

AMD: Pacific Salmon Treaty Commission Research**FY2003 Request: \$1,043,100****Reference No: AMD 36917****AP/AL:** Appropriation**Project Type:** Planning**Category:** Natural Resources**Location:** Statewide**Contact:** Kevin Brooks**House District:** Statewide (HD 1-40)**Contact Phone:** (907)465-5999**Estimated Project Dates:** 07/01/2002 - 06/30/2007**Brief Summary and Statement of Need:**

The State of Alaska has been offered a supplementary allocation of Federal funds in the amount of \$1,043,100 for Fiscal Year 2003. These funds are to facilitate Alaska's obligations required to implement abundance-based fishery management for salmon agreed to when the U.S./Canada Pacific Salmon Treaty was re-signed in 1999. This new agreement requires upgrades and additions to the salmon research program to more intensively assess and manage fisheries in both countries. In order to fulfill these obligations, the State proposes using these funds to initiate programs of one-year duration or to continue several research programs previously operated using other one-time funding sources.

Funding:	<u>FY2003</u>	<u>FY2004</u>	<u>FY2005</u>	<u>FY2006</u>	<u>FY2007</u>	<u>FY2008</u>	<u>Total</u>
Fed Rcpts	\$1,043,100						\$1,043,100
Total:	\$1,043,100	\$0	\$0	\$0	\$0	\$0	\$1,043,100

<input type="checkbox"/> State Match Required	<input checked="" type="checkbox"/> One-Time Project	<input type="checkbox"/> Phased - new	<input type="checkbox"/> Phased - underway	<input type="checkbox"/> On-Going
0% = Minimum State Match % Required		<input checked="" type="checkbox"/> Amendment	<input type="checkbox"/> Mental Health Bill	

Operating & Maintenance Costs:

	<u>Amount</u>	<u>Staff</u>
Project Development:	0	0
Ongoing Operating:	0	0
<u>One-Time Startup:</u>	0	
Totals:	0	0

Additional Information / Prior Funding History:**Project Description/Justification:**

The following is the proposed distribution of this funding to fulfill the State's commitments to the Commission:

Chinook Salmon Management and Research

Coded-Wire-Tag Program on Alaska's Chickamin River \$95.0

The stock composition of chinook salmon in coastwide fisheries is unknown for several key stock groups because of the lack of adequate coded-wire tagging programs, which hampers the ability to manage these stocks effectively. The contribution of wild Alaskan chinook stocks to the commercial and sport fisheries in Canada and the U.S. is poorly known because most of these stocks are not coded-wire tagged. Better knowledge of the contribution of wild Alaskan stocks would advantage the state in ongoing negotiations by documenting their contribution to the fisheries. The Chickamin River chinook stock is one of 51 escapement indicator stocks used in setting Alaska's catch ceiling for chinook salmon under the Pacific Salmon Treaty, and is the second largest chinook stock in southern Southeast Alaska. Coded wire tags would also allow estimation of exploitation rates, incidental mortality and forecasts for fisheries in Southeast Alaska and

British Columbia, where fish from this stock is caught by both parties. This program would fund one year of capture and tagging of chinook smolt leaving the Chickamin River near Ketchikan.

Chinook Port Sampling \$60.0

Most chinook salmon originating in Alaskan hatcheries do not "count" against Alaska's catch ceiling set by the Pacific Salmon Treaty, providing a mechanism for additional "add-on" chinook harvest to Alaskan fishing fleets. This add-on cannot be accrued without adequate recovery of coded-wire tags from Alaskan hatchery fish and accurate estimation of their catch. In recent years several commercial "spring" fisheries targeting concentrations of Alaskan hatchery chinook have been implemented from mid-April through June. These fisheries require intensive sampling to document the catch of Alaskan hatchery fish, but since there are few other commercial salmon fisheries operating at this time of the year, the cost of sampling these fisheries has not been funded. This program would fund one year of additional sampling in the ports of Craig, Ketchikan, Petersburg, Wrangell, Sitka, Juneau, Hoonah, Pelican, Elfin Cove, and Yakutat.

