Pacific Salmon Commission

1985/86

First Annual Report

Pacific Salmon Commission

Established by Treaty between Canada and the United States March 17, 1985

for the

conservation, management and optimum production of Pacific salmon

First Annual Report 1985/86

Vancouver, B.C.
Canada

PACIFIC SALMON COMMISSION

ESTABLISHED BY A TREATY BETWEEN CANADA
AND THE UNITED STATES OF AMERICA

P.O. BOX 30
NEW WESTMINSTER, B.C.
CANADA V3L 4X9

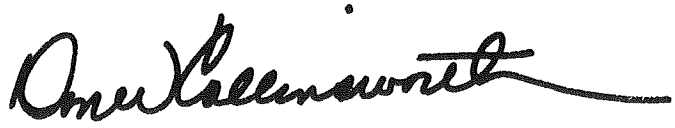
TELEPHONE
(604) 521-3771

Letter of Transmittal

In compliance with Article II, Paragraph 14 of the Treaty between the Government of Canada and the Government of the United States of America concerning Pacific Salmon, it is my pleasure as Chairman of the Pacific Salmon Commission to present my compliments to the Parties and to transmit herewith the first Annual Report of the Commission.

This report summarizes the activities of the Pacific Salmon Commission from the initialling of an agreement on January 28, 1985 through to March 31, 1986. It contains a summary of proceedings of the inaugural meeting of the Commission held in Seattle, Washington September 25 to 27, 1985, proceedings of a meeting held in Vancouver, B.C. February 17 to 21, 1986, and proceedings of the First Annual Meeting of the Commission held in Vancouver March 5 to 7, 1986.

This report also contains a summary of reports submitted by the Northern, Southern and Fraser River Panels on activities of the 1985 fishing season, and on prospects for 1986. Summaries of reports prepared by the Joint Technical Committees are included. Executive summaries of reports prepared by the Transition Committee and the Standing Committee on Finance and Administration review the administrative beginnings of the Commission. A report by the auditor covering the period September 25, 1985 to March 31, 1986 is also included.



Don W. Collinsworth
Chairman

Pacific Salmon Commission

OFFICERS for 1985/86

Chairman	Mr. D. Collinsworth
Vice-Chairman	Dr. A.W. May (to Dec. 31, 1985) Mr. G.E. Jones (from Jan. 1, 1986)

COMMISSIONERS

Canada	United States
Dr. A.W. May (to Dec. 31, 1985)	Mr. D. Collinsworth
Mr. G.E. Jones	Mr. D. Colson
Mr. C. Atleo	Mr. S. Wapato
Mr. R. Shaw	Mr. W. Wilkerson
Mr. R. Wright	Mr. K. Parker
Mr. P. Greene	Mr. G. McMinds
Mr. J. Nichol	Dr. J. Donaldson
Mr. J. Gosnell	Mr. H. Beasley

SECRETARIAT

Executive Secretary	Dr. J.C. Woodey (acting to March 31, 1986)
Deputy Executive Secretary	—
Administrative Officer	Mr. K. Medlock
Chief Biologist	Dr. J.C. Woodey

Contents

Appendices

INTRODUCTION

On March 17, 1985, a Treaty between the Government of the United States of America and the Government of Canada concerning Pacific salmon, was ratified by the President of the United States and the Prime Minister of Canada (Appendix 1).

The interception of salmon bound for rivers of one country by fishermen of the other has been the subject of discussion between the two countries since the early part of this century. As a result of concerns raised over the interception of salmon bound for Canada's Fraser River, an agreement between Canada and the United States was reached in 1930. In 1937, the International Pacific Salmon Fisheries Commission (IPSFC) was established to regulate fisheries on sockeye bound for the Fraser River. A protocol governing pink salmon of Fraser River origin was added in 1957.

Many other intercepting fisheries were also identified through research conducted by the two countries on species and stocks originating from Alaska, British Columbia, Washington and Oregon. Research identified that Alaskan fishermen were catching salmon bound for British Columbia, Oregon and Washington. Canadian fishermen, primarily off the west coast of Vancouver Island, were capturing coho and chinook bound for rivers of Washington and Oregon. Fishermen in northern British Columbia were intercepting salmon returning to Alaska, and American fishermen were catching salmon as they travelled through the Strait of Juan de Fuca and the San Juan Islands towards the Fraser River.

Management of these stocks was a matter of common concern. Both Canada and the United States needed a mechanism which would enable them to reap the benefits of their respective management and enhancement efforts. That mechanism has now been provided by the Pacific Salmon Treaty.

Under terms of the Treaty, the Pacific Salmon Commission has been established by both countries to develop and implement procedures and programs for the achievement of Treaty goals. The Commission provides recommendations or advice to each country on any matters pertaining to the Treaty, serving as a forum for consultation and negotiation of annual management plans for the major intercepting fisheries. This new Commission, effective January 1, 1986, supersedes the International Pacific Salmon Fisheries Commission.

Under the new Treaty, each country has general management control of stocks originating in its own rivers. Implementation of the goals of the Treaty will enable the United States and Canada, through better conservation and enhancement, to prevent overfishing, increase production of salmon, and ensure that each country receives the benefit of its own production.

Information on the extent of interceptions may be imprecise, making it difficult to determine accurate production totals of salmon from each country's rivers. For this reason, and because methods of evaluating the benefits may differ in each country, the Treaty stipulates that both countries must take into account changes in benefits as a result of alteration in fishing patterns, conservation actions, or changes in the abundance of the runs.

The Treaty has set short-term goals to meet concerns about declining chinook stocks. To stabilize and rebuild these stocks, each country established a management program designed to attain escapement goals restoring production of naturally spawning chinook stocks to former levels of abundance by 1998.

An additional goal of the Treaty is to reduce interceptions of all species of salmon and, at the same time, to avoid undue disruption of existing fisheries.

Annual management plans are part of the operating mechanisms which enable Canada and the United States to meet the stated objectives of the Treaty. Fishing plans agreed for 1985 brought major concerns under initial control and set catch ceiling limitations for five important fisheries. They include the west coast of Vancouver Island troll fishery, the north coast troll fishery, the southeastern Alaska net and troll fishery, the Puget Sound net fishery and the Strait of Georgia troll and sport fishery. Most of the limits were put in place for two years and must be renegotiated after 1986. Others, such as the Fraser River, have sharing arrangements spelled out in the Treaty for up to eight years.

Salmon originating in transboundary rivers (rivers that rise in Canada and flow to the sea through the United States) are subject to joint management under mutually agreed harvest shares for Canada and the United States, and spawning escapement goals for the stocks. Close cooperation in designing and implementing enhancement programs for transboundary rivers is an essential part of management. Discussions on the issues of management are continuing between the two countries for another transboundary river, the Yukon.

During the first year of operation, the organizational structure of the Commission has been established with the appointment of Commissioners and alternates, the establishment of Panels and their members, and the appointment of technical committees and standing committees of the Commission. The Secretariat staff was formed by transfer of the Fishery Management Division and Administration Staff of the IPSFC to the Pacific Salmon Commission.

The Chairman and Vice-Chairman of the Commission, Mr. D. Collinsworth of the United States and Dr. A.W. May of Canada respectively, were selected at the first meeting of the Commission. These offices will alternate between the two countries every 12 months with the Vice-Chairman automatically assuming the office of the Chairman.

Three Panels, the Southern, Northern and Fraser River, have up to six members each appointed from each country. A designated alternate for each Panel member was also appointed. Chairmen of the Panels were selected at the first meeting of the Commission. For the Southern Panel, Mr. R. Morley of Canada was selected; for the Northern Panel, Mr. S. Pennoyer of the United States; and for the Fraser River Panel, Mr. F. J. Fraser of Canada.

It is the function of the Panels to provide information and recommendations on the management of the fisheries in their area of responsibility before and after each season harvest. The area of the Northern Panel falls between Cape Suckling in Alaska and Cape Caution in British Columbia; the area of the Southern Panel lies south of Cape Caution with the exception of the area of the Fraser River Panel which encompasses the former Convention area established by the International Pacific Salmon Fisheries Commission. Upon reviewing and examining the annual reports, the annual fishing plans and the salmonid enhancement programs of each country, the Panels provide the Commission with specific recommendations for development of fishery regimes. The Fraser River Panel has been accorded special responsibility for in-season regulation of the fisheries of the United States and Canada in southern British Columbia and northern Puget Sound on sockeye and pink salmon in the area formerly regulated by the International Pacific Salmon Fisheries Commission (Appendix 2).

The Commission is required by the Treaty to produce an annual report through to the end of its first full fiscal year. This report provides a synopsis of the activities of the Commission and its subsidiary bodies for the period beginning with the signing of the Treaty in March of 1985 through to March 31, 1986, the end of the first full fiscal year of operation.

Meetings and Reports

PART I

FIRST MEETING OF THE COMMISSION:
September 25-27, 1985 — Seattle, Washington

The first official meeting of the Pacific Salmon Commission was held on September 25 through 27, in Seattle, Washington. The purpose of the meeting was to select officers for the Commission, its Panels and Joint Technical Committees, and to initiate work of the Panels and Committees. Opening statements were made by the heads of the delegations Mr. D. Collinsworth on behalf of the United States and Dr. A. W. May, on behalf of Canada.

1. Opening Statement — United States

On behalf of the United States, welcome to Seattle for the first meeting of the Pacific Salmon Commission. I see familiar faces on both sides, many of whom a year ago did not expect that we would ever reach this juncture. The fact that we have sunshine in Seattle bodes well for the future of this institution. I hope your stay here is pleasant and that you have a chance to renew old friendships and make new ones.

Our work here has just begun. The work of this Commission is unprecedented in scope. No other fisheries commission is required to accomplish tasks of this kind. We have to make allocation decisions for six fisheries in two countries and assume direct management responsibility for one of those fisheries. The viability of these initiatives will hinge on at least two things: (1) in the United States, full participation by each interested entity; and (2) in both countries, a renewed and intensified commitment of personnel and financial resources to this project.

In the United States, fisheries allocation decisions must take into account the concerns of four states, 24 tribes, many user groups, and the federal government. Our system only will be effective if we operate with their full participation. Therefore, we intend to continue the practice of full involvement by all interested U.S. constituents as was the case during the negotiation.

In both countries, each Party will have to commit substantial new personnel and fiscal resources to drive the Commission, its three Panels, and its Joint Technical Committees. We have to intensify our efforts to monitor the resource and analyze the data. We also have to fund enhancement projects in part to offset the dislocation resulting from some of the allocation decisions embodied in the Treaty. We have to operate and fund the Commission itself. This process is hard work and the process of securing the necessary funding is another job in itself. We need not only a continuation of the hard work and dedication that produced the Treaty, but an intensification of these efforts.

The rewards for our efforts will be effective coastwide salmon management, bilateral cooperation on a scale unprecedented in international fisheries, and increased salmon production from which fishermen of both countries will profit.

D.W. Collinsworth

2. Opening Statement — Canada

On behalf of the Government of Canada, I wish to thank the Government of the United States for hosting this inaugural meeting of the Pacific Salmon Commission here in Seattle. In addition, thank you also for the fine weather you have provided this week as it reflects the high hopes we all have for the success of this Treaty. This view is shared by the strong delegation of Canadians who have accompanied me here for this meeting — many of whom have left the fishing grounds at considerable expense to join us here. My delegation is composed of well-respected representatives from all sectors of Canada's fishing industry. We have a team of people here that is dedicated to working hard and helping make the Treaty a reality.

This Treaty is concerned with the valuable Pacific salmon resource which is of great importance to both countries. By signing the Treaty, both Canada and the United States have taken a significant step forward towards improved conservation and rational management of our Pacific salmon stocks. The Treaty allows each Party the opportunity to develop fisheries and enhancement programs so as to prevent overfishing, provide for optimum production and ensure that benefits are received commensurate with production levels.

We recognize that with the signing of this Treaty our work is just beginning. At this inaugural meeting, we will be dealing mainly with procedural and operational aspects of establishing the new Commission. However, future meetings will deal with post-season evaluation of the fishery, each country's plans for the coming year and inseason management responsibilities on the Fraser River. Future discussions will no doubt be long and often complex and will therefore require our full collective energies.

A subject of great importance to Canada is the salmon resource in the Fraser River. The Fraser is a Canadian river and its salmon stocks are vital to the well-being of our fisheries. In our view, the "country of origin" principle, fought long and hard by both our nations in other international arenas and embodied in the Law of the Sea as well as in this Treaty, is crucial and key to rational management. This Treaty replaces the old Fraser River Treaty. We are optimistic that the arrangements to be put in place under the new Treaty will resolve some of the difficulties, misunderstanding and lack of coordination experienced in the past with respect to Fraser River sockeye and pink salmon management. We expect that the Fraser River Panel will play a key role in designing operating guidelines to provide for implementation of the Treaty principles and proper control of fisheries in the Panel's area of responsibility.

In closing I should like to once again thank the United States for hosting this week's meeting and also to echo the Chairman's thanks for the efforts of the working groups that have facilitated this meeting. I think we should be guided in our future deliberations by the fact that it has taken a very long time to get here and we all have an obligation to ensure that this Treaty works.

A.W. May

3. Summary of Proceedings

The Chairman and Vice-Chairman for the Commission and three Panels were chosen. D. Collinsworth (U.S.) was selected by lot to chair the Commission for its first year of operation. A. W. May (Canada) became Vice-Chairman. Chairmen selected for the panels were: S. Pennoyer (U.S.), Northern Panel; R. Morley (Canada), Southern Panel; G. Jones (Canada), Fraser River Panel.

The Panels were instructed to review and comment on rules of procedure, discuss interaction with Technical Committees and the Commission, review Panel operating schedules, identify technical needs, and prepare reports to the Commission on 1985 fishery regimes and prospects for 1986.

Special instructions were given to the Fraser River Panel to review and make recommendations regarding the transition of authority from the International Pacific Salmon Fisheries Commission (IPSFC). The Panel was also charged with recommending rules of procedures regarding its open and executive sessions, taking into consideration the nature and frequency of meetings that could be expected to take place during the fishing season.

The Southern Panel was instructed to discuss fishing plans for chum and coho for the remainder of 1985.

The Commission adopted the financial regulations under which it will operate. They included: designation of March 31 as the fiscal year-end for the Commission; preparation of the yearly budget no later than 60 days before an annual meeting; acceptance of the Canadian dollar as the standard for budgets; establishment of two funds, a working capital fund and a general fund. Budgets were also approved; an interim one for September 1, 1985 - March 31, 1986 and a budget for fiscal year April 1, 1986 - March 31, 1987. For both budgets, the Commission stressed the need to permit flexibility between categories so that unexpected or new expenditures could be dealt with easily.

Following acceptance of amendments, the Commission adopted its operating bylaws. Provisional bylaws for the three Panels were also adopted. (Copies of the Bylaws and Rules of Procedure of the Pacific Salmon Commission, and Staff Regulations are at the Commission offices and are available on request.) A letter of transmittal regarding the bylaws was drafted for delivery to both governments.

The Commission established a Data Sharing Committee with a mandate to evaluate the desirability of establishing centralized data bases, determine information to be shared between agencies of the two Parties, and to establish protocols for access to regionally established data bases. Approval was given to spend $100,000 for purchase of 10 microcomputers to assist the Joint Technical Committees in proceeding with their tasks.

A Nominating Committee consisting of W. Wilkerson, A. May, G. Jones and J. Donaldson was also established and instructed to proceed with the selection of an Executive Secretary for the Commission.

Draft organization charts and job descriptions of both the Administration and Fishery Management Divisions of the Commission were studied. A Transition Committee was struck to make recommendations regarding personnel and organizational structure for new Commission staff. The committee members were R. Morley, B. Riddell, D. Pethick for Canada and T. Wapato, R. Schmitten, B. Kefauver for the U.S.

At the close of the meeting, the Commission authorized all Joint Technical Committees and Panels to have up to three meetings prior to February 1986, to enable them to complete their reviews of 1985 fishery regimes and prepare reports for presentation to the Commission at the next meeting scheduled for February 17-21, 1986.

PART II
SECOND MEETING OF THE COMMISSION:
February 17-21, 1986 — Vancouver, B.C.

The main purpose of this meeting was to review progress made by the Panels and Joint Technical Committees on completing 1985 reports and on developing proposals for fishery regimes in 1986. The Commission also continued development of administrative procedures, including the appointment of the Executive Secretary and assignments of individuals to the Standing Committees on Finance and Administration and Research and Statistics.

1. SUMMARY OF PRELIMINARY REPORTS OF PANELS ON INTERSESSIONAL MEETINGS

Fraser River Panel
The Panel Chairman reported that agreement for recommendations on fishing plans for 1986 had not been reached.

Southern Panel
The Panel Chairman reported that little progress had been made toward development of recommendations for 1986 because reports from both the Chinook and Coho Technical Committees had not been received by the Panel.

Northern Panel
The Panel had reviewed the 1985 reports of the Northern Boundary and Transboundary Technical Committees and proposals for 1986 fishing and research plans. Recommendations for 1986 fishing regulations were expected to be agreed upon and presented to the Commission during the course of this meeting.

Joint Northern/Southern Panel
Activities of this group were also awaiting reports from the Joint Coho and Chinook Technical Committees. It was anticipated that those reports would be available by March 3.

2. SUMMARY OF PRELIMINARY REPORTS OF JOINT TECHNICAL COMMITTEES

Chinook Technical Committee
The Committee identified several concerns for investigation. They included the decline of chinook stocks, defining "new" enhancement activities, determining fishery-induced mortalities, and criteria for hatchery expansions. Completion of the chinook report has been delayed because of slow submission of data.

Coho Technical Committee
The Committee produced a summary of coho catches for 1985. Concern was expressed that low returns of 1983 brood-year natural coho stocks were expected in 1986 because of the El Nino in 1983. The Chairman reported that the Committee expected to complete its report by mid-March.

Chum Technical Committee
The Committee reported it was working on its 1985 season report and on expectations for the 1986 season. Forecast for the 1986 season is expected to be completed by mid-May.

Northern Boundary Technical Committee
The Committee had submitted its 1985 report to the Northern Panel and put forward recommendations for the 1986 fishing season. In order to allow a catch-up in data analysis, the Committee recommended that a tagging program not be conducted in 1986.

Transboundary Technical Committee
The Committee had submitted both its 1985 report and expectations for 1986 to the Northern Panel. Research needs and enhancement opportunities were addressed.

Data Sharing Committee
The Committee reported it would be meeting to review areas of work.

3. PROGRESS DURING THE MEETING

All Panels met several times during the course of the week. Progress reports were submitted to the Commission at the final plenary session of February 21, 1986.

Fraser River Panel
The Chairman reported that agreed recommendations for the 1986 regulatory regime in Panel area waters had not been reached. A subcommittee has been established to develop a common data base for use by both National Sections of the Panel.

Southern Panel
All work on development of 1986 fishing plans has been deferred until March 2-4 when it is anticipated that the Joint Technical Committee will report on chinook and who will be available. The Chairman identified issues of concern to the Panel, which included procedural matters, the question of approach to hatchery add-ons, and the problem of catch ceiling overages and underages in 1985.

Northern Panel
The Northern Panel presented recommendations on the 1986 fishery regime for adoption by the Commission. Amendments were proposed to Annex IV, Chapter 2, Paragraphs 3(b) and 3(c) to give effect to the agreed regimes for 1986.

Joint Northern/Southern Panel
The Joint Panel did not meet during the course of this session. Meetings are scheduled to begin March 3.

Chairman's Summary
The Chairman of the Commission summarized the issues still outstanding and which the Commission expected to resolve during the next session scheduled for March 2-7, 1986:

(i) Chinook- hatchery add-ons
- overages and underages
- induced fishing mortalities
- reduced catch ceilings by invocation of the 15 percent clause

(ii) Coho - regulatory regimes for Area 20 and Georgia Strait (Canada), 7 and 7A (U.S.)
- west coast troll 1985 shortfall

(iii) Fraser River Panel - regulatory proposals for 1986

(iv) Southern chum regulatory package for northern Puget Sound.

4. SUMMARY OF ADMINISTRATIVE ACTIONS

Two Standing Committees were formed. G. Jones, T. Wapato, B. Graham and B. Kefauver were appointed to the Standing Committee on Finance and Administration, with T. Wapato as Chairman. Appointed to the Standing Committee on Research and Statistics were J. Donaldson, P. Greene, K. Parker, R. Shaw, D. Bevan, S. Marshall, B. Riddell and D. Schutz.

The two Standing Committees had initiated work during the course of this session. A report prepared by the Standing Committee on Finance and Administration was reviewed and accepted by the Commission (Appendix 3). The Committee received approval of its draft terms of reference from the Commission (Appendix 4).

The Committee put forward several recommendations concerning the bylaws and rules of procedure which had been adopted by the Commission. For financial rules, it recommended that the Commission undertake a comprehensive review of the working capital fund and general fund with the aim to clearly identify the purposes of the funds to ensure accurate accounting of expenditures. With regard to obligation of funds, there was consensus that obligations would be considered incurred when purchase orders are issued. The Committee also recommended that the firm of Peat Marwick Mitchell & Co. be appointed the Commission's auditor.

For staff rules, the Committee recommended that the Commission Secretariat not be part of the Public Service of Canada although its rules and regulations would serve as general guidelines for employing Secretariat staff.

The Committee recommended the expenditure of $150,000 to purchase marine, office, and scientific equipment and vehicles.

Consensus was reached that some monies in the 1985-86 budget be designated for Commission relocation costs and that any surpluses remaining in this reserve fund at year-end be carried forward to fiscal year 1986-87. The Committee recommended the Commission approve the budget for 1986-87.

The Committee pointed out that U.S. citizens living in B.C. are not eligible for the medical insurance offered by the Province of British Columbia; a fact that could discourage U.S. citizens from applying for Commission jobs. A recommendation was made that the Commission should seek private medical coverage for its U.S.-citizen employees which would mirror the coverage provided by the B.C. plan.

Agreement was reached that the Committee will be responsible for financial and administrative aspects of Commission publications. The Committee recommended a numbering system be established for Commission documents.

The Chairman announced that the Commission had ratified the appointment of Mr. I. Todd as Executive Secretary. Mr. Todd will take office effective April 1, 1986.

The Transition Committee submitted its report, dated November 7, 1985, to the Commission for consideration (Appendix 5). The report made several recommendations on the process of transferring the operations of the International Pacific Salmon Fisheries Commission to the Pacific Salmon Commission. Recommendations focussed on the Secretariat, inventory, library files, and reports in progress.

The Committee proposed a Commission Secretariat structure with a staff of 17 full-time employees, composed of an executive secretary, deputy executive secretary, personal secretary, and five administrative and nine management positions. The management group would deal chiefly with Fraser River Panel issues. It was recommended that all the administrative and management positions and the personal secretary job be filled by individuals currently employed by IPSFC. Those employees should be permitted to transfer their IPSFC pensions and accrued vacation and sick leave benefits to the Commission. It was also recommended that a budget be set to cover the cost of hiring at least 16 part-time employees on an inseason basis, allowing flexibility in case more than 16 are required.

