

An Explanation of the Fishing Annexes and Related Agreements
Reached During the 1999 Pacific Salmon Treaty Negotiations



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Scope of this Paper

This paper describes the new agreements under the Pacific Salmon Treaty and provides a synopsis of several important points. The new annexes are compared and contrasted with the old annexes. Copies of the new annexes and attachments are available from Alaska Department of Fish and Game area offices, the United States Department of State website @ www.state.gov/www/global/oes/oceans/990630_salmon and from:

Pacific Salmon Commission
600-1155 Robson Street
Vancouver, B.C. V6E-1B5 www.psc.org

Why is a Treaty or New Annexes Necessary?

Talks about fishing between Canada and the United States (Oregon, Washington and Alaska) have been ongoing since the late 1940's. Discussion increased following adoption of 200-mile exclusive economic zones in the 1970's. In addition, for the first time, fisheries science was able to quantitatively determine catches for particular stocks. The results indicated that in Alaska, a substantial portion of the chinook harvest was from stocks outside of Alaska. In addition, work indicated that sockeye catches in Boundary Area fisheries, particularly the Tree Point drift gillnet and District 104 Purse Seine fishery harvested large numbers of Canadian sockeye salmon. Also, Canada established fisheries on the large Transboundary Rivers (Stikine, Taku and Alsek). Because of this, a Treaty regarding these fisheries and others in Canada and Washington and Oregon was signed in 1985. The Treaty established principles for the two nations to consider while establishing fisheries that harvested stocks from the other nation. It also established the present structure, which provides for a unanimous vote necessary for agreement. It is not likely that this kind of structure could be achieved if a new Treaty were negotiated between the nations. Management of these fisheries was established in annexes. The original annexes were designed to expire every few years so that adjustments could be made to the fisheries to make them fair and to meet conservation objectives. All of the original annexes were designed around fixed quotas. The chinook annex was for 263,000 chinook annually. The Tree Point drift gill net and District 104 Purse Seine were for 130,000 and 120,000 (the actual agreement was 480,000 over four years) sockeye annually respectively. The Canadian boundary area fisheries were also for fixed quotas. The fixed quotas led to many difficulties for the fisheries and thus, the new annexes were all based on abundance.

In addition to the fishing agreements between the two nations, the Treaty also provides for a forum for reaching domestic agreements. Specifically, the Treaty provides for settlement of United States Vs Washington as it applies to Alaska and the coordinated agreement for chinook is also expected to satisfy obligations under the Endangered Species Act. Without the Treaty, Alaska would still find itself working to get agreements on these items.

Some Important Points for Alaska

- Conservation, Restoration and “Safe Passage”: The Letter Of Transmittal, the treaty annex amendments and the Attachment on Habitat and Conservation all make strong commitment to salmon conservation aimed at maintaining and/or restoring productivity of all stocks. Specific language notifies all jurisdictions that the new fishery agreements satisfy the fisheries’ share of the international conservation burden. The rest of the burden falls on those responsible for in-stream habitat.
- Endangered Species Act: The Letter of Transmittal from the U.S. and Canadian negotiators to their two governments specifically states their intent that the new annexes and the shift to abundance-based management should take care of salmon conservation and population recovery requirements under the ESA. The National Marine Fisheries Service plans to prepare a Biological Opinion on the U.S.—Canada fishing arrangements that will confirm this.
- Northwest Tribal Fishing,(Stevens-Palmer Treaties and the subsequent “Boldt Decision”): The U.S. negotiators all signed a statement of intent that under the new fishing arrangements Alaska is not obliged to give up salmon under the Boldt Decision.
- North—South Treaty Split: With the exception of chinook, which migrate through all jurisdictions coast-wide, the fishery arrangements have essentially been split into a northern set of Alaska—Canada fishery arrangements and a southern set of Northwest States—Canada arrangements. This limits to a great degree the ability of other parties to use unrelated fishery concerns to leverage Alaska’s allocation.
- Canadian “Equity” Claims: Canada has set “equity balancing” aside in favor of the kind of abundance-based management pioneered in Alaska. When abundance is high everyone catches more fish; when abundance is low everybody catches fewer.
- Canadian Sport Fishing and Charter Fishing: These groups are now included in the West Coast Vancouver Island outside sport abundance-based regime.
- Long-Term Agreements: All arrangements are for at least ten (10) years’ duration in order to provide stability and predictability for Alaska fishermen.

