

Upper Cook Inlet East Side Set Net Chinook Salmon Harvest Patterns

FY2013 Request: \$789,000
Reference No: 54421

AP/AL: Appropriation **Project Type:** Research / Studies / Planning
Category: Natural Resources
Location: Kenai Areawide **House District:** Kenai Areawide (HD 33-35)
Impact House District: Kenai Areawide (HD 33-35) **Contact:** Jeff Regnart
Estimated Project Dates: 07/01/2012 - 06/30/2015 **Contact Phone:** (907)267-2350

Brief Summary and Statement of Need:

The objectives of this project are two-fold: (1) examine patterns of Chinook salmon harvests in the East Side Set Net (ESSN) fishery Upper Cook Inlet (UCI) through analyses of historical fish ticket data; and (2) examine patterns of Chinook salmon harvests and stock composition in the ESSN fishery. This project could provide additional fishing opportunities for both sport and commercial fishermen, specifically for sockeye salmon in the Kenai Section of the UCI management area and for Chinook salmon in the Kenai and Kasilof Rivers and provide economic benefits to the Kenai Peninsula.

Funding:	<u>FY2013</u>	<u>FY2014</u>	<u>FY2015</u>	<u>FY2016</u>	<u>FY2017</u>	<u>FY2018</u>	<u>Total</u>
CFEC Rcpts	\$789,000						\$789,000
Total:	\$789,000	\$0	\$0	\$0	\$0	\$0	\$789,000

<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:

This is the first year for the project. There was a one year study conducted in 1996 by the department. This study was not identical to the one that is being proposed. However the proposed study does contain some aspects of the 1996 study. The following is the information concerning the previous study. <http://www.sf.adfg.state.ak.us/fedaidpdfs/Sp98-03.pdf>

Project Description/Justification:

Data collected from this project could aid in management of the commercial ESSN fishery, allowing for a potential increase in the efficiency of harvesting sockeye salmon, while at the same time providing for conservation of numerous east-side Chinook salmon stocks. This project would provide fishery managers with an increased understanding of the spatial and temporal migration patterns of Chinook and sockeye salmon as they swim to their natal streams. This additional information could result in increased passage of Chinook salmon into streams along the east side of Cook Inlet, which would provide an economic and recreational benefit to thousands of inriver users. At the same time, the data from this project should provide insight into the interrelationship of Chinook and sockeye salmon migration patterns, which could benefit thousands of commercial users by potentially increasing their efficiency at harvesting the targeted stock of sockeye salmon.

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This project will examine patterns of Chinook salmon harvests in the ESSN fishery in UCI through analyses of historical fish ticket data. Two analyses will be conducted. The first will examine harvest patterns in total daily Chinook salmon catch by subdistrict (Ninilchik, Cohoe, Kalifornsky Beach, and Salamatof). The second analysis will examine daily harvest patterns among selected set-net sites (six to eight sites if possible) within each subdistrict. A principal components analysis will be conducted to examine spatial patterns in daily Chinook salmon harvests among set-net sites within the ESSN fishery.

The second objective of this project would utilize 16 ADF&G technicians, who will accompany fishermen in their skiffs to observe and record Chinook and sockeye salmon harvests in about five nets (beach, mid, offshore) picked after each ebb and flood tide at each of 16 sites (four sites each in the Ninilchik, Coho, Kalifornsky Beach, and Salamatof subdistricts) during each fishery opener in July. Results from the first objective (retrospective fish ticket analyses) will be used to aid in selecting sites. Tissue samples will be collected from each Chinook salmon and sent to the ADF&G Gene Conservation Laboratory. Genetic stock identification methods will be used to estimate stock composition in relation to distance from shore, date period and subdistrict, if possible.

This project contributes to the department's mission and is consistent with the Division of Commercial Fisheries core service of Harvest Management. This project may increase economic and social benefits derived from the harvest and use of Kenai River king and sockeye salmon fish, shellfish, and aquatic plants in Alaska.

This project could provide additional fishing opportunities for both sport and commercial fishermen, specifically for sockeye salmon in the Kenai Section of the Upper Cook Inlet management area and for Chinook salmon in the Kenai and Kasilof Rivers. These additional fishing opportunities would provide economic benefits to both sport and commercial fishers of the Kenai Peninsula.