respect to salmon other than Fraser River sockeye and pink salmon before proposing regulations pursuant to paragraph 2. The Fraser River Panel and the Commission shall ensure that regulatory proposals and recommendations, to the extent practicable, meet the requirements of the Parties with respect to the management of stocks other than Fraser River sockeye and pink salmon.
4. In implementing this Article, the Fraser River Panel and the Commission shall take into account and seek consistency with existing aboriginal rights, rights established in existing Indian treaties and domestic allocation objectives.

5. On the basis of the proposals made by the Panel, the Commission shall recommend regulations to the Parties for approval. The Parties shall review the recommendations for, inter alia, consistency with domestic legal obligations. The regulations shall become effective upon approval by the Party in whose waters such regulations are applicable.

6. During the fishing season, the Fraser River Panel may make orders for the adjustment of fishing times and areas stipulated in the annual regulations in response to variations in anticipated conditions. The Parties shall review the orders for consistency with domestic legal obligations. The Parties shall give effect to such orders in accordance with their respective laws and procedures.

7. The Parties shall not regulate their fisheries in areas outside the area specified in Annex II in a manner that would prevent achievement of the objectives of the fishery regime for the salmon referred to in paragraph 1.
Article VII

TRANSBOUNDARY RIVERS

1. This Article applies to salmon originating in transboundary rivers.

2. Notwithstanding Article IV, paragraph 3(c), whenever salmon originate in the Canadian portion of a transboundary river, the appropriate Panel shall provide its views to the Commission on the spawning escapement to be provided for all the salmon stocks of the river if either section of the Panel so requests.

3. On the basis of the views provided by the Panel pursuant to paragraph 2, the Commission shall recommend spawning escapements to the Parties.

4. Whenever salmon originate in the Canadian portions of transboundary rivers, or would originate there as a result of enhancement projects, salmon enhancement projects on the transboundary rivers shall be undertaken co-operatively, provided, however, that either Party, with the consent of the Commission, may separately undertake salmon enhancement projects on the transboundary rivers.
Article VIII

YUKON RIVER

1. Notwithstanding Articles III, paragraph 1(b), and VII, arrangements for consultation, recommendation of escape- ment targets and approval of enhancement activities on the Yukon River require further development to take into account the unique characteristics of that River.

2. The Parties consider it important to ensure effective conservation of stocks originating in the Yukon River and to explore the development of co-operative research and identification of potential enhancement opportunities.

3. The Parties shall initiate in 1983, and conclude, as soon as possible, negotiations to, inter alia:

   (a) account for United States harvests of salmon originating in the Canadian section of the River;

   (b) develop joint management procedures taking into account United States management programs for stocks originating in the United States section of the River;
(c) consider co-operative research programs, enhancement opportunities, and exchanges of biological data; and

(d) develop an organizational structure to deal with Yukon River issues.

4. Prior to the entry into force of this Treaty, the Parties shall agree upon:

(a) the range within which the accounting of United States interceptions referred to in paragraph 3(a) shall be established;

(b) arrangements for exchange of available data on the stocks; and

(c) proposals for research.
Article IX

STEELHEAD

In fulfilling their functions, the Panels and Commission shall take into account the conservation of steelhead.
Article X

RESEARCH

1. The Parties shall conduct research to investigate the migratory and exploitation patterns, the productivity and the status of stocks of common concern and the extent of interceptions.

2. The Commission may make recommendations to the Parties regarding the conduct and coordination of research.

3. Subject to normal requirements, each Party shall allow nationals, equipment and vessels of the other Party conducting research approved by the Commission to have access to its waters for the purpose of carrying out such research.
Article XI

DOMESTIC ALLOCATION

1. This Treaty shall not be interpreted or applied so as to affect or modify existing aboriginal rights or rights established in existing Indian treaties and other existing federal laws.