The transfer of IPSFC inventory, library and files was examined by the Committee. It recommended that general office furniture and equipment, electrophoretic supplies and equipment, and several boats and vehicles be transferred to the Commission. Earmarked for transfer to the Department of Fisheries and Oceans were field equipment, construction tools, and some vehicles and boats. Property not transferred to either the Commission or DFO should be sold at fair market value with the proceeds going to the Commission. The IPSFC library and files should be transferred to the Commission.

For IPSFC reports in progress, the Committee recommended that those reports be completed; the responsibility shifting from the IPSFC to the organization that employs the reports' senior author. Where the senior author does not transfer to either the Pacific Salmon Commission or DFO, the Commission should consider placing the author under contract to complete the report. Reports published by December 31, 1986 should be published as IPSFC reports and funded by the new Commission. Those published after that date would be considered either the work of DFO or the Commission, as appropriate, and would be paid for accordingly.

The Transition Committee pointed out that the process of responsibly winding down IPSFC operations would have to continue beyond December 31, 1985. The Committee recommended that the Commission executive secretary and deputy executive secretary look to winding down the business of the IPSFC by February 17, 1986.

The Commission thanked the Transition Committee for its work and then officially disbanded it, after adopting the major recommendations contained in the report.

5. CLOSING STATEMENTS

The meeting concluded with Chairman D. Collinsworth thanking the participants for their effort at resolving the complex issues before them. Vice-Chairman G. Jones pointed out that decisions made by the Commission affect many people in the fishing industries of both countries and must, therefore, be taken carefully.

The meeting was adjourned at approximately 3:00 p.m. February 21, 1986.

PART III
FIRST ANNUAL MEETING OF THE COMMISSION:
March 5-7, 1986 — Vancouver, B.C.

This session was designated as the first annual meeting of the Commission. The Panels and Joint Technical Committees met March 2 through 4 to develop proposals for conduct of fisheries in 1986. At the first plenary session of the Commission on March 5, the Chairman requested status reports from the Panels so that the Commission could establish a time frame for completion of Panel and Commission work.

1. SUMMARY OF PROGRESS REPORTS OF THE PANELS

Fraser River Panel
The Chairman reported that the Panel had been unable to reach agreement on a sharing formula to be applied to summer-run stocks and requested Commission assistance.

Southern Panel
The Chairman reported that the Panel had reached agreement on a fishing regime for chums in 1986. One issue on coho, that of agreement on the reasons for a shortfall in catch in the west coast of Vancouver Island, remained unresolved and Commission assistance was requested.

Northern Panel
The Panel reported that final drafting of the Northern Panel report was continuing.

Joint Northern/Southern Panels
The Chairman reviewed progress on issues identified by the Joint Technical Committee on chinook and requested additional time to attempt to reach agreement.

The Panels were instructed to continue to work toward resolution of outstanding issues and a reporting timetable was established.

2. FINALIZATION OF 1986 FISHING REGIMES

Coho
The Commission reviewed the national positions on the cause of the 1985 shortfall of 326,000 coho in the west coast of Vancouver Island troll fishery. The Commission agreed that payback of the coho shortfall would be treated in the same manner as for Fraser River sockeye and pink salmon, but that no payback would occur in 1986. The Commission will develop fishing regimes in 1987, and beyond, to compensate Canada for the shortfall. Other approaches to compensation besides adjustment of coho fishery regimes for the west coast of Vancouver Island troll fishery may be considered. It was agreed that the catch ceiling on coho applied to the troll fishery off the west coast of Vancouver Island would not be altered, so no changes were required.

Chum
An inseason clockwork procedure will be used to determine United States catches of Fraser River chum salmon in Puget Sound fishing areas. An understanding had been developed regarding a United States treaty Indian fishery on chum salmon in Juan de Fuca Strait. The United States expressed concern that expansion of Canada's Nitinat chum fishery would increase interception of U.S. stocks. Canada recognized the need for a clean fishery in that area.

Chinook
The Commission considered a number of issues which had been highlighted: induced fishing mortalities, a hatchery add-on proposal by Alaska, catch overages in 1985, status of Strait of Georgia chinook stocks.

The Commission agreed to take into account estimates of fishing-induced mortalities and 1985 catch overages in establishing base ceilings for 1986 only, in the following fisheries:
a) southeast Alaska all-gear catch — 254,000 chinook
b) northern B.C. all-gear catch — 256,000 chinook.

Agreement was reached that Alaska's hatchery add-on proposal for 1986 would be accepted. The pre-season expectation for the 1986 add-on is 23,000 chinook.

The west coast of Vancouver Island 1985 troll catch was discussed. Canada's revised catch figure indicated little deviation from the limit of 360,000 chinook. It was agreed that the 1986 fishery would be limited to this number.

Concern was expressed that management actions taken by Canada in the Strait of Georgia were not sufficient to improve chinook escapements of local wild stocks at a rate commensurate with the 1998 rebuilding target. Canada stated its intention to adjust its management scheme so by the end of 1987 it will be clear that the rebuilding schedule will be achieved.

Fraser River Sockeye
The Commission agreed to a formula for sharing summer-run sockeye in 1986, which allocated United States fishermen 29.93 percent of the total allowable catch (less a prorated catch of 8,589 summer-run sockeye for the coho adjustment in Annex IV, Chapter 4 of the Treaty, plus 18,381 summer-run sockeye as payback for the 1985 sockeye shortfall of 107,000 fish).

In 1987 through 1989, the United States will receive percentages of the total allowable catch (TAC) of summerrun sockeye equal to the percentage computed from the Treaty-defined catch allocations. For 1990, the percentage catch of summer-run sockeye will again be negotiated.

Pink
Regulations for the Area 1 Canadian troll fishery were modified for 1986. Management units 101-4, 101-8, and both 101-3 and 103 north of 54°35′ north will close to pink salmon trolling when the Area 1 troll catch reaches 100,000. When the catch reaches 290,000 fish, management units 101-1, 101-2, 101-3 (south of 54°35′ north), 101-5, 101-6, 101-9 and 101-10 will be shut down. Management units 1-1, 1-2, 1-3, 1-5, 1-7, and 101-7 will remain open until the total Area 1 catch reaches 600,000 pink salmon.

The Commission struck a drafting committee to write the appropriate amendments to Annexes and interpretations of Annexes reached by the Commission for 1986 fishing regimes in the form of a letter to the Parties. The draft letter was reviewed and approved by the Commission (Appendix 6).

3. ADMINISTRATIVE ACTIONS

The Standing Committee on Research and Statistics met during the course of the Annual Meeting. The Committee presented draft 2 of a set of terms of reference which the Commission subsequently ratified (Appendix 7).

The Standing Committee on Finance and Administration recommended that the unexpended balance of funds from fiscal year 1985/86 be carried over into fiscal year 1986/87 for inclusion in the working capital fund. Approval for this approach had been received from the Parties in order to provide the Commission with time to evaluate expenditures that it might consider appropriate as startup costs such, for example, as the cost of relocating offices in downtown Vancouver. The Commission approved this recommendation with the proviso that specific proposals for expenditure of the carry-over funds be presented to the Commission by June 30, 1986.

The Commission also approved the budget for fiscal year 1986/87 as recommended by the Standing Committee on Finance and Administration (Appendix 8). A list of representatives from both Parties assigned to Panels, Standing Committees, and Joint Technical Committees was also established (Appendix 9).

The Commission appointed Mr. C. Walters of the United States to the Standing Committee on Finance and Administration. Mr. I. Todd and Mr. G.E. Jones were appointed to draft a job description for the position of Deputy Executive Secretary. The Executive Secretary was directed to develop recommendations for content of the First Annual Report.

4. CLOSING REMARKS

The Chairman thanked the Panels and Joint Technical Committees for their hard work which led to the ultimate resolution of issues satisfactory to both National Sections, thus paving the way to acceptance of fishery regimes for 1986.

PART IV
ANNUAL REPORTS OF PANELS

Reports of the Panels were finalized after adjournment of the 1986 Annual Meeting. The following Executive Summaries are drawn from the official Panel Reports.

1. REPORT OF THE NORTHERN PANEL

Introduction
The joint U.S. and Canadian sections of the Northern Panel met on January 22-23 and again on February 17-18, 1986, in Vancouver, B.C. The primary purposes of these meetings were to: receive and review the Northern Boundary and Transboundary Technical Committees' reports; receive a progress report on 1986 research planning; receive preliminary 1986 fishing plans; and, to discuss various fishery-related concerns presented by both national sections at the November 1985 meeting. A final review of rules and procedures, a discussion of report content and timing and assignments to technical teams also took place.

1985 Fishery Review
After reviewing the 1985 fishery results and the technical reports, it was concluded that the Northern boundary area and Transboundary area fishing regimes as identified in Annex IV of the U.S.-Canada Treaty were generally adhered to with the following exceptions:

(i) in the boundary area, generally large sockeye and pink returns resulted in limited overages in the sockeye catch in the U.S. Tree Point gill net fishery and in the pink catch in the outer Canadian Area 3 net fishery. Boundary area escapements of sockeye and pink were well over goal levels in most systems; and

(ii) due to the unexpected large return of Stikine sockeye, both countries harvested fewer of these fish than they would have if a good inseason run size estimate had been available.

1986 Run Expectations
In the boundary area, large returns of Alaskan and Canadian pink salmon are anticipated. A large Skeena and average Nass River run of sockeye is expected. Detailed run expectation information is available in the Northern Boundary Technical Committee's report. Expectations are that Canada Area 3 and Area 4 chum returns will be poor.

In the Transboundary rivers, strong sockeye returns are expected in the Stikine and Alsek Rivers, but the Taku River sockeye run may be below average. A special management concern for early Alsek River sockeye was noted. Chinook salmon returns to the rivers should continue to receive protection if the runs are to be rebuilt by 1995. Coho returns to the rivers are not expected to exceed escapement needs. It should be noted that the forecasts for Transboundary rivers are supported by limited data bases for some species and should be viewed with caution.

1986 Fishing Plans
Preliminary fishing plans for the 1986 season were discussed. There was intensive questioning on the fishing regimes, management problems and practices in all fisheries. Both sides raised a number of concerns and questions about the conduct of fisheries, status of stocks and status of research. They had different views as to the objectives for management in different areas and of the priority for resolving these concerns. These exchanges were valuable in allowing Panel members to become more familiar with each country's management concerns and fisheries. A distinction between changes in fisheries for conservation purposes and changes designed to reallocate salmon catches was discussed.

In developing fishing plans, both countries took into account the management concerns for early Alsek River sockeye and the chinook stocks of all Transboundary rivers. A combination of delayed season opening dates, area closures and mesh size restrictions will be used.

1986 Research

The Panel reviewed research plans with technical committee representatives. No adult tagging will occur in the Northern boundary area fisheries in 1986; in 1987, joint tagging of pink and chum salmon is planned.

Recommendations to the Northern Boundary and Transboundary Technical Committees

(i) Nass River Sockeye: Canada has expressed concern over an apparent weakness in the early portion of the Nass River sockeye run. The Northern Boundary Technical Committee is requested to examine available data including test fisheries, fishway counts and catch information to determine the seriousness of this situation. A report of this activity should be available by autumn 1986.

(ii) Stock Identification — District 104 and 106: The Northern Panel directs the joint technical committees, the national research scientists responsible for the design of the U.S.-Canada cooperative research program, to carefully evaluate the 1986 research effort directed at sockeye stock separation in the Noyes Island and District 106 fishery. The objective is to identify stock composition by week, by fishery. The Panel realizes that a major expansion of effort may not be possible due to this late stage in the development of the 1986 program and other priorities. However, it should be determined if program adjustment would better address the stated objectives and could be accomplished within the framework of the existing overall program. Regardless of the outcome of this deliberation, the Panel will request a complete review of the sockeye stock separation program for 1987.

(iii) Chum Stock Status: The Northern Panel instructed the Northern Boundary Technical Committee to review available data and evaluate the status of chum stocks in the boundary area, some of which are depressed. It is felt that the data base is not adequate to evaluate either the seriousness of this problem nor to determine what fisheries management actions might be taken to correct it. A report on this activity should be available by autumn 1986.

(iv) Steelhead Catch Information: The Northern Panel has instructed the joint technical committees to provide information on steelhead in the Northern and Transboundary areas. As a first step in the process, both Canada and the U.S. will exchange information on commercial catches.

Recommendations to Commission

(i) Fishery Regime Modifications: In order to permit Canadian trollers to harvest Canadian pink stocks returning to local streams in the Queen Charlotte Islands, the Northern Panel recommends that Annex IV, Chapter 2, Section 3 be modified for the Area 1 Canadian troll fishery. Parts 3(b) and 3(c) should be replaced by:

"3(b) in 1986 only, the following management units in Area 1 will remain open to pink salmon troll fishing until a total Area 1 troll catch of 600,000 pink salmon has been taken: 1-1, 1-2, 1-3, 1-5, 1-7 and 101-7;

3(c) in consideration of the adjustment made in the southern portion of Area 1, the pink salmon troll fishery in the most northern portion of Area 1 in management units 101-3 north of 54°35′ north, 101-4, 101-8 and 103 north of 54°35′ north will close to pink salmon trolling when the 1986 Area 1 pink troll catch reaches 100,000 and,

3(d) in addition, when the 1986 Area 1 pink troll fishery catch reaches 290,000 fish, Canada will also close management units 101-1, 101-2, 101-3, 101-5, 101-6, 101-9 and 101-10 to pink salmon trolling."

(ii) Pacific Salmon Commission Bylaws: For Chapter II, Page 2, Section A add new rule: "Each alternate panel member shall have the right to attend and participate in debate. Participation in debate may be limited by the chair or vice-chair. An alternate, however, may make motions only in the absence of the member for whom she/he is an alternate."

For Chapter V, Page 12 add for Rule 2B: "Technical and analytical support" to rule of technical committees. For Rule 2C, add "In consultation with panels" to reporting relationships.

(iii) Reporting: The Panel felt that the Transboundary and Northern Boundary Technical Committee reports on 1985 season performance and 1986 run expectations fulfilled fishery reporting requirements of the Northern Panel.

(iv) Transboundary Entitlement: Section D of the Memorandum of Understanding of January 28, 1985, between the United States and Canada states that during the first year following the entry into force of the Treaty, the Commission shall determine: "the percentage of the total allowable catch of salmon that shall be deemed to be of United States origin for the purpose of implementing Article III, Paragraph 1(b) of the Treaty." The Northern Panel wished to bring this requirement to the attention of the Commission.

2. REPORT OF THE SOUTHERN PANEL

1985 Coho Fishery Review

The Southern Panel has not been able to arrive at a mutually agreed upon understanding of Annex IV, Chapter 5, Paragraph 5.

The actual catch of coho salmon in the west coast of Vancouver Island troll fishery was 326,000 pieces less than the 1985 fishery regime ceiling of 1.75 million. The United States section of the Southern Panel takes the position that this does not represent a shortfall, because the Coho Technical Committee has determined that low abundance, rather than management measures, was the major reason for the low catch in the fishery.

The Canadian section of the Southern Panel takes the position that the coho catch was a shortfall of 326,000 pieces. It recommends that compensation for this shortfall be deferred from 1986, to subsequent years when the stocks present in the west coast of Vancouver Island fishery area are better able to withstand additional catch levels. This recommendation does not preclude the Commission from considering other approaches to compensation.

An elaboration of the respective understanding of the U.S. and Canadian sections of the Southern Panel will be provided for consideration of the Commission.

1986 Coho Fishery Regimes

The Southern Panel recommends that no changes be made to the fishery regimes specified in Annex IV, Chapter 5. The management plans and fishing regimes implemented in 1985, including Areas 7, 7A and the Strait of Juan de Fuca, shall remain the basis for the 1986 management plans.

The impact of additional Canadian Georgia Strait hatchery production ("Expo coho") expected to be available for harvest in 1986 was discussed. The Coho Technical Committee reviewed the impact of this additional production and determined that it could increase this component of the catch; however, increases over 1985 catch levels cannot be forecast at this time. The Southern Panel was unable to evaluate whether or not there would be an overall increase in Canadian contribution to the west coast of Vancouver Island troll fishery based on this hatchery increase. The Panel has instructed the Coho Technical Committee to develop recommendations for research programs designed to provide information on stock compositions in all fisheries of concern.

1986 Chum Fishery Regimes

The Southern Panel recommends the following fishing regimes for southern British Columbia and Washington chum fisheries. These regimes are for 1986 only and are not designed to address long-term management objectives of the Parties.

Canada shall conduct its Johnstone Strait, Georgia Strait and Fraser River chum fisheries consistent with the clockwork management scheme developed for 1984 and 1985, with some modifications.

The United States will conduct its Area 7 and 7A chum fisheries with catch ceilings based on total stock size, as outlined in the table below.

Allowable Total Harvest Rate	Total Size Size[1]	Area 7 and 7A Ceiling
10 percent	$\angle$2.6 million	10,000
$\geq$20 percent	$\geq$2.6 million	80,000[2]

1 Estimated preseason and inseason update of chum salmon passing through Johnstone Strait, Georgia Strait, Fraser River and Areas 7 and 7A calculated according to the clockwork approach.

2 For the 80,000 it is expected that 60,000 chum of Fraser River origin will be harvested.

If inseason updates point to a reduction in the current forecast Fraser River component of the total run, despite a total run size of greater than 2.6 million, then the United States could be limited to a catch of 10,000 chum in Areas 7 and 7A. This catch ceiling would be implemented if the Fraser River component of the total run could not support a fishery and meet a minimum escapement goal, and Canada restricts fisheries in Johnstone Strait and the Fraser River to remain below a 10 percent exploitation rate on Fraser River chum.

The United States fisheries will be managed in a manner that, as far as practicable:

(i) spreads the impact on all portions of the Fraser run

(ii) maintains a traditional proportion of effort and catch between Areas 7 and 7A, and avoids concentrations of effort along the boundary.

The fishery management plan is predicated on the following assumptions:

(i) All catch of Fraser River origin chum taken in Johnstone Strait, Georgia Strait, Fraser River and Areas 7 and 7A fisheries is included in the allowable total harvest rate.

(ii) If there is an adjustment to the run size estimates, all three components of the run (Canadian enhanced and natural, and United States stocks) will be adjusted in proportion to the change from the preseason forecast until sufficient GSI data are available to more accurately apportion the total run size.

(iii) The escapement targets are those specified in the 1984 and 1985 clockwork management plan. All fish not harvested at the allowable harvest rate under the plan will be allowed to escape and spawn.

If during subsequent domestic consultation on the 1986 fishing plan, Canadian chum salmon managers decided to deviate from the general approach or the outlined assumptions, the Southern Panel chair and vice-chair will be notified and a decision made as to the need for convening a Southern Panel meeting to develop appropriate changes to the management plan.

3. REPORT OF THE FRASER RIVER PANEL

1985 Fisheries Review

Fraser River sockeye and pink salmon fisheries in the Fraser River Panel area were regulated by the International Pacific Salmon Fisheries Commission in 1985, as per the Treaty. United States treaty Indian fishermen were regulated by the U.S. Department of Interior. The sockeye sharing arrangement provided for a United States harvest of 27 percent (minus 50,000) of the total allowable catch. In addition, United States fishermen were to receive 32.73 percent of the TAC of Fraser River pink salmon. Domestic allocation by gear type was requested by Canada and implemented in the Canadian area net fisheries.

Preliminary stock assessment estimates show the United States harvested 2,923,000 out of a total harvest of 11,225,000 Fraser River sockeye taken in commercial catches. The TAC of Fraser River sockeye for computational purposes was estimated at 11,406,000 fish, of which the United States share under the Treaty would have been 3,030,000 sockeye. The balance between actual catch and allocation shows a shortfall of 107,000 Fraser sockeye in the U.S. catch.

Data on domestic allocation of sockeye in Canada showed a large deviation between the troll catch goal of 2.4 percent and the actual catch of 14.3 percent. The troll catch was not regulated by the IPSFC. Net catches were close to the desired sharing between purse seines and gill nets.

Escapements of sockeye to spawning grounds in the Fraser River watershed totalled 2,139,000 fish, slightly larger than the preseason goal but reflective of Canadian inseason increases in escapement. The large Quesnel Lake area return of 9.5 million fish (68.8 percent of the total run) produced an escapement of 1,349,000 spawners.

Preliminary stock assessment of pink salmon, using protein electrophoresis techniques, indicated that the Fraser River pink salmon return totalled 18,924,000 fish, 18 percent higher than the preseason forecast of 16,000,000. The pink salmon TAC was estimated at 12,512,000 fish. United States commercial and recreational catches amounted to 3,788,000 fish compared to a Treaty-defined share estimated at 4,095,000. The United States shortfall on pink salmon was estimated at 307,000 fish.

In Canada, the domestic allocation of Fraser River pink salmon catches was 33 percent to troll fishermen in 1985. Actual catch distribution showed trollers harvested 24.9 percent of Canada's total. Net catches were shared between purse seines and gill nets as requested.

Escapement of Fraser River pink salmon reached 6,461,000 spawners, somewhat larger than the preseason goal of 5,000,000 fish.

1986 Sockeye Run Expectations

The major sockeye stocks returning on the 1986 cycle have been late-run Adams River and associated stocks in the South Thompson River area. In 1982, over 70 percent of the total return was produced in that watershed. Chilko, Stellako, Birkenhead and Weaver sockeye have also contributed to the catch on this cycle. Early-timing sockeye stocks arriving before the end of July have not provided significant returns on the cycle for several years.

The early Stuart run in 1986 is an off-cycle year. Moreover, the 1982 escapement was adversely affected by unfavorable conditions during migration; several thousand potential spawners were lost en route. Only 4,560 fish reached the spawning areas, the lowest number since 1968. The forecast is for a return of only 25,000 4-year-old fish from this escapement. In addition, approximately 10,000 5-year-olds should return to boost the total forecast to 35,000 adults. Since the total return would be below escapement requirements, no fishing can be allowed.

Other conservation concerns focus on late Nadina and Pitt River sockeye. The late Nadina run has barely been holding its own. Increased escapement is of vital importance. The Pitt run is composed primarily of 5-year-old sockeye in most years. The 1981 escapement was near optimum. However, severe flooding in late fall 1981 reduced the egg-to-fry survival rate. The 1982 escapement was below desired levels and incubation conditions were not much better; therefore the returns of both 4-year-old and 5-year-old fish will be low. A total expected return of only 30,000 Pitt sockeye will require that all possible conservation measures be implemented to ensure adequate escapement in 1986.

In 1986, a good return of the subdominant Horsefly run is expected. Rebuilding of this cycle is a high priority and will require a low rate of fishing to ensure an increased escapement. A total run of 260,000 Horsefly sockeye is forecast, including 5-year-old fish from the 1981 brood.

The Seymour River run is abundant on the 1986 and 1987 cycles. It is expected that this river will produce 250,000 sockeye in 1986. Several other summer-run streams tributary to Shuswap Lake had sizable escapements in 1982 and should have good returns as well.

Chilko River had an excellent escapement in 1982 which produced over 13,000,000 yearling smolts. A record number of jacks returned in 1985 and this suggests a good run in 1986; the forecast is for 1,200,000. The Chilko stock should be a significant contributor to the 1986 fisheries.

Stellako River sockeye brood year escapement was below optimum and the forecast is for a below average return of 350,000 fish in 1986.

The Birkenhead run in 1982 produced nearly 750,000 fish. While some flooding was observed on the spawning grounds, losses were probably not severe. Based on a good return of jacks, 500,000 Birkenhead sockeye are expected to return in 1986.

