Location: StatewideContact: Wayne RegelinHouse District: Statewide (HD 1-40)Contact Phone: (907)465-4190Estimated Project Dates: 07/01/2000 - 06/30/2005

Brief Summary and Statement of Need:

This CIP request will provide funding required to continue research on the interrelationships of Dall Sheep and predators in the central Alaska range. Funds will be spent to purchase radio collars, capture ewes and lambs to afix collars, and charter aircraft for radio tracking of collared animals and assessing sheep population trends. This project was begun in FY98 and interruption of the data collection cycle will seriously compromise the project.

Funding:	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	Total
Fish/Game	\$78,000	\$32,500					\$110,500
Total:	\$78,000	\$32,500	\$0	\$0	\$0	\$0	\$110,500
□ State Match Required □ One-Time Project ✓ Phased P 0% = Minimum State Match % Required □ Amendmender				On-GoingMental Health	n Bill		
Operating &	Maintenance				Amo	unt	<u>Staff</u>
		Pr	oject Develo	opment:		0	0
Ongoing Operating:				erating:		0	0
	One-Time Startup:					0	
				Totals:		0	0

Additional Information / Prior Funding History:

Dall sheep research studies begun under SLA97/CHP100 (\$160.0) and were funded by proceeds from the auction of a special Governor's Permit for a Dall sheep hunt. Since that iime additional Governor's Permits have been auctioned and the proceeds deposited into a special account in the Fish and Game Fund. These permit auction revenues will be used to fund this CIP request. It is anticipated that additional permit auction revenues will be available to fund the final year of this project in FY2002.

Project Description/Justification:

Dall sheep are widespread throughout most mountain ranges in Alaska and are valued by both hunters and nonconsumptive wildlife users. Sheep populations have been surveyed at irregular intervals in many parts of the state for several decades, although precise estimates of population size are not available for most areas. However, surveys during the 1990s indicated that sheep populations in much of the Alaska Range and Brooks Range were below levels that occurred during the 1970s and 1980s. Spring or summer surveys to assess lamb production and survival were conducted annually from 1993-1997 in the central Alaska Range. Causes of the decline in sheep numbers are unknown, but severe winters, dry summers and predation many be involved. A recent study indicated coyote predation may be an important source of mortality for lambs in that area. Previous studies suggested that wolf predation on adult sheep might be important to some sheep populations. However, little is known about interactions of coyotes and wolves in Alaska, or how changes in populations of these predators may affect sheep populations.

Studies begun under the Dall Sheep Management CIP (SLA97/CHP 100) will assess several demographic features of Dall sheep in the central Alaska Range. Ongoing studies of wolves, caribou, and moose in the region will facilitate a broader understanding of the complex predator-prey relationships that exist in a multi-prey, multi-predator system. This

Dall Sheep Research in the Central Alaska Range

FY2001 Request:	\$78,000
Reference No:	33447

will assist managers in assessing the relative importance of various features, including predation, predator management, weather, and hunting, that may affect sheep populations. Specific products of this research will include: (1) estimates of lamb survival and recruitment rates, and an assessment of the relative importance of various mortality factors of lambs; (2) estimates of pregnancy, birth, and survival rates of ewes: and (3) an evaluation of the relationships among populations of sheep, coyotes, and wolves.

Funds requested under the CIP will be used for the following:

Radiocollars (new and refurbished)	8,000
Animal capture equipment and supplies	2,000
Travel	1,000
Aircraft charters	2,000
Aircraft fuel	2,000
Field supplies	1,000
Report preparation and printing	2,000