2. This Article shall not be interpreted or applied so as to affect or modify any rights or obligations of the parties pursuant to other Articles and Annexes to this Treaty.
Article XII

TECHNICAL DISPUTE SETTLEMENT

1. Either Party may submit to the Chairman of the Commission, for referral to a Technical Dispute Settlement Board, any dispute concerning estimates of the extent of salmon interceptions and data related to questions of overfishing. The Commission may submit other technical matters to the Chairman for referral to a Board. The Board shall be established and shall function in accordance with the provisions of Annex III. The Board shall make findings of fact on the disputes and the other technical matters referred to it.

2. The findings of the Board shall be final and without appeal, except as provided in paragraph 3, and shall be accepted by the Commission as the best scientific information available.

3. Either Party may, by application in writing to the Chairman of the Commission, request reconsideration of a finding of a Board, provided that such request is based on information not previously considered by the Board and not previously known to or reasonably
discoverable by the Party requesting such reconsideration. The Chairman shall, if possible, refer the request to the Board which made the finding. Otherwise, the Chairman shall refer the request to a new Board constituted in accordance with the provisions of Annex III.
Article XIII

ANNEXES

1. All references to this Treaty shall be understood to include the Annexes.

2. The Commission, whenever appropriate, shall review the Annexes and may make recommendations to the Parties for their amendment.

3. The Annexes may be amended by the Parties through an Exchange of Notes between the Government of Canada and the President of the United States of America.

4. The Commission shall publish the texts of the Annexes whenever amended.
Article XIV

IMPLEMENTATION

Each Party shall:

(a) enact and enforce such legislation as may be necessary to implement this Treaty;

(b) require reports from its nationals and vessels of catch, effort and related data for all stocks subject to this Treaty and make such data available to the Commission; and

(c) exchange fisheries statistics and any other relevant information on a current and regular basis in order to facilitate the implementation of this Treaty.
Article XV

ENTRY INTO FORCE AND TERMINATION
OF TREATY

1. This Treaty is subject to ratification. It shall enter into force upon the exchange of instruments of ratification at ____________.

2. At the end of the third year after entry into force and at any time thereafter, either Party may give notice of its intention to terminate this Treaty. The Treaty shall terminate one year after notification.

3. Upon the entry into force of this Treaty, the Convention between Canada and the United States of America for the Protection, Preservation and Extension of the Sockeye Salmon Fishery in the Fraser River System, as amended, signed May 26, 1930, shall be terminated. Following the termination of the Convention, the transfer of responsibilities from the International Pacific Salmon Fisheries Commission to the Commission, the Fraser River Panel and the Government of Canada shall be as agreed by the Parties.
Annex I

PANELS

The following panels shall be established pursuant to Article II, paragraph 18:

(a) a Southern Panel for salmon originating in rivers with mouths situate south of Cape Caution, except as specified in sub-paragraph (b);

(b) a Fraser River Panel for Fraser River sockeye and pink salmon harvested in the area specified in Annex II; and

(c) a Northern Panel for salmon originating in rivers with mouths situate between Cape Caution and Cape Suckling.
Annex II

FRASER PANEL AREA

The area comprises the waters described in Article I of the Convention between Canada the the United States of America for the Protection, Preservation and Extension of the Sockeye Salmon Fishery in the Fraser River System, as amended, signed May 26, 1930.
Annex III

TECHNICAL DISPUTE SETTLEMENT BOARD

1. Each Technical Dispute Settlement Board shall be composed of three members. Within 10 days of receiving a request under Article XII to refer a matter to a Board, the Chairman of the Commission shall notify the Parties. Within 20 days of this notification, each party shall designate one member and the Parties shall jointly designate a third member, who shall be Chairman of the Board.

2. The Board shall determine its rules of procedure, but the Commission or the Parties may specify the date by which the Board shall report its findings. The Board shall provide an opportunity for each Party to present evidence and arguments, both in writing and, if requested by either Party, in oral hearing. The Board shall report its findings to the Commission, along with a statement of its reasons.