Pacific Salmon Treaty - 1999

A Short Explanation of the Fishing Annexes and Related Agreements

The fishing annexes of immediate concern to Alaska are; 1) coast-wide chinook, 2) Northern Boundary (Tree Point drift gillnet, Noyes Island Purse seine, Portland Canal Chum, Canadian Area 1 troll and Canadian Area 3 Purse seine), and 3) Transboundary Rivers (Alek set gill net, Canadian and Alaskan Taku and Stikine River gillnet fisheries). Fishing annexes that do not directly involve Alaska are: West Coast Vancouver Island coho salmon, Washington and Southern British Columbia chum salmon and Fraser River sockeye salmon. In addition, there is an attached understanding relating to management of coho salmon in the Northern Boundary Area. Only the annexes of concern to Alaska are discussed in this document.

The key feature of the new fishery annexes is adoption of the Alaska style of “abundance-based” management. This simply means that allowable catches under the new annexes are based on the annual abundance rather than ceilings or long term averages as in the old agreements. This is a rational approach because there is a need to manage fisheries so that salmon escapement goals are met each year. Thus, in years of high abundance, when there are many more fish returning than are need to achieve escapement goal requirements, the harvest can be liberalized. In years when few fish return, fishing is restricted to ensure escapement goals are realized. Most importantly, adoption of this management approach coupled with the other agreements has been determined by the Parties to fully meet obligations under Article III of the Treaty for both fair sharing and conservation.

In addition to fishing annexes, the new agreement also: 1) establishes a Transboundary River Panel that is separate from the Northern Panel, 2) establishes obligations with respect to identifying and reporting to the Commission on non-fishing factors that limit salmon production, 3) establishes a new committee to foster scientific cooperation between the Parties 4) establishes a management plan for conservation of coho salmon in the northern boundary area in years of low abundance, 5) establishes a mechanism for the U.S. Congress to appropriate funds into two trust accounts (one in the north and one in the south) to be used to improve the scientific basis for management, small scale enhancement and habitat restoration.

Last, there are issues concerning activities outside of the scope of the Treaty that must be concluded. These are: 1) the establishment of funds necessary to implement the new annexes by Congress and to endow the trust accounts; 2) an evaluation of the fishing annexes by the National Marine Fisheries Service (NMFS) to ensure that there will not be additional restrictions because of the Endangered Species Act (ESA); 3) a stipulation

that ensures that there is no extension of the Palmer-Stevens Treaty fishing rights of Northwest Indian Tribes and 4) funds from Congress to restore critical salmon habitat.

