

**Upper Cook Inlet and Kuskokwim River Coho Salmon
Projects**

**FY2001 Request: \$500,000
Reference No: 6923**

AP/AL: Appropriation
Category: Development

Project Type: Planning

Location: Cook Inlet

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Estimated Project Dates: 07/01/2000 - 06/30/2005

Brief Summary and Statement of Need:

The Upper Cook Inlet and Kuskokwim management areas have historically produced substantial runs of coho salmon that support important commercial, recreational, personal use, and subsistence fisheries. Relatively little information is available on coho salmon escapement levels, smolt production, and marine survival for these systems. These proposed projects will improve our knowledge of overall return and escapement by increasing the number of systems for which estimates of coho spawning escapements are available.

Funding:	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	Total
Rcpt Svcs	\$500,000						\$500,000
Total:	\$500,000	\$0	\$0	\$0	\$0	\$0	\$500,000

<input type="checkbox"/> State Match Required	<input type="checkbox"/> One-Time Project	<input checked="" type="checkbox"/> Phased Project	<input type="checkbox"/> On-Going
0% = Minimum State Match % Required		<input 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>	<u>0</u>	<u>0</u>
Totals:	0	0

Additional Information / Prior Funding History:

This CIP project has no prior funding.

Project Description/Justification:

The Upper Cook Inlet and Kuskowkim management areas have historically produced substantial runs of coho salmon that support important commercial, recreational, personal use, and subsistence fisheries. Coho salmon spawn in a wide variety of freshwater systems throughout these management areas. Unfortunately, relatively little information is available on coho salmon spawning escapement levels, smolt production, and marine survival for most of these systems. Escapement goals have only been established for a limited number of systems where weirs have been operated or surveys conducted over a period of several years. Most of these escapement goals are based on average counts that seem to sustain harvests rather than on an understanding of the productive capacity of these systems. These proposed projects will improve our knowledge of overall return and escapement by increasing the number of systems for which estimates of coho spawning escapement are available.

Improve Inseason Enumeration of Coho Salmon in the Little Susitna River - \$95.0

Location: Little Susitna River

Primary Objective: Enumerate coho salmon entering the Little Susitna River such that inseason management of fishery objectives can occur.

Description: From 1988-1995 the Little Susitna River weir was situated at river mile 32.5 to facilitate management of the recreational fishery. In 1996, the weir was moved upstream to river mile 70 to address complaints that the weir at river mile 32.5 severely interfered with the coho salmon migration. The change in migratory timing between river mile 32.5 and river mile 70 (approximately three weeks) made inseason management based on weir counts impractical. By moving the weir back downstream to river mile 32.5,

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this project will improve inseason management by as much as three weeks. It will also allow monitoring of chum salmon escapement, since many chum salmon spawn below river mile 70. This will also provide funding to extend the counting season.

Support for Cooperative Kuskokwim River Coho Salmon Escapement Monitoring - \$195.0

Location: Kuskokwim River - George and Tatlawiksuk Rivers

Primary Objective: Enumerate coho salmon returning to the George and Tatlawiksuk Rivers

Description: This project would provide additional support to non-profit groups for on-site operational costs of cooperative salmon escapement projects during the coho season, and expand the Department's involvement at two additional sites. Kuskokwim Native Association (KNA) would receive \$30.0 annually to extend the George and Tatlawiksuk River weir projects through coho season. Such funding is not currently dedicated, and the cooperator has to pursue grant sources. A second component would fund an ADF&G Fishery Biologist I and Fishery Technician II to work at cooperative escapement projects during the coho season.

Develop an Index of Total Coho Salmon Abundance Using Commercial Catch and Offshore Test Fishing Information - \$105.0

Location: Upper Cook Inlet

Primary Objective: To develop models using commercial catch and offshore test fishing data to estimate coho salmon abundance to the Upper Cook Inlet management area.

Description: While the Upper Cook Inlet commercial salmon fishery is directed at sockeye salmon, about 350,000 coho salmon, on average, are also harvested. An understanding of the relationship between coho salmon harvests and sockeye salmon management actions could provide valuable inseason information on coho salmon run abundance. This information would help managers make better harvest control decisions. Management of the sockeye salmon commercial fishery has changed greatly over the years, and the time and area open to commercial fishing also can vary greatly within a single season. Coho salmon commercial catches, therefore, are not reliable indicators of overall abundance (i.e. catch may not be proportional to actual abundance).

Develop a Coho Salmon Enumeration Program on the West Side of Cook Inlet - \$185.0

Location: A tributary to West Cook Inlet

Primary Objectives: Enumerate coho salmon entering one system in West Cook Inlet

Description: There are presently no enumeration projects and no fishery objectives for coho salmon on the west side of Cook Inlet. This program would locate and initiate an enumeration project on one important west Cook Inlet stream. A weir would be constructed (year 1) and operated (years 1-3) to enumerate coho salmon entering one West Cook Inlet stream. If continued and supplemented with a CWT project, a biological escapement goal and fishery objectives could ultimately be developed for this stream.

Kogrukluk River Resistance Board Weir and Support Facilities - \$120.0

Location: Kogrukluk River, a tributary of the Kuskokwim River.

Primary Objectives: Enumerate coho salmon returning to the Kogrukluk River.

Description: A resistance board weir is needed to replace the existing fixed-picket weir on the Kogrukluk River in the middle Kuskokwim River basin. The resistance board weir can better operate during high water events that often disable the current fixed-picket weir during coho season. A boat survey of the Kogrukluk River would be conducted to locate an optimal site for the new weir. The bulk of this budget request would be used for the purchase of weir material, fabrication, transportation to the site, and installation. Additionally, costs of an outboard motorboat and field housing at the new site are included.