3. Decisions of a Board, including procedural rulings and findings of fact, shall be made by majority vote and shall be final and without appeal except as provided in Article XII, paragraph 3.
4. Remuneration of the members and their expense allowances shall be determined on such basis as the Parties may agree at the time the Board is constituted. The Commission shall provide facilities for the proceedings.
Annex IV

Chapter 1  TRANSBOUNDARY RIVERS

1. Notwithstanding Article III, paragraph 1(b), 37.5 percent of the harvest by the United States of each species of salmon originating in Canadian sections of transboundary rivers, except those with mouths situate in the Bering Sea and Arctic Ocean, shall be deemed to be of United States origin.

2. As it is not yet possible to determine with accuracy the extent of exploitation by fisheries of the two Parties and the spawning escapement requirements of salmon bound for Canadian sections of the transboundary rivers in the southeastern Alaska area, the Parties during 1983 shall form a Technical Working Group to:

(a) assemble available information on the migratory patterns (including consideration of recent stock separation studies based on examination of scales), extent of exploitation and spawning escapement requirements of the stocks; and

(b) identify potential increases in stocks that can be achieved through enhancement.
3. The following arrangements shall apply to the United States and Canadian fisheries which harvest salmon stocks bound for the Stikine River.

(a) **Sockeye Salmon**

(i) In 1983 the run of sockeye is anticipated to be 70,000 pieces. Given this expected run size, subject to agreed adjustments in the event that analysis of available data (which shall be made available for joint review) indicates that the run size differs significantly from that projected, and based on the data base available to each side:

(A) the United States shall manage its fisheries to allow approximately 55,000 sockeye to reach the Canadian section of the River; and

(B) Canada shall manage its food and commercial fisheries to allow a spawning escapement of approximately 40,000 to 47,000 sockeye.
(ii) In 1984 the run of sockeye is anticipated to be 40,000 pieces. Given this expected run size, subject to agreed adjustments in the event that analysis of available data (which shall be made available for joint review) indicates that the run size differs significantly from that projected, and based on the data base available to each side:

(A) the United States shall manage its fisheries to allow approximately 33,500 sockeye to reach the Canadian section of the River; and

(B) Canada shall manage its food and commercial fisheries to allow a spawning escapement of approximately 28,000 sockeye.

(iii) In 1983 and 1984, taking into account the low anticipated run sizes and difficulties in achieving precise spawning escapements, the foregoing provisions may result in the Canadian share of the Stikine River sockeye harvest exceeding 35 percent of the Total Allowable Catch. It is the United States view that the allowable catch should be divided between the countries so that the United States would receive 65 percent and Canada 35 percent.
(b) **Coho Salmon**

Given the prevailing rates of harvest of Stikine River coho salmon in United States troll fisheries and in net fisheries targeting on other species, it may not be possible in 1983 and 1984 for the United States to provide an upriver escapement sufficient to meet spawning requirements and a Canadian in-river harvest of 35 percent of the total expected catch. It is also expected that the 1983 and 1984 runs will be poor. In light of these circumstances the Parties shall monitor the runs in and on the approaches to the Stikine River throughout the season, with a view to providing Canada with an in-river harvest as close as possible to a 35 percent share of the total catch while, at the same time, meeting spawning requirements.

(c) **Other Species**

Canadian catches and United States terminal catches of chinook, pink and chum salmon bound for the Canadian section of the River will be taken as an incidental harvest in the directed fishery for sockeye.
4. (a) In 1983, Canada shall limit its in-river fishery so that catches of sockeye and pink salmon originating in the Taku River do not exceed 3,000 and 5,000 pieces, respectively.

(b) The Parties shall meet during 1983 to re-evaluate the fishery regime for the fisheries on Taku bound salmon for 1984, taking into account the report of the working group described in paragraph 2 of this Chapter. At the same time the Parties will also give consideration to improving procedures for co-operative management of the fisheries on transboundary river stocks in the southeast Alaska area, and to the question of future sharing of allowable harvests, taking into account potential enhancement opportunities.

5. Chinook and early sockeye salmon runs originating in the Alsek River are depressed and require special protection in 1983 and 1984. Fisheries for other species originating in the Alsek River shall be conducted in the same manner as in recent years.

