

CANADA

Fisheries: Pacific Salmon

*Agreements amending annex IV to the treaty of January 28, 1985,
as amended.*

Effected by exchange of notes

Signed at Washington June 4 and 29, 1990;

Entered into force June 29, 1990.

And exchange of notes

Dated at Washington June 13 and August 12, 1991;

Entered into force August 12, 1991.

The Canadian Embassy to the Department of State

Canadian Embassy

Ambassade du Canada

No. 82

The Embassy of Canada presents its compliments to the Department of State of the United States of America and has the honour to refer to the Treaty between Canada and the United States of America concerning Pacific Salmon signed at Ottawa on January 28, 1985,¹ and to the recommendations made by the Pacific Salmon Commission on May 16, 1990, in accordance with Article XIII, paragraphs 2 and 3 of the Treaty.

The Embassy has the honour to propose that Annex IV of the Treaty be amended to read as set forth in the attachment to this note, in accordance with the informal amendment procedure established by Article XIII, paragraph 3 of the Treaty.

If this proposal is acceptable to the Government of the United States of America, the Embassy has the further honour to propose that this note, including its attachment, together with the note in reply from the Department of State, will constitute an Exchange of Notes between the Government of Canada and the Government of the United States of America amending Annex IV of the Treaty, which will become effective on the date of the Department of State's note.

The Canadian Embassy avails itself of this opportunity to renew to the Department of State of the United States of America the assurance of its highest consideration.

Washington, D.C., June 4, 1990

¹ TIAS 11091.

ATTACHMENT 1

Revised Annex IV to the Pacific Salmon Treaty in effect for 1990

*Annex IV**Chapter 1**TRANSBOUNDARY RIVERS*

1. Recognizing the desirability of accurately determining exploitation rates and spawning escapement requirements of salmon originating in the Transboundary Rivers, the Parties shall maintain a Joint Transboundary Technical Committee (Committee) reporting, unless otherwise agreed, to the Northern Panel and to the Commission. The Committee, *inter alia*, shall

- (a) assemble and refine available information on migratory patterns, extent of exploitation and spawning escapement requirements of the stocks;
- (b) examine past and current management regimes and recommend how they may be better suited to achieving preliminary escapement goals;
- (c) identify enhancement opportunities that:
 - (i) assist the devising of harvest management strategies to increase benefits to fishermen with a view to permitting additional salmon to return to Canadian waters;
 - (ii) have an impact on natural Transboundary river salmon production.

2. The Parties shall improve procedures of coordinated or cooperative management of the fisheries on Transboundary River stocks.

3. Recognizing the objectives of each Party to have viable fisheries, the Parties agree that the following arrangements shall apply to the United States and Canadian fisheries harvesting salmon stocks originating in the Canadian portion of

- (a) the Stikine River:
 - (i) Assessment of the annual run of Stikine River sockeye salmon shall be made as follows:
 - a. A pre-season forecast of the Stikine River sockeye run will be made by the Transboundary Technical Commit-

tee prior to March 1 of each year. This forecast may be modified by the Transboundary Technical Committee prior to the opening of the fishing season.

- b. In-season estimates of the Stikine River sockeye run and the Total Allowable Catch (TAC) shall be made under the guidelines of an agreed Stikine Management Plan and using a mathematical forecast model developed by the Transboundary Technical Committee. Both U.S. and Canadian fishing patterns shall be based on current weekly estimates of the TAC. At the beginning of the season and up to an agreed date, the weekly estimates of the TAC shall be determined from the pre-season forecast of the run strength. After that date, the TAC shall be determined from the in-season forecast model.
 - c. Modifications to the Stikine Management Plan and forecast model may be made prior to June 1 of each year by agreement of both Parties. Failure to reach agreement in modifications shall result in use of the model and parameters used in the previous year.
 - d. Estimates of the TAC may be adjusted in-season only by concurrence of both Parties' respective managers. Reasons for such adjustments must be provided to the Transboundary Technical Committee.
- (ii) Harvest sharing of naturally occurring Stikine River sockeye salmon for the period 1988 to 1992, contingent upon activities specified in the February 1988 Understanding between the United States and the Canadian Section of the Pacific Salmon Commission concerning Joint Enhancement of Transboundary River Salmon Stocks (Understanding) shall be as follows:
- a. When the estimated TAC of Stikine River sockeye salmon is zero or less:
 - 1. Canada may conduct its native food fishery but the catch shall not exceed 4,000 fish, there will be no commercial fishing;
 - 2. The United States shall not direct commercial fisheries at Stikine River sockeye salmon in District 108;

3. The United States may fish in the commercial gill net fisheries in the Sumner Strait portion of District 106 so long as the in-season estimate of the contribution of Stikine River sockeye salmon is less than 20 percent of the total catch to date of sockeye salmon in Sumner Strait.
- b. When the estimated TAC of Stikine River sockeye salmon is between 1 and 20,000 fish:
1. Canada shall conduct its commercial and native food fisheries so that the all gear catch is at least 10,000 fish and may increase its catch to include any surplus available in-river total allowable catch but not to exceed 15,000 fish;
 2. The United States shall not direct commercial fisheries at Stikine sockeye salmon in District 108;
 3. The United States may fish in the commercial gill net fisheries in the Sumner Strait portion of District 106 so long as the in-season estimate of the contribution of Stikine River sockeye salmon is less than 25 percent of the total catch to date of sockeye salmon in Sumner Strait. If the contribution of Stikine River sockeye salmon is greater than 20 percent but less than 25 percent only one day of fishing per week will be permitted, if greater than 25 percent, no fishing will be permitted in Sumner Strait.
- c. When the estimated TAC of Stikine River sockeye salmon is between 20,001 and 60,000 fish:
1. Canada shall conduct its commercial and native food fisheries so that the all gear catch is at least 15,000 fish and may increase its catch to include any surplus total allowable catch but not to exceed 20,000 fish;
 2. The United States may direct commercial fisheries at Stikine River sockeye salmon in District 108 if the total TAC of Stikine River sockeye salmon is

greater than the actual catch of Stikine River sockeye salmon in District 106 plus 20,000.

- d. When the estimated TAC of Stikine River sockeye salmon is greater than 60,000 fish:
 - 1. Canada shall conduct its commercial and native food fisheries so that the all gear catch is at least 20,000 fish and may increase its catch to include any surplus total allowable catch but not to exceed 30,000 fish;
 - 2. The United States may direct commercial fisheries at Stikine River sockeye salmon in District 108 if the total TAC of Stikine River sockeye salmon is greater than the actual catch of Stikine River sockeye salmon in District 106 plus 30,000.
- e. United States incidental catches of Stikine River sockeye salmon in District 108 shall not be counted when computing TAC available for the Canadian fishery. For the purpose of calculation, the Canadian inriver allowable catch of sockeye salmon will be based on a 10 percent harvest rate of Stikine River sockeye salmon in the District 106 drift gill net fishery.
- (iii) Canada shall harvest no more than 4,000 coho salmon annually in the Stikine River from 1988 through 1992.
- (iv) Canadian harvests of chinook, pink, and chum salmon may be taken as an incidental harvest in the directed fishery for sockeye and coho salmon.
- (v) Both Parties shall take the appropriate management action to ensure that the necessary escapement goals for the chinook salmon bound for the Canadian portions of the Stikine River are achieved by 1995.
- (vi) If the United States unilaterally withdraws from mutually agreed enhancement goals and activities as specified in the Understanding, then the harvest sharing of naturally occurring Stikine River salmon as stated in sections (ii) through (iv) above shall remain in effect.
- (vii) If Canada unilaterally withdraws from mutually agreed enhancement goals and activities as specified in the Under-

standing, then the harvest sharing of naturally occurring Stikine River sockeye salmon shall be as follows:

- a. When the estimated TAC of Stikine River sockeye salmon is zero or less:
 1. Canada may conduct its native food fishery but the catch shall not exceed 4,000 fish, there will be no commercial fishing;
 2. The United States shall not direct commercial fisheries at Stikine River sockeye salmon in District 108;
 3. The United States may fish in the commercial gill net fisheries in the Sumner Strait portion of District 106 so long as the in-season estimate of the contribution of Stikine River sockeye salmon is less than 20 percent of the total catch to date of sockeye salmon in Sumner Strait.
- b. When the estimated TAC of Stikine River sockeye salmon is between 1 and 20,000 fish:
 1. Canada shall conduct its commercial and native food fisheries so that the all gear catch is at least 4,000 fish and may increase its catch to include any surplus available in-river total allowable catch but not to exceed 7,000 fish;
 2. The United States may direct commercial fisheries at Stikine sockeye salmon in District 108 if the total TAC of Stikine River sockeye salmon is greater than the actual catch of Stikine River sockeye salmon in District 106 plus 7,000;
 3. The United States may fish in the commercial gill net fisheries in the Sumner Strait portion of District 106 so long as the in-season estimate of the contribution of Stikine River sockeye salmon is less than 25 percent of the total catch to date of sockeye salmon in Sumner Strait.
- c. When the estimated TAC of Stikine River sockeye salmon is between 20,001 and 60,000 fish:

1. Canada shall conduct its commercial and native food fisheries so that the all gear catch is at least 7,000 fish and may increase its catch to include any surplus total allowable catch but not to exceed 15,000 fish;
 2. The United States may direct commercial fisheries at Stikine River sockeye salmon in District 108 if the total TAC of Stikine River sockeye salmon is greater than the actual catch of Stikine River sockeye salmon in District 106 plus 15,000.
- d. When the estimated TAC of Stikine River sockeye salmon is greater than 60,000 fish:
1. Canada shall conduct its commercial and native food fisheries so that the all gear catch is at least 15,000 fish and may increase its catch to include any surplus total allowable catch but not to exceed 25,000 fish;
 2. The United States may direct commercial fisheries at Stikine River sockeye salmon in District 108 if the total TAC of Stikine River sockeye salmon is greater than the actual catch of Stikine River sockeye salmon in District 106 plus 25,000.
- e. United States incidental catches of Stikine River sockeye salmon in District 108 shall not be counted when computing TAC available for the Canadian fishery. For the purpose of calculation, the Canadian inriver allowable catch of sockeye salmon will be based on a 10 percent harvest rate of Stikine River sockeye salmon in the District 106 drift gill net fishery.
- f. Canada shall harvest no more than 2,000 coho salmon annually.
- g. Canadian harvest of chinook, pink, and chum salmon may be taken as an incidental harvest in the directed fishery for sockeye and coho salmon.
- (b) the Taku River:
- (i) Harvest sharing of naturally occurring Taku River sockeye salmon for the period 1988 to 1992, contingent upon activities

specified in the February 1988 Understanding concerning Joint Enhancement of Transboundary River Salmon Stocks (Understanding), shall be as follows:

- a. Canada shall harvest no more than 18 percent of the TAC of the sockeye salmon originating in the Canadian portion of the Taku River each year.
- b. Canada shall harvest no more than 3,000 coho salmon each year.
- (ii) Canadian harvests of chinook, pink and chum salmon may be taken as an incidental harvest in the directed fishery for sockeye and coho salmon.
- (iii) Both Parties shall take the appropriate management action to ensure that the necessary escapement goals for chinook salmon bound for the Canadian portions of the Taku River are achieved by 1995.
- (iv) If the United States unilaterally withdraws from mutually agreed enhancement goals and activities as specified in the Understanding, then the harvest sharing of naturally occurring Taku River salmon as stated in sections (i) and (ii) above shall remain in effect.
- (v) If Canada unilaterally withdraws from mutually agreed enhancement goals and activities as specified in the Understanding, then Canada's share of naturally occurring Taku River sockeye salmon shall be 15 percent of the TAC. Furthermore, Canada shall commercially harvest coho, chinook, pink, and chum salmon only incidentally during a directed sockeye salmon fishery.