Adams and lower Shuswap sockeye should provide the largest portion of the 1986 harvest. The brood year escapement to Adams River, Little River and associated spawning areas was the second largest on record. The lower Shuswap escapement increased dramatically in 1982. A combined spawning of 3,000,000 adults gave rise to a lake population estimate of approximately 147,000,000 juvenile fish in late October 1983. Marine growth has again been low, resulting in relatively few, small 3-year-old jacks in 1985. The returning jack number was the smallest on record for a dominant cycle year. Also, the length of Adams jacks was the smallest on record. Relationships between the returning numbers and size and marine growth measurements from scales of jacks, forecast that the Adams River area will return 8,000,000 sockeye in 1986. Lower Shuswap should produce an additional 2,000,000 fish. Middle Shuswap River sockeye rear in Mabel Lake, but have essentially the same migration timing as Adams sockeye. A good escapement in 1982 should produce a return of about 150,000 fish. The total Shuswap area late run of 10,150,000 would be about the same as in 1982.

Weaver Creek spawning channel had a record production of 56,000,000 fry from the brood year spawning. The largest number of jacks on record returned in 1985. Marine survival appears to have been above average and a return of 700,000 is forecast for 1986. This would be less than in 1982, but still a good return. Harrison River sockeye production is expected to give a return of only 25,000. The Cultus Lake run should produce 75,000 4-year-old fish.

The total Fraser return in 1986 should reach 14,000,000 fish including returns from other minor stocks. Net escapement goals for the various spawning areas total 4,000,000 adult sockeye. This is just slightly below the estimated optimum level of escapement on the cycle, but some runs will not have enough fish to meet the individual goals. The gross escapement goal is 4,500,000 sockeye, leaving approximately 9,500,000 fish for harvest. Because of larger escapement requirements on this cycle, the total allowable catch will be less than was taken in the 1985 season.

No further information on run size will be available until the mature fish approach the coast in summer. Forecasts on timing and migration via Johnstone Strait will be available by mid-June 1986.

PART V
REPORTS OF THE JOINT TECHNICAL COMMITTEES

Reports from the Joint Technical Committees were received by the Secretariat following adjournment of the Annual Meeting. The following Executive Summaries are drawn from these reports.

1. REPORT OF THE JOINT TECHNICAL COMMITTEE ON COHO

This report was prepared by the Joint Coho Technical Committee to encapsulate results of the 1985 fisheries which harvested coho stocks north of Cape Falcon, Oregon (Reference Table A).

1985 Review of Fisheries Specifically Referenced in the Coho Annex

(i) West coast Vancouver Island troll: A total of 1.404 million coho were caught in this fishery which was under a catch ceiling of 1.75 million. This compares with the 1980-84 average catch of 1.844 million coho. In addition, this fishery caught 2.5 million pink, 1.1 million sockeye, 358,000 chinook and 275,000 chum.

(ii) Canadian Juan de Fuca net (Area 20): The coho catch in the Juan de Fuca net fishery was 232,000 which was well above the 1980-84 average of 109,000. The catch occurred incidentally in IPSFC fisheries on sockeye and pink. Peak catches were in the first opening in July.

(iii) U.S. net fisheries in Areas 7, 7A and Strait of Juan de Fuca: As required by Section 3 of the Coho Annex, no net fisheries directed at coho salmon occurred in Areas 7 and 7A. A total of 116,400 coho were harvested in northern Puget Sound (Areas 6, 7 and 7A) during fisheries directed at Fraser River sockeye and pink salmon, compared to a 1980-84 average of 76,000. An additional catch of 25,500 coho was taken in Areas 7 and 7A during a fishery directed at chum salmon during late October.

Coho catches by nontreaty and treaty Indian net fisheries in the Strait of Juan de Fuca (Areas 4B, 5 and 6C) occurred during fisheries directed at Fraser River sockeye and pink salmon. As in the years prior to enactment of the Pacific Salmon Treaty, treaty Indian net fisheries directed at coho and chum were conducted by the Makah and Klallam Tribes in the Strait of Juan de Fuca. The U.S. coho catch in the Strait of Juan de Fuca during IPSFC-controlled fisheries was 59,200 fish, compared to a 1980-84 average of 25,600 fish. A total of 25,000 coho were harvested during Strait of Juan de Fuca treaty Indian net fisheries directed at coho and chum salmon, 25 percent below the 1980-84 average.

TABLE A. PRELIMINARY 1985 COHO SALMON CATCHES COMPARED WITH 1984 AND 1983 (1000 fish).

	Troll			Net			Sport			Total[3]		
Fishery	1985	1984	1983	1985	1984	1983	1985	1984	1983	1985	1984	1983
S.E. Alaska[1]	1,589	1,133	1,280	899	769	699	56	60	55	2,544	1,962	2,034
British Columbia[2a]												
North Coast	507	531	733	164	163	217	–	–	–	671	694	950
Central	128	328	433	97	60	153	–	–	–	225	388	586
West Coast Van. Is.	1,404	2,172	2,169	23	11	9	–	–	–	1,427	2,183	2,178
Georgia St.[2 b,c,d]	199	117	121	32	14	16	732	443	404	963	574	541
Johnstone Strait	–	–	–	148	119	243	–	–	–	148	119	243
Juan de Fuca Strait	–	–	–	232	75	17	–	–	–	232	75	17
Fraser River	–	–	–	17	9	11	–	–	–	17	9	11
Sub-totals[3]	2,238	3,148	3,456	713	451	666	732	443	404	3,683	4,042	4,526
WA/OR Ocean												
Wa. Nontreaty	129	23	24	–	–	–	179	40	209	308	63	233
Wa. Treaty	87	43	38	–	–	–	–	–	–	87	43	38
Oregon	84	14	320	–	–	–	182	123	147	266	137	467
California	11	43	57	–	–	–	15	19	27	26	62	84
Sub-totals[3]	311	123	439	–	–	–	376	182	383	687	305	822
Puget Sound	–	–	–	1,155	804	921	–	141	274	1,155	945	1,195
WA Coastal Terminal	–	–	–	71	91	29	–	17	4	71	108	33
Columbia River	–	–	–	193	191	7	1	1	–	194	192	7
Grand Totals[3]	4,138	4,404	5,175	2,960	2,215	2,293	1,165	827	1,116	8,263	7,446	8,584

[1] Southeast Alaska troll coho catches shown for calendar year. 1982-84 average used for preliminary estimate of 1985 sport catch.

[2a] British Columbia net catches include only fish over 5 lbs. round weight.

[2b] Sport catches are for tidal waters only, catch updates will be provided by Feb. 1986 for 1983 and 1984.

[2c] Georgia Strait sport catch is the only data currently compiled for B.C. sport fisheries.

[2d] Johnstone Strait, Juan de Fuca Strait and Fraser River troll catch included in Georgia Strait.

[3] All totals may include rounding errors.

1985 Review of Coho Harvests by Other Fisheries

(i) Southeast Alaska:

Troll — Due to chinook management considerations, the troll coho season was delayed until July 1 from the normal June 15 opening. The total catch of 1,588,700 coho was 40 percent larger than the 1984 harvest and 50 percent above the 1980-84 average.

Net — Coho are harvested by gill nets in southeast Alaska during directed coho fisheries and fisheries targeting on other species. The 1985 gill net (set nets and drift nets combined) coho catch was 508,900 fish. Coho are taken incidentally in purse seine fisheries directed at sockeye, pink and chum. Seine fisheries harvested 386,500 coho in 1985. The total southeast Alaska net catch was 16 percent higher than 1984 and 21 percent above the 1980-84 average.

Sport — Final sport catches of coho for 1985 are not available at this time. The catch of coho is estimated to be similar to the 1982-84 average of 56,000 fish.

(ii) British Columbia:

North coast net fisheries — There were no directed net fisheries for coho in the north coast in 1985. A total of 261,000 coho were caught incidentally in fisheries targeting on sockeye, pink and chum. This compares with the 1980-84 average of 272,000 coho and the 1970-79 average of 381,000 coho. Directed coho net fisheries have been almost entirely curtailed since the late 1970s.

Johnstone Strait net fishery — The 1985 coho catch by this fishery was 148,000 fish. This was slightly less than the 1980-84 average of 184,000 coho. The catch was taken incidentally during fisheries directed at Fraser River sockeye and pink and Big Qualicum chum.

Georgia Strait net fishery — The 1985 coho catch in the Georgia Strait net fishery was 32,000 fish. This was above the 1980-84 average catch of 12,000 coho. Most of this catch came during terminal fisheries on Big Qualicum hatchery chum and coho.

West coast Vancouver Island net fishery — The coho catch in this fishery was 23,000 fish. This was above the 1980-84 average catch of 11,000. Most of this catch was taken during fall fisheries directed at various local chum stocks.

Fraser River gill net fishery — The Fraser River gill net fishery harvested 17,000 coho in directed sockeye and pink fisheries during 1985. This was about equal to the 1980-84 average catch of 16,000 coho.

Indian food fishery — The aggregate 1985 catch of coho in the coastwide Indian food fishery is currently unavailable. However, the coho catch in the Fraser River Indian food fishery, the largest on the coast, was 18,000 fish. This compares with the 1980-84 average coho catch of 43,000 fish.

Georgia Strait sport fishery — The coho catch in the Georgia Strait sport fishery totaled 732,000 fish. This compares with the 1980-84 average catch of 470,000 fish. Chinook management actions in the form of reduced bag limits and spot closures may have diverted effort onto coho.

Georgia Strait troll fishery - The coho catch in the Georgia Strait troll fishery totaled 199,000 fish which was above the 1980-84 average catch of 132,000. Chinook closures in Georgia Strait redirected effort onto coho during July, August and September.

North coast troll fishery — The coho catch in the north coast troll fishery totaled 627,000 fish. This compares with the 1980-84 average catch of 808,000 coho. Targeting on pink and chinook stocks in July may have diverted effort away from coho.

(iii) U.S. ocean fisheries north of Cape Falcon to the Washington-B.C. border

U.S. ocean coho fisheries between Cape Falcon, Oregon and the Washington-B.C. border were regulated under quotas in response to management concerns for Skagit River coho. Other stocks identified as being of particular management concern were Oregon coastal natural and Columbia River late coho. Regulations adopted by the Pacific Fishery Management Council (PFMC) were generally designed to minimize impacts on critical stocks while providing harvest opportunity on other stocks.

Nontreaty troll — Nontreaty troll opportunity for coho harvest occurred in two separate, quota-constrained, all-species fisheries. A July 15-18 all-species fishery in the area between Cape Alava and Leadbetter Point was constrained by a harvest quota of 78,500 coho. The coho catch in this fishery was 136,300 fish. To compensate for exceeding the quota, the PFMC adjusted regulations for the pink-directed fishery north of Carroll Island and the all-species fishery in the Columbia River catch area. For the pink fishery, the originally adopted harvest quota of 31,200 coho was eliminated and coho landings were not allowed. Hooking and release mortality during the pink fishery was estimated at 3,500 coho.

The quota for the all-species troll fishery scheduled to begin on August 21 in the Columbia River management area was reduced from 32,000 coho to a one-day fishery with a quota of 10,000 coho. The actual coho catch by this fishery was 32,500 fish.

The total nontreaty troll coho catch in the area north of Cape Falcon to the Washington-B.C. border was 168,800 fish, 26 percent below the 1980-84 average.

Treaty troll — The treaty Indian ocean troll fishery was constrained by a 75,000 coho quota for May through September. The catch for this period was 87,200 coho, 64 percent above the 1980-84 average.

Recreational — The recreational fishery north of Cape Falcon was managed on the basis of three subarea quotas. As planned, preseason and inseason management actions were primarily directed at controlling the rate of chinook harvest because a normal fishery would have resulted in the chinook quota (established for the fishery in response to concerns for Spring Creek hatchery tule stock) being reached with a significant portion of the coho quota left uncaught.

The recreational fishery within the Neah Bay-La Push area harvested 25,400 coho (within 100 fish of the quota) and was closed on September 2. The Westport area recreational fishery harvested 73,600 coho, about 400 fish less than the quota established for this subarea. The Columbia River area recreational fishery, including Buoy 10 catches during August 18-22, harvested 110,800 coho, compared to a quota of 99,000 coho.

(iv) Inside fisheries for the Columbia River, Washington Coast and Puget Sound

Columbia River — The Columbia River gill net fishery harvested 193,200 coho, nearly all hatchery stocks. A recreational fishery in the Buoy 10 area near the mouth of the Columbia River harvested 25,400 coho. Approximately 600 coho were harvested by mainstem recreational fisheries above the Megler-Astoria Bridge.

Washington coast — Terminal area commercial coho catches were generally well below preseason expectations for Willapa Bay, Grays Harbor, Quinault, and Quillayute summer stocks. Fisheries on the Queets, Hoh and Quillayute fall stocks were conducted in accordance with management plan agreements reached between the Washington Department of Fisheries and relevant treaty Indian tribes as part of the process employed for developing regulations for ocean fisheries. Generally, these plans established fishing schedules with contingencies based upon inseason run size estimation by terminal area fisheries. The commercial terminal net harvests of Queets, Hoh and Quillayute fall coho stocks were above 1980-84 averages and river sport catches were comparable to recent year levels of a few hundred fish.

Puget Sound — The total Puget Sound commercial coho catch was 1.15 million fish, 48 percent greater than the 1984 catch and 26 percent above the 1980-84 average. The Puget Sound coho catch, excluding the northern Puget Sound and Strait of Juan de Fuca harvests discussed earlier, was 922,000, 26 percent above 1984 and 20 percent above the 1980-84 average. While catches were relatively high in several areas (e.g. South Sound, Port Gardner Bay, and Bellingham Bay), directed coho fisheries in some other areas, including Skagit River and Bay, Stillaguamish River, and Strait of Juan de Fuca tributaries, were either severely curtailed or completely closed due to coho conservation concerns. Coho harvests in these areas were primarily taken during fisheries directed at other species. Recreational fishery harvest estimates for Puget Sound coho are not available at this time.

1985 Spawning Escapements

(i) Southeast Alaska: Information is not available on which to directly estimate escapements for southeast Alaska coho stocks. Stock status is based upon comparisons of historical and current harvest patterns, harvest rates for selected stocks, and index escapements to a limited number of indicator systems. Available information suggests that, overall, southeast Alaska coho stocks are reasonably healthy.

(ii) British Columbia: Despite highly variable ocean survival rates, all British Columbia hatcheries met their brood stock targets. Escapement estimates for wild coho stocks are currently unavailable. The Fraser River test fishery suggests a slight increase in Fraser River escapement over the brood year.

(iii) Puget Sound: Escapement goals for hatchery facilities were generally met. The goals for natural stocks were not achieved for the Skagit River, Stillaguamish River, Hood Canal and tributaries to the Strait of Juan de Fuca.

(iv) Washington Coast: Hatchery escapement goals were met for Willapa Bay, but were not achieved for Grays Harbor. Data for escapements to other hatchery facilities are not available at this time. The escapement of Grays Harbor natural coho was well below its goal. With the exception of the Queets run, escapements of other north coastal natural stocks appear to be above the low end of the range established for management.

(v) Columbia River: The coho escapement to lower Columbia River hatcheries was 93,900 adults, slightly below the 1980-84 average. Escapements to upper river (above Bonneville Dam) hatcheries was 11,600 adult coho, above the 1980-84 average.

1986 Stock Forecasts

(i) Canadian stocks in the west coast Vancouver Island troll: Canadian preseason abundance forecasts are not available. Available stock assessment information for Fraser River coho indicates a conservation concern exists on the 1986 cycle. This concern is heightened by the expected high exploitation rate on Adams sockeye in 1986. Three main indicators are:

- returns to the river have declined by an average of 13 percent (20,900 pieces) per cycle since 1971, resulting in a 1983 return of only 34 percent of the 1971 level. This trend is similar to the decline recorded by the test fishery
- escapements have declined by an average of 15 percent (18,100 pieces) per cycle since 1971, resulting in a 1983 escapement (32,900) of only 30 percent of the 1971 level and the poorest ever recorded on this cycle
- recent harvest rates, estimated from one wild and three enhanced 1980 brood CWT release groups from Salwein Creek (Vedder-Chilliwack system), averaged approximately 80 percent. This level is considerably above the 70 percent level currently thought to be sustainable.

(ii) U.S. stocks: Forecasts for major U.S. stocks are presented in Table B. The 1985 figures are also given so comparisons to the 1986 forecasts can be made.

TABLE B
COHO SALMON FORECASTS

Area & Type	Stock	(Thousands) 1986	1985	% Chg
CA/OR & Columbia	OPI	1,793.0	615.9	191
Oregon Coast ocean abundance	Private hatchery	285.5	96.8	195
Washington Coast Ocean escapement Average fishery	Willapa Bay (Hatchery)	92.0	101.7	(10)
	Grays Harbor (Natural)	44.0	40.0	10
	Grays Harbor (H)	25.6	31.9	(20)
	Quinault (N)	7.7	7.1	8
	Quinault (H)	7.3	15.9	(54)
	Queets (N)	3.9	6.6	(41)
	Queets (H)	4.2	4.9	(14)
	Hoh (N)	3.0	3.9	(23)
	Hoh (H)	0.0	0.0	0
	Quillayute Fall (N)	4.8	11.3	(62)
	Quillayute Fall (H)	2.2	1.8	39
	Quillayute Summer (N)	1.4	1.6	(12)
	Quillayute Summer (H)	5.2	3.2	63
Puget Sound U.S. Puget Sound Catch & Escapement	Strait (N)	9.9	13.5	(27)
	Strait (H)	17.7	14.7	20
	Nooksack-Samish (N)	36.6	48.0	(24)
	Nooksack-Samish (H)	122.2	180.7	(32)
	Skagit (N)	37.6	18.6	102
	Skagit (H)	25.3	13.7	85
	Stillaguamish (N)	32.7	21.0	56
	Snohomish (N)	136.6	184.4	(26)
	Snohomish (H)	34.4	45.3	(24)
	South Sound (N)	157.6	196.3	(20)
	South Sound (H)	484.4	541.3	(11)
	Hood Canal (N)	53.9	67.1	(20)
	Hood Canal (H)	59.1	65.8	(10)

2. REPORT OF THE JOINT TECHNICAL COMMITTEE ON CHINOOK

This report was prepared by the Joint Chinook Technical Committee to summarize the performance of 1985 fisheries, 1985 spawning escapements, expectations for 1986 stock abundance and some comments concerning current management issues.

1985 Fishery Performance

Summary 1985 chinook catch statistics for troll, net and sport fisheries by area are presented in Table C. The total 1985 chinook catch in all areas north of Cape Falcon, Oregon was down 422,000 (19 percent) from the 1984 catch level. Figure 1 shows the chinook management regions under the Pacific Salmon Commission's jurisdiction.

(i) Fisheries Under Pacific Salmon Treaty Catch Ceilings

Actual catches are compared with harvest ceilings for fisheries and management areas specified in the Pacific Salmon Treaty in the table below:

		(THOUSAND FISH)			
				DIFFERENCE	
AREA AND FISHERY		CEILING	CATCH	#'S	%
SE Alaska (T,N,S) a/	Base	263	270	7	+3
	Total	269 b/	276	7	+3
North/Central B.C.	(T,N,S)	263	279	16	+6
West Coast Vancouver Is.	(T)	360	370	10	+3
Georgia Strait	(T,S)	275	295	20	+7

a/ T=Troll; N=Net; S=Sport
b/ Adjusted for hatchery add-on of 6,000.

(ii) Other Fisheries

British Columbia:

Southern net — The incidental catch of chinook in Johnstone Strait net fisheries increased in 1985 in spite of reduced effort. The Juan de Fuca and Area 29-Fraser catch exceeded recent catch levels. The Barkley Sound (Area 23) net fishery was minor in 1985, limited to a one-day test fishery directed at chinook.

Native food fisheries — The aggregate catch of chinook salmon in native food fisheries in British Columbia was 41,012 (excluding minor catches in Johnstone Strait-Georgia Strait and part of west coast Vancouver Island).

Other sport — Tidal sport catches for Johnstone Strait and the west coast of Vancouver Island, other than Barkley Sound, are not available. Nontidal sport data are not currently available, and are not included in B.C. sport totals.

Washington/Oregon:

Ocean fisheries north of Cape Falcon — Far northerly migrating chinook stocks are taken incidently to harvests directed at Columbia River tule and Puget Sound stocks. In 1985, ocean troll and sport fisheries in the area north of Cape Falcon were managed under quotas established in response to concerns for the Spring Creek tule hatchery stock.

Ocean fisheries south of Cape Falcon — Ocean fisheries in the area between Cape Falcon and Cape Blanco were designed to increase harvest opportunity on healthy northern migrating stocks. Troll fisheries from Cape Blanco to Point Delgada were closed to protect depressed southern Oregon/ northern California stocks.

TABLE C. PRELIMINARY 1985 CHINOOK CATCHES FROM STOCKS CONTRIBUTING TO U.S.-CANADA SALMON TREATY AREAS, COMPARED WITH 1983 AND 1984 CATCHES (numbers of fish in 1,000's)

	Troll			Net			Sport			Total[3]		
Fishery	1983	1984	1985	1983	1984	1985	1983	1984	1985	1983	1984	1985
S.E. Alaska[1]	271	236	217	20	32	36	22	22	23	313	290	276
British Columbia[2a]												
North coast	163	180	193	17	31	40	20	20	9[2b]	200	231	242
Central coast	91	74	25	13	5	12	–	–	–	104	79	37
Vancouver Island	385	460	370	38	44	12	n/a	44	18[2c]	423	548	400
Georgia Strait	105	88	54	18	20	30	198	369	235[2d]	321	477	319
Johnstone Strait	15	9	6	28	18	38	10	10	10	53	37	54
Juan de Fuca Strait	0.2	0.3	0.4	0.3	6	17	–	–	– [2d]	1	6	17
Sub-total	759	811	648	114	124	149	228	443	272	1,102	1,378	1,069
Puget Sound	–	–	–	195	246	250[3a]	190	175	n/a[3b]	385	421	250+
Wash./Oregon Ocean												
Wa. Nontreaty	49	10	38	–	–	–	48	7	28	97	17	66
Wa. Treaty[4]	25	19	17	–	–	–				25	19	17
Or. (N. of Cape Falcon)	5	2	5	–	–	–	3	0	4	8	2	9
Or. (S. of Cape Falcon)	71	60	207	–	–	–	21	17	52	92	77	259
Sub-total[5]	150	91	267	–	–	–	72	24	94	222	115	351
Columbia River	–	–	–	58	128	146[3c]	–	–	–	58	128	146
Grand Totals[5]	1,180	1,138	1,116	387	530	581	512	664	379	2,080	2,332	2,092

[1] Southeast Alaska troll chinook catches shown for Oct. 1- Sept. 30 catch counting year.

[2a] British Columbia net catches include only fish over 5 lbs. round weight.

[2b] Sport catches are for tidal waters only, catch updates will be provided as available.

[2c] Estimates of tidal sport catches from Barkley Sound only.

[2d] Georgia Strait sport catches include Juan de Fuca Strait sport catches.

[3a] Puget Sound net catches include Puget Sound and Washington coastal, treaty and non-treaty catches.