6. Considering that stocks of salmon originating in Canadian sections of the Columbia River form only a
small proportion of the total populations of Columbia River salmon, the arrangements for consultation and recommendation of escapement targets and approval of enhancement activities set out in Article VII are not appropriate to the Columbia system as a whole. Nevertheless, the Parties consider it important to ensure effective conservation of upriver stocks which extend into Canada and to explore the development of mutually beneficial enhancement activities. Therefore, notwithstanding Article VII, paragraphs 2, 3 and 4, during 1983 the Parties shall consult with a view to developing, for the transboundary sections of the Columbia, more practicable arrangements for consultation and setting escapement targets than those specified in Article VII, paragraphs 2 and 3. Such arrangements should seek to:

(a) ensure effective conservation of the stocks;

(b) facilitate future enhancement of the stocks on an agreed basis; and

(c) avoid interference with United States management programs on the extensive salmon stocks existing in the non-transboundary tributaries and the main stem of the Columbia River.
Chapter 2  Northern British Columbia-Southeastern Alaska

Boundary Area

1. Considering that the chum salmon stocks originating in streams in Portland Canal and harvested in the mixed stock and target fisheries in the Dixon Entrance, Portland Inlet and Portland Canal are depressed and require protection:

(a) in 1983 and 1984 neither Party shall allow target fisheries on these stocks in Portland Canal unless it is determined that a harvestable surplus exists; and

(b) in 1983, assessments shall be made to identify possible measures (including enhancement and regulatory programs) to restore the stocks. On the basis of such assessments, proposals shall be prepared for a long term plan to bring about such restoration.

2. (a) With respect to sockeye salmon, the United States shall:

(i) limit its purse seine fishery in the Noyes Island area (District 4) in a manner that will result in an annual average harvest of 160,000 sockeye salmon during the period 1983-86; and
(ii) limit its drift gill net fishery at Tree Point (Districts 1A and 1B) in a manner that will result in an annual average harvest of 130,000 sockeye salmon during the period 1983-86.

(b) These harvest levels shall be reviewed during the negotiation of fishery regimes for 1985 and 1986.

3. Canada shall limit its fisheries for pink salmon in the sub-areas of Areas 3 and 5 that were described in the interim arrangements for 1981 and 1982 and in the area 1 troll fishery in a manner which will result in a total catch in the 1983 and 1984 pink salmon cycles of 2 million fish. Of this total, in 1983, no more than a total 650,000 pink salmon shall be taken, and of that, the area 1 troll fishery shall take no more than 125,000 pink salmon. In 1984, no more than a total 1,350,000 pink salmon shall be taken, and of that, the area 1 troll fishery shall take no more than 275,000 pink salmon. These harvest levels shall be reviewed during the negotiation of fishery regimes for 1985 and 1986.
4. The Parties shall exchange preliminary management plans for the fisheries described above at the earliest possible date. Such exchange shall include determination of the intended pattern of the Canadian troll fishery in area 1 which will reflect the understanding of the interim arrangement for 1982 pending the development of new regulatory lines in area 1.
Annex IV

Chapter 3

CONSERVATION MEASURES FOR CHINOOK SALMON

For the past several years, escapements for many naturally spawning chinook salmon stocks originating from the Columbia River northward to southeastern Alaska have declined and are now at levels substantially below production goals. These stocks cannot sustain recent rates of exploitation in the following fisheries: Georgia and Johnstone Straits, central and northern British Columbia, and southeastern Alaska.

The Parties agree to undertake the following actions to stabilize and rebuild depressed stocks of naturally spawning chinook salmon.

1. In 1983, the Parties will jointly develop and initiate a coordinated salmon management program designed to meet the following objectives:

   (a) at least prevent further declines in spawning escapements from recent levels for depressed chinook salmon stocks; and
(b) restore the production of naturally spawning chinook salmon stocks by achieving escapement goals within a ten year period (approximately 2 cycles, beginning in 1983) which will provide the maximum sustainable harvest.

2. The chinook salmon management program will include at least:

(a) identification of indicator stocks representative of naturally spawning populations of chinook salmon;

(b) procedures to obtain reliable estimates of spawning escapements;

(c) establishment of criteria to evaluate the effectiveness of conservation actions;

(d) exchange of information necessary to analyze the effectiveness of alternative fishery regulatory measures to satisfy conservation objectives;

(e) recommendations for research required to implement this program effectively; and
(f) development of necessary measures for monitoring and enforcing compliance with the terms of this Treaty.