Genetic Stock Identification \$135.0

Currently coded-wire-tags are used to estimate the contribution of various stocks to the commercial and sport chinook fisheries. While a high proportion of hatchery chinook are tagged, relatively few wild chinook are tagged coastwide, due to remote locations, costs involved and agency priorities. This disparity results in overstating the importance of many stocks to the fisheries while under-estimating the contribution of a large number of many substantial wild stocks. This disadvantages Alaska where wild stocks constitute a large part of the production and advantages British Columbia and the southern U.S. where hatchery production is higher and wild-stock production is a lesser percentage. Genetic stock identification shows promise in identifying wild stocks and correctly valuing their contribution to the catch. This program would fund one year of genetic sampling and analysis of chinook salmon caught in Alaska commercial and sport fisheries.

Boundary Area (Southern Southeast Alaska) Salmon Management and Research

Northern Boundary Area Sockeye and Pink Salmon Stock Identification \$220.0

The 1999 Pacific Salmon Treaty Agreement stipulated sharing of Canadian and Alaskan Boundary Area pink and sockeye stocks with the allowable catch based on the historical average fraction of the run harvested by each nation. Major improvements are needed in run forecasting, in-season stock identification and catch and escapement monitoring, as well as data dissemination capabilities to implement these new abundance-based agreements. In the past and at present, preseason forecasts of the number of fish returning are not accurate and do not provide managers with the confidence needed to harvest surplus fish when shown to be present after the season is over. In addition, migratory routes and stock mixtures change from year to year and the catch of Treaty stocks is not known until after the season when it is too late to adjust the fisheries. Accurate in-season estimate of the catch of Treaty fish is critical to accurately determine the surplus during the fishing season, in order to avoid overfishing which would require limiting fisheries to pay back fish in subsequent years and to utilize the harvestable surplus. This program would fund computer hardware, software, programming, and research into stock identification technology required to improve forecasting and manage the fisheries inseason to terms of the Treaty agreements.

Escapement Surveys \$40.0

Only a relative few of the thousands of spawning streams in Southern Southeast Alaska are surveyed annually. Most of these surveys are from aircraft and only pink and chum salmon escapements can be estimated with any certainty due to the enormous size of their returns. This program would fund one year of additional escapement surveys for coho and sockeye salmon in Boundary Area streams to facilitate documentation of their contribution to fisheries in Alaska and British Columbia.

Transboundary Rivers (Stikine, Taku, Alsek) and fisheries (District 106, 108, 111, and Yakutat)

District 111 Sockeye stock Identification; Research and Management \$60.0

The sockeye stock mixtures contributing to the District 111 gillnet fishery have become increasingly complex with the addition of hatchery fish from the Snettisham hatchery as well as fish planted into Canada's Tatsaemenie Lake on the Taku River. In addition, the 1999 Pacific Salmon Treaty mandates harvest sharing of wild sockeye stocks caught in both the District 111 fishery and the Canadian in-river fisheries. Managers must be able to adjust time and area fished to target surplus wild or hatchery stocks while avoiding harvesting a higher than agreed percentage of treaty fish. This requires development of accurate preseason forecasts as well as timely inseason estimates of the catch of different wild stocks and hatchery stocks.

Mark-recapture escapement estimates for Stikine chinook and sockeye, and Alsek River coho salmon. \$325.0

The Pacific Salmon Treaty specifies harvest sharing, conservation, and enhancement requirements of transboundary river salmon stocks as well as mandating abundance-based catch agreements for Taku, Stikine, and Alsek River sockeye, chinook and coho salmon. These rivers are large, complex, and remote systems with numerous tributaries where visibility is frequently poor due to glacial silt resulting in the number and spawning distribution of Stikine River chinook and sockeye and Alsek River coho being poorly known. Without accurate escapement estimates our ability to estimate the catch and return of important stocks or accurately determine escapement requirements is difficult. This program would fund one year of mark-recapture studies for Stikine River chinook, sockeye, and coho stocks and Alsek River sockeye.

Chinook Technical Committee and Administrative Support

This program would fund 6 staff months of continued funding for the Alaskan co-chair of the Pacific Salmon Commission's Chinook Technical Committee which is responsible for developing abundance based chinook catch ceilings for coast-wide chinook fisheries at an estimated cost of \$48,100.

Indirect costs @ 6% are \$60,000.