Chinook Salmon

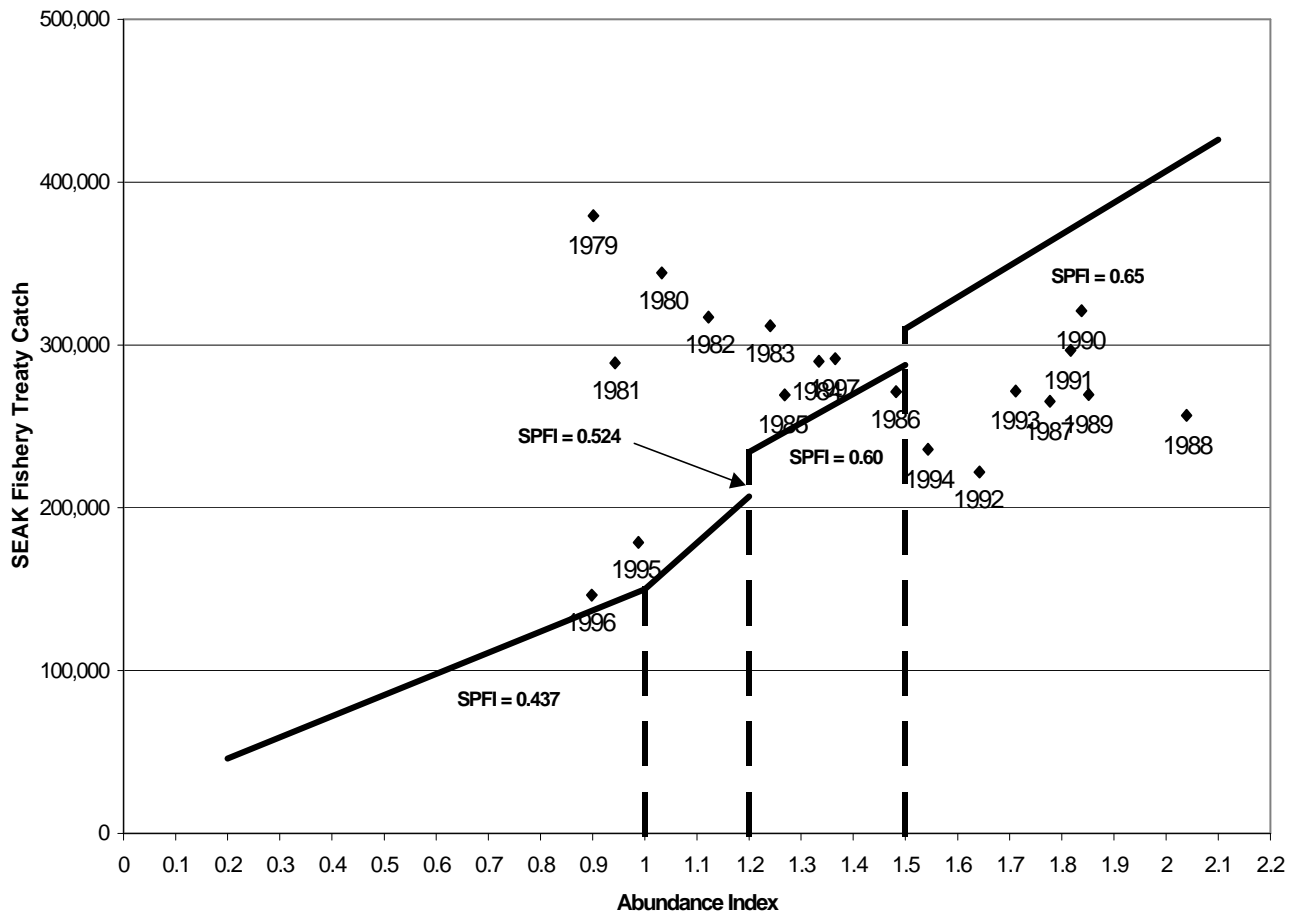
Besides implementation of abundance-based management, a key feature of the new chinook annex is that it specifies management responsibilities for all chinook fisheries from Cape Suckling north of Yakutat in Alaska to Cape Falcon south of the Columbia River in Oregon. Addition of new responsibilities for fisheries coastwide has resulted in added complexity. Because all chinook fisheries will operate under a consistent set of rules, catch foregone for conservation purposes will result in increased escapement. Another key feature of the new agreement is that the Chinook Technical Committee is responsible for establishing standards for biological stock assessments and is required to review escapement goals to be sure that they are realistic for systems which have lost significant amounts of spawning and rearing habitat to urbanization, dams, and development. Having realistic escapement goals prevents a jurisdiction from claiming that escapement goals are not being met due to overfishing by another jurisdiction. In addition, the establishment of realistic escapement goals will also help all parties determine what average production can be realized over the long term.