4. The Parties agree that if the catch allocations set out in paragraph 3 are not attained due to management actions by either Party in any one year, compensatory adjustments shall be made in subsequent years. If a shortfall in the actual catch of a Party is caused by management action of that Party, no compensation shall be made.

5. The Parties agree that the following arrangements shall apply to United States and Canadian fisheries harvesting salmon stocks originating in Canadian portions of the Alsek River: recognizing that chinook and early run sockeye stocks originating in the Alsek River are depressed and require special protection,

and in the interest of conserving and rebuilding these stocks, the necessary management actions shall continue until escapement targets are achieved.

6. The Parties agree to consider cooperative enhancement possibilities and to undertake as soon as possible studies on the feasibility of new enhancement projects on the Transboundary Rivers and adjacent areas for the purpose of increasing productivity of stocks and providing greater harvests to the fishermen of both countries.

7. Recognizing that stocks of salmon originating in Canadian sections of the Columbia River constitute a small portion of the total populations of Columbia River salmon, and that 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 River system as a whole, the Parties consider it important to ensure effective conservation of up-river 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 1985, the Parties shall consult with a view to developing, for the transboundary sections of the Columbia River, a more practicable arrangement for consultation and setting escapement targets than those specified in Article VII, paragraphs 2 and 3. Such arrangements will seek to, *inter alia*,

- (a) ensure effective conservation of the stocks;
- (b) facilitate future enhancement of the stocks on an agreed basis;
- (c) avoid interference with United States management programs on the salmon stocks existing in the non-transboundary tributaries and the main stem of the Columbia River.

Chapter 2

*NORTHERN BRITISH COLUMBIA
SOUTHEASTERN ALASKA*

1. Considering that the chum salmon stocks originating in streams in the Portland Canal require rebuilding, the Parties agree in 1990 and 1991 to jointly reduce interceptions of these stocks to the extent practicable and to undertake assessments to identify possible measures to restore and enhance these stocks. On the basis of such assessments, the Parties shall instruct the Commission to identify long-term plans to rebuild these stocks.
2. With respect to sockeye salmon, the United States shall
 - (a) with respect to District 4 purse seine fishery:
 - (i) for the four year period, 1990 through 1993, limit its fishery in a manner that will result in a maximum four-year total catch of 480,000 sockeye salmon prior to United States Statistical Week 31;
 - (ii) when the annual catch reaches 160,000 sockeye salmon, no further daily fishing periods in District 4 will be allowed prior to Statistical Week 31;
 - (iii) all underages not to exceed 20% of the Annex ceiling will add to, and overages will subtract from, the subsequent four-year period.
 - (b) limit its drift gillnet fishery in Districts 1A and 1B in a manner that will result in an average annual harvest of 130,000 sockeye salmon.
3. With respect to pink salmon, Canada shall
 - (a) limit its net fishery in Areas 3-1, 3-2, 3-3, 3-4, and 5-11 in a manner that will result in an average annual harvest of 900,000 pink salmon;
 - (b) with respect to the Area 1 troll fishery:
 - (i) for the four year period, 1990-1993, limit its Area 1 pink salmon troll catch to a total of 5.125 million;
 - (ii) during the period 1990 through 1993, close the pink salmon troll fishery in the most northerly portion of Area 1 in management units 101-4, 101-8, 101-3 north of 54 degrees 37 minutes N. and 103 north of 54 degrees 37 minutes N to pink

salmon trolling when the pink salmon fishery has lasted 22 days starting with the beginning of the troll season in Area 1, but no earlier than July 22, except that the most northerly portion of the area shall close to pink salmon trolling whenever the catch in that area reaches 300,000 pinks.

- (iii) limit the maximum harvest in the entire Area 1 in any one year to 1.95 million pink salmon; and,
- (iv) all underages, not to exceed 20% of the Annex ceiling, will add to, and overages will subtract from, the subsequent four-year period.

4. In 1987 and thereafter, in order to ensure that catch limits specified in paragraphs 2 and 3 are not exceeded, the Parties shall implement appropriate management measures which take into account the expected run sizes and permit each country to harvest its own stocks.

5. In setting pink salmon fisheries regimes for 1987 and thereafter, the Parties agree to take into account information from the northern pink tagging program.

6. The Parties shall at the earliest possible date exchange management plans for the fisheries described herein.

7. In order to accomplish the objectives of this Chapter, neither Party shall initiate new intercepting fisheries, nor conduct or redirect fisheries in a manner that intentionally increases interceptions.

8. The Parties shall maintain a Joint Northern Boundary Technical Committee (Committee) reporting, unless otherwise agreed, to the Northern Panel and the Commission. The Committee, *inter alia*, shall

- (a) evaluate the effectiveness of management actions;
- (b) identify and review the status of stocks;
- (c) present the most current information on harvest rates and pattern on these stocks, and develop a joint data base for assessments;
- (d) collate available information on the productivity of stocks in order to identify escapements which produce maximum sustainable harvests and allowable harvest rates;
- (e) present historical catch data, associated fishing regimes, and information on stock composition in fisheries harvesting these stocks;
- (f) devise analytical methods for the development of alternative regulatory and production strategies;

- (g) identify information and research needs, including future monitoring programs for stock assessments; and,
- (h) for each season, make stock and fishery assessments and recommend to the Northern Panel conservation measures consistent with the principles of the Treaty.

Chapter 3

CHINOOK SALMON

1. Considering the escapements of many naturally spawning chinook stocks originating from the Columbia River northward to southeastern Alaska have declined in recent years and are now substantially below goals set to achieve maximum sustainable yields, and recognizing the desirability of stabilizing trends in escapements and rebuilding stocks of naturally spawning chinook salmon, the Parties shall

- (a) instruct their respective management agencies to establish a chinook salmon management program designed to meet the following objectives:
 - (i) halt the decline in spawning escapements in depressed chinook salmon stocks; and,
 - (ii) attain by 1998, escapement goals established in order to restore production of naturally spawning chinook stocks, as represented by indicator stocks identified by the Parties, based on a rebuilding program begun in 1984;
- (b) continue the chinook working group to clarify policy issues relating to the execution of this Chapter; for example, the definition of pass-through, and the development of common procedures for adjusting catch ceilings in response to changes in abundance, positive incentives and enhancement add-ons; the chinook working group will develop options for consideration by the Commission and Panels as appropriate;
- (c) jointly initiate and develop a coordinated chinook management program;
- (d) maintain a Joint Chinook Technical Committee (Committee) reporting, unless otherwise agreed, to the Northern and Southern Panels and to the Commission, which *inter alia*, shall
 - (i) evaluate management actions for their consistency with measures set out in this Chapter and for their potential effectiveness in attaining these specified objectives;
 - (ii) evaluate annually the status of chinook stocks in relation to objectives set out in this Chapter and, consistent with paragraph (d) (v) beginning in 1986, make recommendations for

adjustments to the management measures set out in this Chapter;

- (iii) develop procedures to evaluate progress in the rebuilding of naturally spawning chinook stocks;
 - (iv) recommend strategies for the effective utilization of enhanced stocks;
 - (v) recommend research required to implement this rebuilding program effectively; and,
 - (vi) exchange information necessary to analyze the effectiveness of alternative fishery regulatory measures to satisfy conservation objectives;
- (e) ensure that
- (i) in 1990, the all gear catch in Southeast Alaska shall not exceed the base catch of 263,000 plus 39,000 chinook salmon; Alaska shall open its general summer troll fishery July 1; the harvest in the June fishery shall not exceed 30,000 chinook salmon (excluding Alaska hatchery add-on chinook) taken in a similar manner to 1989, and areas of high chinook abundance shall be closed during chinook non-retention periods to reduce incidental mortalities;
 - (ii) in 1990, the all-gear catch in northern and central B.C. shall not exceed the base catch of 263,000 plus 39,000 chinook salmon; the added increment to be harvested in the northern portion of the region; these catches exclude a portion of the catch in selected extreme terminal areas as described in the letter of transmittal;
 - (iii) in 1990, the annual troll catch off the west coast of Vancouver Island shall not exceed 360,000 chinook salmon;
 - (iv) in 1990, the total annual catch by the sport and troll fisheries in the Strait of Georgia shall not exceed 275,000 chinook salmon; Canada will undertake management measures to minimize further reductions in spawning escapements in 1990;
 - (v) adjustments to the ceilings may be made in response to reductions in chinook abundance so that the indicator stocks are rebuilt by 1998;