3. In 1983, the Parties shall enact regulations designed to ensure that:

(a) the combined catch by all southeastern Alaskan salmon fisheries does not exceed 263,000 chinook, and of that, the catch taken by the commercial salmon fisheries does not exceed 243,000 chinook; and

(b) the combined catch by all Canadian salmon fisheries in Georgia and Johnstone Straits and central and northern British Columbia does not exceed 868,000 chinook.

4. In 1983 and 1984, the Parties shall implement management measures for fisheries in other areas as required to ensure that chinook salmon from depressed stocks that are conserved by the imposition of harvest ceilings accrue principally to spawning escapement.
5. Following the 1983 season and prior to the development of fishery regimes for the 1984 season, the Parties shall establish a Technical Committee, representative of the Northern and Southern Panels, to evaluate the effectiveness of management actions taken in 1983 with respect to:

(a) consistency of actual catches with corresponding harvest ceilings;

(b) the effect of the management measures described in paragraph 3; and

(c) the degree to which the decline in spawning escapement levels has been affected.

6. The Technical Committee shall also re-examine, and if appropriate, propose changes to the extent of reductions in exploitation required to meet the objective specified in sub-paragraph 1(a), and contained in the Report entitled Joint United States/Canada Technical Response to the Canadian Proposal for Chinook Conservation, dated November 30, 1982 (appended to this Annex). On the basis of the findings of the Technical Committee, the Parties shall adopt measures in 1984 which will result
in reductions in catches to achieve the objective specified in paragraph 1(a). According to present agreed scientific analysis of the status of the stocks of concern contained in the Report, this would require a reduction in catches by the affected fisheries of approximately 25 percent from the 1981-82 harvest of chinook levels (paragraph 2 of the Report).

7. The Parties agree that enhancement efforts designed to increase artificial production of chinook salmon would be beneficial to the rebuilding program. Maintenance of harvest ceilings, combined with increased availability of enhancement fish, provides the opportunity to accelerate the stock rebuilding process by significantly reducing exploitation rates of naturally spawning stocks. The United States is initiating a program under section 4(h) of the Northwest Power Act as a national commitment to rehabilitation of Columbia River salmon stocks and is developing additional cooperative enhancement plans for southeastern Alaska. Efforts to increase chinook stocks are also under development by the States of Idaho, Oregon, Washington and Alaska, and federal agencies of the United States. Production from Canada's Salmonid Enhancement Program
will continue to increase its contribution to the available harvest of chinook salmon in the affected fisheries.
Chapter 4

FRASER RIVER SOCKEYE AND PINK SALMON

1. In order to increase the effectiveness of the management of fisheries in the Fraser Panel Area and in fisheries outside the Area which harvest Fraser River sockeye and pink salmon and to permit effective implementation of Article III, the negotiations for the 1985 and 1986 fishery regimes shall include development of:

(a) agreed adjustments in the limits of the Area to simplify domestic management in the two countries; and

(b) formulae for providing the United States with agreed harvests of Fraser River sockeye and pink salmon in the Area which take into account:

(i) within the context of Article III, the implications of potential increases in the production of Fraser River sockeye and pink salmon, and of benefits provided to the United States through Canadian management actions in fisheries.
for stocks other than Fraser River sockeye and pink salmon;

(ii) the need to provide flexibility in management of fisheries outside the Area which harvest Fraser River sockeye and pink salmon; and

(iii) the total harvest of Fraser River sockeye and pink salmon wherever they occur.

2. In the interim, in 1983, on the basis of IPSFC projections regarding the abundance of the returning runs (of approximately 6.5 million sockeye and approximately 21.0 million pinks), escapement requirements (including the spawning escapement and estimates of the Native Indian food catch) and normal patterns of fishing outside the Area, it is anticipated that the Total Allowable Catches of sockeye and pink salmon within the Area will be 3.5 million and 10 million, respectively.