The chinook annex defines the different fisheries as either “Aggregate Abundance Based Management” (AABM) or “Individual Stock Based Management” fisheries (ISBM). The AABM fisheries include: 1) the Southeast Alaska sport and commercial fisheries; 2) the Northern British Columbia commercial troll and Queen Charlotte Island sport fishery; and 3) the West Coast of Vancouver Island troll and “outside” sport fisheries.

Previously, these three fisheries were managed under fixed quotas or ceilings. This resulted in many disappointments ranging from unrealized catch in a particular fishery, excessive catch in other fisheries and not meeting escapement goals. Now these AABM Fisheries will be managed to achieve a catch based on the overall abundance of chinook salmon in the fishing area. This is a rational approach because these fisheries take a broad mixture of stocks, but relatively few fish from any one stock. Abundance and hence catch, will be determined based on either pre-season forecasts, in-season estimates, or both. Alaska will use a combination of both to set the allowable catch. This may be difficult at times for fishermen since the targeted catch may change mid-season as a result of the in-season index estimate. A large increase in catch, although welcome, may prove to be difficult to harvest. A decrease in the catch may cause some hardship for those planning on a later season harvest.

The agreement for Alaska has four different levels of harvest rate over a range of abundance indices from 0.25 to 2.1 (Figure 1). The abundance index is calculated relative to the average estimated abundance of legal size chinook in a fisheries waters

Figure 1
 Southeast Alaska All Gear Chinook Catch



between 1979 and 1982. It does not take into account what other fisheries caught in each year nor escapement.

If the current agreement had been in place since 1985, a total of nine years would have seen catches higher than what was actually caught (1986 through 1994), while five (1985 and 1995 through 1998) would have seen catches reduced.

The ISBM fisheries will also be managed based on abundance. However, since the catch in these fisheries typically comes from fewer stocks, and usually one or more stocks make up a large part of the catch, management will be based on the abundance of those important stocks. The intent of the new agreement is that these fisheries will be managed to insure that escapement goals are met for the most important stocks. Redirecting the management objective of these fisheries to prioritize achievement of escapement goals for major component stocks will take time. The agreement requires that the necessary data will be collected, that the management tools will be developed, and that the shift will occur. In the interim, until the stocks contributing to each fishery have achieved their escapement goals, these fisheries will be managed to reduce the exploitation rate from the 1979-1982 base period by 30-40%. If this reduction does not result in the stocks meeting their escapement objectives, further reductions are mandated.

The coast-wide system is designed to insure that depressed stocks will be rebuilt, escapement goals will be met, and sustainable management practices developed. If stocks are not rebuilding and escapement goals are not being met, then further restrictions to the fisheries are mandated. Further restrictions will be implemented first in the appropriate ISBM Fisheries where reducing catch will provide the most fish returning to the spawning grounds. Specifically, this annex provides:

1. A table of catches associated with specific abundance indices for each AABM fishery;
2. An obligation to reduce exploitation rates in the ISBM fisheries with “depressed stocks” present. A Canadian ISBM fishery that has a depressed stock will have to reduce the exploitation rate by 36%, a U.S. ISBM fishery will have to reduce its exploitation rate by 40%. Reductions are relative to the 1979-1982 base period rate and this is referred to as the “General Obligation”. If the stocks are still below goal, a further reduction is also stipulated (Specific Obligation) Previously, there was no obligation to reduce harvest rates in these fisheries;
3. If all AABM fisheries have met their obligations, and the ISBM fisheries have implemented both the general and specific obligations, and a stock remains below approximately 70% of its escapement goal for a minimum of two years, there is a mechanism for reducing catches in both types of fisheries. This provision is called the “Weak Stock Gate”.
4. A long-term goal of the chinook annex is to begin to manage for total mortality instead of just landed catch. As the fisheries reduce incidental mortality, they will receive a credit that will allow them to recapture 50 percent of that as catch;
5. Adjustments to the allowable catch based on the pre-season forecast can be made in fisheries where in-season catch and effort data can demonstrate the ability to accurately measure the abundance. At this time only Alaska has developed the information needed to make in-season adjustments to the allowable catch based on fishery performance data.
6. The Alaska hatchery add-on and terminal exclusion programs will continue;
7. The Chinook Technical Committee is responsible for specifying objectives for biologically based assessment programs, to report on compliance with the management objectives by all fisheries, and to review and establish escapement goals.