- (vi) fishing regimes are reviewed by the Committee and structured so as not to affect unduly or to concentrate disproportionately on stocks in need of conservation;
 - (vii) starting with the 1987 season, a 7.5 percent management range is established above and below a catch ceiling. On a continuing basis, the cumulative deviation (in numbers of fish) shall not exceed the management range. In the event that the cumulative deviation exceeds the range, the responsible Party shall be required in the succeeding year, to take appropriate management actions to return the cumulative deviation, plus any penalty assessed, to a level within the established management range. Negative cumulative deviations shall not accumulate below the management range. It is the intent of this section to insure that, on average, the annual catch in ceilinged fisheries is equal to the agreed target ceiling; and,
 - (viii) in 1987 and thereafter, the United States will continue to monitor fisheries in Juan de Fuca Strait (Areas 4B, 5, 6A, 6C) and the outer portions of Puget Sound (6B, 7, 7A, 9) so as to assess the levels and trends in the interceptions of Canadian chinook salmon;
- (f) maintain the following program, recognizing that associated fishing mortalities can affect the rebuilding schedule. The Parties shall
- (i) minimize the effects of such mortalities;
 - (ii) monitor, assess, and report associated fishing mortalities;
 - (iii) provide the information required by the Chinook Technical Committee to estimate the magnitude and assess the impacts of associated mortalities on an on-going basis;
 - (iv) beginning in 1989, the Chinook Technical Committee shall
 - a. review reports provided by the Parties on an annual basis, unless directed by the Commission, and estimate the magnitude of all quantifiable sources of associated fishing mortalities;
 - b. evaluate their impact on the rebuilding schedule and recommend management actions that will achieve the objectives of the chinook rebuilding program, taking into account the effects of all fishing mortalities; and

- c. develop technical procedures and standardize methodologies to quantify the magnitude of associated fishing mortalities, including savings of fish, and assess their impacts upon the rebuilding program, including pass-through commitments.
 - (v) the Commission shall annually take into account, starting in 1988, the impacts of fishing mortalities, as determined by the Chinook Technical Committee, in establishing regional fishing regimes and may adjust allowable catches accordingly, to assure rebuilding by 1998;
 - (g) manage all salmon fisheries in Alaska, British Columbia, Washington and Oregon, so that the bulk of depressed stocks preserved by the conservation program set out herein principally accrue to the spawning escapement;
 - (h) establish, at the conclusion of the chinook rebuilding program, fishery regimes to maintain the stocks at optimum productivity and provide fair internal allocation determinations. It is recognized that the Parties are to share the benefits of coastwide rebuilding and enhancement, consistent with such internal allocation determinations and this Treaty; and,
 - (i) exchange annual management plans prior to each season.
2. The Parties agree that enhancement efforts designed to increase production of chinook salmon would benefit the rebuilding program. They agree to consider utilizing and redirecting enhancement programs to assist, if needed, in the chinook rebuilding program. They agree that each region's catches will be allowed to increase above established ceilings based on demonstrations to the Commission and assessment by it of the specific contributions of each region's new enhancement activities, provided that the rebuilding schedule is not extended beyond 1998, and provisions of Subsection 1(e)(vi) of this Chapter are adhered to.
3. The Parties shall submit a report to the Commission by December 1990 which presents
- (a) joint recommendations for chinook salmon escapement goals in the transboundary rivers;
 - (b) given the goals recommended in 3(a), a jointly accepted assessment of progress toward rebuilding chinook stocks in these transboundary

rivers based on escapement data available through 1989, and the likelihood of achievement of these goals by 1995; and,

- (c) cooperatively developed management options to be identified by December 1990 and initiated in 1991 and following seasons to ensure rebuilding of chinook stocks in the transboundary rivers which are identified in 3(b) as requiring further management actions.

Chapter 4

FRASER RIVER SOCKEYE AND PINK SALMON

1. In order to increase the effectiveness of the management of fisheries in the Fraser River Area (hereinafter the Area) and in fisheries outside the Area which harvest Fraser River sockeye and pink salmon, the Parties agree

- (a) that the preliminary expectations of the total allowable catches of Fraser River sockeye and pink are:

	<i>Sockeye</i>	<i>Pink</i>
1985	6.6 million	11.0 million
1986	12.5 million	
1987	3.1 million	12.0 million
1988	3.6 million	
1989	7.1 million	14.0 million
1990	13.0 million	
1991	3.1 million	14.0 million
1992	3.6 million	

- (b) that

- (i) based on these preliminary expectations, the United States shall harvest as follows:

	<i>Sockeye</i>	<i>Pink</i>
1985	1.78 million	3.6 million
1986	3.0 million	
1987	1.06 million	3.6 million
1988	1.16 million	

- (ii) the United States catches referred to in paragraph 1(b)(i) herein shall be adjusted in proportion to any adjustments in the total allowable catches set out in paragraph 1(a) herein that are due to any agreed adjustments in pre-season or in-season expectations of run-size. When considering such adjustment, the Parties shall take into account all fisheries that harvest Fraser

River sockeye and pink salmon including annual Fraser River Indian food fish harvests in excess of 400,000 sockeye. The United States catches shall not be adjusted to any adjustments in the total allowable catch that may be caused by changes in escapement goals that form the basis for the agreed total allowable catches set out in paragraph 1(a) herein;

- (iii) notwithstanding the agreed United States and Canadian catch levels for Fraser River sockeye and for coho off the west coast of Vancouver Island, as provided in paragraph 1(b)(i) herein and in Chapter 5, respectively, and subject to paragraph 1(b)(ii), in 1985 the United States catch of Fraser River sockeye shall be 1.73 million and the Canadian catch of coho off the west coast of Vancouver Island shall not exceed 1.75 million; and in 1986, the United States catch of Fraser River sockeye shall be 2.95 million and the Canadian catch of coho off the west coast of Vancouver Island shall not exceed 1.75 million;
- (c) in 1985, to instruct the International Pacific Salmon Fisheries Commission to develop regulatory programs in the Area to give effect to the provisions of paragraph 1(b);
- (d) to instruct the Fraser River Panel for 1986 through 1992 to develop regulations to give effect to the provisions of paragraphs 1(b) and 1(f);
- (e) to instruct the Fraser River Panel that if management measures fail to achieve such sockeye and pink catches, any difference shall be compensated by adjustments to the Fraser fishery in subsequent years;
- (f) in the period 1989 to 1992, the Fraser River Panel shall determine the annual United States catch level so that the total United States catch in this period shall not exceed 7 million sockeye in the aggregate. In the years 1989 and 1991, the United States harvest shall not exceed 7.2 million pink salmon, in the aggregate. Notwithstanding the foregoing, these levels shall be reduced in proportion to any decreases in the total allowable catches set out in paragraph 1(a) herein that are due to any agreed decreases in pre-season or in-season expectations of run size. When considering such reductions, the Parties shall take into account all fisheries that harvest Fraser River sockeye and pink salmon including annual Fraser River Indian food

fish harvests in excess of 400,000 sockeye. The United States catches shall not be reduced due to any decreases in the total allowable catch that may be caused by changes in escapement goals that form the basis for the agreed total allowable catches set out in paragraph 1(a) herein;

- (g) to consider no sooner than 1989 adjusting the regime in accordance with the principles of Article III;
- (h) to instruct the Fraser River Panel that in managing Fraser River sockeye and pink salmon, it shall take into account the management requirements of other stocks in the Area.

2. Notwithstanding the provisions of Paragraphs 1(b) and 1(f), and to ensure that Canada receives the benefits of any Canadian-funded enhancement activities undertaken following entry into force of this Treaty, any changes in the total allowable catch due to such activities shall not result in adjustment of the United States catch.

3. The Parties shall establish data-sharing principles and processes which ensure that the Parties, the International Pacific Salmon Fisheries Commission, the Commission and the Fraser River Panel are able to manage their fisheries in a timely manner consistent with this Chapter.

4. The Parties may agree to adjust the definition of the Area as necessary to simplify domestic fishery management and ensure adequate consideration of the effect on other stocks and species harvested in the Area.

5. In managing the fisheries in the Area, the Parties, the Commission, and the Fraser River Panel shall take into account fisheries inside and outside the Area that harvest Fraser River sockeye and pink salmon. The Parties, the Commission, and the Fraser River Panel shall consider the need to exercise flexibility in management of fisheries outside the Area which harvest Fraser River sockeye and pink salmon.

6. The Parties shall establish a technical committee for the Fraser River Panel:

- (a) the members shall coordinate the technical aspects of Fraser River Panel activities with and between the Commission staff and the national sections of the Fraser River Panel, and shall report to their respective national sections of the Panel. The committee may receive assignments of a technical nature from the Fraser River Panel and will report results directly to the Panel.

- (b) membership of the committee shall consist of up to 3 such technical representatives as may be designated by each national section of the Commission.
- (c) members of the technical committee shall analyze proposed management regimes, provide technical assistance in the development of proposals for management plans, explain technical reports and provide information and technical advice to the respective national sections of the Panel.
- (d) the technical committee shall work with the Commission staff during pre-season development of the fishery regime and management plan and during in-season consideration of regulatory options for the sockeye and pink salmon fisheries of Fraser Panel Area waters to ensure that:
 - (i) domestic allocation objectives of both Parties are given full consideration;
 - (ii) conservation requirements and management objectives of the Parties for species and stocks other than Fraser River sockeye and pink salmon in the Fraser River Panel Area during periods of Panel regulatory control are given full consideration; and,
 - (iii) the Commission staff is timely informed of management actions being taken by the Parties in fisheries outside of the Fraser River Panel Area that may harvest sockeye and pink salmon of Fraser River origin.
- (e) the staff of the Commission shall consult regularly in-season with the technical committee to ensure that its members are fully and timely informed on the status of Fraser River sockeye and pink salmon stocks, and the expectations of abundance, migration routes and proposed regulatory options, so the members of the technical committee can brief their respective national sections prior to each in-season Panel meeting.

Chapter 5

COHO SALMON

1. Recognizing that for the past several years some coho stocks have been below levels necessary to sustain maximum harvest and that recent fishing patterns have contributed to a decline in some Canadian and United States coho stocks, and in order to prevent further decline in spawning escapements, adjust fishing patterns, and initiate, develop, or improve management programs for coho stocks, the Parties shall

- (a) instruct their respective management agencies to continue to develop coho salmon management programs designed to meet the following objectives
 - (i) prevent overfishing; and,
 - (ii) provide for optimum production;
- (b) maintain a Joint Coho Technical Committee (Committee), reporting, unless otherwise agreed, to the Panels and the Commission. The membership of the Committee shall include representation from the Northern and Southern Panel Areas. The Committee, *inter alia*, shall, at the direction of the Commission and relevant Panels
 - (i) evaluate management actions for their consistency with measures set out in this Chapter and for their potential effectiveness in attaining the objectives established by the Commission;
 - (ii) annually identify, review, and evaluate the status of coho stocks in relation to the objectives set out in this Chapter and make recommendations for adjustments to the management measures consistent with those objectives;
 - (iii) present the most current information on exploitation rates and patterns on these stocks, and develop a joint data base for assessments;
 - (iv) collate available information on the productivity of coho stocks in order to identify the management objectives necessary to prevent overfishing;
 - (v) present historical catch data and associated fishing regimes;
 - (vi) estimate stock composition in fisheries of concern to the Commission and Panels;

- (vii) devise analytical methods for the development of alternative regulatory and production strategies;
 - (viii) identify information and research needs, including future monitoring programs for stock assessments;
 - (ix) investigate the feasibility of alternative methodologies for implementing indicator stock programs in all areas;
 - (x) for each season, make stock and fishery assessments and recommend to the Commission conservation measures consistent with the principles of the Treaty;
 - (xi) develop programs to assure the attainment of spawning escapement goals and prevent overfishing;
 - (xii) exchange information necessary to analyze the effectiveness of alternative fishery regulatory measures in achieving conservation objectives; and,
 - (xiii) work to develop, under the direction of the Joint Northern and Southern Panels, standard methodologies for coho stock and fishery assessment; and,
- (c) unless otherwise agreed, in any area where fisheries of one Party may intercept coho stocks originating in the rivers of the other which require conservation action or such other action as the Commission may determine, that Party will endeavor to limit incidental coho catches in fisheries targeting on other species.