3. In 1983, the United States shall be provided 50 percent of the Total Allowable Catches of each species within the Area less 150,000 sockeye and 300,000 pinks.
4. In 1984, based on an expected run of 3.75 million sockeye and an Area Total Allowable Catch of approximately 1.75 million sockeye, the United States shall be provided with 50 percent of the Total Allowable Catch within the Area of sockeye less 50,000 fish.

5. The IPSFC or the Commission shall develop regulatory programs in the Area to give effect to the provisions of this Annex.
Annex IV

Chapter 5

SOUTHERN BRITISH COLUMBIA - WASHINGTON COHO AND CHUM FISHERIES

1. Anticipated returns of some natural coho and chum salmon stocks originating in Johnstone Strait, the Strait of Georgia and the Fraser River in 1983 and 1984 are expected to be weak and therefore not likely to have a harvestable surplus. Some enhanced stocks of coho and chum originating in the above areas are anticipated to have harvestable surpluses and locally directed fisheries on these enhanced stocks are expected.

2. The Parties shall meet and develop agreed fishery regimes by April 30, 1983 for the 1983 and 1984 fishing season in response to the conservation status of the resources.

3. If at a later date it is determined that harvestable surpluses of Canadian or United States coho and chum salmon exist the Parties will consult to identify and agree on fishing opportunities.
Annex IV

Chapter 6

GENERAL OBLIGATION

With respect to intercepting fisheries not dealt with elsewhere in this Annex, the Parties shall not permit interceptions to increase above the levels of recent years, nor initiate new intercepting fisheries, except as may be agreed.
Exchange of Notes

I have the honor to refer to the discussions between representatives of our two Governments and to the Treaty between the Government of the United States of America and the Government of Canada concerning Pacific salmon (the Treaty) and to confirm on behalf of the United States Government the understanding set out below that has been reached between our two Governments concerning the implementation of Article XVII, paragraph 3 of the Treaty.

A. Prior to the first anniversary of the date of entry into force of the Treaty:

1. The Fraser River Panel established pursuant to the Treaty shall assume the following responsibilities consistent with the Treaty:

   (a) review and evaluate information provided by the Parties, pursuant to Article IV, paragraph 3, in order to provide recommendations to the Commission on the fishery regime to be included in Annex IV;
(b) on adoption by the Parties of the fishery regime, make proposals to the Commission regarding regulations for the harvest of Fraser River sockeye and pink salmon within the Fraser Panel Area (the Area);

(c) collect in-season information on catches within the Area; review information on escapements within the Area; collate information provided by the Parties pursuant to paragraphs D, 2 and 3 for fisheries outside the Area; conduct test fishing on Fraser River sockeye and pink salmon; and collect data on upriver escapements by observation at Hell's Gate and through the conduct of a hydroacoustic program at Mission Bridge;

(d) make orders for the adjustment of the fisheries pursuant to Article VI, paragraph 6, on the basis of information garnered under subparagraph (c); and

(e) provide the Commission, at the end of each fishing season, with an accounting of the catches, wherever made, of Fraser
River sockeye and pink salmon and with an appraisal of the extent to which the Panel achieved the objectives set by the Parties.

2. Canada shall assume all responsibilities of the International Pacific Salmon Fisheries Commission (IPSFC) except for those responsibilities specified in subparagraph 1.

B. The IPSFC will continue to discharge its responsibilities in the interval between the entry into force of the Treaty and, pursuant to paragraph A, the assumption of responsibilities by Canada and the Fraser River Panel.

C. Prior to the fourth anniversary of the entry into force of the Treaty, the Commission shall review the division of responsibilities set out above.

D. Canada and the United States shall provide to the Commission:

1. the information required by Article IV, paragraph 3;
2. information on in-season catches and estimated catches of Fraser River sockeye and pink salmon by time, area, species, and gear type;

3. post-season statistical information regarding Fraser River sockeye and pink salmon catches by area, gear type, species and time;

4. data on spawning escapements for all sockeye and pink stocks which migrate through the Area; and

5. information on any problems identified in achieving national goals resulting from in-season regulation of the Area fisheries.