[3b] Puget Sound sport catches include Puget Sound marine but not freshwater sport catches.

[3c] Columbia River net catches include Oregon, Washington, and treaty catches, but not treaty ceremonial catches.

[4] Treaty troll catch for period of May 1-Sept. 30, in ocean area 1-4B.

[5] All totals may include rounding errors.

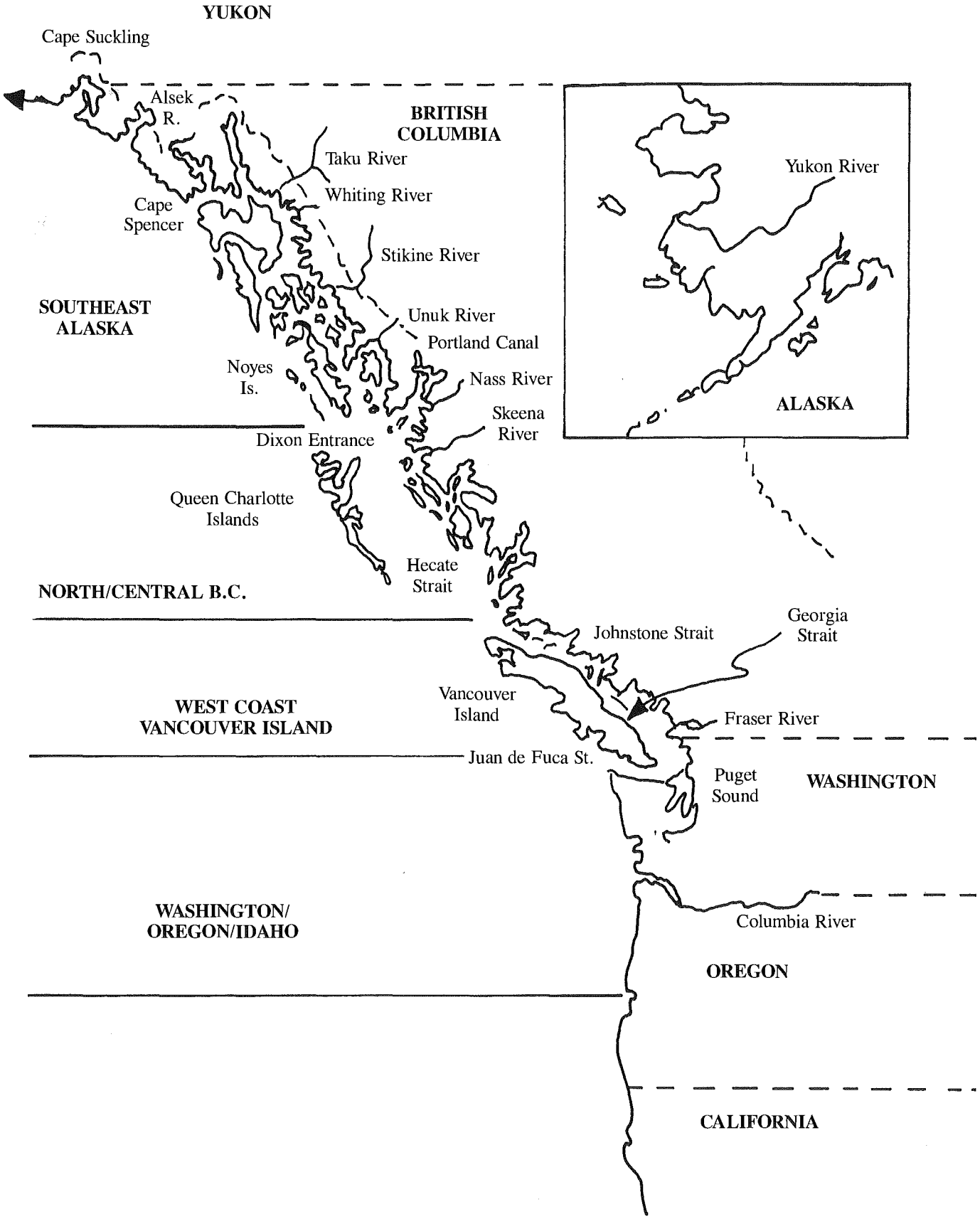


Figure 1. Major chinook salmon management regions under Canada/U.S. Pacific Salmon Commission

Puget Sound — Sport and net fisheries in Puget Sound continued to be restricted due to concerns for critically depressed spring chinook stocks. With several exceptions, Puget Sound summer/fall chinook are generally healthy and support inside sport and net fisheries.

Washington coast — Washington coastal stocks on the Quillayute, Hoh, and Queets Rivers are managed on the basis of escapement floors and terminal exploitation rates. With the exception of the Quillayute spring/summer run, these coastal stocks are not of immediate conservation concern. Fisheries on this stock were primarily limited to incidental harvests taken during a fishery directed at summer steelhead. No directed commercial fisheries were conducted on Grays Harbor fall chinook. Grays Harbor spring chinook remain a problem; the only terminal harvest of this stock was a small number taken by river sport fisheries and by Indian fisheries on the Chehalis reservation.

Columbia River — Columbia River chinook fisheries were conducted on several races and stocks. There was no directed commercial fishery on upriver spring chinook in 1985. There was a ceremonial and subsistence fishery for upriver spring chinook at a level equal to recent years. The improved adult count of spring chinook at Bonneville Dam was transferred into a 285 percent increase over 1984 escapement into the Snake River basin (as measured at Ice Harbor Dam). The incidental harvest of summer chinook was minimal and escapement remained at recent year levels. Columbia River commercial fall fisheries increased somewhat, reflecting an improved upriver bright, fall chinook run; however, harvests of tule stocks were restricted due to concerns over escapements to Spring Creek hatchery.

Spawning Escapements

Detailed escapement histories for stocks of concern will be included in Agency reports. Comparisons of 1985 escapements with recent escapements are summarized below by region. A new graphic index of progress in rebuilding chinook stocks is presented (Figures 2,3,4) and escapements to the indicator stocks are presented in Table D. Table E lists exploitation rate indicator stocks associated with each escapement indicator.

(i) Southeast Alaska: Chinook salmon escapements in 1985 to southeast Alaska and Canadian portions of transboundary river systems showed improvements in five of eleven index systems. The 1985 escapement to all systems was 48 percent above the pre-rebuilding 1975-80 level. Of the three transboundary rivers, the Taku and Stikine showed improved escapements while the Alsek decreased relative to 1984 levels. Behm Canal index systems continued to show a strong recovery while index tributaries of the Chilkat and King Salmon Rivers showed significant declines relative to 1984. Overall, the 15-year rebuilding program established by Alaska in 1981 appears to be on schedule.

(ii) British Columbia: Considering all B.C. chinook stocks, escapements in 1985 increased by 16 percent over 1984, but remain only 66 percent of the escapement goals. While most stocks appear to be rebuilding, a number of major stocks are not responding to current management action (late-timing middle Fraser stocks, Georgia Strait and west coast Vancouver Island hatchery and natural fall chinook). A similar pattern of differential rebuilding was noted in the 1984 chinook technical report and appears to be related to run timing and the distribution of fishing effort.

(iii) Puget Sound: Puget Sound natural chinook stock escapements were similar to those during the years 1981-84. Stocks that were previously depressed continued to return at 50-60 percent of their escapement goals and stocks that were not previously depressed met their escapement goals. There were no major changes in escapement, although inary estimates indicate that Skagit spring chinook were higher than expected and that Green River summer/ fall chinook were lower than expected.

(iv) Washington Coast: Washington coastal stocks continued to return at recent year levels. Preliminary data indicate that escapement goals were achieved for all stocks except Grays Harbor spring and Quillayute spring/summer stocks. Based on preliminary data, it appears that the Grays Harbor fall chinook run returned at levels substantially above those of the early 1980s and achieved the escapement goal for the second straight year.

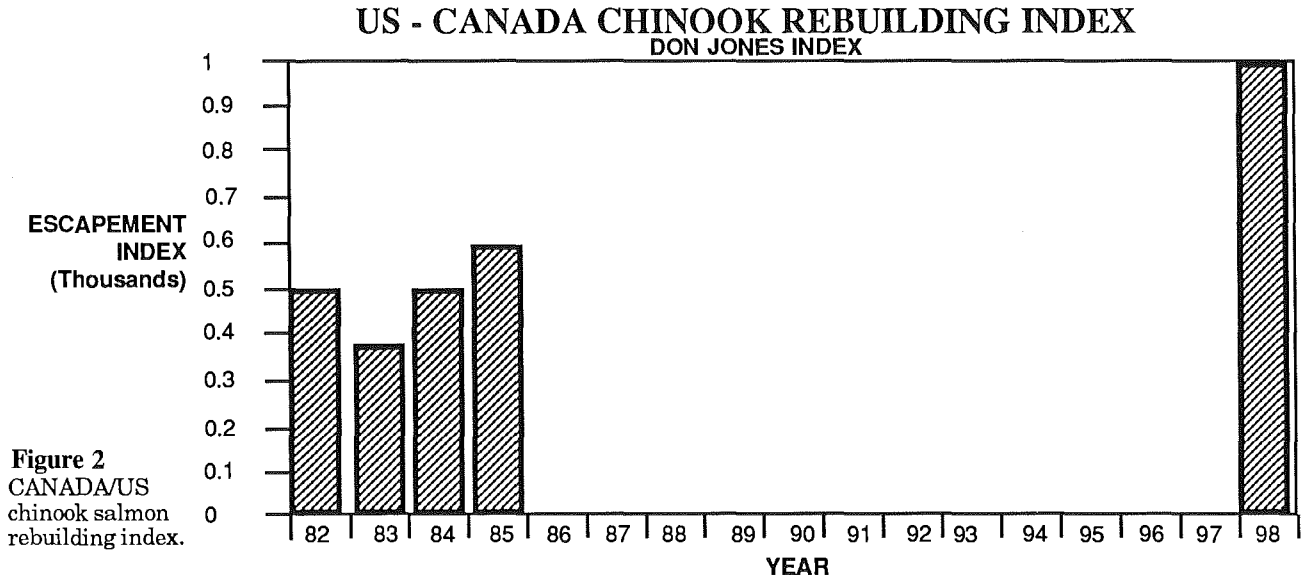


Figure 2
CANADA/US chinook salmon rebuilding index.

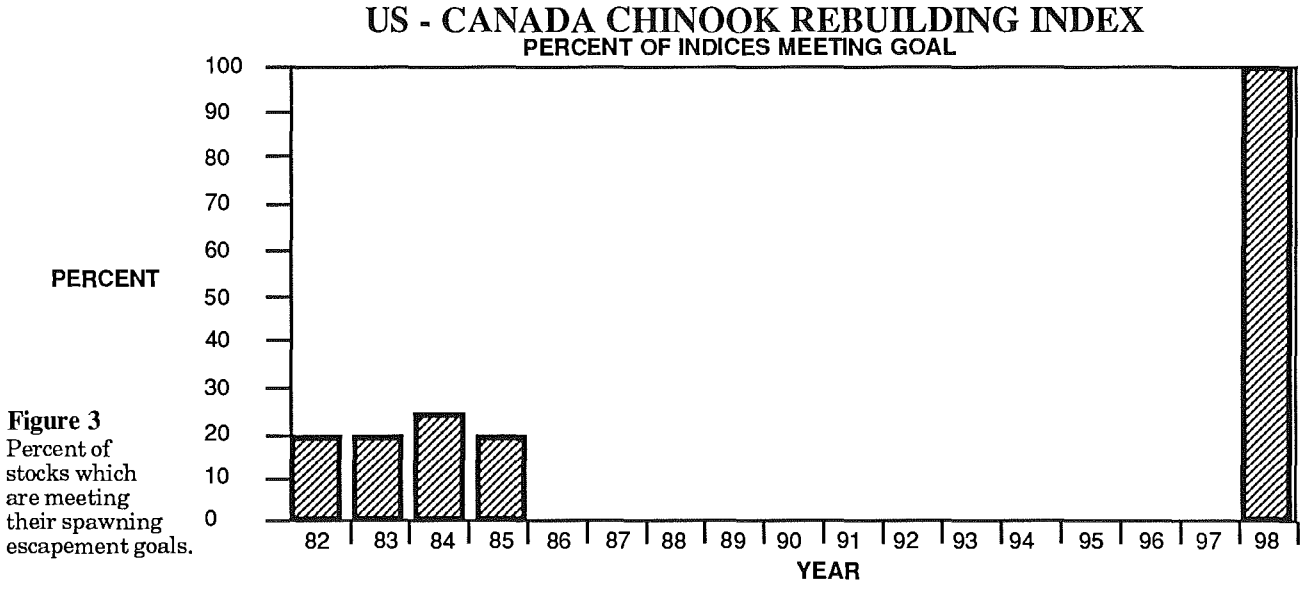


Figure 3
Percent of stocks which are meeting their spawning escapement goals.

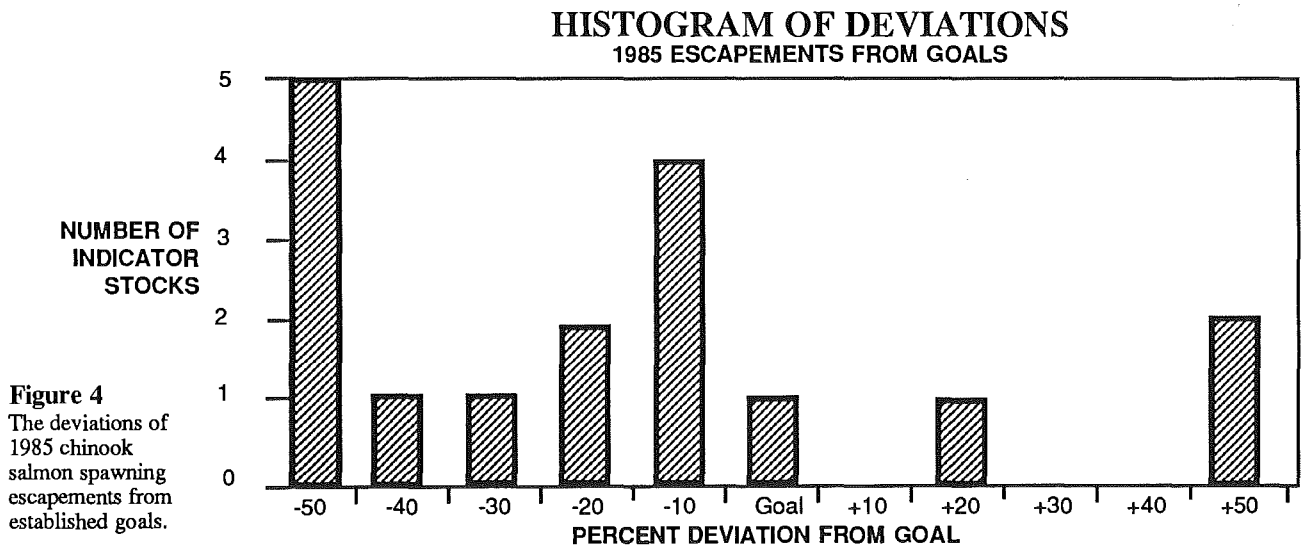


Figure 4
The deviations of 1985 chinook salmon spawning escapements from established goals.

TABLE D. SUMMARY OF CHINOOK ESCAPEMENT INDICATOR STOCKS (PRIMARILY NATURALLY SPAWNING) OF INTEREST IN PSC MANAGEMENT. (Figures in 1000's of fish).

Escapement Stock Unit	Indicator Escapement Goal	Escapements 1985	1984	1983	1982	Conservation Concern in 1986[1]
S.E. Alaska[2] (exclude trans.)	11.5	8.3	10.7	7.2	6.6	no
Transboundary[3] (Ak. and B.C.)	58.3	23.3	17.2	10.8	30.2	no
British Columbia[4]						
North Coast	25.4	9.5	12.7	10.7	5.5	no
Central Coast	18.5	10.0	9.3	8.6	8.0	no
Georgia St.[5]	11.5	6.3	5.8	3.0	3.5	yes
W.Cst. Van Is.[5]	76.0	28.0	38.0	11.0	8.5	yes
Fraser/Lower	175.0	106.0	87.5	6.0	22.0	no
Fraser/Middle		yet to be selected				yes
Fraser/Upper	9.8	7.0	4.9	4.3	1.4	no
Fraser/Thompson	14.3	12.7	7.1	6.4	3.3	no
Washington						
Puget Sound[7]						
Nooksack R. spr.	2.0	1.0	?	?	0.5	no
Green River falls	5.8	2.9	3.4	3.7	1.8	yes
North Cst.[6,7]						
Hoh R. spr.	0.9	1.1	1.5	1.8	1.6	no
Queets R. fall	2.5	3.9	3.9	2.6	4.1	no
Greys Harbour fall	14.6	?	21.0	4.5	5.6	yes
Columbia River						
Up R. spring[8]	120.0	83.1	46.8	54.9	70.0	yes
Up R. summer[8]	85.0	24.8	22.4	18.0	20.1	yes
Up R. brights	40.0	94.6	61.0	48.7	31.1	no
Williamette spr.	35.0	34.5	43.5	30.6	46.2	no
Oregon Coast		not available				no

1 Stocks of conservation concern in 1986 as selected by the agencies.

2 Estimated total escapements of S.E. Alaska indicator stocks excluding transboundary rivers.

3 Transboundary goals shown are the average current Canadian (72,500) and Alaskan (44,000) escapement goals.

4 Escapement monitoring methodology changed between 1983 and 1984, resulting in increased estimates of escapements.

5 Preliminary values only, escapement monitoring program is being reviewed.

6 Escapement floor. Terminal fishery managed for fixed exploitation rate provided escapement exceeds floor.

7 Additional stock escapements are monitored and may be used to measure rebuilding.

8 These stock groupings will be disaggregated as individual stock escapement goals are finalized.

TABLE E. SUMMARY OF CHINOOK ESCAPEMENT INDICATOR STOCKS AND THE EXPLOITATION RATE INDICATOR ASSOCIATED WITH THE ESCAPEMENTS

ESCAPEMENT INDICATOR STOCK UNITS	EXPLOITATION RATE INDICATOR STOCK UNITS
S.E. Alaska (excl. Trans.)	none
Transboundary (Ak. & B.C.)	none
British Columbia:	British Columbia:
North coast	same (Kitsumkalum River)
Central coast	same (Atnarko River)
Strait of Georgia	hatcheries in Quinsam/Campbell
(natural esc. portion)	Big Qualicum, Capilano Rivers
West coast Van. Is.	Robertson Creek hatchery
(Somas River)	
Fraser/Lower River	Chilliwack & Chehalis hatchery
(Harrison River)	stocks
Fraser/Mid	(no escapement indicator to-date)
Fraser/Upper	same (Bowron River)
Fraser/Thompson	Salmon and Eagle Rivers
(Lower Shuswap R.)	(small enhancement facilities)
Washington:	Washington:
Puget Sound	Puget Sound
Nooksack R. springs	Nooksack and Samish hatchery
Puget Sound wild falls	Stilly/Snoh. hatchery
	mid Puget Sound hatchery
	South Puget Sound hatchery
	Hood Canal hatchery
Hoko River falls	Juan de Fuca Strait falls
North coast[1]	North coast
Hoh River springs	Hoh spr./summers
Queets River falls	Queets River falls
Columbia River:	Columbia River:
Willamette springs	Willamette hatchery
Up-river springs	Leavenworth hatchery
	Rapid River hatchery
	Upper Salmon springs
Up-river summers	Wells hatchery
	McCall hatchery
Up-river brights	Priest Rapids hatchery
Oregon Coastal: none	Oregon Coastal: none

[1] Escapement floor; terminal fishery managed for fixed exploitation rate provided escapement exceeds floor.

(v) Columbia River: Columbia River stocks also show a mixed response to rebuilding efforts. Escapement needs for spring chinook were met for both lower river hatchery stocks (Willamette and Cowlitz). The Bonneville Dam count of 83,100 upriver spring adults was a significant increase over the record low count of 46,800 in 1984, but still below the escapement goal of 120,000. The 1985 run was more than 50 percent hatchery fish, but natural escapement also increased in the Snake River Basin. The 1985 return of 24,800 summer adult chinook over Bonneville Dam was the largest since 1980, slightly above the 1984 run of 22,400. The run was, however, far below the escapement goal of 85,000. The upriver fall-bright escapement of 94,600 was the largest since 1960 and exceeded the spawning escapement goal at McNary Dam by approximately 135 percent. The egg-take goal for the Spring Creek hatchery stock (tule fall chinook) was not met for the first time in 10 years. The 1985 adult return to Spring Creek hatchery was 5,397 (compared to a goal of 8,200 and a 10-year average of 15,814). The Lower River hatchery stock (tule fall chinook) met its egg-take goal with the exception of a 20 percent shortfall at Bonneville hatchery. The Bonneville hatchery tule adult return was 8,739 (compared to a 10-year average of 19,758).

(vi) Oregon Coast: Escapement of Oregon coastal north-migrating chinook stocks (mostly fall-run natural fish) are expected to be well above record 1984 returns. Preliminary analysis of index streams indicates 130 spawning adults per index mile, compared to 94 adults per mile in 1984; an increase of 38 percent.

1986 Forecasts

The Committee did not find a reason to substantively change its previous (January 21, 1986) assessment of 1986 stock expectations. For the sake of completeness this assessment is, by-in-large, repeated here and is based on agency presentations of data to the Committee.

STOCK	Preliminary 1986 Expectations
Southeast Alaska	Generally above recent year levels.
Transboundary	Generally above recent year levels.
British Columbia	Returns in 1986 will largely result from escapements previous to the rebuilding program. Abundance of fall chinook from the Strait of Georgia and the west coast of Vancouver Island are expected to be reduced. Production from some hatcheries will be increasing, but will not contribute significantly to abundances in mixed stock fisheries of concern. Total production from Canadian hatcheries is expected to be reduced by approximately 25-30 percent from 1983-84 levels and similar to 1985. Total run strength of B.C. chinook will likely not be perceptively different from 1985.
Puget Sound	Spring stocks very poor. Summer/Fall average, except for very poor run expectations for Green/Duwamish.
Washington Coastal	Generally at recent year average levels. Grays Harbor spring and Quillayute spring/summer stocks continued to be depressed.
Columbia River	Upriver brights, very good. Upper Columbia springs improved, but still poor. Upriver summers, very poor. Spring Creek, very poor. Bonneville hatchery, very poor. Lower River hatchery (except Bonneville) above average.
Oregon	Generally healthy.

(i) Alaska: Limited information exists to forecast chinook salmon run strength to southeast Alaska and Transboundary river systems. Brood year escapements to index areas and returns to date do suggest, however, that abundance in 1986 will continue the trend of improvements seen since 1980.

(ii) British Columbia: Returns of later timing middle Fraser stocks and Georgia Strait fall chinook are not expected to increase and may continue to decline unless additional management actions are taken. Jack returns to Robertson Creek in 1985 continued a declining trend which began in 1981 and appear to be extremely depressed. This suggests that the 1983 brood year survival will be well below average. In the past, Robertson Creek chinook have contributed heavily to northern B.C. and southeast Alaska troll fisheries and there is concern that a failure of the Robertson Creek stock will increase harvest rates on other stocks contributing to southeast Alaska and northern British Columbia fisheries.