2. For coho stocks shared by fisheries of the United States and Canada, recommendations for fishery regimes shall be made by the Northern Panel for coho salmon originating in rivers with mouths situated between Cape Caution and Cape Suckling and by the Southern Panel for coho salmon originating in rivers with mouths situated south of Cape Caution, as provided in Annex I. At the direction of the Commission, each Party shall establish regimes for its troll, sport, and net fisheries consistent with management objectives approved by the Commission.

3. The Parties agree

- (a) for 1990, the west coast of Vancouver Island (Canadian Management Areas 21, 23, 24, 25, 26, 27, 121, 123, 124, 125, 126, 127, and 130-1) troll harvest shall not exceed 1.8 million Coho;
- (b) for 1990, the Swiftsure Bank area will be closed to chinook and coho salmon trolling in order to address conservation concerns

expressed by both Parties. Troll fishing for sockeye and pink salmon shall, upon appropriate prior notice, be permitted only in order to attain Canadian domestic troll allocation objectives on sockeye and pink;

- (c) to avoid any alterations in coho fisheries along the west coast of Vancouver Island that would increase the proportional interception of U.S. coho stocks;
- (d) that in 1990, for Canadian Area 20, and U.S. Areas 7 and 7A, fisheries directed at coho salmon will be permitted. Notwithstanding this agreement, if the Commission determines that conservation concerns expressed by either Party warrant further restrictions, then the Parties shall limit their catch of coho salmon to that taken incidentally during fisheries under the control of the Fraser Panel and those permitted under the provisions of Annex IV, Chapter 6. Both Parties agree that in 1987, due to conservation concerns expressed by both Parties and agreed to by the Commission, coho fisheries in Canadian Area 20 and U.S. Areas 7 and 7A shall be limited by the levels of incidental coho catch anticipated during fisheries conducted under the control of the Fraser Panel and provisions of Annex IV, Chapter 6;
- (e) for 1990, the United States shall adhere to presently agreed management objectives in Strait of Juan de Fuca Areas 4B, 5, and 6C; and,
- (f) to develop in 1991 and thereafter, troll fishery regimes for the west coast of Vancouver Island that
 - (i) implement conservation measures approved by the Commission and take into account any increased contributions by the Parties to the fishery; and,
 - (ii) provide for the sharing of benefits of coho production of each Party consistent with the principles of Article III.

4. Notwithstanding any other provisions of this Chapter, the Commission, for 1991 and thereafter, may set specific fishery regimes as appropriate, which may include troll harvest ceilings, for coho salmon in the intercepting fisheries restricted under this Chapter that

- (a) implement conservation measures approved by the Commission;
- (b) take into account increased production;
- (c) provide for the recognition of benefits of coho production of each Party consistent with the principles of Article III;

- (d) take into account actions taken by each Party to address its conservation concerns; and,
- (e) take into account time and area management measures which will assist either Party in meeting its conservation objectives while avoiding undue disruption of fisheries.

5. Starting with the 1987 season, a 7.5 percent management range is established above and below a catch ceiling. On a continuing basis, the cumulative deviation (in numbers of fish) shall not exceed that management range. In the event that the cumulative deviation exceeds the range, the responsible Party shall be required, in the succeeding year, to take appropriate management actions to return the cumulative deviation, plus any penalty assessed, to a level within the established management range. Negative cumulative deviations shall not accumulate below the management range. It is the intent of this section to insure that, on average, the annual catch in ceilinged fisheries is equal to the agreed target ceiling.

6. The Parties agree that enhancement efforts designed to increase production of coho salmon would, when combined with catch ceilings and/or time/area management measures, aid in rebuilding depressed natural stocks by reducing the exploitation rates on these stocks. They agree that utilizing this opportunity in the future to rebuild natural stocks is, in most cases preferable to reductions in fishing levels. A major objective of enhancement is to lay the foundation for improved fisheries in Annex areas in the future.

Chapter 6

SOUTHERN BRITISH COLUMBIA AND WASHINGTON STATE CHUM SALMON

1. The Parties shall maintain a Joint Chum Technical Committee (Committee) reporting, unless otherwise agreed, to the Southern Panel and the Commission. The Committee, *inter alia*, will undertake to

- (a) identify and review the status of stocks of primary concern;
- (b) present the most current information on harvest rates and patterns on these stocks, and develop a joint data base for assessments;
- (c) collate available information on the productivity of chum stocks to identify escapements which produce maximum sustainable harvests and allowable harvest rates;
- (d) present historical catch data, associated fishing regimes, and information on stock composition in fisheries harvesting those stocks;
- (e) devise analytical methods for the development of alternative regulatory and production strategies;
- (f) identify information and research needs, to include future monitoring programs for stock assessments; and,
- (g) for each season, make stock and fishery assessments and evaluate the effectiveness of management.

2. In 1990, Canada will manage its Johnstone Strait, Strait of Georgia, and Fraser River chum fisheries to provide continued rebuilding of depressed naturally spawning chum stocks, and, to the extent practicable, minimize increased interceptions of United States origin chum. Terminal fisheries conducted on specific stocks with identified surpluses will be managed to minimize interception of non-targeted stocks.

3. In 1990,

- (a) for Johnstone Strait run sizes less than 3.0 million
 - (i) Canada, taking into account the catch of Canadian chum in United States Areas 7 and 7A, will limit its harvest rate in Johnstone Strait to less than 10 percent, resulting in a Johnstone Strait catch level of up to 225,000 chum; and,
 - (ii) when the catch in Johnstone Strait is 225,000 chum or less, the United States catch of chum in Areas 7 and 7A shall be

limited to chum taken incidentally to other species and in other minor fisheries, but shall not exceed 20,000, provided, however, that catches for the purposes of electrophoretic sampling shall not be included in the aforementioned limit;

- (b) for Johnstone Strait run sizes from 3.0 million to 3.7 million
 - (i) Canada, taking into account the catch of Canadian chum in United States Areas 7 and 7A, will limit its harvest rate in Johnstone Strait to 20 percent, resulting in a Johnstone Strait catch level of 225,000 to 640,000 chum; and,
 - (ii) when the catch in Johnstone Strait is from 225,000 to 640,000 chum, the United States catch of chum in Areas 7 and 7A shall not exceed 120,000;
- (c) for Johnstone Strait run sizes of 3.7 million and greater
 - (i) Canada, taking into account the catch of Canadian chum in United States Areas 7 and 7A, will harvest at a rate in Johnstone Strait of 30 percent or greater, resulting in a Johnstone Strait catch level of 640,000 chum or greater; and,
 - (ii) when the catch in Johnstone Strait is 640,000 chum or greater, the United States catch of chum in Areas 7 and 7A shall not exceed 140,000;
- (d) it is understood that the Johnstone Strait run sizes, harvest rates, and catch levels referred to in 3(a), 3(b), and 3(c) are those determined in season, in Johnstone Strait, by Canada; and,
- (e) the United States shall manage in a manner that, as far as practicable, maintains a traditional proportion of effort and catch between United States Areas 7 and 7A, and avoids concentrations of effort along the boundary in Area 7A.

4. In 1990, the United States shall conduct its chum fishery in the Strait of Juan de Fuca (United States Areas 4B, 5 and 6C) so as to maintain the limited effort nature of this fishery, and, to the extent practicable, minimize increased interceptions of Canadian origin chum. The United States shall continue to monitor this fishery to determine if recent catch levels indicate an increasing level of interception.

5. If the United States chum fishery in Areas 7 and 7A fails to achieve the 1990 catch levels specified in paragraphs 3(a)(ii), 3(b)(ii), and 3(c)(ii), any differences shall be compensated by adjustments to the Areas 7 and 7A fishery in

subsequent years, except that chum catches below the level specified in paragraph 3(a)(ii) shall not be compensated.

6. Catch compositions in fisheries covered by this chapter will be estimated by post-season analysis using methods agreed upon by the Joint Chum Technical Committee.

7. Canada will manage the Nitinat net chum fishery to minimize the harvest of non-targeted stocks.

8. In 1990, Canada shall conduct electrophoretic sampling of chum taken in the West Coast Vancouver Island troll fishery if early-season catch information indicates that catch totals for the season may reach levels similar to 1985 and 1986. Sampling, should it occur, will include catches taken from the southern areas (Canadian Areas 121–124).

Chapter 7

GENERAL OBLIGATION

With respect to intercepting fisheries not dealt with elsewhere in this Annex, unless otherwise agreed, neither Party shall initiate new intercepting fisheries, nor conduct or redirect fisheries in a manner that intentionally increases interceptions.

The Department of State to the Canadian Embassy

The Department of State has the honor to refer the Embassy of Canada to the Embassy's Note No. 82 of June 4, 1990 concerning the recommendations made by the Pacific Salmon Commission on May 16, 1990, in accordance with Article XIII, paragraphs 2 and 3 of the Pacific Salmon Treaty signed at Ottawa on January 28, 1985.

The proposal that Annex IV of the Treaty be amended to read as set forth in attachment 1 to the Embassy's Note, in accordance with the amendment procedure established by Article XIII, paragraph 3 of the Treaty, is acceptable to the Government of the United States of America.

The Department of State confirms that the Embassy's Note of June 4, 1990, together with its attachment and this reply, shall constitute an agreement between the Government of Canada and the Government of the United States of America amending Annex IV of the Treaty, which shall become effective on the date of this note.

[Signature]

Department of State,
Washington, June 29, 1990.

