

DIDSON Sonar Equipment Purchase**FY2007 Request: \$400,000****Reference No: 39293****AP/AL:** Appropriation**Project Type:** Equipment**Category:** Natural Resources**Location:** Fairbanks Areawide**Contact:** Denby S. Lloyd**House District:** Fairbanks Areawide (HD 7-11)**Contact Phone:** (907)465-4210**Estimated Project Dates:** 07/01/2006 - 06/30/2008**Brief Summary and Statement of Need:**

The Division of Commercial Fisheries is seeking funding for two DIDSON (Dual Frequency Identification Sonar) units. These sonar units will be used to count migrating Chinook salmon at the Chena River.

Funding:	<u>FY2007</u>	<u>FY2008</u>	<u>FY2009</u>	<u>FY2010</u>	<u>FY2011</u>	<u>FY2012</u>	<u>Total</u>
Rcpt Svcs	\$400,000						\$400,000
Total:	\$400,000	\$0	\$0	\$0	\$0	\$0	\$400,000

<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:

FY06 - \$200.0; FY05 - \$300.0; FY04 - \$300.0

Project Description/Justification:

One of the core services of the Commercial Fisheries Division is stock assessment and applied research. Sonar is an important stock assessment tool for estimating salmon abundance in many river systems around Alaska. Accurate and timely estimates of spawning salmon abundance are used to make fishery management decisions during the season that maximize sustainable harvest opportunities and provide stable or increasing economic benefits to commercial fisheries. Funding is sought for two DIDSON (Dual Frequency Identification Sonar) units. These sonar units are needed to count migrating Chinook salmon at the Chena River.

The Chena River Chinook salmon stock is one of the most important US stocks in the Yukon River drainage. The Division of Sport Fish uses passage estimates from a counting tower located on the Chena River dam to manage sport fisheries on the Chena River. The Division of Commercial Fisheries uses these same estimates in post-run reconstructions and future preseason forecasts.

The primary difficulty of the Chena River counting project is making visual counts when water clarity decreases, typically during high water events. In three of the past five years, poor visibility has made it impossible to count during the peak of the Chinook salmon run. Given the importance of the project, the Department would like to deploy DIDSON (Dual Frequency Identification Sonar) at the site during these periods of low visibility to get more accurate estimates of Chinook salmon passage.

The DIDSON is a relatively recent advance that uses sonar to produce video-like images in rivers with extremely poor water clarity. These images are easy to interpret and require minimal training compared with other sonar technologies. Since 2003, the department has been using DIDSON to replace aging equipment at former Bendix projects and has assisted in the development of the DIDSON system.

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This project will complement existing escapement projects in providing both Sport and Commercial Fisheries managers with timely data upon which to base decisions. If approved, we will begin immediate procurement of the equipment, however, lead times can run as high as six months. If the funding is available early enough, we should be able to deploy the DIDSON at the Chena River counting project next season as necessitated by poor water clarity. 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.