Transboundary Rivers Annex

This annex specifies arrangements for fishing by Canada and Alaska in the Alsek, Stikine and Taku rivers. In addition, it renews sockeye salmon enhancement activities for these drainages. In previous agreements, only sockeye salmon management on the Taku and Stikine were abundance-based. In the new agreement, management of all species will convert to an abundance-based approach no later than May 1, 2004. Development and funding of programs and databases are necessary prior to the implementation of abundance based management, hence the later starting date. While the abundance of chinook stocks in these rivers have rebounded, the new agreement specifies that no new fisheries will be developed for chinook salmon on any of these rivers without the consent of both Parties.

Stikine River

A preseason forecast for sockeye will be developed each year. Each Party will harvest 50% of the Total Allowable Catch (TAC) of sockeye. The plan to produce 100,000 enhanced sockeye salmon annually was renewed. Alaska will manage its coho salmon fishery so that escapements are achieved and Canada will be allowed a directed coho fishery with a total catch of 4,000.

Taku River

Alaska will manage its sockeye fisheries to harvest 82% of the TAC. If, after managing the fishery to achieve this level, the escapement exceeds 100,000, Canada will be allowed to harvest 20% of the amount of sockeye over 100,000. Enhanced sockeye salmon will be shared equally. The goal of producing 100,000 enhanced sockeye was renewed.

For coho salmon, until a new maximum sustained yield escapement goal is developed (by agreement no later than May 2004), a goal of 38,000 will be used. During this time, Alaska will manage its coho fishery to ensure a minimum above border inriver run of 38,000. Canada will have no numerical limit on coho through statistical week 33; however, Canada may harvest additional coho according to the following schedule:

Above Border Run	Directed fishery Limit
Less than 50,000	3,000
50,000 to 60,000	5,000
60,000 to 75,000	7,500
Greater than 75,000	10,000

Alsek River

Alaska will manage its sockeye fishery to achieve the escapement goal.