(iii) Puget Sound: Spring chinook stocks are expected to remain depressed. Most natural stocks of summer/fall chinook originating from Puget Sound are healthy and are expected to return at levels similar to 1981-84 averages. Stocks which returned to Puget Sound in sufficient numbers to meet escapement goals in recent years are expected to do so in 1986 as well. Stocks that have been depressed are expected to continue returning to Puget Sound at 50-60 percent of their escapement goals. The major exception to the general continuation of stock status in Puget Sound is the Green-Duwamish River, where a very small run is expected. Returns of this stock in 1986 will come primarily from the 1982 brood escapement which was about 1,800 fish, or 32 percent of the escapement goal; the lowest in the last 10 years.

(iv) Washington Coast: Washington coastal forecasts for 1986 returns are not yet available. However, preliminary indications are for returns similar to levels experienced in recent years. Grays Harbor spring and Quillayute spring/summer stocks are expected to return at levels below escapement goals.

(v) Columbia River: Lower river spring chinook returns in 1986 are projected to be at, or slightly below average, but at a level sufficient to meet escapement goals. Upriver spring stocks, although still depressed, are expected to show continued improvement from the record low return in 1984. Summer chinook returns are expected to continue at the depressed levels of recent years. The various fall chinook stock expectations are for a wide range of returns in comparison to their recent 10-year averages. The Lower River hatchery tule stock is expected to return at 170,600 adults (37 percent above average); however, Bonneville hatchery, a major producer of this stock group, is expected to be very depressed. The Spring Creek hatchery tule stock is expected to return at about 16,000 adults, or about 18 percent of the average. Because tules produced at the Bonneville and Spring Creek facilities contribute heavily to ocean fisheries off Washington and the west coast of Vancouver Island, failure of these stocks while maintaining the current harvest ceiling will increase harvest rates of comingled stocks found in these areas. Upriver bright fall chinook are expected to return at about 289,400 (185 percent above average).

(vi) Northern Oregon: Expectations for far-northerly migrating Oregon coastal chinook are for stock abundance similar to the healthy levels observed in recent years. Both 1984 and 1985 adult escapements were at record levels.

Summary conclusions and recommendations

Positive Developments in 1985

1. Escapements increased for many natural stocks in 1985.
2. Several stocks, identified as conservation concerns, almost met or exceeded escapement goals in 1985.
3. Harvest rates for most indicator stocks declined in 1985.

Negative Developments in 1985

1. Escapements of several late summer and fall stocks improved little in 1985.
2. Production of British Columbia hatchery stocks declined in 1985 and little change is anticipated for 1986. Several major hatchery stocks, namely Robertson Creek, Spring Creek and Bonneville hatcheries declined significantly in 1985 and further declines are forecast for 1986.
3. Georgia Strait stocks continue as a serious conservation concern.

Major Conclusions

(i) Rebuilding of natural chinook populations in the Strait of Georgia requires further conservation actions. This stock was the most depressed indicator stock used in past evaluation models. These models predicted the stock would barely meet rebuilding goals by 1998 under initially proposed 1985-86 ceilings, even with modelling assumptions that 1985 abundance would not decline. Reduced stock abundance in 1985 and harvest rates which are still too high, indicate that substantive additional actions should be taken in 1986.

(ii) Other stocks requiring management attention in 1986 are Robertson Creek hatchery, Spring Creek and Bonneville hatcheries (Columbia River), and Green River (Puget Sound); but these problems do not trigger the 15 percent clause.

(iii) Troll and purse seine chinook nonretention fisheries increased in 1985 and further increases are expected. While some increases were anticipated during the rebuilding program, the extent of 1985 noncatch mortalities were felt to be inconsistent with the Treaty concept of minimizing these fishery impacts. Impacts of net changes in induced fishing mortalities should be assessed.

(iv) The Committee is concerned about the cumulative effect of quota overages, deviations from pass-through and new induced fishing mortalities on natural stock rebuilding. This concern is heightened by recent significant declines in hatchery production in some regions, with potential increases of natural stock harvest rates. In total, such impacts could adversely affect rebuilding; however, this is difficult to evaluate quantitatively early in the rebuilding program. Risk of not rebuilding is increased if these positive biases continue to accumulate.

(v) Alaska has adequately demonstrated an ability to estimate hatchery add-ons with the procedures used in 1985; however, impacts on natural stock rebuilding have not been fully delineated. The Committee concluded that because of the small add-on in 1985 and the risk adjustment procedures used, impacts on natural stocks in 1985 were probably insignificant.

(vi) Regarding Alaska's proposal for a 1986 add-on, the Committee concluded that Alaska is capable of harvesting new Alaska hatchery production. A Committee consensus was not reached regarding specific recommendations for allowing the 1986 Alaska add-on, or on the appropriate risk adjustment to be used, if the Commission approves Alaska's proposal.

Recommendations

(i) Management action is required in 1986 to achieve the reduced harvest rate necessary for rebuilding Strait of Georgia chinook stocks. Catch ceiling reductions alone would exceed 15 percent of the 1985 ceiling.

(ii) Reductions of chinook nonretention fisheries should be implemented in 1986, consistent with the Treaty language requiring the minimization of impacts. Monitoring and assessment should continue in 1986. Unless the impact of such mortalities is minimized, the Commission should take induced mortalities into account in establishing future catch ceilings based on Commission criteria for "minimization."

(iii) All fisheries-induced mortalities should be taken into account in evaluating net impacts on the rebuilding program. Increased induced fishing mortalities and biological impacts resulting from increased minimum size limits should be assessed and accounted for.

(iv) Management and/or conservation actions should be taken to achieve broodstock requirements in response to the depressed status of Robertson Creek hatchery, Spring Creek hatchery, and Bonneville hatchery stocks in 1986.

(v) The Commission should establish policies regarding deviations from catch ceilings to ensure that, on average, ceilings are not exceeded. In response to concerns in conclusion 4, the Committee recommends that overages in 1985 totaling 53,000 chinook should be deducted from 1986 ceilings.

(vi) The Committee could not reach a consensus on recommendations on the magnitude of the 1986 Alaska add-on. It is recommended that for the purposes of computing "new" enhancement, "old" enhancement should be constrained to no less than the average enhancement contributions observed during the approximate period 1977-84. It is also recommended that the actual base period chosen in defining "old" enhancement be evaluated on a case-by-case basis.

(vii) The Committee has not been able to fully address recommendations for research. However, the establishment of indicator stock programs must receive high priority.

3. REPORT OF THE JOINT TECHNICAL COMMITTEE ON CHUM

This report had not been received by the Secretariat at the time of publication of the Annual Report.

4. REPORT OF THE NORTHERN BOUNDARY TECHNICAL COMMITTEE

Sockeye, chum and pink stocks returning to southern southeast Alaska and northern B.C. follow complicated and wide ranging migration routes which frequently result in the interception of one country's fish by the other country. Selected fisheries in Alaska which intercept Canadian fish are Tree Point/Cape Fox gill net, District 104 seine, Clarence Strait/Revilla Channel seine and District 106 gill net and seine. Selected fisheries in northern B.C. which intercept Alaskan fish are Area 1 troll and net, Area 3 troll and net, and the Area 4 and 5 net.

All the selected interception fisheries in Canada and Alaska have long fishing histories at various levels and were implemented to target on production from the country of origin. At present, most of the fisheries are managed to target initially on one species, then switch to another species when it becomes dominant in the catches.

Increases in fishing efficiency over time have probably occurred for all gear types as a result of improvements to gear, vessel design, electronics, etc.

In 1986, the total pink salmon return to southern southeast Alaska is expected to be 37.9 million. Formal forecasts for other species are not available. The expected returns to northern B.C. are: in Area 3, pink 2 million; sockeye 456,000; chum 80,000; in Area 4, pink 2.9 million; sockeye 3 million.

The U.S. and Canada initiated a major research effort in 1982 directed at clarifying the interception rates of pink and sockeye in key boundary area fisheries. For sockeye, the analysis of scale pattern differences and adult tagging were used in 1982 and 1983. Scale pattern analysis alone was used in 1984 and 1985. In 1982, adult tagging of pink salmon was conducted. In 1984 and 1985, the adult pink salmon tagging program was repeated and scale pattern analysis, electrophoresis and parasite analysis for sockeye was conducted.

Results from the 1982-84 studies indicate that major interceptions of Canadian sockeye occur in the Tree Point gill net and Noyes Island purse seine fisheries. Gill net and purse seine fisheries in the Clarence Strait area also are harvesting significant numbers of Canadian

sockeye. Based on the 1982 and 1984 adult pink tagging, the Canadian Area 1 troll and net fisheries were identified as major interceptors of Alaskan pink salmon. The Area 3 net fishery also caught significant numbers of Alaskan pink. Low interception levels were identified in a number of other fisheries. U.S. interception rates of Canadian pink stocks were highest at Cape Fox; in addition, low levels were identified in the Cape Muzon/Dall Island, lower Clarence Strait, and Noyes Island fisheries. In some cases, due to high catches, the numbers of fish intercepted may be significant.

5. REPORT OF THE TRANSBOUNDARY TECHNICAL COMMITTEE

1985 Fishery Review

(i) Stikine: Based on a projection for a below average sockeye return to the Stikine, U.S. drift gill net and Canadian inriver fisheries were restricted in the early portion of the run. By early July, test fishing and stock separation results, as well as fishery performance, indicated that an above average run was occurring. Through the remainder of the run, both countries targeted extensive fishing effort on Stikine sockeye. Post-run escapement counts and stock separation studies indicate that additional Stikine sockeye could have been harvested as the sockeye escapement was well above the goal. A record 67,400 sockeye were counted at the Tahltan Lake weir. For the sockeye harvested, the sharing formula provided by the Treaty was met. August coho availability in the District 106 U.S. drift gill net fishery was considerably above average; however, the District 108 U.S. drift gill net fishery in Fredrick Sound was below average. The proportion of Stikine coho in U.S. gill net and troll fisheries is not known. Due to a lack of known usable coho escapement index areas and generally poor survey conditions, few surveys are made. An evaluation of inriver abundance of coho relative to the sockeye population is pending results of the 1985 Canadian test fishing program. Chinook escapement surveys indicated a good return to index streams.

(ii) Taku River: An above average return of sockeye provided larger than expected harvests in both Alaskan and Canadian gill net fisheries. Escapement counts of sockeye in the Taku drainage and the preliminary mark and recapture population estimate indicate that the overall Taku escapement was above the preliminary goal. A strong coho run was indicated by good catches in the District 111 Alaskan gill net fishery and good escapement counts on select lower river tributaries; however, available information suggests that coho escapement to some headwater areas was weak. An average fall chum run occurred based on availability in the District 111 gill net fishery. A limited survey of fall chum spawning areas was conducted due to poor weather conditions. Based on escapement counts, the 1985 chinook return to the Taku River was well above average for recent years. An exceptionally large pink run to the Nakina River was evident.

(iii) Alsek: The 1985 return of sockeye to the Alsek River was poor as expected. Despite severe restrictions in U.S. and Canadian fisheries, the early run sockeye escapement to Klukshu Lake did not improve over the 1980 level. Some improvement to late run escapements was observed, but overall escapement goals were not met in Canadian systems. A very poor return of chinook to the Alsek in 1985 resulted in the escapement goal not being met despite very low chinook harvests in inriver fisheries. The Alsek coho run appeared to be average although low effort in the Dry Bay fishery resulted in a below average inriver catch.

1986 Stock Forecasts

(i) Stikine: It is anticipated that only sockeye will have potential for a directed fishery in 1986. The escapement of sockeye in 1981, the predominant brood year for the 1986 return, was much higher than average, consequently a good return of sockeye is anticipated for 1986. A total allowable catch in excess of 100,000 may be expected. Stikine coho returns in 1986 are expected to be below average and no allowable harvest is anticipated. The 1986 Stikine chinook return is expected to be above average but no harvestable surplus is expected to return to the terminal net fishing areas and the river. Terminal and inriver commercial gill net fisheries should be managed to minimize the incidental harvest of chinook salmon.

(ii) Taku River: Taku River stocks of sockeye, coho, chum and pink salmon are anticipated to return at below average levels. Conservation actions may have to be taken to achieve coho escapement goals and, therefore, careful inseason monitoring of terminal areas will be required. Chinook returns may be above average but efforts to rebuild these stocks should continue.

(iii) Alsek River: An above average return of sockeye to the Alsek River is expected for 1986. Management actions implemented in 1984 to improve early run sockeye escapements should continue. A below average return of coho is expected. Conservation measures for the rebuilding of chinook runs should continue.

Review of Research Program

Research on the Transboundary rivers has been conducted primarily on sockeye stock identification and escapement, since 1982, on the Stikine and Taku Rivers. Some work has also been done to evaluate escapement of other species. Accomplishments and findings include:

(i) Sockeye scale pattern analysis and parasite prevalence can be used to reasonably identify Stikine and Taku River stocks and other Alaskan and Canadian stocks.

(ii) On the Stikine River, Tahltan and non-Tahltan sockeye can be identified by scale characteristics, parasite prevalence, egg diameter and electrophoretic traits.

(iii) Timing of some sockeye runs through Sumner Strait and District 111 has been determined by tagging and/or scale studies.

(iv) Sockeye stock identification using electrophoresis and occurrence of a brain parasite warrants further investigation for specific application.

(v) Hydroacoustic (sonar) techniques used with test net catches for species allocation show some promise for estimating escapement of all species. Testing has been done on the Stikine River.

(vi) On the Taku River, mark-recapture methods are being used to provide escapement estimates for sockeye, chum, coho, and pink salmon in 1985.

(vii) Separation of Taku and Snettisham sockeye in the District 111 fishery was investigated by scale pattern analysis.

(viii) Radio-tagging was used in 1984 on the Taku River to increase understanding of sockeye migration and spawning distribution.

(ix) Alsek River studies have received lower priority but annual catch monitoring is done and spawning ground surveys and weir counts are conducted.

Enhancement Opportunities

Several potential enhancement opportunities have been identified in the Transboundary river drainages. Some involve increasing the available habitat to salmon through the removal of blockages or providing passage facilities above barrier falls. Other projects would provide better utilization of existing habitat through lake fertilization and by conducting fry plants in systems that are lacking spawning areas. In 1985, Tahltan Lake in the Stikine watershed was fertilized on an experimental basis in an effort to increase smolt size and survival to adults.

The State of Alaska and private Alaskan nonprofit hatchery operators have constructed several hatchery facilities that will contribute salmon to Alaskan fisheries that are partially managed for Transboundary river stocks. The siting of these fisheries was planned with the goal of minimizing the impact of hatchery production on natural stocks. In some instances, new management approaches will be needed to ensure that this goal can be met.

Data and Program Needs

The Committee identified four general program areas as relevant and important to the development of management programs. These are: (1) establish escapement goals for each species and stock; (2) identify conservation concerns by developing accurate run projections; (3) develop management systems that will achieve escapement goals and meet required catch allocations; and (4) achieve ability to reconstruct annual runs by enumerating catches and escapements by evaluating biological parameters.

PART VI
AUDITORS' REPORT
FINANCIAL STATEMENTS - March 31, 1986

AUDITORS' REPORT TO THE COMMISSION

We have examined the statement of assets and liabilities of the Pacific Salmon Commission as at March 31, 1986 and the statements of receipts and expenditure, changes in funds and changes in cash for the period from March 17, 1985, the date of ratification of the Treaty concerning Pacific Salmon, to March 31, 1986. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests and other procedures as we considered necessary in the circumstances.

In our opinion, these financial statements present fairly the financial position of the Commission as at March 31, 1986 and the results of its operations, changes in funds and changes in cash for the period then ended in accordance with generally accepted accounting principles.

Lee, Marwick, Mitchell & Co.

Coquitlam, Canada
June 26, 1986

Chartered Accountants

Statement of Assets and Liabilities
March 31, 1986

Assets

Current assets:	
Cash and term deposits	$ 1,099,001
Accounts receivable	795
Interest receivable	5,693
Prepaid expenses	16,278
Total current assets	1,121,767
Fixed assets (Note 3)	164,209
	$ 1,285,976

Liabilities

Current liabilities:	
Accounts payable	$ 82,794
Total current liabilities	82,794
Advances from contracting parties represented by:	
Fixed asset fund	164,209
Working capital fund	1,038,973
	1,203,182
	$ 1,285,976

See accompanying notes to financial statements.

Statement of Receipts and Expenditure
Period from March 17, 1985 to March 31, 1986

Receipts:	
Contributions of cash from contracting parties	$ 1,316,000
Contributions of fixed assets from contracting parties	56,524
Interest on term deposits	28,494
	1,401,018
Expenditures:	
Materials and supplies	15,177
Overhead	11,174
Rentals	25,966
Repairs and maintenance	951
Salaries and employee benefits	110,529
	163,797
Excess of receipts over expenditures	$ 1,237,221

See accompanying notes to financial statements.

Statement of Changes in Funds
Period from March 17, 1985 to March 31, 1986

	General Fund	Fixed Asset Fund	Working Capital Fund	Total
Balance, beginning of year	$ –	–	–	–
Transfer between funds				
– purchase of equipment	(198,248)	198,248	–	–
– allocation to Working Capital Fund	(1,038,973)	–	1,038,983	
Changes during the year:				
Excess of receipts over expenditures	1,237,221	–	–	1,237,221
Depreciation	–	(34,039)	–	(34,039)
Balance, end of year	$ –	164,209	1,038,983	1,203,182

See accompanying notes to financial statements.

Statement of Changes in Cash
Period from March 17, 1985 to March 31, 1986

Source of cash:	
Contributions from contracting parties	$ 1,316,000
Interest	22,801
	1,338,801
Use of cash:	
Operating expenses	163,797
Purchase of fixed assets, net of contribution in kind	141,724
Prepaid expenses	16,278
Accounts receivable	795
Accounts payable	(82,794)
	239,800
Increase in cash	1,099,001
Cash balance, beginning of year	–
Cash balance, end of year	$ 1,099,001

See accompanying notes to financial statements.

Notes to Financial Statements
March 31, 1986

1. Nature of organization:

   The Pacific Salmon Commission was established by Treaty between the Governments of Canada and the United States of America to promote cooperation in the management, research and enhancement of Pacific salmon stocks. The Treaty was ratified on March 17, 1985 and the Commission commenced operations on September 26, 1985.

2. Significant accounting policies:

   (a) Fund accounting:

   The General Fund represents the accumulated excess of funds provided by the Contracting Parties over expenditures, net of transfer to or from the Fixed Assets Fund.

   The Fixed Assets Fund represents the cumulative results of fixed asset transactions. Depreciation is charged to the Fixed Assets Fund.

   The Working Capital Fund represents funds provided by the contracting parties for capital and special program expenditures.

   (b) Fixed assets:

   Fixed assets are stated at cost. Depreciation is provided using the straight-line method at rates sufficient to amortize the costs over the estimated useful lives of the assets. The rates of depreciation used are:

Automobiles	10%
Boats	20%
Computer hardware	20%
Equipment	20%
Films	33%
Furniture and fixtures	10%

   (c) Income tax:

   The Commission is a non-taxable organization under the Privileges and Immunities (International Organizations) Act (Canada).

   (d) Foreign exchange:

   Transactions originating in foreign currencies are translated at the exchange rate prevailing at the transaction dates. Assets and liabilities denominated in foreign currency at the balance sheet date are translated to equivalent Canadian amounts at the current rate of exchange.

2. Fixed assets:

	Cost	Accumulated Depreciation	Net Book Value
Automobiles	$ 5,250	525	4,725
Boats	2,506	501	2,005
Computer hardware	135,435	27,087	108,348
Equipment	51,347	5,135	46,212
Films	1,800	600	1,200
Furniture and fixtures	1,910	191	1,719
	$ 198,248	34,039	164,209

Appendices

Appendix 1

Treaty Between the Government of Canada and the Government of the United States of America Concerning Pacific Salmon

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

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

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

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

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

Have agreed as follows:

Article I

DEFINITIONS

As used in this Treaty,

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

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

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

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

5. "overfishing" means fishing patterns which result in escapements significantly less than those required to produce maximum sustainable yields;

6. "stocks subject to this Treaty" means Pacific salmon stocks which originate in the waters of one Party and

(a) are subject to interception by the other Party;

(b) affect the management of stocks of the other Party; or

(c) affect biologically the stocks of the other Party; and

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

Article II

COMMISSION AND PANELS

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

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

3. The Commission shall consist of not more than eight Commissioners, of whom not more than four shall be appointed by each Party. Each Party may also appoint not more than four alternate Commissioners, to serve in the absence of any Commissioner appointed by that Party.

4. The Commissioners and alternate Commissioners shall hold office at the pleasure of the Party by which they were appointed.

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

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

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

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

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

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

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

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

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

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

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

16. The Commission may engage staff or authorize the Executive Secretary to do so. The Executive Secretary shall have full authority over the staff subject to the direction of the Commission. If the office of the Executive Secretary is vacant, the Commission shall determine who shall exercise that authority.

17. The Commission shall establish a Committee on Research and Statistics and a Committee on Finance and Administration. The Commission may eliminate or establish committees as appropriate.

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

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

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

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

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

Article III

PRINCIPLES

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

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

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

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

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

(a) the desirability in most cases of reducing interceptions;

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

(c) annual variations in abundance of the stocks.

Article IV

CONDUCT OF FISHERIES

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

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

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

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

(a) the estimated size of the run;

(b) the interrelationship between stocks;

(c) the spawning escapement required;

(d) the estimated total allowable catch;

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

(f) its domestic allocation objectives whenever appropriate.

The Commission shall forward this information to the appropriate Panels.

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

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

6. On adoption by both Parties, the fishery regimes referred to in paragraph 5 shall be attached to this Treaty as Annex IV.

7. Each Party shall establish and enforce regulations to implement the fishery regimes adopted by the Parties. Each Party, in a manner to be determined by the Commission, shall notify the Commission and the other Party of these regulations and shall promptly communicate to the Commission and to the other Party any in-season modification.

Article V

SALMON ENHANCEMENT PROGRAMS

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

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

(a) operations of the plans for existing projects;

(b) plans for new projects; and

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

The Commission shall forward this information to the appropriate Panels.

3. The Panels shall examine the information and report their views to the Commission in light of the obligations set forth in Article III.

4. The Commission shall review the reports of the Panels and may make recommendations to the Parties.

Article VI
FRASER RIVER

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

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

3. The Fraser River Panel shall review with other appropriate Panels the fishery regimes and the information provided pursuant to Article IV, paragraph 3, with respect to salmon other than Fraser River sockeye and pink salmon before proposing regulations pursuant to paragraph 2. The Fraser River Panel and the Commission shall ensure that regulatory proposals and recommendations, to the extent practicable, meet the requirements of the Parties with respect to the management of stocks other than Fraser River sockeye and pink salmon.

4. In implementing this Article, the Fraser River Panel and the Commission shall take into account and seek consistency with existing aboriginal rights, rights established in existing Indian treaties and domestic allocation objectives.

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

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

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

Article VII
TRANSBOUNDARY RIVERS

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

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

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

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

Article VIII
YUKON RIVER

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

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

3. The Parties shall initiate in 1985, and conclude, as soon as possible, negotiations to, inter alia:

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

(b) develop co-operative management procedures taking into account United States management programs for stocks originating in the United States section of the River;

(c) consider co-operative research programs, enhancement opportunities, and exchanges of biological data; and

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

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

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

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

(c) proposals for research.