The Canadian Embassy to the Department of State

Canadian Embassy

Ambassade du Canada

Note No. 72

The Embassy of Canada presents its compliments to the Department of State and has the honour to refer to the Treaty between Canada and the United States of America concerning Pacific Salmon signed at Ottawa on January 28, 1985, and to the recommendations made by the Pacific Salmon Commission on May 17, 1991, in accordance with Article XIII, paragraphs 2 and 3 of the Treaty.

The Embassy has the honour to propose that Annex IV of the Treaty be amended to read as set forth in the attachment to this note, in accordance with the informal amendment procedure established by Article XIII, paragraph 3 of the Treaty.

If this proposal is acceptable to the Government of the United States of America, the Embassy has the further honour to propose that this note, including its attachment, together with the note in reply from the Department of State, will constitute an Exchange of Notes between the Government of Canada and the Government of the United States of America amending Annex IV of the Treaty, which will become effective on the date of the Department of State's note.

The Embassy of Canada avails itself of this opportunity to renew to the Department of State the assurances of its highest consideration.

Washington, D.C

June 13, 1991

ATTACHMENT 1

Revised Annex IV to the Pacific Salmon Treaty in effect for 1991

*Annex IV**Chapter 1**TRANSBOUNDARY RIVERS*

1. Recognizing the desirability of accurately determining exploitation rates and spawning escapement requirements of salmon originating in the Transboundary Rivers, the Parties shall maintain a Joint Transboundary Technical Committee (Committee) reporting, unless otherwise agreed, to the Northern Panel and to the Commission. The Committee, *inter alia*, shall

- (a) assemble and refine available information on migratory patterns, extent of exploitation and spawning escapement requirements of the stocks;
- (b) examine past and current management regimes and recommend how they may be better suited to achieving preliminary escapement goals;
- (c) identify enhancement opportunities that:
 - (i) assist the devising of harvest management strategies to increase benefits to fishermen with a view to permitting additional salmon to return to Canadian waters;
 - (ii) have an impact on natural Transboundary river salmon production.

2. The Parties shall improve procedures of coordinated or cooperative management of the fisheries on Transboundary River stocks.

3. Recognizing the objectives of each Party to have viable fisheries, the Parties agree that the following arrangements shall apply to the United States and Canadian fisheries harvesting salmon stocks originating in the Canadian portion of

- (a) the Stikine River:
 - (i) Assessment of the annual run of Stikine River sockeye salmon shall be made as follows:
 - a. A pre-season forecast of the Stikine River sockeye run will be made by the Transboundary Technical Committee prior to March 1 of each year. This forecast may be

modified by the Transboundary Technical Committee prior to the opening of the fishing season.

- b. In-season estimates of the Stikine River sockeye run and the Total Allowable Catch (TAC) shall be made under the guidelines of an agreed Stikine Management Plan and using a mathematical forecast model developed by the Transboundary Technical Committee. Both U.S. and Canadian fishing patterns shall be based on current weekly estimates of the TAC. At the beginning of the season and up to an agreed date, the weekly estimates of the TAC shall be determined from the pre-season forecast of the run strength. After that date, the TAC shall be determined from the in-season forecast model.
 - c. Modifications to the Stikine Management Plan and forecast model may be made prior to June 1 of each year by agreement of both Parties. Failure to reach agreement in modifications shall result in use of the model and parameters used in the previous year.
 - d. Estimates of the TAC may be adjusted in-season only by concurrence of both Parties' respective managers. Reasons for such adjustments must be provided to the Transboundary Technical Committee.
- (ii) Harvest sharing of naturally occurring Stikine River sockeye salmon for the period 1988 to 1992, contingent upon activities specified in the February 1988 Understanding between the United States and the Canadian Section of the Pacific Salmon Commission concerning Joint Enhancement of Transboundary River Salmon Stocks (Understanding) shall be as follows:
- a. When the estimated TAC of Stikine River sockeye salmon is zero or less:
 - 1. Canada may conduct its native food fishery but the catch shall not exceed 4,000 fish, there will be no commercial fishing;
 - 2. The United States shall not direct commercial fisheries at Stikine River sockeye salmon in District 108;

3. The United States may fish in the commercial gill net fisheries in the Sumner Strait portion of District 106 so long as the in-season estimate of the contribution of Stikine River sockeye salmon is less than 20 percent of the total catch to date of sockeye salmon in Sumner Strait.
- b. When the estimated TAC of Stikine River sockeye salmon is between 1 and 20,000 fish:
1. Canada shall conduct its commercial and native food fisheries so that the all gear catch is at least 10,000 fish and may increase its catch to include any surplus available in-river total allowable catch but not to exceed 15,000 fish;
 2. The United States shall not direct commercial fisheries at Stikine sockeye salmon in District 108;
 3. The United States may fish in the commercial gill net fisheries in the Sumner Strait portion of District 106 so long as the in-season estimate of the contribution of Stikine River sockeye salmon is less than 25 percent of the total catch to date of sockeye salmon in Sumner Strait. If the contribution of Stikine River sockeye salmon is greater than 20 percent but less than 25 percent only one day of fishing per week will be permitted, if greater than 25 percent, no fishing will be permitted in Sumner Strait.
- c. When the estimated TAC of Stikine River sockeye salmon is between 20,001 and 60,000 fish:
1. Canada shall conduct its commercial and native food fisheries so that the all gear catch is at least 15,000 fish and may increase its catch to include any surplus total allowable catch but not to exceed 20,000 fish;
 2. The United States may direct commercial fisheries at Stikine River sockeye salmon in District 108 if the total TAC of Stikine River sockeye salmon is

greater than the actual catch of Stikine River sockeye salmon in District 106 plus 20,000.

- d. When the estimated TAC of Stikine River sockeye salmon is greater than 60,000 fish:
 1. Canada shall conduct its commercial and native food fisheries so that the all gear catch is at least 20,000 fish and may increase its catch to include any surplus total allowable catch but not to exceed 30,000 fish;
 2. The United States may direct commercial fisheries at Stikine River sockeye salmon in District 108 if the total TAC of Stikine River sockeye salmon is greater than the actual catch of Stikine River sockeye salmon in District 106 plus 30,000.
 - e. United States incidental catches of Stikine River sockeye salmon in District 108 shall not be counted when computing TAC available for the Canadian fishery. For the purpose of calculation, the Canadian inriver allowable catch of sockeye salmon will be based on a 10 percent harvest rate of Stikine River sockeye salmon in the District 106 drift gill net fishery.
- (iii) Canada shall harvest no more than 4,000 coho salmon annually in the Stikine River from 1988 through 1992.
 - (iv) Canadian harvests of chinook, pink, and chum salmon may be taken as an incidental harvest in the directed fishery for sockeye and coho salmon.
 - (v) Both Parties shall take the appropriate management action to ensure that the necessary escapement goals for the chinook salmon bound for the Canadian portions of the Stikine River are achieved by 1995.
 - (vi) If the United States unilaterally withdraws from mutually agreed enhancement goals and activities as specified in the Understanding, then the harvest sharing of naturally occurring Stikine River salmon as stated in sections (ii) through (iv) above shall remain in effect.
 - (vii) If Canada unilaterally withdraws from mutually agreed enhancement goals and activities as specified in the Under-

standing, then the harvest sharing of naturally occurring Stikine River sockeye salmon shall be as follows:

- a. When the estimated TAC of Stikine River sockeye salmon is zero or less:
 1. Canada may conduct its native food fishery but the catch shall not exceed 4,000 fish, there will be no commercial fishing;
 2. The United States shall not direct commercial fisheries at Stikine River sockeye salmon in District 108;
 3. The United States may fish in the commercial gill net fisheries in the Sumner Strait portion of District 106 so long as the in-season estimate of the contribution of Stikine River sockeye salmon is less than 20 percent of the total catch to date of sockeye salmon in Sumner Strait.
- b. When the estimated TAC of Stikine River sockeye salmon is between 1 and 20,000 fish:
 1. Canada shall conduct its commercial and native food fisheries so that the all gear catch is at least 4,000 fish and may increase its catch to include any surplus available in-river total allowable catch but not to exceed 7,000 fish;
 2. The United States may direct commercial fisheries at Stikine sockeye salmon in District 108 if the total TAC of Stikine River sockeye salmon is greater than the actual catch of Stikine River sockeye salmon in District 106 plus 7,000;
 3. The United States may fish in the commercial gill net fisheries in the Sumner Strait portion of District 106 so long as the in-season estimate of the contribution of Stikine River sockeye salmon is less than 25 percent of the total catch to date of sockeye salmon in Sumner Strait.
- c. When the estimated TAC of Stikine River sockeye salmon is between 20,001 and 60,000 fish:

1. Canada shall conduct its commercial and native food fisheries so that the all gear catch is at least 7,000 fish and may increase its catch to include any surplus total allowable catch but not to exceed 15,000 fish;
 2. The United States may direct commercial fisheries at Stikine River sockeye salmon in District 108 if the total TAC of Stikine River sockeye salmon is greater than the actual catch of Stikine River sockeye salmon in District 106 plus 15,000.
- d. When the estimated TAC of Stikine River sockeye salmon is greater than 60,000 fish:
1. Canada shall conduct its commercial and native food fisheries so that the all gear catch is at least 15,000 fish and may increase its catch to include any surplus total allowable catch but not to exceed 25,000 fish;
 2. The United States may direct commercial fisheries at Stikine River sockeye salmon in District 108 if the total TAC of Stikine River sockeye salmon is greater than the actual catch of Stikine River sockeye salmon in District 106 plus 25,000.
- e. United States incidental catches of Stikine River sockeye salmon in District 108 shall not be counted when computing TAC available for the Canadian fishery. For the purpose of calculation, the Canadian inriver allowable catch of sockeye salmon will be based on a 10 percent harvest rate of Stikine River sockeye salmon in the District 106 drift gill net fishery.
- f. Canada shall harvest no more than 2,000 coho salmon annually.
- g. Canadian harvest of chinook, pink, and chum salmon may be taken as an incidental harvest in the directed fishery for sockeye and coho salmon.
- (b) the Taku River:
- (i) Harvest sharing of naturally occurring Taku River sockeye salmon for the period 1988 to 1992, contingent upon activities

specified in the February 1988 Understanding concerning Joint Enhancement of Transboundary River Salmon Stocks (Understanding), shall be as follows:

- a. Canada shall harvest no more than 18 percent of the TAC of the sockeye salmon originating in the Canadian portion of the Taku River each year.
- b. Canada shall harvest no more than 3,000 coho salmon each year.
- (ii) Canadian harvests of chinook, pink and chum salmon may be taken as an incidental harvest in the directed fishery for sockeye and coho salmon.
- (iii) Both Parties shall take the appropriate management action to ensure that the necessary escapement goals for chinook salmon bound for the Canadian portions of the Taku River are achieved by 1995.
- (iv) If the United States unilaterally withdraws from mutually agreed enhancement goals and activities as specified in the Understanding, then the harvest sharing of naturally occurring Taku River salmon as stated in sections (i) and (ii) above shall remain in effect.
- (v) If Canada unilaterally withdraws from mutually agreed enhancement goals and activities as specified in the Understanding, then Canada's share of naturally occurring Taku River sockeye salmon shall be 15 percent of the TAC. Furthermore, Canada shall commercially harvest coho, chinook, pink, and chum salmon only incidentally during a directed sockeye salmon fishery.

