

**Yukon River Pilot Station Sonar Chinook Salmon
Estimation Verification Project**

**FY2007 Request: \$500,000
Reference No: 41514**

AP/AL: Appropriation

Project Type: Planning

Category: Natural Resources

Location: Pilot Station

Contact: Denby S. Lloyd

House District: Bering Straits (HD 39)

Contact Phone: (907)465-4210

Estimated Project Dates: 07/01/2006 - 06/30/2009

Brief Summary and Statement of Need:

Funding is being requested to verify the accuracy of the sonar count of chinook salmon moving up the Yukon River. This project will use mark and recapture methodology to provide an independent verification of the accuracy of the sonar count. Chinook salmon will be captured in the vicinity of the Pilot Station sonar project, tagged, and recovered at numerous locations throughout the Yukon River drainage, including the Canadian portions of the river. Statistical techniques will be used to estimate the total return of chinook salmon from the mark/recapture project and then compared with the estimate produced by the sonar at Pilot Station.

Funding:	FY2007	FY2008	FY2009	FY2010	FY2011	FY2012	Total
CFEC Rcpts	\$500,000						\$500,000
Total:	\$500,000	\$0	\$0	\$0	\$0	\$0	\$500,000

<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 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
One-Time Startup:	0	0
Totals:	0	0

Additional Information / Prior Funding History:

CS SB231 funds this project with 500.0 new CFEC receipts fund code. Original request - 600.0 RSS

Project Description/Justification:

Chinook salmon are the most commercially valuable species of salmon returning to the Yukon River; and are also the most important subsistence species. Harvests occur on mixed stocks spawning from above the Canadian border to the lower reaches of the river. Successful management of this resource requires a method for estimating the total population of chinook salmon that return to the river each year and the available harvestable surplus. Sonar has been used for this purpose, however, department managers know that sonar under counts the return by some proportion, because many chinook salmon migrate outside the range of the sonar. This project will determine the extent to which the counts are missing some fish and provide the basis for developing improved or alternative methods to more accurately enumerate chinook salmon. A more accurate count of the number of salmon returning is expected to increase the number available for harvest and the incomes of commercial fishermen and processors. This project will improve the ability of the department to maintain desired escapements while achieving the maximum, biologically sustainable harvest. These objectives are contained in End Result 1 and in strategies A1 and A2.