Article IX

STEELHEAD

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

Article X

RESEARCH

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

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

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

Article XI

DOMESTIC ALLOCATION

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

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

Article XII

TECHNICAL DISPUTE SETTLEMENT

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

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

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

Article XIII

ANNEXES

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

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

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

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

Article XIV

IMPLEMENTATION

Each Party shall:

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

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

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

Article XV

ENTRY INTO FORCE AND TERMINATION OF TREATY

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

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

3. Upon the entry into force of this Treaty, the Convention between Canada and the United States of America for the Protection, Preservation and Extension of the Sockeye Salmon Fishery in the Fraser River System, as amended, signed May 26, 1930, shall be terminated. However, the International Pacific Salmon Fisheries Commission shall continue to function insofar as is necessary to implement Annex IV Chapter 4, paragraph (1)(c). Following the termination of the Convention, the transfer of responsibilities from the International Pacific Salmon Fisheries Commission to the Commission, the Fraser River Panel and the Government of Canada shall be as agreed by the Parties.

Annex I

PANELS

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

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

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

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

Annex II

FRASER PANEL AREA

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

1. The territorial waters and the high seas westward from the western coast of Canada and the United States of America and from a direct line drawn from Bonilla Point, Vancouver Island, to the lighthouse on Tatoosh Island, Washington — which line marks the entrance to Juan de Fuca Strait — and embraced between 48 and 49 degrees north latitude, excepting therefrom, however, all the waters of Barkley Sound, eastward of a straight line drawn from Amphitrite Point to Cape Beale and all the waters of Nitinat Lake and the entrance thereto.

2. The waters included within the following boundaries:

Beginning at Bonilla Point, Vancouver Island, thence along the aforesaid direct line drawn from Bonilla Point to Tatoosh Lighthouse, Washington, described in paragraph numbered 1 of this Article thence to the nearest point of Cape Flattery, thence following the southerly shore of Juan de Fuca Strait to Point Wilson, on Quimper Peninsula, thence in a straight line to Point Partridge on Whidbey Island thence following the western shore of the said Whidbey Island, to the

* Quebec City, P.Q. Canada, March 17, 1985

entrance to Deception Pass, thence across said entrance to the southern side of Reservation Bay, on Fidalgo Island, thence following the western and northern shore line of the said Fidalgo Island to Swinomish Slough, crossing the said Swinomish Slough, in line with the track of the Great Northern Railway, thence northerly following the shore line of the mainland to Atkinson Point at the northerly entrance to Burrard Inlet, British Columbia, thence in a straight line to the southern end of Bowen Island, thence westerly following the southern shore of Bowen Island to Cape Roger Curtis, thence in a straight line to Gower Point, thence westerly following the shore line to Welcome Point on Sechelt Peninsula, thence in a straight line to Point Young on Lasqueti Island, thence in a straight line to Dorcas Point on Vancouver Island, thence following the eastern and southern shores of the said Vancouver Island, to the starting point at Bonilla Point, as shown on the British Admiralty Chart Number 579, and on the United States Coast and Geodetic Survey Chart Number 6300, as corrected to March 14, 1930, copies of which are annexed to this Convention and made a part thereof.

3. The Fraser River and the streams and lakes tributary thereto.

Annex III

TECHNICAL DISPUTE SETTLEMENT BOARD

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

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

3. Decisions of a Board, including procedural rulings and findings of fact, shall be made by majority vote and shall be final and without appeal except as provided in Article XII, paragraph 3.

4. Remuneration of the members and their expense allowances shall be determined on such basis as the Parties may agree at the time the Board is constituted. The Commission shall provide facilities for the proceedings.

Annex IV

Chapter 1

TRANSBOUNDARY RIVERS

1. Recognizing the desirability of accurately determining exploitation rates and spawning escapement requirements of salmon originating in the Transboundary Rivers, the Parties shall establish 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) in 1985 and in 1986 Canada shall annually harvest 35% of the total allowable catch of sockeye originating in the Canadian portions of the Stikine River or 10,000 such sockeye, whichever is greater;

(ii) in 1985 and in 1986 Canada shall annually harvest 2,000 Stikine River coho;

(iii) in the years 1985 through 1995, the Parties shall take appropriate management action to ensure that the escapement goal of 19,800 to 25,000 chinook salmon in the Canadian portion of the Stikine River is achieved by 1995;

(iv) in 1985, since the run of sockeye is anticipated to be below average, in-season run-size determination and subsequent management actions will be necessary to ensure that harvest objectives and escapements are met;

(v) in 1985 and in 1986, Canadian commercial catches of chinook, pink and chum salmon in the Canadian portions of the Stikine River may be taken as an incidental harvest in the directed fishery for sockeye and coho;

(b) the Taku River:

(i) in 1985 and in 1986 Canada shall annually harvest 15% of the total allowable catch of sockeye originating in the Canadian portion of the Taku River;

(ii) in 1985 and in 1986 Canadian harvests of chinook, pink, chum, and coho salmon may be taken as an incidental harvest in the directed fishery for sockeye;

(iii) in the years 1985 through 1995, the Parties shall take appropriate management action to ensure that the escapement goal of 25,600 to 30,000 chinook salmon in the Canadian portion of the Taku River is achieved by 1995.

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:

(a) 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;

(b) in the event that in 1985 and in 1986 the run of sockeye is below average, additional restrictions will be required to meet escapement goals.

6. The Parties agree to consider cooperative enhancement possibilities and to undertake as soon as possible 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 1985 to jointly reduce interception 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 stocks.

2. With respect to sockeye salmon, the United States shall

(a) during the period 1985 through 1988, limit its purse seine fishery in District 4 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;

(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) in 1985 and 1986, limit its troll fishery in Area 1 in a manner that will result in a maximum two year total catch of 1 million troll pink salmon;

(c) in 1985 and 1986, if 300,000 troll pink salmon are caught in Area 1 in either year, then close to pink salmon trolling sub-areas 101-3 north of 54 35' north, 101-4, 101-8, and 103 north of 54 35' north.

4. In 1985 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 1984 and 1985 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 establish 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;

(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;

(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) jointly initiate and develop a coordinated chinook management program.

(c) establish 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)(iv) 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;

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

(d) ensure that

(i) in 1985 and 1986, the annual all-gear catch in northern and central British Columbia and southeast Alaska shall not exceed 526,000 chinook salmon to be divided equally between the Parties;

(ii) in 1985 and 1986, the annual troll catch off the west coast of Vancouver Island shall not exceed 360,000 chinook;

(iii) in 1985 and 1986, the total annual catch by the sport and troll fisheries in the Strait of Georgia shall not exceed 275,000 chinook;

(iv) if recommended by the Committee, in 1986 and subsequent years adjustments to the ceilings may be made in response to reductions in chinook abundance so that the indicator stocks are rebuilt by 1998; provided that reductions in ceilings for 1986 will not be made unless the Committee recommends a reduction greater than 15 percent, based on reductions in stock abundance for that year;

(v) 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;

(vi) if catch ceilings are exceeded in any year, the differences shall be addressed by the responsible Party in a manner that will ensure rebuilding of the affected stocks by 1998.

(e) evaluate all sources of induced fishing mortality, estimate unreported catches of chinook salmon, assess the impact and minimize the effects of these factors in 1985 and 1986. The Commission shall take into account such estimates of total chinook mortality in implementing the chinook rebuilding program.

(f) 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.

(g) 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.

(h) 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 assessments by it of the specific contributions of each region's new enhancement activities, provided that the rebuilding schedule is not extended beyond 1998.

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:

	Sockeye	Pink
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:

	Sockeye	Pink
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.

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 United States catch of coho stocks of United States origin, 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) establish 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

(i) evaluate the effectiveness of management actions;

(ii) identify and review the status of stocks;

(iii) present the most current information on harvest 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 escapements which produce maximum sustainable harvests and allowable harvest rates;

(v) present historical catch data, associated fishing regimes, and information on stock composition in fisheries harvesting these stocks;

(vi) devise analytical methods for the development of alternative regulatory and production strategies;

(vii) identify information and research needs, including future monitoring programs for stock assessments;

(viii) for each season, make stock and fishery assessments and recommend to the Commission conservation measures consistent with the principles of the Treaty;

(b) unless otherwise agreed, in any area where fisheries of one Party may intercept coho stocks originating in the rivers of the other, endeavour to limit incidental coho catches by fisheries targeting on other species.

2. For coho stocks shared by Washington and southern British Columbia fisheries, each Party shall establish regimes for its ocean troll, ocean sport, and inside troll, net and sport fisheries consistent with management objectives approved by the Commission.

3. In 1985, the Parties shall adhere to presently agreed management objectives for Canadian Area 20, U.S. Areas 7 and 7A, and Juan de Fuca Strait.

4. The Parties agree

(a) that in 1985 and 1986 the total annual troll catch of coho in Canadian Management Areas 21, 23, 24, 25, 26, 27, 121, 123, 124, 125, 126, 127, and 130-1 shall not exceed 1.75 million;

(b) 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;

(c) to develop, in 1986 and thereafter 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 Canada to the fishery, and

(ii) provide for the sharing of benefits of coho production of each Party consistent with the principles of Article III.

5. If management measures result in a significant deviation from catch levels set out in paragraph 4 in any year, differences shall be compensated by adjustments to the fishery in subsequent years, provided that conservation objectives for natural coho stocks and other principles of Article III are not adversely affected.

6. Notwithstanding any other provisions of this Chapter, the Commission, for 1987 and thereafter, shall set specific harvest levels for coho salmon in the intercepting fisheries in areas described in paragraph 4.

Chapter 6

SOUTHERN BRITISH COLUMBIA - WASHINGTON CHUM FISHERIES

Considering that anticipated returns of some natural salmon stocks originating in Johnstone Strait, the Strait of Georgia, the Fraser River, Puget Sound, Juan de Fuca Strait and Nitinat Lake are expected to be weak and therefore not likely to provide a harvestable surplus in 1985,although some enhanced stocks originating in these areas may provide harvestable surpluses and anticipating locally directed fisheries on such enhanced stocks, the Parties shall

1. No later than March 31, 1985, establish a Joint Chum Technical Committee (Committee) reporting, unless otherwise agreed, to the Southern Panel and the Commission, to, inter alia,

(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 in order 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) develop analytical methods to permit the exploration of alternative regulatory and production strategies;

(f) identify information and research needs, to include future monitoring programs for stock assessments;

(g) develop fishery regimes for the 1985 season and thereafter;

2. No later than August 15, 1985, instruct the Committee to present a report to the Parties on the activities set out in paragraph 1 herein.

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.

MEMORANDUM OF UNDERSTANDING

The Governments of Canada and the United States of America have agreed to record the following in connection with the Treaty Concerning Pacific Salmon, in order to set out the intention of the Parties with respect to implementation of Article III, paragraph 1(b) of the said Treaty, Data Sharing and the Yukon River, Transboundary Rivers and the Northern Boundary - Southeastern Alaska fisheries:

A. Implementation of Article III, paragraph 1(b)

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

With respect to the obligation to provide each Party with benefits equivalent to the production of salmon originating in its rivers (contained in Article III, paragraph 1(b) of the Treaty), it is recognized that data on the extent of interceptions in some areas are imprecise and that it is therefore not possible to determine with certainty the total production of salmon from each country's rivers. It is also recognized that methods of evaluating benefits accruing within each country

may differ. For these reasons, it is anticipated that it will be some time before the Commission can develop programs to implement the provisions of Article III, paragraph 1(b) in a complete and comprehensive manner. Nevertheless, in the short term, the Commission shall ensure that the annual fishery regimes and understandings regarding enhancement are developed in an equitable manner taking into account the principle outlined in Article III 1(b). In particular, the Commission's decisions take into account changes in the benefits flowing to each of the Parties through alteration in fishing patterns, conservation actions, or as the result of changes in the abundance of the runs.

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

B. Data Sharing

Considering that development of comprehensive evaluations of management is required in order to assess the impact of such regimes on interception fisheries and on the stocks which contribute to those fisheries for the effective implementation of the Treaty, the Parties consider it necessary to develop a coast-wide stock assessment and management data system, including catch, effort, escapement, and codedwire tag data that will yield reliable management information in a timely manner and develop analytical models along with standardized methods for monitoring fishing effort. The Parties agree to maintain a coded-wire tagging and recapture program designed to provide statistically reliable data for stock assessments and fishery evaluations. The Parties agree to establish a working group prior to April 1, 1985 to review the program and to make recommendations to the Commission before April 1, 1987.

Therefore, the Parties agree to

(a) develop the capability to use current season coded-wire tag data, fishing data, spawning escapement data, and age composition data for the pre-season management process for the next season;

(b) continue in 1985 and 1986 the research program begun in 1982 in northern British Columbia and Southeast Alaska, designed to develop agreed estimates of rates of interception of salmon in the area;

(c) continue efforts to develop analytical models that forecast abundance and analyze recovery and escapement data to refine stock productivity estimates and monitor and forecast management needs;

(d) improve evaluation of escapements through improved monitoring (key index area streams, standardization of methods, etc.) and coded-wire tag recovery in escapements;

(e) develop and maintain coded-wire tagging programs for key stocks or index groups to measure exploitation rates and better define time-area distribution for development of management options;

(f) obtain coastwide estimates for non-reported incidental catches of juvenile salmon;

(g) evaluate and develop alternative techniques such as electrophoresis, scale analysis, etc., for stock identification in order to identify stocks not represented by coded-wire tag groups;

(h) explore the feasibility of in-season management;

(i) review annually methodologies and procedures for the purpose of determining performance of applied measures and maintaining "state-of-the-art" fishery management techniques.

C. Yukon River

Considering that salmon stocks originating from the Canadian section of the Yukon River and the Canadian section of the Porcupine River are harvested by fishermen of both Canada and the United States and that effective conservation and management of these resources is of mutual interest, the Parties, in order to facilitate implementation of Article VIII, shall

1. During March 1985, meet in order inter alia, to

(a) determine current stock status;

(b) develop preliminary escapement goals;

(c) examine enhancement opportunities;

(d) examine conservation concerns, including habitat degradation.

and recommend management strategies and goals;

(e) develop and recommend cooperative research proposals for 1985 and thereafter; and

(f) notwithstanding the Transboundary River Annex and other provisions of this Memorandum establish the range within which the percentage of the U.S. harvest of each species of salmon originating in Canadian sections of the rivers that shall be deemed to be of U.S. origin shall be set, as required by Article VIII, paragraph (4).

2. During March 1985, establish a technical committee to compile available data and itemize research requirements for effective future management and conservation.

3. Notwithstanding the Transboundary River Annex and other provisions of this Memorandum, during October 1985, initiate negotiations as required by Article VIII, paragraph (3), to determine inter alia, the percentage of the U.S. harvest of each species of salmon originating in Canadian sections of the rivers that shall be deemed to be of U.S. origin.

D. Transboundary Rivers

Whereas salmon originating in Canadian sections of Transboundary Rivers are subject to harvesting by U.S. fishermen in U.S. waters;

And whereas the Parties have encountered difficulties in determining the percentage of the total allowable catch of salmon that shall be deemed to be of United States origin for the purpose of implementing Article III, paragraph 1(b) of the Treaty,

The Parties therefore agree that the Commission shall determine this percentage during the first year following the entry into force of the Treaty.

E. Northern Boundary - Southeastern Alaska

In recognition of the Northern Boundary Technical Committee Report that Area 3 net fisheries in Canada harvest both Canadian and U.S. pink stocks along the boundary areas, Canada shall provide to the United States a plan that ensures that fisheries in this Area are not increased during the period of mid July through mid August.

Appendix 2

Memorandum of Understanding Regarding Implementation of Article XV Paragraph 3 of the Treaty

Department of External Affairs *Ministere des Affaires extérieures*

Canada

Excellency,

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

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

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

   (a) review and evaluate information provided by the Parties, pursuant to Article IV, paragraph 3, in order to provide recommendations to the Commission for the fishery regime included in Annex IV;

   (b) make proposals to the Commission regarding regulations for the harvest of Fraser River sockeye and pink salmon within the Fraser Panel Area (the Area);

   (c) collect in-season information on catches within the Area; review information on escapements within the Area; collate information provided by the Parties pursuant to sub-paragraphs D. 3 and D. 4 for fisheries outside the Area; conduct test fishing on Fraser River sockeye and pink salmon; collect data on upriver escapements by observation at Hell's Gate and through the conduct of a hydroacoustic program at Mission Bridge; and design and conduct studies to identify and discriminate between races of Fraser River sockeye and pink salmon harvested in the fisheries including specification of samples required from upriver sections of the Fraser River and from sites outside the Area;

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

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

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

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

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

His Excellency Paul Heron Robinson, Jr.
Embassy of the United States of America
100 Wellington Street
Ottawa, Ontario
K1P 5T1

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

1. the information required by Article IV, paragraph 3;

2. samples required for the racial work referred to in sub-paragraph A.1 (c);

3. information on in-season catches, by time, area, species and gear type, for fisheries outside the Area that harvest sockeye and pink salmon bound for the Fraser River;

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

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

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

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

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

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

   (b) interpretation of statistical and biological data and other information referred to in paragraph D;

   (c) collection and assembly of such data as may be required by the Commission and its Panels; and

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

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

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

4. The Environment Conservation Division, Biology Division and Engineering Division, and appropriate members of the Fishery Management and Administrative Divisions shall be transferred to DFO and integrated as practicable.

5. The transfer of the Fishery Management Division and Operations Division of the IPSFC referred to in sub-paragraphs 1, 3 and 4 shall occur during the period September 1985 to March 1986. The transfer of the Environment Conservation Division, the Biology Division, the Engineering Division and members of the Administrative Division referred to in sub-paragraph 4 may occur at any time within the year after the date of entry into force of the Treaty. Officials of the Parties shall consult with each other and with the IPSFC staff to seek agreement on the specific timing of these transfers, taking into account the need for continued sound management of the fishery resource and administrative and budgetary cycles of the two Governments.

F. In order to ensure continuity in the methodology of collection of upriver data required for the management of Fraser River sockeye and pink salmon:

1. Pending the entry into force of the Treaty, DFO staff shall participate in work directed by IPSFC staff on upriver activities, i.e. production system activities.

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

3. On request of either Party, opportunities shall be provided for technical experts of either Party or the Commission to observe the data collection operations of the Parties related to the activities of the Fraser River Panel.

G. The Parties shall consult with each other and with the IPSFC staff, with a view, inter alia, to offering employment to IPSFC employees with the new Commission, the Fraser River Panel, or within government agencies of the two Parties on terms and conditions comparable, to the extent practicable, with those they enjoy in IPSFC.

H. 1. The IPSFC library in New Westminster, British Columbia, which contains irreplaceable historical records, shall be transferred to the new Commission and shall be readily accessible to the Fraser River Panel, the Commission and others whose professional needs require use of these library facilities.

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

3. The remaining assets shall be transferred to Canada.

4. Prior to its dissolution the IPSFC shall in cooperation with the Parties, discharge all its outstanding debts, obligations and liabilities.

I. For a term to be agreed upon, the new Commission shall maintain the IPSFC scientific and technical publication series in order to provide for reporting of past scientific work carried out under the auspices of the IPSFC.

I have the honour to propose that if the understanding set out in this Note is acceptable to the Government of the United States of America, this Note and your reply to that effect, shall constitute an Agreement between the Government of Canada and the Government of United States of America regarding the implementation of the Treaty and shall enter into force on the date of your reply.

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

Accept, Excellency, the assurance of my highest consideration.

The Secretary of State
for External Affairs

Appendix 3

Report of the Standing Committee on Finance and Administration (Including Notation of Commission Action) February 19, 1986 (As revised February 20, 1986)

United States	Canada
S. Timothy Wapato, Chairman	Garnet Jones
Barry Kefauver	Bud Graham

During its meeting of February 17 - 21, 1986, the Pacific Salmon Commission appointed the following individuals to serve on the Standing Committee on Finance and Administration:

Canada:	Garnet Jones Bud Graham
U.S.:	S. Timothy Wapato Barry Kefauver

Commissioner Wapato was appointed interim chairman of the Committee. Acting Executive Secretary Jim Woodey will serve as a member of the Committee pending appointment of the Executive Secretary. John Davis, Rob Morley, Ken Medlock, Chuck Walters and Tom Jensen also participated in the Committee's work.

The Committee was directed to review and edit, if necessary, draft terms of reference for the Committee. In addition, the Committee was directed to review and report upon the administrative matters identified within the Commission's draft administrative agenda (Attachment 1*). This report is organized around that draft agenda and reviews each item in turn.

A. Committee Terms of Reference

The draft terms of reference for this committee were, in general, acceptable to us. We recommend no substantive changes to the draft, but have made several editorial changes in the interest of clarity and diction (Attachment 2).

COMMISSION ACTION: Terms of Reference approved.

B. Bylaws Review

1. Rules of Procedure.

The Commission has reviewed and provisionally approved the rules of procedure, and thus this matter is outside the purview of the Committee.

2. Technical Dispute Settlement Board.

The Commission has agreed that the Pacific Salmon Treaty adequately addresses this matter and that no additional definition is required.

* Copies of all attachments are available at the Commission offices.

3. Financial Rules.

The PSC staff, at the Commission's request, reviewed the financial rules provisionally adopted at the last Commission meeting. The staff provided the Committee with a variety of proposed changes to those rules (Attachment 3). In general, we feel that it is unnecessary to change the rules in any way at this time. This is not to say, however, that changes may not be called for in the future. Indeed, we have some concerns that will need to be addressed. In particular, we believe that the financial rules as presently drafted fail to provide adequate definition of the purposes to which the Working Capital Fund and General Fund should be applied and, importantly, fail to provide safeguards to ensure proper use of the fund. This concern has come to the fore in light of recent experience. We recommend that the Parties — specifically Diana Pethick and Barry Kefauver — and the Executive Secretary undertake a comprehensive review of the Working Capital Fund, General Fund and related issues and that they be prepared to report to the Commission at the next regular Commission meeting.

COMMISSION ACTION: Approved.

Among the staff's suggested changes is one item concerning Financial Rule 11 that deals with obligation of funds. We view this as a matter of interpretation and agree with the interpretation provided by the staff. That is, we recommend that Rule 11 be interpreted to mean that obligations will be considered incurred when purchase orders are issued.

COMMISSION ACTION: Approved.

The staff has also recommended that the Commission appoint an auditor. The Committee recommends that the firm of Peat, Marwick and Mitchell be engaged as the Commission's auditor. This firm served as the IPSFC auditor and provides audit services to several other international fishery commissions.

COMMISSION ACTION: Approved.

4. Staff Rules.

The Committee began work on this matter using a draft prepared by Diana Pethick. We have made a number of changes to the draft that, for the most part, reflect two concerns: first, we have eliminated any suggestion that Commission secretariat staff are a formal part of the Public Service of Canada; second, we have incorporated provisions for employment of the Executive Secretary and Deputy Executive Secretary intended to reflect the Commission's agreement on this subject (Attachment 4).

