

AP/AL: Appropriation **Project Type:** Planning
Category: Natural Resources
Location: North Slope Borough **Contact:** John Hilsinger
House District: Arctic (HD 40) **Contact Phone:** (907)267-2324
Estimated Project Dates: 07/01/2008 - 06/30/2014

Brief Summary and Statement of Need:

The purpose of this study is to evaluate the distribution and abundance of Pacific salmon in Arctic freshwaters north and east of Point Hope, AK. Because continued climatic change will have important impacts on Arctic ecology generally and Pacific salmon distributions specifically, it is important that these resource evaluations be updated.

Funding:	FY2009	FY2010	FY2011	FY2012	FY2013	FY2014	Total
Gen Fund	\$150,000	\$250,000					\$400,000
Total:	\$150,000	\$250,000	\$0	\$0	\$0	\$0	\$400,000

<input type="checkbox"/> State Match Required	<input type="checkbox"/> One-Time Project	<input checked="" 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:

No prior funding.

Project Description/Justification:

The purpose of this study is to evaluate the distribution and abundance of Pacific salmon in Arctic freshwaters north and east of Point Hope, Alaska. The study would be the first comprehensive survey in this area of Alaska. Published studies and local observations over the last several decades suggest that Pacific salmon species have been extending their ranges and increasing abundance in Arctic waters. This is partly a response to warming temperatures in the Arctic and if climatic model predictions are correct, we should expect this trend to continue.

Most information on salmon distribution north and east of Point Hope is found as part of general surveys of freshwater fishes conducted in the mid 1980's. Because continued climatic change will have important impacts on Arctic ecology generally and Pacific salmon distributions specifically, it is important that these resource evaluations be updated. Salmon resources in Northern Arctic waters are a recognized supplement to subsistence economies of some North Slope communities and increasing abundance may offer limited commercial opportunity as well. Climate induced changes of species distributions may also impact food webs.

The goal of this project is to update our assessment of salmon resources in the Alaskan Arctic (north and east of Point Hope, Alaska). Over a two-year period, we will address four objectives: 1) document species presence across a range of index rivers from Point Hope to the Canadian border using survey methods and interviews with local residents of North Slope communities, 2) document the location of salmon spawning activity using aerial survey techniques, 3) determine whether juvenile salmon are present in streams as an indicator of sustaining populations, and 4) establish a suite of index streams that will form the basis of continued monitoring for changes in species distribution and abundance. An updated assessment of Pacific salmon in the Alaskan Arctic may represent a valuable proxy for climate change in the Arctic.