4. The Parties agree that if the catch allocations set out in paragraph 3 are not attained due to management actions by either Party in any one year, compensatory adjustments shall be made in subsequent years. If a shortfall in the actual catch of a Party is caused by management action of that Party, no compensation shall be made.

5. The Parties agree that the following arrangements shall apply to United States and Canadian fisheries harvesting salmon stocks originating in Canadian portions of the Alsek River: recognizing that chinook and early run sockeye stocks originating in the Alsek River are depressed and require special protection,

and in the interest of conserving and rebuilding these stocks, the necessary management actions shall continue until escapement targets are achieved.

6. The Parties agree to consider cooperative enhancement possibilities and to undertake as soon as possible studies on the feasibility of new enhancement projects on the Transboundary Rivers and adjacent areas for the purpose of increasing productivity of stocks and providing greater harvests to the fishermen of both countries.

7. Recognizing that stocks of salmon originating in Canadian sections of the Columbia River constitute a small portion of the total populations of Columbia River salmon, and that 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 River system as a whole, the Parties consider it important to ensure effective conservation of up-river 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 1985, the Parties shall consult with a view to developing, for the transboundary sections of the Columbia River, a more practicable arrangement for consultation and setting escapement targets than those specified in Article VII, paragraphs 2 and 3. Such arrangements will seek to, *inter alia*,

- (a) ensure effective conservation of the stocks;
- (b) facilitate future enhancement of the stocks on an agreed basis;
- (c) avoid interference with United States management programs on the salmon stocks existing in the non-transboundary tributaries and the main stem of the Columbia River.

Chapter 2

*NORTHERN BRITISH COLUMBIA
SOUTHEASTERN ALASKA*

1. Considering that the chum salmon stocks originating in streams in the Portland Canal require rebuilding, the Parties agree in 1990 and 1991 to jointly reduce interceptions of these stocks to the extent practicable and to undertake assessments to identify possible measures to restore and enhance these stocks. On the basis of such assessments, the Parties shall instruct the Commission to identify long-term plans to rebuild these stocks.
2. With respect to sockeye salmon, the United States shall
 - (a) with respect to District 4 purse seine fishery:
 - (i) for the four year period, 1990 through 1993, limit its fishery in a manner that will result in a maximum four-year total catch of 480,000 sockeye salmon prior to United States Statistical Week 31;
 - (ii) when the annual catch reaches 160,000 sockeye salmon, no further daily fishing periods in District 4 will be allowed prior to Statistical Week 31;
 - (iii) all underages not to exceed 20% of the Annex ceiling will add to, and overages will subtract from, the subsequent four-year period.
 - (b) limit its drift gillnet fishery in Districts 1A and 1B in a manner that will result in an average annual harvest of 130,000 sockeye salmon.
3. With respect to pink salmon, Canada shall
 - (a) limit its net fishery in Areas 3-1, 3-2, 3-3, 3-4, and 5-11 in a manner that will result in an average annual harvest of 900,000 pink salmon;
 - (b) with respect to the Area 1 troll fishery:
 - (i) for the four year period, 1990-1993, limit its Area 1 pink salmon troll catch to a total of 5.125 million;
 - (ii) during the period 1990 through 1993, close the pink salmon troll fishery in the most northerly portion of Area 1 in management units 101-4, 101-8, 101-3 north of 54 degrees 37 minutes N. and 103 north of 54 degrees 37 minutes N to pink

salmon trolling when the pink salmon fishery has lasted 22 days starting with the beginning of the troll season in Area 1, but no earlier than July 22, except that the most northerly portion of the area shall close to pink salmon trolling whenever the catch in that area reaches 300,000 pinks.

- (iii) limit the maximum harvest in the entire Area 1 in any one year to 1.95 million pink salmon; and,
 - (iv) all underages, not to exceed 20% of the Annex ceiling, will add to, and overages will subtract from, the subsequent four-year period.
4. In 1987 and thereafter, in order to ensure that catch limits specified in paragraphs 2 and 3 are not exceeded, the Parties shall implement appropriate management measures which take into account the expected run sizes and permit each country to harvest its own stocks.
 5. In setting pink salmon fisheries regimes for 1987 and thereafter, the Parties agree to take into account information from the northern pink tagging program.
 6. The Parties shall at the earliest possible date exchange management plans for the fisheries described herein.
 7. In order to accomplish the objectives of this Chapter, neither Party shall initiate new intercepting fisheries, nor conduct or redirect fisheries in a manner that intentionally increases interceptions.
 8. The Parties shall maintain a Joint Northern Boundary Technical Committee (Committee) reporting, unless otherwise agreed, to the Northern Panel and the Commission. The Committee, *inter alia*, shall
 - (a) evaluate the effectiveness of management actions;
 - (b) identify and review the status of stocks;
 - (c) present the most current information on harvest rates and pattern on these stocks, and develop a joint data base for assessments;
 - (d) collate available information on the productivity of stocks in order to identify escapements which produce maximum sustainable harvests and allowable harvest rates;
 - (e) present historical catch data, associated fishing regimes, and information on stock composition in fisheries harvesting these stocks;
 - (f) devise analytical methods for the development of alternative regulatory and production strategies;

- (g) identify information and research needs, including future monitoring programs for stock assessments; and,
- (h) for each season, make stock and fishery assessments and recommend to the Northern Panel conservation measures consistent with the principles of the Treaty.

Chapter 3

CHINOOK SALMON

1. Considering the escapements of many naturally spawning chinook stocks originating from the Columbia River northward to southeastern Alaska have declined in recent years and are now substantially below goals set to achieve maximum sustainable yields, and recognizing the desirability of stabilizing trends in escapements and rebuilding stocks of naturally spawning chinook salmon, the Parties shall

- (a) instruct their respective management agencies to establish a chinook salmon management program designed to meet the following objectives:
 - (i) halt the decline in spawning escapements in depressed chinook salmon stocks; and,
 - (ii) attain by 1998, escapement goals established in order to restore production of naturally spawning chinook stocks, as represented by indicator stocks identified by the Parties, based on a rebuilding program begun in 1984;
- (b) continue the chinook working group to clarify policy issues relating to the execution of this Chapter; for example, the definition of pass-through, and the development of common procedures for adjusting catch ceilings in response to changes in abundance, positive incentives and enhancement add-ons; the chinook working group will develop options for consideration by the Commission and Panels as appropriate;
- (c) jointly initiate and develop a coordinated chinook management program;
- (d) maintain a Joint Chinook Technical Committee (Committee) reporting, unless otherwise agreed, to the Northern and Southern Panels and to the Commission, which *inter alia*, shall
 - (i) evaluate management actions for their consistency with measures set out in this Chapter and for their potential effectiveness in attaining these specified objectives;
 - (ii) evaluate annually the status of chinook stocks in relation to objectives set out in this Chapter and, consistent with paragraph (d) (v) beginning in 1986, make recommendations for

adjustments to the management measures set out in this Chapter;

- (iii) develop procedures to evaluate progress in the rebuilding of naturally spawning chinook stocks;
 - (iv) recommend strategies for the effective utilization of enhanced stocks;
 - (v) recommend research required to implement this rebuilding program effectively; and,
 - (vi) exchange information necessary to analyze the effectiveness of alternative fishery regulatory measures to satisfy conservation objectives;
- (e) ensure that
- (i) in 1991, the all-gear catch in Southeast Alaska shall not exceed the base ceiling of 263,000 chinook salmon plus 10,000; in 1992, the all-gear catch in Southeast Alaska shall not exceed 263,000 chinook salmon; these catches exclude the Alaska hatchery add-on as described in the letter of transmittal; in 1991 and 1992 Alaska shall open its general summer troll fishery on July 1; the June fishery shall not exceed 40,000 chinook salmon (excluding the Alaska hatchery add-on) taken in a manner similar to 1989 and 1990; and areas of high chinook abundance shall be closed during chinook non-retention periods to reduce incidental mortalities;
 - (ii) in 1991, the all-gear catch in Northern and Central B.C. shall not exceed the base ceiling of 263,000 chinook salmon plus 10,000; in 1992, the all-gear catch in Northern and Central B.C. shall not exceed 263,000 chinook salmon; these catches exclude a portion of the catch in extreme terminal areas as described in the letter of transmittal;
 - (iii) in 1991 and 1992, the annual troll catch off the west coast of Vancouver Island shall not exceed 360,000 chinook salmon;
 - (iv) in 1991 and 1992, the total annual catch by the sport and troll fisheries in the Strait of Georgia shall not exceed 275,000 chinook salmon; Canada will undertake management measures to achieve the target of rebuilding Lower Georgia Strait and Fraser River chinook stocks by 1998;

- (v) adjustments to the ceilings may be made in response to reductions in chinook abundance so that the indicator stocks are rebuilt by 1998;
 - (vi) fishing regimes are reviewed by the Committee and structured so as not to affect unduly or to concentrate disproportionately on stocks in need of conservation;
 - (vii) starting with the 1987 season, a 7.5 percent management range is established above and below a catch ceiling. On a continuing basis, the cumulative deviation (in numbers of fish) shall not exceed the management range. In the event that the cumulative deviation exceeds the range, the responsible Party shall be required in the succeeding year, to take appropriate management actions to return the cumulative deviation, plus any penalty assessed, to a level within the established management range. Negative cumulative deviations shall not accumulate below the management range. It is the intent of this section to insure that, on average, the annual catch in ceilinged fisheries is equal to the agreed target ceiling; and,
 - (viii) in 1987 and thereafter, the United States will continue to monitor fisheries in Juan de Fuca Strait (Areas 4B, 5, 6A, 6C) and the outer portions of Puget Sound (6B, 7, 7A, 9) so as to assess the levels and trends in the interceptions of Canadian chinook salmon;
- (f) maintain the following program, recognizing that associated fishing mortalities can affect the rebuilding schedule. The Parties shall
- (i) minimize the effects of such mortalities;
 - (ii) monitor, assess, and report associated fishing mortalities;
 - (iii) provide the information required by the Chinook Technical Committee to estimate the magnitude and assess the impacts of associated mortalities on an on-going basis;
 - (iv) beginning in 1989, the Chinook Technical Committee shall
 - a. review reports provided by the Parties on an annual basis, unless directed by the Commission, and estimate the magnitude of all quantifiable sources of associated fishing mortalities;
 - b. evaluate their impact on the rebuilding schedule and recommend management actions that will achieve the objec-

tives of the chinook rebuilding program, taking into account the effects of all fishing mortalities; and