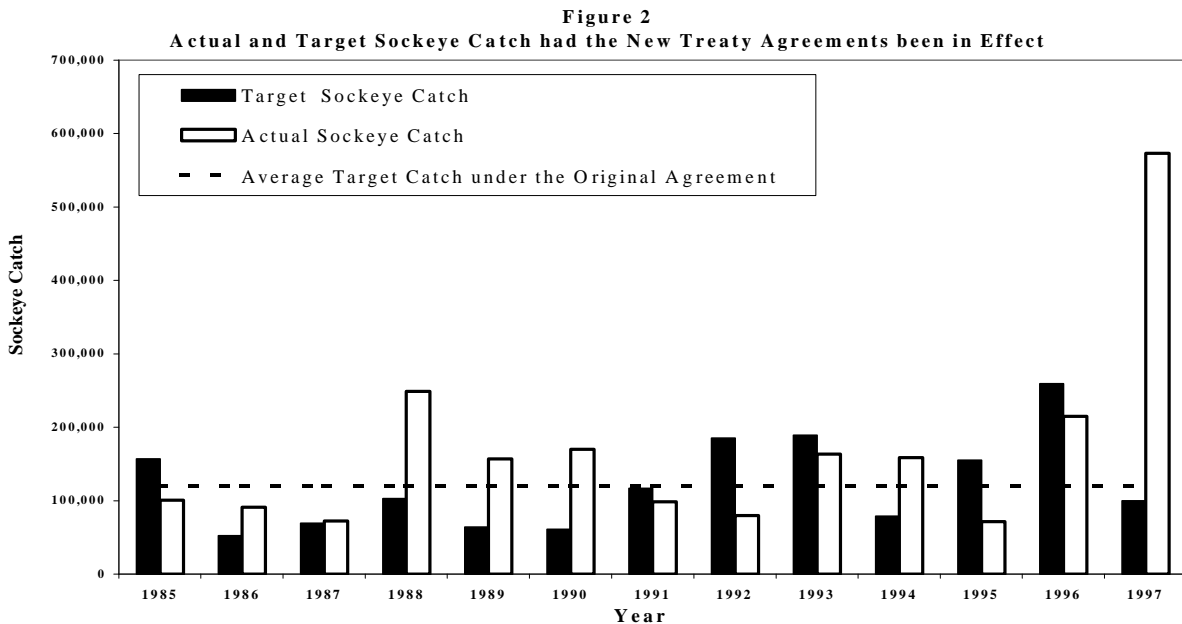
Northern Boundary Annex

The Northern Boundary annex agreements were restructured to be “abundance based” rather than the ceilings or long term averages agreed to in 1985. Catches will now rise and fall depending on the abundance of the applicable stocks. In Alaska, the abundance of Skeena, and, or Nass River sockeye each year will determine the allowable catches. In Canada, the abundance of Alaskan pink salmon will determine allowable catches. The new annex runs through 2008 with an agreement to review it a minimum of two years before it expires with a view to renewing it.

Alaska District 104 Purse Seine

The 1985 annex provided that Alaska could harvest 480,000 sockeye over a four year period prior to statistical week 31 (120,000 per year). The new annex allows the purse seine fishery to harvest 2.45% of the Annual Allowable Harvest (AAH) of the Nass and Skeena sockeye run prior to statistical week 31. Catches are not restricted after week 31 and the total AAH for the year would be much greater than 2.45%. The AAH is calculated by subtracting the actual escapement of Nass and Skeena sockeye (up to as the goal of 1.1 million fish) from the total run size. After statistical week 30, Alaska will manage this fishery based on the abundance of Alaskan pink salmon and other wild stocks.

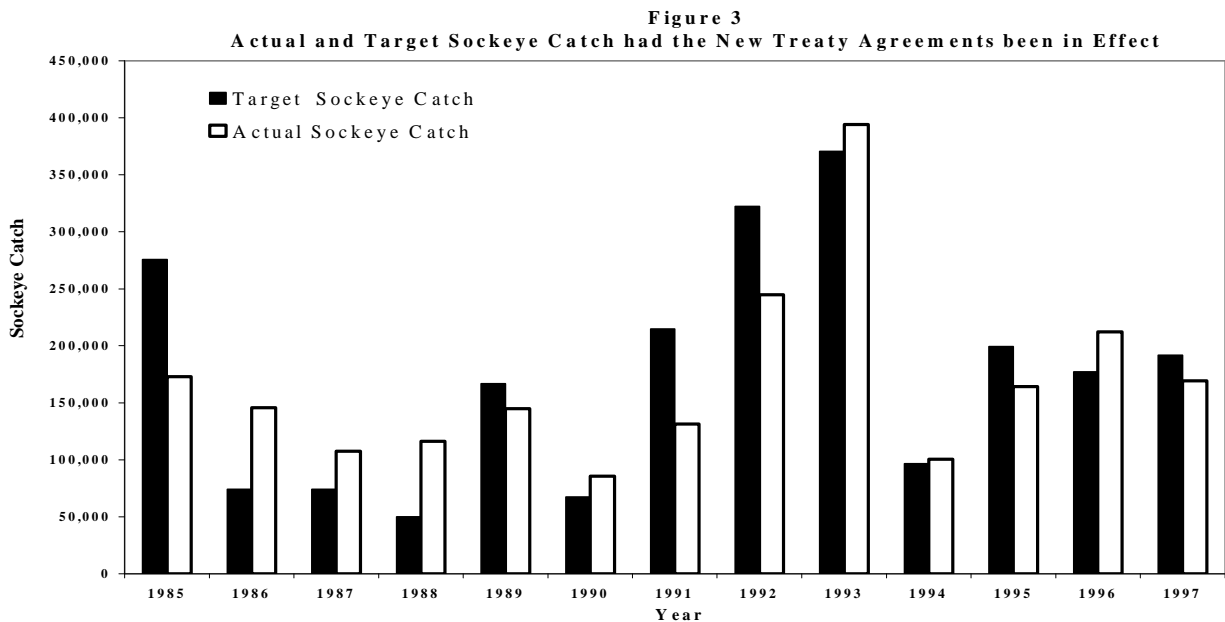
If the agreement had been in place since 1985, the pre-week 31 catch would have been greater in six of the years and less than six of the years (Figure 2). One year would have remained the same.