Our recommended changes flow from our understanding that Secretariat employees are not employees of one Party or another, but answer to the Commission itself. We recommend that the rules and regulations of the Public Service of Canada should be consulted by the Commission, but used only as guidance in establishing terms and conditions of Secretariat employment.

The Commission agreed to extend the term of probation for the Executive Secretary and to make special arrangements for employment of the Deputy Executive Secretary; our recommended rules incorporate those agreements. We recommend that the Commission provisionally adopt the staff rules, subject to a general review at the next annual Commission meeting.

COMMISSION ACTION: Pending. Rules Nos. 12, 13, 15, 29 and 42 have been revised pursuant to Commission comments and are included for Commission review. Approved February 21, 1986.

C. Finance and Administration Committee Report

1. Recommended Purchases.

At the Commission's request, the PSC staff prepared a listing of recommended equipment purchases for this fiscal year (Attachment 5). In part, we endorse those recommendations. We recommend that the Commission purchase those equipment items listed under the categories Marine Equipment, Office Equipment, Scientific Equipment, and Vehicles.

The staff also recommended acquisition of computers and related equipment costing $56,000. We are sympathetic to this proposal, but recommend that no additional computer equipment be auhorized for purchase until the Data Committee is consulted and steps taken to ensure maximum coordination of purchases. We recommend that the Commission establish a prompt time-frame within which such consultation must occur and that the Executive Secretary (or, in the absence of the Executive Secretary, some other responsible and informed individual) be appointed by the Commission to lead the consultation and coordination effort.

COMMISSION ACTION: Approved but eliminated purchase of one mini-van. Total cost of approved purchase is $150,000.

2. Budget: FY 1986-87.

We recommend no change be made to the existing FY 1986-87 Pacific Salmon Commission budget. We feel that the Financial Rules provide adequate flexibility to cope with any changed circumstances or needs.

COMMISSION ACTION: Approved.

3. Reserve Fund for Relocation.

The PSC staff has recommended that a reserve fund be established for relocation costs and that the fund be carried over from the FY 1985-86 budget to FY 1986-87 (Attachment 6). We agree that funds should be earmarked for relocation costs and that those funds, if any, that remain available from FY 1985-86 be carried over to FY 1986-87 for this purpose.

COMMISSION ACTION: Approved.

4. Hospital/Medical Insurance for U.S. Staff.

Beginning January 1st of this year, B.C. Medical Insurance is no longer available to U.S. citizens resident in British Columbia. As a result, U.S. citizens employed by the Commission will be forced to forego medical insurance or seek coverage through a private insurer. Dr. Jim Woodey is presently the only PSC employee in this difficult circumstance. Only one private insurer provides coverage to U.S. citizens. The cost of private insurance far exceeds that of B.C. Medical coverage: e.g., $334/quarter vs. $108/quarter. We also note that the quality of coverage available through private insurance is lower than that available through B.C. Medical.

This problem presents the question whether the Commission wishes to reimburse U.S citizen Commission employees for the differential cost of medical coverage. We recommend that this be done. The unavailability or high cost of medical insurance could substantially discourage highly qualified potential Commission employees who are U.S. citizens. We believe that Commission employees should be asked to pay the same or equivalent rates for their medical coverage. The Commission should be aware that employers' contributions to medical insurance costs are a taxable benefit to the employee and, thus, as contributions increase so does the employee's tax liability.

COMMISSION ACTION: Approved. Executive Secretary shall explore possibility of U.S. citizens obtaining other coverage.

D. IPSFC Transition Committee Report

1. Secretariat Staffing Review.

The only issue of note in this area concerns ongoing efforts to hire a replacement for former IPSFC biologist Wayne Saito. A job description has been prepared and will soon be distributed. Dr. Woodey will consult with Diana Pethick and Chuck Walters to ensure that the job announcement is distributed as widely as possible in both the United States and Canada.

COMMISSION ACTION: Approved.

2. Inventory.

The PSC staff has prepared an inventory of former IPSFC property available to the Pacific Salmon Commission (Attachment 7). We recommend that this inventory be considered to supercede the inventory prepared several months ago by former IPSFC Director John Roos.

The inventory identifies property recommended for transfer to the Pacific Salmon Commission or, alternatively, to Canada. We endorse those recommendations and recommend that the Commission adopt the inventory.

The Committee notes that this inventory provides for the transfer of a former IPSFC warehouse to the Pacific Salmon Commission. We have agreed that the warehouse should remain in the hands of the Commission pending the Commission's relocation. It may ultimately prove more convenient to the Commission to acquire warehouse space somewhere other than New Westminster. Canada has agreed to supply new warehouse space to the Commission, with the understanding that the old warehouse will then be transferred to Canada.

COMMISSION ACTION: Approved.

3. Disposition of IPSFC Records.

We recommend that IPSFC records be maintained in the manner identified in the Transition Committee report.

COMMISSION ACTION: Approved.

4. Printing Costs for IPSFC Reports.

We recommend that the cost of printing IPSFC reports be met in the manner identified in the Transition Committee report.

COMMISSION ACTION: Approved.

E. Office Space/Relocation

This matter has been addressed by the Commission.

F. Publication Series

The committee recommends that we be directed to consult with the Standing Committee on Research and Statistics on the question of the Commission's publication series. The committees' responsibilities overlap somewhat. This committee will be responsible for financial and administrative aspects of Commission publishing; the Research and Statistics committee will, we understand, have primary responsibility for editorial policy and related matters.

Diana Pethick has prepared a suggested document numbering system for Commission documents (Attachment 8). We recommend that the Commission approve this system, subject to review and comment by panel and committee chairs.

COMMISSION ACTION: Approved in part. Decision pending on question of inclusion of Yukon Technical Committee reports within proposed document numbering system. This matter will be addressed by the Commission.

Appendix 4

Terms of Reference of the Standing Committee on Finance and Administration

The Committee shall consist of at least one commissioner and up to four technical advisors or experts from each Party plus the Executive Secretary of the Pacific Salmon Commission. The Committee shall:

1. provide for a review and analysis of the budget documents and provide advice and recommendations to the Commission;
2. review and recommend to the Commission any changes in staffing or financial procedures, if appropriate;
3. develop, and review the financial and administrative aspects of a publications policy for the Commission;
4. perform other related functions to assure efficiency and that effective financial and personnel management procedures are carried out within the Commission.

Appendix 5

Report of the Transition Committee to the Pacific Salmon Commission Submitted November 7, 1985

COLUMBIA RIVER INTER-TRIBAL FISH COMMISSION
975 S.E. Sandy Boulevard, Suite 202, Portland, Oregon 97214 Telephone (503) 238-0667

November 7, 1985

Mr. Don W. Collinsworth
Chairman
Pacific Salmon Commission
P.O. Box 3-2000
Juneau, Alaska 99802

Dear Chairman Collinsworth,

The IPSFC Transition Committee hereby submits for your consideration our report on various matters related to the transition from the International Pacific Salmon Fisheries Commission to the Pacific Salmon Commission. We are hopeful that our recommendations will meet with your approval.

It is our understanding that you and Vice-Chairman Dr. May will consult on this report and schedule no later than November 15, 1985, a telephone conference call among all Commission members. The report will be considered by the Commission at that time.

The IPSFC Transition Committee remains at your service.

Sincerely,

S. Timothy Wapato
Committee Chairman

Commissioner
Pacific Salmon Commission

Enclosure

IPSFC TRANSITION COMMITTEE

Report to the Pacific Salmon Commission

Transition of the IPSFC to the PSC
including recommendations on:

- Secretariat
- Inventory and Files
- Reports in Progress

United States Members	Canadian Members
S. Timothy Wapato, Chairman	Rob Morley, Vice-Chairman
Rollie Schmitten	Brian Riddell
Barry Kefauver	Diana Pethick

Report prepared by:
Thomas C. Jensen, CRITFC

I. INTRODUCTION

At the inaugural meeting of the Pacific Salmon Commission, held September 25-27, 1985, in Seattle, Washington, the Commission established the IPSFC Transition Committee. Members of the Committee are, for Canada, Rob Morley (DFO), Brian Riddell (DFO), and Diana Pethick (DFO) and, for the United States, S. Timothy Wapato (PSC/CRITFC), Rollie Schmitten (NMFS), and Barry Kefauver (DOS). Bud Graham (DFO) and Tom Jensen (CRITFC) participated in the work of the Committee.

The Committee was directed to report to the Commission by November 8, 1985 on the following matters:

1) Pacific Salmon Commission Secretariat staff structure;
2) Suitability of current IPSFC staff for Secretariat employment;
3) Disposition of IPSFC staff not recommended for Secretariat employment;
4) Disposition of IPSFC inventory, including office and other equipment, and
5) Disposition of the IPSFC library and files.

Committee members Wapato, Schmitten, and Morley, and T. Jensen met informally on October 23rd, in Portland Oregon, and identified one other matter — IPSFC reports in progress — as appropriate for Committee review.

The Pacific Salmon Commission also directed the Committee to prepare a letter for Chairman Collinsworth's signature, informing IPSFC staff that the Transition Committee had been formed and would be working with and requiring the assistance of the IPSFC. A copy of that letter is included with this report. Attachment 1.*

In addition to the specific directions of the Pacific Salmon Commission, the Transition Committee consulted in its work the August 18, 1985 Exchange of Notes between the Governments of the United States and Canada concerning transition from the IPSFC to the PSC. A copy of the Exchange of Notes is appended to this report and quoted where useful. Attachment 2.

In addition to the informal meeting noted above, the Transition Committee held one formal meeting on October 31, 1985, at the Department of Fisheries and Oceans office in New Westminter, British Columbia. IPSFC Director John Roos met with the Committee at that time. Also on the 31st, Committee members Tim Wapato and Rob Morley, joined by Bud Graham, met informally with IPSFC staff to discuss the transition process. This report draws on minutes from the October 31st meetings.

* Copies of attachments are available at the Commission offices.

This report examines, in turn, PSC Secretariat staffing, inventory, and IPSFC reports in progress. A closing section addresses the process of winding-down IPSFC operations. We also include for the Commission's information a letter from IPSFC staff regarding Commission office location.

II. PACIFIC SALMON COMMISSION SECRETARIAT STAFFING

Article II, paragraphs 15 and 16 of the Pacific Salmon Treaty provide for the establishment of an executive secretariat to serve the staffing needs of the Pacific Salmon Commission. In previous discussions between U.S. and Canadian representatives, it has been agreed that the Commission will be an active deliberative and negotiating body, but, in general, will not supplant the work of the two parties in direct fishery management. See Memorandum to Commissioners, Pacific Salmon Commission Working Group (August 23, 1985). Thus, the Commission will, in general, require administrative staff support.

The single exception to this generalization pertains to the work of the Fraser River Panel. Treaty Article VI grants certain preand in-season responsibilities to the Fraser River Panel and, in so doing, creates a need for Commission technical staff. The Exchange of Notes between the Governments of the United States and Canada details the Fraser River Panel's technical responsibilities and speaks to the means by which those responsibilities will be met:

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

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

   (a) review and evaluate information provided by the Parties, pursuant to Article IV, paragraph 3, in order to provide recommendations to the Commission for the fishery regime included in Annex IV;

   (b) make proposals to the Commission regarding regulations for the harvest of Fraser River sockeye and pink salmon within the Fraser Panel area (the Area);

   (c) collect in-season information on catches within the Area; review information on escapements within the Area; collate information provided by the Parties pursuant to sub-paragraphs D. 3 and D. 4 for fisheries outside the Area; conduct test fishing on Fraser River sockeye and pink salmon; collect data on upriver escapements by observation at Hell's Gate and through the conduct of a hydroacoustic program at Mission Bridge; and design and conduct studies to identify and discriminate between races of Fraser River sockeye and pink salmon harvested in the fisheries including specification of samples required from upriver sections of the Fraser River and from sites outside the Area;

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

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

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

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

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

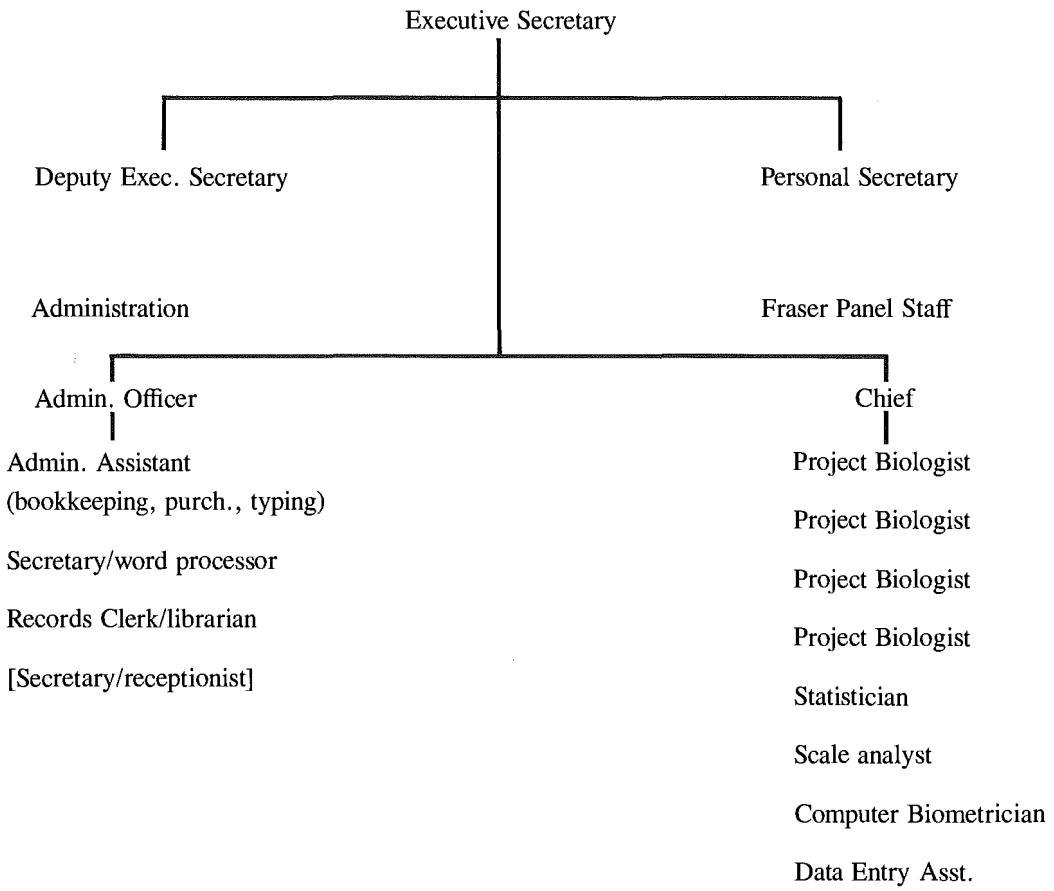
   (a) the discharge of the responsibilities of the Commission and of the Fraser River Panel as specified, inter alia, in sub-paragraph A.1; ...

4. [A]ppropriate members of the Fishery Management and Administrative Divisions shall be transferred to DFO and integrated as practicable...

G. The Parties shall consult with each other and with the IPSFC staff, with a view, inter alia, to offering employment to IPSFC employees with the new Commission, the Fraser River Panel, or within government agencies of the two Parties on terms and conditions comparable, to the extent practicable, with those they enjoy in IPSFC."

In previous discussions within the Commission, it was suggested that full-time Secretariat staff be capped at 16 employees. With these directions in mind, the IPSFC Transition Committee has developed the following proposed PSC Secretariat staffing structure:

PROPOSED PSC SECRETARIAT STRUCTURE
(All positions are full-time.)



A. Number of Employees

We have recommended a total Secretariat staff of 17 full-time employees. As a preliminary matter, it will be noted that this total exceeds by one the staffing level suggested by the Commission. If the Commission wishes to maintain the 16-person ceiling, the Committee would recommend that the Secretary/receptionist slot (bracketed in the above chart) be made an in-season, rather than year-round position. However, to do so would, in our judgment, be less than desirable and we recommend against it.

The secretary/receptionist should be particularly helpful to the Fraser Panel staff and with routine correspondence. The Fraser Panel staff will need secretarial support year-round. Moreover, in advance of and during the fishing season, the Commission should expect a large number of phone calls from fishermen and industry representatives. The IPSFC typically receives more than 100 calls per day — above routine levels — during the season. We feel that these reasons fully justify the addition of a third secretary to the Commission staff.

B. Secretariat Staff Positions

John Roos, Director of IPSFC, provided the Commission with job descriptions for current IPSFC Administration and Management Division employees. We relied heavily on those descriptions in our consideration of Secretariat staff structure, particularly Fraser Panel Staff, and have included the descriptions as an appendix to this report. Appendix 3.* The position of the Executive Secretary is under discussion by the Nominating Committee. The position of Deputy Executive Secretary is new, and we will describe our thoughts on that position below.

On September 26, 1985, Mr. Roos made a presentation to the Commission in which he described his views on Commission Secretariat staffing requirements. In general, he recommended that five administrative staffers be hired from the current seven-person IPSFC Administration Division staff and that the 10-person IPSFC Management Division be transferred in toto to the Secretariat and increased by three additional management employees.

* Appendix 3 to this report of the Transition Committee is available at the Commission offices.

1. Administrative Staff

We support Mr. Roos' recommendation with regard to the requisite number of administrative staff positions. It seems unquestionable to us that the Secretariat will confront substantial paper-flow and word processing duties throughout much of the year, and that those duties will dramatically increase during the fishing season. Additionally, the administrative staff will be responsible for maintenance of central Commission files and operation of the former-IPSFC library. The five administrative positions should be considered the minimum necessary for the task.

2. Fraser Panel Staff

Our recommendation on transfer of the Management Division departs somewhat from Mr. Roos' position. We do not believe that the Fraser Panel and Commission's new responsibilities require hiring of staff in addition to those now employed by the IPSFC Management Division. Time and experience may prove us wrong, and the Commission should be prepared for that possibility, but at present we see no need for additional management staff positions.

We do agree with Mr. Roos that most, though not all, current IPSFC Management Division positions should be transferred to the Fraser Panel staff. Of the ten current positions, we feel that nine will be required to meet Fraser Panel and Commission needs. The single exception is the "Project Scientist" position. The responsibilities of this position are most appropriately transferred to the Department of Fisheries and Oceans.

C. Deputy Executive Secretary

The Transition Committee recommends establishment of a Deputy Executive Secretary position. This seat would report directly to the Executive Secretary and would serve a mixed administrative and management role. The Deputy's job would be to assist the Executive Director in supervision of the administrative and Fraser Panel staffs and serve as the coordinator and initial contact for the panels and committees. We recommend that the Deputy be hired by the Executive Secretary with the concurrence of the Commission. We also recommend that the Deputy position be filled as soon as possible after the Executive Secretary is hired.

D. Position Classifications

The Department of Fisheries and Oceans has reviewed the administrative and management job descriptions provided by Mr. Roos and has provided preliminary Canadian Government position classifications for each of the 17 recommended slots, except the Executive Secretary and Deputy Executive Secretary positions.

E. Transfer of IPSFC Employees to Secretariat

The question of which IPSFC employees should be retained by the PSC Secretariat is, of course, a sensitive one, indeed the most sensitive we faced. The Committee urges that the question be answered as soon as possible: its long pendency has been the cause of understandable anxiety among IPSFC staff.

In our deliberations on this matter, the Committee has hewed closely to the provisions of the Exchange of Notes that, in our interpretation, place a strong — though not binding — obligation on the Commission and the Parties to employ IPSFC staff in positions equivalent to those they now hold. In this regard, we would point to Sections E(1), (3)-(5) and G of the Exchange of Notes.

The Committee recommends that nine Fraser Panel staff positions be filled by the IPSFC employees currently holding those responsibilities in the IPSFC Management Division.

The Committee further recommends that the Secretariat administrative positions, including the personal secretary to the Secretary be filled by individuals now employed by the IPSFC Administration Division.

F. Temporary Employees

The IPSFC position descriptions provided to the Commission by Mr. Roos included a section devoted to temporary (in-season) employees. Appendix 3. The Management Division employs 16 persons each year on an in-season basis. Total temporary employment is equivalent to six full-time employees. Mr. Roos recommended that the Commission hire four additional temporary employees, the equivalent of one additional full-time employee.

The Transition Committee is persuaded that at least the 16 parttime positions now utilized by the Management Division will be needed also by the Fraser Panel staff. In fact it is likely that the Fraser Panel staff may require some or all of the additional temporary employees recommended by Mr. Roos. We recommend that, in advance of the 1986 season, the Commission Secretariat develop a budget adequate to cover these in-season personnel costs, allowing flexibility in case more than 16 workers are needed.

G. Transfer of IPSFC Pensions and Benefits

If the Pacific Salmon Commission is to have a pension plan, it must establish one that is independent of the IPSFC pension. Where IPSFC employees are transferred to the Commission, they should be allowed to transfer to the Commission pension plan their accrued benefits (or shares) from the IPSFC pension.

The IPSFC pension should be left open to support current IPSFC pensioners and those IPSFC employees who do not transfer to the Commission.

Where IPSFC employees are transferred to the Commission, they should be allowed to transfer to the Commission their accrued annual leave and sick leave benefits. We also recommend that any monies set aside in IPSFC accounts for annual leave and severance pay for IPSFC employees who transfer to the Commission should be transferred to the Pacific Salmon Commission.

III. TRANSFER OF IPSFC INVENTORY

The Exchange of Notes says this with respect to the transfer of IPSFC property:

"H. 1. The IPSFC library in New Westminster, British Columbia, which contains irreplaceable historical records, shall be transferred to the new Commission and shall be readily accessible to the Fraser River Panel, the Commission and others whose professional needs require use of these library facilities.

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

3. The remaining assets shall be transferred to Canada."

At the request of the Committee, IPSFC staff prepared an inventory of IPSFC property. Also at our request, Director Roos and his staff divided the inventory into two categories: 1) objects appropriately transferred to the Pacific Salmon Commission Secretariat and, 2) property that should be transferred to the Department of Fisheries and Oceans.

The IPSFC response was exceptional; the inventory is exhaustive and informative. The inventory is included here as Attachments 4 & 5. Unfortunately, the real property inventory was received November 7th, too late for Committee review and we express no opinion on IPSFC real property. Attachment 6.

The Commission should be aware that a question has been raised by the Department of State concerning the disposition of real property. This matter is under discussion between the Parties.

1. Office Equipment, Vehicles, Boats, and Related Things

The Committee is, in most respects, satisfied with the division of assets recommended by the IPSFC. In general, office equipment, including furniture, personal computers, and a photocopier, are recommended for transfer to the Commission Secretariat. Also slated for transfer to the Secretariat are electrophoretic supplies and equipment and several boats and vehicles. Attachment 4.

Field Equipment, construction tools, many vehicles and small boats are recommended for transfer to the Department of Fisheries and Oceans. Attachment 5.

We are concerned about several matters:

1) Will the Fraser Panel staff need additional water-craft, trailers and vehicles to meet in-season sampling and transportation needs?

2) Are the vehicles recommended for transfer to the Commission strong enough and equipped to pull a boat and trailer?

3) Should the radio equipment recommended for transfer to DFO be retained by the Commission to facilitate in-season management work?

4) Will the Commission require warehouse space for storage of vehicles and water-craft?