E. The following administrative arrangements shall apply to the transfers of staff from IPSFC:

1. Appropriate members of the existing Fishery Management Division and of other Divisions of the IPSFC shall be transferred to the Commission so that it shall have the capability to perform the following duties:

   (a) the discharge of the responsibilities of the Commission and of the Fraser River Panel as specified inter alia in paragraph A 1;

   (b) interpretation of statistical and biological data and other information referred to in paragraph D;
(c) collection and assembly of such data as may be required by the Commission and its Panels; and

(d) preparation of such publications as may be decided upon by the Commission.

2. The staff shall be under the direction of the Executive Director pursuant to Article II, paragraph 16.

3. The Operations Division shall be transferred to the Department of Fisheries and Oceans (DFO), Canada, to the extent practicable, and shall continue to carry out upriver work on pink and sockeye salmon in coordination with the staff of the Fraser River Panel. While there will be some duplication of work in the spawning areas during this initial period, it is anticipated that the Operations Division will eventually be integrated into DFO's Fraser River Management and Enhancement Operations to streamline upriver operations and to avoid duplication. The close working
relationship that now exists at the staff level between the IPSFC Fishery Management Division and Operations Division should be maintained between the Fraser River Panel staff and the appropriate DFO responsibility centers.

4. The Environment Conservation Division, Biology Division, and Engineering Division shall be transferred to DFO and integrated as practicable.

5. The transfers of the Fishery Management Division and the Operations Division of the IPSFC referred to in paragraphs 1 and 2 shall occur during the period November to March. The transfer of the Environment Conservation Division, the Biology Division and the Engineering Division referred to in paragraph 3 may occur at any time within the year after the date of entry into force of the Treaty. Officials of the Parties shall consult with each other and with the IPSFC staff to seek agreement on the specific timing of these transfers, taking into account the need for continued sound management of the fishery resource and the administrative and budget cycles of the two Governments.
F. In order to ensure continuity in the methodology of collection of upriver data required for the management of Fraser River sockeye and pink salmon:

1. Pending the entry into force of the Treaty, DFO staff shall participate with IPSFC staff in IPSFC upriver activities.

2. In the first two years following entry into force of the Treaty former IPSFC staff members whose responsibilities included upriver work, and who become employees of DFO, shall participate in the carrying out of Canada's upriver responsibilities, as practicable. With respect to upstream spawning escapement work, the advice of the new Commission's staff shall be sought as appropriate.

3. On request of either Party, opportunities shall be provided for technical experts to observe the data collection operations of the Parties related to the activities of the Fraser River Panel.
G. The Parties shall consult with each other and with the IPSFC staff, with a view, inter alia, to offering employment to IPSFC employees in the new Commission, the Fraser River Panel, or within government agencies of the two Parties on terms and conditions comparable, to the extent practicable, with those they enjoy in IPSFC.

H. The IPSFC library in New Westminster, B.C., which contains irreplaceable historical records, shall be transferred to the new Commission and shall be readily accessible to the new Fraser River Panel, the Commission, and others whose professional needs require use of these library facilities.

Other IPSFC assets necessary for the work of the Commission and the Fraser River Panel shall be transferred to the Commission.

The remaining assets shall be transferred to Canada.

I have the honor to propose that if the understanding set out in this Note is acceptable to the Government of Canada, this Note and your reply to that effect, shall constitute an Agreement between the Government of the United States of America and the Government of Canada regarding the implementation of the Treaty and shall enter into force as the date of signature.
At the end of the third year after entry into force and at any time thereafter, either Party may give notice of its intention to terminate this Agreement. The Agreement shall terminate one year after notification.

I avail myself of this opportunity to renew to you, Sir, the assurance of my highest consideration.