Alaska District 101 (Tree Point) Drift Gillnet

The 1985 agreement allowed for an average annual catch of 130,000 sockeye of all stocks. However, Nass River sockeye are the majority of the sockeye salmon caught in this fishery and the new agreement allows Alaskan fishermen to harvest 13.8% of the AAH of Nass sockeye stocks. The AAH is calculated by subtracting the actual escapement of Nass River sockeye (up to the goal of 200,000) from the total run size. Unlike the District 104 Purse Seine agreement, this AAH applies for the total year. There are no limits on the catch of other sockeye stocks or other species of salmon.

If the agreement had been in place, catches would have been very similar to those since 1985 (Figure 3).



Portland Canal Chum Salmon

As in previous years, no net fishing is allowed in Alaska Section 1A and Canadian sub-areas 3-15 and 3-16, nor is directed chum salmon fishing allowed in Alaska District 1B north and east of Akeku Point or in Canadian sub-areas 3-11 and 3-13 unless agreed to by both Parties.

Canadian Area 3 Net Fishery

The previous agreement allowed Canadian fishermen to harvest an average of 900,000 pink salmon each year in Area 3 (1-4) and Area 5-11. The new agreement allows Canadian fishermen in Area 3 to harvest 2.49 percent of the AAH of Alaskan pink salmon returning to Districts 1, 2 and 3. The AAH is calculated by subtracting the

escapement of pink salmon in Districts 1, 2 and 3 (up to the goal of 10.75 million fish) from the total run size.

Canadian Area 1 Troll Fishery

The previous agreements initially called for an average seasonal catch of 500,000 pink salmon, but for the period 1990 – 1993 the allowable average catch was set at 5.125 million. Alaskan pink salmon account for the majority of the pink salmon caught in this fishery and the new agreement calls for a 2.57% AAH of Alaskan pink salmon stocks returning to Districts 1 –3.

Application of the AAH Concept

The new agreement requires the Northern Boundary Technical Committee to develop and exchange pre-season forecasts of the AAH's for Nass and Skeena sockeye, and for Alaskan pink salmon. In-season, the Technical Committee will exchange stock assessment data at least each week to update estimates of run size. Post season, the Technical Committee will conduct a final accounting of actual catches and report those results to the Northern Panel and Commission.

The agreement recognizes that actual catches in the various fisheries will vary from the negotiated shares and therefore an accounting mechanism was developed. The intent of the accounting mechanism is to require accountability among the Parties for achievement of their catch shares while providing flexibility in their management. The accounting mechanism uses actual numbers of fish a Party harvests in a year that are less than or more than their negotiated share. Deviations in a year are added to or subtracted from previous years' deviations to compute a cumulative deviation. The intent of the provision is for a management agency to return a cumulative deviation to a neutral or negative balance as soon as possible. If a Party cumulates overages for five consecutive years, it must provide a management plan to eliminate the overage. Further, the intent of the policy is to not allow either Party to alter its' fishing behavior in a given year to harvest a cumulated underage nor to allow a Party to harvest more than 150 percent of its AAH in a single year.