The Committee would like to meet with IPSFC staff on these issues. We recommend that the Commission accept the disposition of IPSFC assets outlined in the inventories, subject to satisfactory resolution of the four questions presented above.

Where vehicles or boats are transferred to the Commission, their titles and insurance policies must also be transferred. Similarly, where other equipment is transferred for which a maintenance or repair contract exists, that contract should be terminated or, if practicable, transferred. The Committee recommends that decisions on transfer of equipment be made no later than early December.

Where property is not transferred to either the Commission or the Government of Canada, that property should be sold at fair marketvalue. The proceeds from any such sale should be deposited in Pacific Salmon Commission accounts and used to offset future years' budget needs.

2. Library

An inventory of the IPSFC library was done about two years ago. The Committee has asked Mr. Roos to see that the inventory is updated as soon as possible.

The IPSFC's librarian, Fumi Saito has announced her intention to retire as of January 1, 1986. Ms. Saito has worked for the IPSFC for many years and is the person most familiar with the library. She is willing to prepare the library for transfer and to oversee its set-up in the new Commission offices. The Committee recommends that the Commission ask the IPSFC to prepare the library for shipment and put Ms. Saito on contract, beginning January 1, to oversee the transfer and set-up of the library. We also recommend that the Commission offer Ms. Saito a contract to train the Commission's new librarian/records clerk.

3. Files

The Committee has appointed Mr. Michael Grayum (NWIFC) and Dr. Brian Riddell (DFO) to conduct an inventory of IPSFC files. Their primary task will be to identify those files that pertain to work to be done by the Department of Fisheries and Oceans and to earmark those files for duplication. An IPSFC contractor currently is carrying out an inventory of IPSFC engineering files and packaging them for shipment.

The Committee recommends that all IPSFC files be transferred to the Commission and, as appropriate, maintained as working or archival materials. The files should be open to interested and responsible persons and available for duplication.

IV. IPSFC REPORTS IN PROGRESS

We have included as Attachment 7 a list prepared by Mr. Roos detailing IPSFC reports in progress. The Committee agrees with Mr. Roos that provision should be made for completion of those reports. We recommend that the responsibility for ensuring completion of a report should shift from the IPSFC to the organization that employs the report's senior author.

Where the senior author does not transfer to either the Commission or the Department of Fisheries and Oceans, the Commission should consider placing the author under contract to complete the report. For example, Mr. Gilhousen, author of report #1, has retired. The author of report #2 is deceased. Mr. Roos has suggested and we agree, that Mr. Gilhousen should be asked to complete both reports for the Commission.

The Exchange of Notes provides that:

"I. For a term to be agreed upon, the new Commission shall maintain the IPSFC scientific and technical publication series in order to provide for reporting of past scientific work carried out under the auspices of the IPSFC."

The Committee recommends that the IPSFC publication series be continued until December 31, 1986. Reports published by that date should be published as IPSFC reports. The responsibility for publication costs associated with those reports should be borne by the Pacific Salmon Commission. Reports not published by December 31, 1986, should be considered the work of the Commission or the Department of Fisheries and Oceans, as appropriate, and published by the respective organization.

The cost of completing and publishing the 1985 Annual Report of the IPSFC should be borne by the IPSFC. The total cost of publication and distribution will be less than $10,000 Cdn.

The Commission will note that Mr. Roos' list of reports in progress includes as Document #6 a yet-to-be-started history of the IPSFC. Mr. Roos has expressed his interest in preparing the initial draft of an IPSFC history. We understand that the IPSFC recently has written to both Parties suggesting that the history be prepared.

We feel most strongly that this work should be done. A history of the IPSFC would inform the Commission's own work and would stand as a significant contribution to the literature of Pacific salmon management. The Committee recommends that an IPSFC history be paid for and published by the Pacific Salmon Commission. Not wishing to prejudice Mr. Roos' candidacy for Commission Executive Secretary, we do feel that he would be an appropriate and skilled author.

V. RELOCATION OF COMMISSION OFFICES

The decision as to the location of the new Commission office is not the province of this Committee. For the Commission's information, we have attached a letter we received from the IPSFC staff that details some concerns over office location. Attachment 8. The Committee expresses no opinion on this matter.

VI. WIND-DOWN OF IPSFC OPERATIONS

The process of responsibly winding-down IPSFC operations will, we are quite sure, have to continue beyond December 31, 1985. The Transition Committee recommends that the Executive Secretary and Deputy Executive Secretary work closely with the Parties with a view to winding-down the business of the IPSFC by February 17, 1986.

* * * *

Distribution: Commissioners
Alternates
Committee Members

attachments
TCJ.11785

Appendix 6

Recommendations of the Commission to the Parties for Amendments to Annexes to Give Effect to the Agreed Fishery Regime for 1986

PACIFIC SALMON COMMISSION

March 7, 1986

The Honourable Joe Clark
Secretary of State
for External Affairs
Ottawa, Ontario
K1A 0G2

The Honourable George P. Schultz
Secretary of State
U.S. Department of State
Washington, D.C. 20520

Dear Sir:

I have the honor to report to you on understandings which have been reached by the Pacific Salmon Commission and to recommend changes in Annex IV of the Pacific Salmon Treaty, which entered into force in 1985.

In accordance with Article XIII, Paragraph 2 of the Treaty, the Commission recommends the following amendments to Annex IV, which pursuant to Article XIII, paragraph 3 may be implemented through an exchange of notes between the Governments. The Commission expects that the relevant management agencies will manage fisheries under their responsibility in the recommended manner during the 1986 fishing season. The Commission recommends that an exchange of notes occur implementing these proposals as soon as possible.

1. Chapter 2, paragraph 3 (b) and (c) shall be replaced by the following:

"3(b). in 1986 only, the following management units in Area 1 will remain open to pink salmon troll fishing until a total Area 1 troll catch of 600,000 pink salmon has been taken: 1-1, 1-2, 1-7, 1-3, 1-5 and 101-7;

3(c). in consideration of the adjustment made in the southern portion of Area 1, the pink salmon troll fishery in the most northern portion of Area 1 in Management Units 101-4, 101-8, and 101-3 north of 5435′N. and 103 north of 5453′N. will close to pink salmon trolling when the 1986 Area 1 pink troll catch reaches 100,000; and

3(d). in addition, when the 1986 Area 1 pink troll fishery catch reaches 290,000 fish Canada will also close Management Units 101-1, 101-2, 101-3, 101-5, 101-9, 101-6 and 101-10 to pink salmon trolling."

2. Chapter 5, paragraph 3, shall be amended as follows:
"1985" shall be changed to "1986."

3. Chapter 6. Add a new paragraph 3 as follows:

"3. Implement the following regimes for 1986 only, which are not designed to address long term management objectives of the parties:

(a) Canada shall conduct their Johnstone Strait, Georgia Strait and Fraser River chum fisheries consistent with the clockwork management scheme developed for 1984 and 1985, except as modified herein.

(b) The United States will conduct Area 7 and 7A chum fisheries as follows:

(i) The following catch ceilings for United States fisheries will be implemented:

Allowable Total Harvest Rate	Total Stock Size	Area 7 and 7A Ceiling
10 percent	< 2.6 million	10 thousand
≥ 20 percent	≥ 2.6 million	80 thousand

It is understood that of the 80 thousand it is expected that 60 thousand chum of Fraser River origin will be harvested.
It is also understood that total stock size refers to estimated preseason and inseason update of chum salmon passing through Johnstone Strait, Georgia Strait, Fraser River and Areas 7 and 7A calculated according to the clockwork approach.

(ii) If the Fraser River component of the total run is reduced from the current preseason forecast by the inseason updates to the extent that, despite a total run size of greater than 2.6 million, the Fraser River component of the total run could not support a fishery and meet a minimum escapement goal, and Canada restricts fisheries in Johnstone Strait and the Fraser River to remain below a 10 percent exploitation rate on Fraser River chum, then United States Areas 7 and 7A fisheries would be limited to a catch of 10,000 chum.

(c) The fishery management plan described herein is predicated on the following assumptions:

(i) All catch of Fraser River origin chum taken in Johnstone Strait, Georgia Strait, Fraser River and Areas 7 and 7A fisheries is included in the allowable total harvest rate.

(ii) If there is an adjustment to the run size estimates, all three components of the run (Canadian enhanced and natural, and United States stocks) will be adjusted in proportion to the change from the preseason forecast until sufficient GSI data is available to more accurately apportion the total run size.

(iii) The escapement targets are those specified in the 1984 and 1985 clockwork management plan. All fish not harvested at the allowable harvest rate under the plan will be allowed to escape and spawn.

(d) If during subsequent domestic consultation on the 1986 fishing plan Canadian chum salmon managers decide to make deviations from the general approach or the specific assumptions outlined in paragraph (c), the Southern Panel Chair and Vice-Chair will be notified and a decision made as to the need for convening a Southern Panel meeting to develop appropriate changes to the management plan specified in paragraph (b).

(e) The United States fisheries will be managed in a manner that, as far as practicable:

(i) spreads the impact on all portions of the Fraser run,

(ii) maintains a traditional proportion of effort and catch between Areas 7 and 7A, and avoids concentrations of effort along the boundary."

The Commission has also reached the following understanding as to the implementation of the Pacific Salmon Treaty.

COHO

The 1985 fishery regimes described in Annex IV, Chapter 5 of the Treaty shall be continued in 1986. The management plans and fishing regimes implemented in 1985, including U.S. management Areas 7, 7A and the Strait of Juan de Fuca and Canadian management Area 20, shall remain the basis for the 1986 management plans. It is understood that the Government of Canada intends to harvest 1.75 million coho in the West Coast of Vancouver Island troll fishery in 1986 in accordance with the existing provisions of Annex IV, Chapter 5.

The Commission accepts the conclusions of the Southern Panel concerning the impact of additional Canadian Georgia Strait hatchery production (Expo coho) expected to be available for harvest in 1986. The Coho Technical Committee reviewed the impact of this additional production and determined that it could increase this component of the catch; however increases over 1985 catch levels cannot be forecast at this time. The Commission was unable to evaluate whether or not there would be an overall increase in Canadian contribution to the West Coast of Vancouver Island troll fishery based on this hatchery increase. The Commission instructs the Coho Technical Committee to develop recommendations for research programs designed to provide information on stock compositions in all fisheries of concern.

The actual catch of coho salmon by the West Coast of Vancouver Island troll fishery was 326,000 pieces (preliminary) less than the 1985 fishery regime ceiling of 1.75 million. No compensation for this shortfall shall occur in 1986. The Commission shall develop fishery regimes for 1987, and subsequent years, taking into consideration compensation for this shortfall. The Commission will ensure that the principles of Article III and Annex IV, Chapter 5 of the Treaty guide it in the development of future coho fishery regimes. The Commission may consider other approaches to compensation besides adjustment of coho fishery regimes for the West Coast of Vancouver Island troll fishery.

The Commission agrees that payback provisions of the coho annex (Annex IV, Chapter 5) and the Fraser River annex (Annex IV, Chapter 4) shall be applied in the same manner. However, the provisions relating to deviations from catch limits on Transboundary Rivers (Annex IV, Chapter 1) and Chinook (Annex IV, Chapter 3) may not necessarily be applied in that manner.

FRASER RIVER SOCKEYE

The summer run stocks of Fraser River sockeye in 1986 include Early Stuart, Bowron, Pitt, Gates, Fennell, Late Nadina, Chilko Lake, HorseflyMitchell, Raft, Seymour, Scotch, Late Stuart, Chilko River, Stellako and any minor stocks

with migratory timing coinciding with the aforementioned stocks. The Birkenhead stock is included with the late runs.

The preseason forecast for Fraser River sockeye in 1986 is 14,000,000 of which 2,405,000 are summer run fish. The spawning escapement goal for the summer runs in 1986 is 690,000 fish. For the purposes of computing the Total Allowable Catch on the summer runs and the United States share thereof, the Fraser River Indian food fishery component of the gross escapement for summer runs is 262,000 fish. Based on the above computation the Total Allowable Catch of summer runs will be 1,453,000 sockeye.

Based on the preseason forecast, the United States share of the summer run of Fraser River sockeye in 1986 shall be 444,675 sockeye derived as follows: the United States basic share is 29.93% of the Total Allowable Catch, which equals a catch of 434,833 summer run sockeye which will be adjusted in proportion to any adjustment in the Total Allowable Catch. The United States share of the summer run Total Allowable Catch shall be reduced by 8,589 summer run sockeye, which are a portion of the 50,000 coho adjustment specified in paragraph 1(b) (iii) of Chapter 4 of Annex IV of the Treaty and increased by 18,381 summer run sockeye, which are a portion of the preliminary estimate of the 1985 Canadian Fraser sockeye overage of 107,000 sockeye. The remaining adjustments of 41,411 sockeye of the coho adjustments will be applied to the United States share of late runs in 1986. The remaining 88,619 sockeye of the 1985 sockeye overage will be applied to the United States share of late runs in 1986 unless otherwise agreed by the Fraser River Panel.

Of the total payback from the 1985 Fraser sockeye overage, 17.18% shall be summer run sockeye based on the preseason expectations of total summer run fish to total run. The payback for the 1985 sockeye overage shall be adjusted in accordance with any adjustments in the final sockeye overage estimate.

In 1987, 1988 and 1989 the United States share of the Total Allowable Catch of the Fraser River sockeye shall be distributed so that the United States proportional share of the Total Allowable Catch of summer runs shall be the same as the United States proportional share of the Total Allowable Catch of late runs, and otherwise in accordance with Chapter 4 of Annex IV of the Treaty.

CHINOOK

In response to concerns expressed by the Joint Technical Committee for chinook, the Commission agreed that base catch ceilings for Southeast Alaska and northern British Columbia need to be reduced in response to the potential cumulative impact of induced mortalities and harvest in excess of ceilings. The base ceilings for 1986 only will be:

S.E. Alaska all gear catch	254,000 chinooks
Northern B.C. all gear catch	256,000 chinooks

In 1986 the Southeast Alaska all-gear catch of chinook shall consist of the base catch (above) plus a catch of new Alaska hatchery add-on to be calculated in-season as described in Alaska's 1986 add-on proposal. The preseason expectation for the 1986 add-on is 23,000.

In response to the concerns expressed for Strait of Georgia chinook stocks by the Joint Technical Committee, the Commission agrees that Canada will invoke management actions, as appropriate, in 1986 and 1987, to return to the rebuilding schedule by the end of 1987.

The Commission and the Panels, in the establishment of fisheries for 1987 and subsequent years, will take into account all sources of chinook mortalities in implementing the chinook rebuilding program.

The Commission requests that the responsible management agencies provide information in 1986 to account for all fishing-related sources of increased and decreased mortalities since implementation of the Treaty.

The Joint Technical Committee on Chinook Salmon will provide assessments to the Commission and the Panels on the impact of fishing-related mortalities on the chinook rebuilding program.

The Commission will appoint a work group to identify means of addressing overages and underages from catch ceilings in the future. Incentives to discourage consistent overages should specifically be addressed in order to ensure consistency with the intention of the chinook rebuilding program.

Finally, in respect of transboundary rivers, the Commission wishes to note that it will not be possible to reach agreement on the percentage of the Total Allowable Catch of salmon that shall be deemed to be of United States origin for purpose of implementing Article III, paragraph 1(b) of the Treaty in accordance with the time frame allowed in paragraph D of the Memorandum of Understanding to the Treaty. Accordingly, the Commission proposes that the Governments agree to a one-year extension of the time limit for determining this percentage.

Sincerely,

Don W. Collinsworth
Chairman
Pacific Salmon Commission

Original also sent to:

The Honourable Tom Siddon, Minister of Fisheries and Oceans

Appendix 7

Draft 2: Terms of Reference for the Committee on Research and Statistics

The Committee shall consist of two Commissioners and two technical advisors from each Party plus the Executive Director of the Pacific Salmon Commission or his designee. The Committee shall:

(1) in conjunction with the Commission develop a plan of research and information collection to meet Treaty obligations;

(2) provide advice for the dissemination of information requested through the Commission and provide scientific advice on research and information needs;

(3) through a sub-Committee on Data Sharing, provide for the compilation and maintenance of databases maintained by the Commission, and recommend policies and procedures for data compilation and dissemination of fishery-related statistics and environmental information;

(4) facilitate consultation and co-operation between Parties with respect to the co-ordination of research programs, appraisal and exchange of scientific information and views relating to stocks and fisheries involved in this Treaty;

(5) review activities of appointed Technical Committees and provide for annual evaluation of reports submitted to the Panels and/or the Commission;

(6) advise the Commission regarding technical programs, identified by any appointed Committee or one of the Parties, which would better enable the Parties to meet their responsibilities in the Treaty; advise on processes for deliberation on technical issues presented by and/or to the Commission; review progress of the Parties in responding to technical programs recommended by the Commission; and when necessary assist in defining research priorities;

(7) advise on settlement procedures and co-ordinate the procedures for resolving technical disputes;

(8) develop, co-ordinate, and review the editorial policy and procedures of the Commission and the publication of technical information presented to the Commission.

19/02/86

Appendix 8

Pacific Salmon Commission
Approved Budget
March 2, 1986

Fiscal Year 1986-87
April 1 1986 - March 31, 1987

Staff salaries	$ 715,000
Staff benefits	85,000
Staff travel	70,000
Transportation of things	69,000
Rents, communications and utilities	170,000
Printing	25,000
Other services	210,000
Supplies	36,000
Equipment	50,000
	$1,430,000

Due from each Party $715,000 Canadian

FY 1986-1987

Object Classes 11 & 12: Salaries and Benefits

Object Class 11: Secretariat Staff Salaries $715,000

Object Class 12: Secretariat Staff Benefits* 85,000

Total: $800,000

* To include some or all of the following: employer portion of pension costs; social security; medical, disability, life, and accidental death and dismemberment insurance.

Object Class 21: Secretariat Staff Travel $70,000

These funds will provide for the travel of the Executive Secretary and other members of the Secretariat staff between Vancouver, B.C. and various locations in the United States and Canada of importance to the Commission. Such locations could include one or more of the following: Washington, D.C.; Ottawa, Ontario; Juneau, Alaska; Anchorage, Alaska; Portland, Oregon; Seattle, Washington; and Olympia, Washington.

Object Class 22: Transportation of Things $69,000

This object class will cover any or all of the following (or related) types of expenditures:
- freight, express and courier service
- transportation of household effects (new hires)
- miscellaneous shipping costs.

Object Class 23: Rents, Communications and Utilities $170,000

This object class will cover any or all of the following (or related) types of expenditures:
- telephones
- telex
- postage
- xerox machine
- utilities (heat, light, water, sewage)
- rental of facilities for the annual meeting
- rental of facilities for other meetings.

Object Class 24: Printing $25,000

This object class will cover the following types of expenditures:
- printing of reports and forms
- printing of the annual report.

Object Class 25: Other Services $210,000

This object class will cover any or all of the following (or related) types of expenditures:
- maintenance contracts on the computer, word processors, typewriters, Xerox, etc.
- building maintenance contract
- auditing fees
- vehicle insurance and other vehicle needs
- other miscellaneous contracts.

Object Class 26: Supplies $36,000

This object class will cover any or all of the following (or related) types of expenditures:
- stationery
- miscellaneous office supplies
- biological supplies.

Object Class 31: Equipment $50,000

This object class will cover any or all of the following (or related) types of expenditures:
- miscellaneous office furniture
- miscellaneous office equipment
- miscellaneous scientific equipment.

Appendix 9

Membership Lists for Standing Committees, Panels and Joint Technical Committees as of March 31, 1986

U.S.A.	Canada

(a) Standing Committee on Finance and Administration

S.T. Wapato (Chairman)	G.E. Jones (Vice-Chairman)
B. Kefauver	C.C. Graham
C.K. Walters	

(b) Standing Committee on Research and Statistics

J. Donaldson (Vice-Chairman)	W. Shinners (Chairman)
K. Parker	P. Greene
D. Bevan	B. Riddell
P. Mundy	D. Schutz

(c) Fraser River Panel

R. Schmitten (Vice-Chairman)	F.J. Fraser (Chairman)
L. Loomis	R. Harrison
G.I. James	E. Birch
E. Manary	D. Dickson
R. Turner	S. Douglas
R. Zuanich	M. Forrest
G. Kruse	M. Griswold
	J. Hill
	G. Jones
	L. Wick
	B. Wilson

(d) Southern Panel

G. DiDonato (Vice-Chairman)	R. Morley (Chairman)
C. Morganroth	D. Brock
S. Boley	R. Clifton
J. Martin	T. Davis
R. Whitener	B. Duncan
R. Schmitten	R. Fowler
D. Bevan	J. Lenic
K. Brigham	D. Lynn
M. Cedergreen	F. Penland
B. Bohn	W. Peterson
T. Williams	E. Safarik
R. Myshak	L. Straight

(e) Northern Panel

S. Pennoyer (Chairman)
D. Cantillon
G. Slaven
G. Bruce
B. Wallace
W. Wiley
E. Krygier
L. Dalton
O. Haynes
J. Winther
R. McVey
J. Brooks
E. Kremer (Vice-Chairman)
P. Sprout
H. Clifton
M. Forand
G. Hazelwood
R. Holkestad
L. Iverson
R. Kendel
B. Lefeaux-Valentine
J. Malcolm
R. Morgan
A. Ronneseth

(f) Joint Technical Committee on Chinook

M. Fraidenburg (Co-Chairman)
T. Cooney
D. Bevan
G. Freitag
D. Hanson
K. Henry
S. Ignel
R. Kaiser
S. Marshall
G. Morishima
T. Roth
H. Schaller
M. Seibel
T. Wright
B. Riddell (Co-Chairman)
P. Starr
K. Pitre
L. Orman
T. Shardlow
K. Wilson

(g) Joint Technical Committee on Coho

G. Morishima (Co-Chairman)
T. Cooney
M. Grayum
R. Hayman
K. Henry
M. Hunter
R. Kaiser
J. Meyer
R. Kadowaki (Co-Chairman)
K. Pitre
N. Shubert
T. Shardlow
D. Peacock

Northern Coho

A. Anderson
J. Helle
B. Van Alen
M. Seibel
L. Shaul

(h) Northern Boundary Technical Committee

D. Cantillon (Co-Chairman)
G. Freitag
J. Helle
S. Hoffman
G. Oliver
J. Olsen
J. Valentine
P. Sprout (Co-Chairman)
L. Jantz
M. Henderson

(i) Transboundary Rivers Technical Committee

D.	Cantillon (Co-Chairman)	R.	Harrison (Co-Chairman)
A.	Anderson	S.	Johnston
W.	Bergman	C.	Wood
P.	Kissner		
S.	Marshall		
J.	Olsen		

(j) Joint Technical Committee on Chum

G.	Graves (Co-Chairman)	D.	Anderson (Co-Chairman)
D.	Haring	A.	Gould
K.	Henry	T.	Brackam
M.	Hinton	S.	Heizer
J.	Meyer	R.	Harrison
K.	Sanford	M.	Farwell

(k) Joint Committee on Data Sharing

D.	Bevan (Co-Chairman)	B.	Riddell (Co-Chairman)
K.	Henry	J.	Bjorring
R.	Marasco	D.	Schutz
G.	Morishima	J.	Schnute
P.	Roger	L.	Lapi
M.	Seibel	V.	Palermo
T.	Wright	T.	Hoyt