Subject to change by mutual agreement on receipt of views provided by IPSFC.
LETTER OF UNDERSTANDING BETWEEN THE NEGOTIATORS REGARDING IMPLEMENTATION OF ARTICLE III 1(b)

In submitting our recommendations to governments, the negotiators hold the view that the principal goals of the treaty are to enable both countries, through better conversation and enhancement, to increase production of salmon and to ensure that the benefits resulting from each country's efforts accrue to that country. In this regard, we believe that research on the migratory movements of stocks subject to interception must be continued for several years. Such research is required not only to determine with more precision the extent of interceptions by both sides, but also to provide an improved basis for conservation and enhancement. The negotiators believe that resultant long term increases in production of salmon will fully justify the short term expenditures on research.

With respect of the obligation to provide each Party with benefits equivalent to the production of salmon originating in its rivers (contained in Article III, paragraph 1(b) of the Draft Treaty), it must be recognized that data on the extent of interceptions in some areas are imprecise and that it is therefore not possible to determine with certainty the total production of salmon from each country's rivers. It must also be recognized that methods of evaluating benefits accruing within each country may differ. For these reasons, it is anticipated that it will be some time before the Commission can develop programs to implement the provisions of Article III, paragraph 1(b) in a complete and comprehensive manner. Nevertheless, in the short term, it is essential that the Commission ensure that the annual fishery regimes and understandings regarding enhancement be developed in an equitable manner.
taking into account the principle outlined in Article III 1(b). In particular, the Commission's decisions should take into account changes in the benefits flowing to each of the Parties through alteration in fishing patterns, conservation actions, or as the result of changes in the abundance of the runs.

In the longer term, if it is determined that one country or the other is deriving substantially greater benefits than those provided from its rivers, it would be expected that within the Commission, the Parties would develop a phased program to eliminate the inequity within a specified time period, taking into account the provisions of Article III paragraph 3. Since correction of imbalances is a national responsibility and may involve differential fishery adjustments or enhancement projects on a regional basis within either country, it would be incumbent on the Party with the advantage to submit appropriate proposals to the Commission for consideration. The plan would be discussed within the Commission and be reflected in the agreed fishery regimes and coordinated enhancement planning in ensuing years.
EXCHANGE OF NOTES

Pending entry into force of the Treaty and the Agreement regarding the implementation of Article XVII, paragraph 3 of the Treaty, the Parties shall seek to implement the Treaty and the Agreement on a provisional basis.
Joint U.S./Canada Technical Response to the Canadian Proposal for Chinook Conservation

Most natural spawning chinook stocks contributing to fisheries in Georgia-Johnstone Strait, North-Central British Columbia and Southeast Alaska cannot be expected to be able to sustain current levels of fisheries exploitation. Canadian and U.S. technical advisors have examined the Canadian proposal to reduce the over-all exploitation rate on these stocks by fifteen (15) percentage points. The advisors agree that:

1. Such a reduction would represent a significant conservation action that would likely halt the decline in spawning escapements and begin rebuilding these stocks. In 1983 the United States and Canada should jointly design a chinook conservation program that would result in rehabilitation of naturally spawning stocks within a defined time period.

2. Implementation of the proposal could involve a wide variety of regulatory measures for individual
fisheries; however, establishment of catch ceilings at levels comparable to a 25% reduction in harvest by troll, net and sport fisheries in the Georgia-Johnstone Strait, North-Central British Columbia and Southeast Alaska areas would be required.

Based on an analysis using average 1981/82 stock sizes, the total harvest by all fisheries operating in these areas would be reduced by approximately 326,000 chinook from recent levels. Appropriate regulatory measures, such as catch ceilings, would be required for other fisheries to ensure that savings resulting from reduced fisheries would accrue principally to spawning escapements.

3. Maintenance of harvest ceilings at these levels with increased enhancement production provides an opportunity to significantly reduce exploitation rates of naturally spawning stocks and thus accelerate the rebuilding process. Eventually, catch ceilings could be increased to permit higher harvests of enhancement fish while maintaining reduced exploitation rates of natural stocks at acceptable levels.
4. Changes in spawning escapement levels should be the principal criteria to evaluate the effectiveness of conservation actions.

5. The status of chinook stocks should be assessed annually through joint action by Canada and the United States.

6. It is not possible at this time to examine stock transfer effects that would result from implementation of these chinook conservation measures.