- c. develop technical procedures and standardize methodologies to quantify the magnitude of associated fishing mortalities, including savings of fish, and assess their impacts upon the rebuilding program, including pass-through commitments;
 - (v) the Commission shall annually take into account, starting in 1988, the impacts of fishing mortalities, as determined by the Chinook Technical Committee, in establishing regional fishing regimes and may adjust allowable catches accordingly, to assure rebuilding by 1998;
 - (g) manage all salmon fisheries in Alaska, British Columbia, Washington and Oregon, so that the bulk of depressed stocks preserved by the conservation program set out herein principally accrue to the spawning escapement;
 - (h) establish, at the conclusion of the chinook rebuilding program, fishery regimes to maintain the stocks at optimum productivity and provide fair internal allocation determinations. It is recognized that the Parties are to share the benefits of coastwide rebuilding and enhancement, consistent with such internal allocation determinations and this Treaty; and,
 - (i) exchange annual management plans prior to each season.
2. The Parties agree that enhancement efforts designed to increase production of chinook salmon would benefit the rebuilding program. They agree to consider utilizing and redirecting enhancement programs to assist, if needed, in the chinook rebuilding program. They agree that each region's catches will be allowed to increase above established ceilings based on demonstrations to the Commission and assessment by it of the specific contributions of each region's new enhancement activities, provided that the rebuilding schedule is not extended beyond 1998, and provisions of Subsection 1(e)(vi) of this Chapter are adhered to.
3. The Parties shall submit a report to the Commission by December 1991 which presents
- (a) joint recommendations for chinook salmon escapement goals in the transboundary rivers;

- (b) given the goals recommended in 3(a), a jointly accepted assessment of progress toward rebuilding chinook stocks in these transboundary rivers based on escapement data available through 1991, and the likelihood of achievement of these goals by 1995; and,
- (c) cooperatively developed management options to be identified by December 1991 and initiated in 1992 and following seasons to ensure rebuilding of chinook stocks in the transboundary rivers which are identified in 3(b) as requiring further management actions.

Chapter 4

FRASER RIVER SOCKEYE AND PINK SALMON

1. In order to increase the effectiveness of the management of fisheries in the Fraser River Area (hereinafter the Area) and in fisheries outside the Area which harvest Fraser River sockeye and pink salmon, the Parties agree

- (a) that the preliminary expectations of the total allowable catches of Fraser River sockeye and pink are:

	<i>Sockeye</i>	<i>Pink</i>
1985	6.6 million	11.0 million
1986	12.5 million	
1987	3.1 million	12.0 million
1988	3.6 million	
1989	7.1 million	14.0 million
1990	13.0 million	
1991	3.1 million	14.0 million
1992	3.6 million	

- (b) that

- (i) based on these preliminary expectations, the United States shall harvest as follows:

	<i>Sockeye</i>	<i>Pink</i>
1985	1.78 million	3.6 million
1986	3.0 million	
1987	1.06 million	3.6 million
1988	1.16 million	

- (ii) the United States catches referred to in paragraph 1(b)(i) herein shall be adjusted in proportion to any adjustments in the total allowable catches set out in paragraph 1(a) herein that are due to any agreed adjustments in pre-season or inseason expectations of run-size. When considering such adjustment, the Parties shall take into account all fisheries that harvest Fraser

River sockeye and pink salmon including annual Fraser River Indian food fish harvests in excess of 400,000 sockeye. The United States catches shall not be adjusted to any adjustments in the total allowable catch that may be caused by changes in escapement goals that form the basis for the agreed total allowable catches set out in paragraph 1(a) herein;

- (iii) notwithstanding the agreed United States and Canadian catch levels for Fraser River sockeye and for coho off the west coast of Vancouver Island, as provided in paragraph 1(b)(i) herein and in Chapter 5, respectively, and subject to paragraph 1(b)(ii), in 1985 the United States catch of Fraser River sockeye shall be 1.73 million and the Canadian catch of coho off the west coast of Vancouver Island shall not exceed 1.75 million; and in 1986, the United States catch of Fraser River sockeye shall be 2.95 million and the Canadian catch of coho off the west coast of Vancouver Island shall not exceed 1.75 million;
- (c) in 1985, to instruct the International Pacific Salmon Fisheries Commission to develop regulatory programs in the Area to give effect to the provisions of paragraph 1(b);
- (d) to instruct the Fraser River Panel for 1986 through 1992 to develop regulations to give effect to the provisions of paragraphs 1(b) and 1(f);
- (e) to instruct the Fraser River Panel that if management measures fail to achieve such sockeye and pink catches, any difference shall be compensated by adjustments to the Fraser fishery in subsequent years;
- (f) in the period 1989 to 1992, the Fraser River Panel shall determine the annual United States catch level so that the total United States catch in this period shall not exceed 7 million sockeye in the aggregate. In the years 1989 and 1991, the United States harvest shall not exceed 7.2 million pink salmon, in the aggregate. Notwithstanding the foregoing, these levels shall be reduced in proportion to any decreases in the total allowable catches set out in paragraph 1(a) herein that are due to any agreed decreases in preseason or in-season expectations of run size. When considering such reductions, the Parties shall take into account all fisheries that harvest Fraser River sockeye and pink salmon including annual Fraser River Indian food

fish harvests in excess of 400,000 sockeye. The United States catches shall not be reduced due to any decreases in the total allowable catch that may be caused by changes in escapement goals that form the basis for the agreed total allowable catches set out in paragraph 1(a) herein;

- (g) to consider no sooner than 1989 adjusting the regime in accordance with the principles of Article III;
- (h) to instruct the Fraser River Panel that in managing Fraser River sockeye and pink salmon, it shall take into account the management requirements of other stocks in the Area.

2. Notwithstanding the provisions of Paragraphs 1(b) and 1(f), and to ensure that Canada receives the benefits of any Canadian-funded enhancement activities undertaken following entry into force of this Treaty, any changes in the total allowable catch due to such activities shall not result in adjustment of the United States catch.

3. The Parties shall establish data-sharing principles and processes which ensure that the Parties, the International Pacific Salmon Fisheries Commission, the Commission and the Fraser River Panel are able to manage their fisheries in a timely manner consistent with this Chapter.

4. The Parties may agree to adjust the definition of the Area as necessary to simplify domestic fishery management and ensure adequate consideration of the effect on other stocks and species harvested in the Area.

5. In managing the fisheries in the Area, the Parties, the Commission, and the Fraser River Panel shall take into account fisheries inside and outside the Area that harvest Fraser River sockeye and pink salmon. The Parties, the Commission, and the Fraser River Panel shall consider the need to exercise flexibility in management of fisheries outside the Area which harvest Fraser River sockeye and pink salmon.

6. The Parties shall establish a technical committee for the Fraser River Panel:

- (a) the members shall coordinate the technical aspects of Fraser River Panel activities with and between the Commission staff and the national sections of the Fraser River Panel, and shall report to their respective national sections of the Panel. The committee may receive assignments of a technical nature from the Fraser River Panel and will report results directly to the Panel.

- (b) membership of the committee shall consist of up to 3 such technical representatives as may be designated by each national section of the Commission.
- (c) members of the technical committee shall analyze proposed management regimes, provide technical assistance in the development of proposals for management plans, explain technical reports and provide information and technical advice to the respective national sections of the Panel.
- (d) the technical committee shall work with the Commission staff during pre-season development of the fishery regime and management plan and during in-season consideration of regulatory options for the sockeye and pink salmon fisheries of Fraser Panel Area waters to ensure that:
 - (i) domestic allocation objectives of both Parties are given full consideration;
 - (ii) conservation requirements and management objectives of the Parties for species and stocks other than Fraser River sockeye and pink salmon in the Fraser River Panel Area during periods of Panel regulatory control are given full consideration; and,
 - (iii) the Commission staff is timely informed of management actions being taken by the Parties in fisheries outside of the Fraser River Panel Area that may harvest sockeye and pink salmon of Fraser River origin.
- (e) the staff of the Commission shall consult regularly in-season with the technical committee to ensure that its members are fully and timely informed on the status of Fraser River sockeye and pink salmon stocks, and the expectations of abundance, migration routes and proposed regulatory options, so the members of the technical committee can brief their respective national sections prior to each in-season Panel meeting.

Chapter 5

COHO SALMON

1. Recognizing that for the past several years some coho stocks have been below levels necessary to sustain maximum harvest and that recent fishing patterns have contributed to a decline in some Canadian and United States coho stocks, and in order to prevent further decline in spawning escapements, adjust fishing patterns, and initiate, develop, or improve management programs for coho stocks, the Parties shall

- (a) instruct their respective management agencies to continue to develop coho salmon management programs designed to meet the following objectives
 - (i) prevent overfishing; and,
 - (ii) provide for optimum production;
- (b) maintain a Joint Coho Technical Committee (Committee), reporting, unless otherwise agreed, to the Panels and the Commission. The membership of the Committee shall include representation from the Northern and Southern Panel Areas. The Committee, *inter alia*, shall, at the direction of the Commission and relevant Panels
 - (i) evaluate management actions for their consistency with measures set out in this Chapter and for their potential effectiveness in attaining the objectives established by the Commission;
 - (ii) annually identify, review, and evaluate the status of coho stocks in relation to the objectives set out in this Chapter and make recommendations for adjustments to the management measures consistent with those objectives;
 - (iii) present the most current information on exploitation rates and patterns on these stocks, and develop a joint data base for assessments;
 - (iv) collate available information on the productivity of coho stocks in order to identify the management objectives necessary to prevent overfishing;
 - (v) present historical catch data and associated fishing regimes;
 - (vi) estimate stock composition in fisheries of concern to the Commission and Panels;

- (vii) devise analytical methods for the development of alternative regulatory and production strategies;
 - (viii) identify information and research needs, including future monitoring programs for stock assessments;
 - (ix) investigate the feasibility of alternative methodologies for implementing indicator stock programs in all areas;
 - (x) for each season, make stock and fishery assessments and recommend to the Commission conservation measures consistent with the principles of the Treaty;
 - (xi) develop programs to assure the attainment of spawning escapement goals and prevent overfishing;
 - (xii) exchange information necessary to analyze the effectiveness of alternative fishery regulatory measures in achieving conservation objectives; and,
 - (xiii) work to develop, under the direction of the Joint Northern and Southern Panels, standard methodologies for coho stock and fishery assessment; and,
- (c) unless otherwise agreed, in any area where fisheries of one Party may intercept coho stocks originating in the rivers of the other which require conservation action or such other action as the Commission may determine, that Party will endeavor to limit incidental coho catches in fisheries targeting on other species.