Coho Salmon

In response to Canadian concerns specifically over Skeena River coho salmon, but northern B.C. coho in general, a mechanism was developed to impose reciprocal closures in the northern boundary area in years like 1997, when catch and escapement data indicated that the Northern B.C. coho return was low. The mechanism uses the average catch per boat day (CPUE) during statistical weeks 27, 28 and 29 along the boundary area (Area 6) to trigger various closures in Alaska and Canada. There are three possible closures depending upon the CPUE.

If the CPUE is less than 10 fish per day in these three weeks, then a three-week closure is implemented during statistical weeks 31, 32 and 33. The area to be

closed includes Canadian Areas 1, 3, 4, and 5 (and adjacent off shore areas) and the southern portions of Alaskan Districts 1, 2, 3, all of District 4, and the adjacent off shore areas. The decision will be reviewed after two weeks to consider other new information.

If the CPUE is between 10 and 14, the closure is for two weeks in statistical weeks 31 and 32. The area to be closed is the same except the closure in District 104 stops at Sakie Point.

If the CPUE is between 15 and 22, a 10-day closure will occur beginning in statistical week 31. The area to be closed is the same as for the two week closure.

In addition to establishing reciprocal in-season management closures in years of low abundance of coho, the agreement provides for: 1) weekly exchange of data by Canadian and U.S. managers to facilitate implementation; 2) development of MSY escapement goals for Nass and Skeena coho, and improvement of stock assessment programs for these stocks; and 3) ability to consider the use of selective fishing to access pink salmon during a troll closure.

Last, the agreement states that Alaska will maintain two elements of its existing coho salmon management plan that is in state regulations. The first element requires us to continue to conduct an in-season assessment of the projected all-gear catch during statistical weeks 28 and 29 using the troll CPUE. If the projected all gear catch of wild coho is less than 1.1 million fish, we will close the troll fishery for up to seven days. Second, we agreed to maintain our management plan that requires assessment of the need for a closure of about 10 days in mid August.

Habitat and Restoration

Recognizing that the protection and restoration of salmon habitat and maintenance of adequate water quality and quantity are vital to achieving optimum production the Parties agreed to use their best efforts, consistent with applicable law to; 1) protect and restore habitat, 2) maintain and improve safe passage of salmon and, 3) maintain adequate water quality and quantity. To promote these objectives, the Parties also agreed to:

Identify and report to the Commission, those stocks of salmon for which harvest controls alone can not restore optimum production.

Identify non-fishing factors that are limiting the production of salmon.

Identify options for addressing those non-fishing factors that are limiting production.

Report to the Commission on progress being made to achieve these objectives.

Northern Boundary and Transboundary Rivers Fund

The Parties have agreed to establish a “Northern Fund” to be used in S.E. Alaska and Northern British Columbia to support the following activities:

Development of improved information for resource management and improved understanding of factors affecting salmon production.

Rehabilitation and restoration of habitat to enhance productivity.

Enhancement of wild stock production through the use of low technology, low cost approaches (as opposed to large hatcheries with high operating costs).

The Parties have agreed to request a grant from the U.S. Congress for \$75.0 million to be used as an endowment for the fund. The endowment would be invested under terms of a trust agreement, spending each year would be limited to the annual earnings. Each year a committee composed of three members for the U.S. and Canada would establish priorities, solicit proposals, and award contracts for use of the earnings. Earnings from the fund would be available after 2008 only after the Parties concluded negotiations to renew the fishing annexes. A similar fund was created to address issues in Southern British Columbia and the Pacific Northwest.

Scientific and Institutional Matters

To foster cooperation in the implementation of the new fishing annexes, and recognizing the benefits of increased stability and consultation the Parties agreed to:

Participate to the extent practicable in each other’s public process that are used to establish annual management regimes.

Encourage staff exchanges.

To establish a Committee on Scientific Cooperation that will; 1) assist the Commission in setting a scientific agenda, 2) monitor progress on enhanced scientific cooperation, 3) provide support to the Technical Committees, including helping them distinguish between technical and policy matters, and 4) implement the terms of the Habitat and Restoration agreement.