2. For coho stocks shared by fisheries of the United States and Canada, recommendations for fishery regimes shall be made by the Northern Panel for coho salmon originating in rivers with mouths situated between Cape Caution and Cape Suckling and by the Southern Panel for coho salmon originating in rivers with mouths situated south of Cape Caution, as provided in Annex I. At the direction of the Commission, each Party shall establish regimes for its troll, sport, and net fisheries consistent with management objectives approved by the Commission.

3. The Parties agree

- (a) for 1991 and 1992, the west coast of Vancouver Island (Canadian Management Areas 21, 23, 24, 25, 26, 27, 121, 123, 124, 125, 126, 127, and 130-1) annual troll harvest shall not exceed 1.8 million Coho;

- (b) for 1991 and 1992, the Swiftsure Bank area will be closed to chinook and coho salmon trolling in order to address conservation concerns expressed by both Parties. Troll fishing for sockeye and pink salmon shall, upon appropriate prior notice, be permitted only in order to attain Canadian domestic troll allocation objectives on sockeye and pink;
- (c) to avoid any alterations in coho fisheries along the west coast of Vancouver Island that would increase the proportional interception of U.S. coho stocks;
- (d) that in 1991 and 1992, for Canadian Area 20, and U.S. Areas 7 and 7A, fisheries directed at coho salmon will be permitted. Notwithstanding this agreement, if the Commission determines that conservation concerns expressed by either Party warrant further restrictions, then the Parties shall limit their catch of coho salmon to that taken incidentally during fisheries under the control of the Fraser Panel and those permitted under the provisions of Annex IV, Chapter 6. Both Parties agree that in 1987, due to conservation concerns expressed by both Parties and agreed to by the Commission, coho fisheries in Canadian Area 20 and U.S. Areas 7 and 7A shall be limited by the levels of incidental coho catch anticipated during fisheries conducted under the control of the Fraser Panel and provisions of Annex IV, Chapter 6;
- (e) for 1991 and 1992, the United States shall adhere to presently agreed management objectives in Strait of Juan de Fuca Areas 4B, 5, and 6C; and,
- (f) to develop in 1993 and thereafter, troll fishery regimes for the west coast of Vancouver Island that
 - (i) implement conservation measures approved by the Commission and take into account any increased contributions by the Parties to the fishery; and,
 - (ii) provide for the sharing of benefits of coho production of each Party consistent with the principles of Article III.

4. Notwithstanding any other provisions of this Chapter, the Commission, for 1993 and thereafter, may set specific fishery regimes as appropriate, which may include troll harvest ceilings, for coho salmon in the intercepting fisheries restricted under this Chapter that

- (a) implement conservation measures approved by the Commission;

- (b) take into account increased production;
- (c) provide for the recognition of benefits of coho production of each Party consistent with the principles of Article III;
- (d) take into account actions taken by each Party to address its conservation concerns; and,
- (e) take into account time and area management measures which will assist either Party in meeting its conservation objectives while avoiding undue disruption of fisheries.

5. Starting with the 1987 season, a 7.5 percent management range is established above and below a catch ceiling. On a continuing basis, the cumulative deviation (in numbers of fish) shall not exceed that management range. In the event that the cumulative deviation exceeds the range, the responsible Party shall be required, in the succeeding year, to take appropriate management actions to return the cumulative deviation, plus any penalty assessed, to a level within the established management range. Negative cumulative deviations shall not accumulate below the management range. It is the intent of this section to insure that, on average, the annual catch in ceilinged fisheries is equal to the agreed target ceiling.

6. The Parties agree that enhancement efforts designed to increase production of coho salmon would, when combined with catch ceilings and/or time/area management measures, aid in rebuilding depressed natural stocks by reducing the exploitation rates on these stocks. They agree that utilizing this opportunity in the future to rebuild natural stocks is, in most cases preferable to reductions in fishing levels. A major objective of enhancement is to lay the foundation for improved fisheries in Annex areas in the future.

Chapter 6

*SOUTHERN BRITISH COLUMBIA AND WASHINGTON STATE CHUM
SALMON*

1. The Parties shall maintain a Joint Chum Technical Committee (Committee) reporting, unless otherwise agreed, to the Southern Panel and the Commission. The Committee, *inter alia*, will undertake to

- (a) identify and review the status of stocks of primary concern;
- (b) present the most current information on harvest rates and patterns on these stocks, and develop a joint data base for assessments;
- (c) collate available information on the productivity of chum stocks to identify escapements which produce maximum sustainable harvests and allowable harvest rates;
- (d) present historical catch data, associated fishing regimes, and information on stock composition in fisheries harvesting those stocks;
- (e) devise analytical methods for the development of alternative regulatory and production strategies;
- (f) identify information and research needs, to include future monitoring programs for stock assessment; and,
- (g) for each season, make stock and fishery assessments and evaluate the effectiveness of management.

2. In 1991 and 1992, Canada will manage its Johnstone Strait, Strait of Georgia, and Fraser River chum fisheries to provide continued rebuilding of depressed naturally spawning chum stocks, and, to the extent practicable, minimize increased interceptions of United States origin chum. Terminal fisheries conducted on specific stocks with identified surpluses will be managed to minimize interception of non-targeted stocks.

3. In each of 1991 and 1992,

- (a) for Johnstone Strait run sizes less than 3.0 million
 - (i) Canada, taking into account the catch of Canadian chum in United States Areas 7 and 7A, will limit its harvest rate in Johnstone Strait to less than 10 percent, resulting in a Johnstone Strait catch level of up to 225,000 chum; and,
 - (ii) when the catch in Johnstone Strait is 225,000 chum or less, the United States catch of chum in Areas 7 and 7A shall be

limited to chum taken incidentally to other species and in other minor fisheries, but shall not exceed 20,000, provided, however, that catches for the purposes of electrophoretic sampling shall not be included in the aforementioned limit;

- (b) for Johnstone Strait run sizes from 3.0 million to 3.7 million
 - (i) Canada, taking into account the catch of Canadian chum in United States Areas 7 and 7A, will limit its harvest rate in Johnstone Strait to 20 percent, resulting in a Johnstone Strait catch level of 225,000 to 640,000 chum; and,
 - (ii) when the catch in Johnstone Strait is from 225,000 to 640,000 chum, the United States catch of chum in Areas 7 and 7A shall not exceed 120,000;
- (c) for Johnstone Strait run sizes of 3.7 million and greater
 - (i) Canada, taking into account the catch of Canadian chum in United States Areas 7 and 7A, will harvest at a rate in Johnstone Strait of 30 percent or greater, resulting in a Johnstone Strait catch level of 640,000 chum or greater; and,
 - (ii) when the catch in Johnstone Strait is 640,000 chum or greater, the United States catch of chum in Areas 7 and 7A shall not exceed 140,000;
- (d) it is understood that the Johnstone Strait run sizes, harvest rates, and catch levels referred to in 3(a), 3(b), and 3(c) are those determined in season, in Johnstone Strait, by Canada; and,
- (e) the United States shall manage in a manner that, as far as practicable, maintains a traditional proportion of effort and catch between United States Areas 7 and 7A, and avoids concentrations of effort along the boundary in Area 7A.

4. In 1991 and 1992, the United States shall conduct its chum fishery in the Strait of Juan de Fuca (United States Areas 4B, 5 and 6C) so as to maintain the limited effort nature of this fishery, and, to the extent practicable, minimize increased interceptions of Canadian origin chum. The United States shall continue to monitor this fishery to determine if recent catch levels indicate an increasing level of interception.

5. If the United States chum fishery in Areas 7 and 7A fails to achieve the 1991 and 1992 catch levels specified in paragraphs 3(a)(ii), 3(b)(ii), and 3(c)(ii), any differences shall be compensated by adjustments to the Areas 7 and 7A fish-

ery in subsequent years, except that chum catches below the level specified in paragraph 3(a)(ii) shall not be compensated.

6. Catch compositions in fisheries covered by this chapter will be estimated by post-season analysis using methods agreed upon by the Joint Chum Technical Committee.

7. Canada will manage the Nitinat net chum fishery to minimize the harvest of non-targeted stocks.

8. In 1991 and 1992, Canada shall conduct electrophoretic sampling of chum taken in the West Coast Vancouver Island troll fishery if early-season catch information indicates that catch totals for the season may reach levels similar to 1985 and 1986. Sampling, should it occur, will include catches taken from the southern areas (Canadian Areas 121–124).

Chapter 7

GENERAL OBLIGATION

With respect to intercepting fisheries not dealt with elsewhere in this Annex, unless otherwise agreed, neither Party shall initiate new intercepting fisheries, nor conduct or redirect fisheries in a manner that intentionally increases interceptions.

The Department of State to the Canadian Embassy

The Department of State refers to the Embassy of Canada's Note No. 72 of June 13, 1991, concerning the recommendations made by the Pacific Salmon Commission on May 17, 1991, in accordance with Article XIII, paragraphs 2 and 3 of the Pacific Salmon Treaty Between the Government of the United States of America and the Government of Canada Concerning Pacific Salmon, signed at Ottawa on January 28, 1985.

The Embassy's proposal that Annex IV of the Treaty be amended to read as set forth in attachment 1 of the Embassy's note, in accordance with the amendment procedure established by Article XIII, paragraph 3 of the Treaty, is acceptable to the Government of the United States of America.

The Department of State confirms that the Embassy's note of June 13, 1991, including its attachment, together with this note in reply, shall constitute an agreement between the Government of the United States of America and the Government of Canada amending Annex IV of the Treaty, which shall enter into force on the date of this note.

Department of State,
Washington, August 12, 1991.