

Marine Mammal Research

FY2020 Request: \$1,000,000

Reference No: AMD 43347

AP/AL: Appropriation

Project Type: Research / Studies / Planning

Category: Natural Resources

Location: Statewide

House District: Statewide (HD 1-40)

Impact House District: Statewide (HD 1-40)

Contact: Eddie Grasser

Estimated Project Dates: 07/01/2019 - 06/30/2024

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Brief Summary and Statement of Need:

This project's purpose is to help reduce Endangered Species Act (ESA) regulatory burdens and constraints on economic and other activities, and maintain Alaska Native access to marine mammal (MM) subsistence resources. Most MM species in Alaska are either listed under the ESA or are likely to be petitioned for listing by environmental and animal rights non government organizations (NGO). When MMs are listed under the ESA, additional regulations are put in place that can greatly impact economic and other activities as well as diminish opportunities for subsistence.

Funding:	<u>FY2020</u>	<u>FY2021</u>	<u>FY2022</u>	<u>FY2023</u>	<u>FY2024</u>	<u>FY2025</u>	<u>Total</u>
1002 Fed Rcpts	\$750,000						\$750,000
1108 Stat Desig	\$250,000						\$250,000
Total:	\$1,000,000	\$0	\$0	\$0	\$0	\$0	\$1,000,000

<input checked="" type="checkbox"/> State Match Required	<input type="checkbox"/> One-Time Project	<input type="checkbox"/> Phased - new	<input checked="" type="checkbox"/> Phased - underway	<input type="checkbox"/> On-Going
25% = Minimum State Match % Required		<input checked="" 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

Prior Funding History / Additional Information:

Sec1 Ch17 SLA2012 P116 L27 SB160 \$1,550,000

Sec7 Ch43 SLA2010 P26 L26 SB230 \$600,000

Sec4 Ch30 SLA2007 P93 L14 SB53 \$473,300

Attaining information about Alaska's MM species and ensuring that information is considered in ESA decision making is the most effective way to limit regulatory impacts of MM ESA listings on Alaskans. ESA implementation uses a precautionary approach that requires federal agencies to address perceived threats to listed species. Less information typically results in stronger regulatory protection measures, which in many instances may provide little to no conservation benefit to the specific species.

Project Description/Justification:

This project will enable critical marine mammal research to inform ESA decisions. Research projects will be pursued to: 1) inform listing decisions on species likely to be petitioned for listing under the ESA (e.g., northern fur seal); 2) obtain information to minimize unnecessary burdens on resource development, subsistence, and other activities; and 3) focus ESA recovery actions on activities that will increase population size and result in delisting.

Current Projects

The Marine Mammal Program (MMP) has obtained federal grants to conduct 20 multiyear studies. The studies are funded by federal agencies such as the National Marine Fisheries Service (NMFS), US Fish and Wildlife Service (USFWS), Office of Naval Research (ONR) and the Bureau of Ocean Energy Management (BOEM) and non-federal agencies such as the North Slope Borough (NSB) and the North Pacific Research Board (NPRB). MMP will also look to partner with non-state and non-federal groups to find in kind match where possible. This project will provide authority to go forward with these studies, which have grants that have been awarded to the MMP. The studies include the following:

Ice Seals: There are seven operating/capital studies on ice seals (bearded, ringed, and spotted). These studies are investigating movement and habitat use of tagged live seals, harvest monitoring to assess number of animals taken, condition monitoring of harvested animals, as well as hormone level and trophic foraging level of seals over time. These studies will aid in assessment for removal of ringed seals from the endangered species list. Seal habitat also coincides with areas of interest for offshore oil and gas development, therefore information is needed to better understand habitat use and to plan lease sales and permit development activities with effective mitigation measures.

Beluga Whales: There are four operating/capital studies on beluga whales. Three studies focus on the endangered Cook Inlet beluga whale (CIB). The primary purpose of the first study is to strengthen estimation of CIB vital rates (reproduction and survival). The second study focuses on obtaining current information on year-round CIB spatial foraging ecology and habitat use, and how those life-history characteristics may have changed over the last ~50 years. The third project is support for a collaborative project with National Marine Fisheries Service to use unmanned aircraft to take high-resolution photos of the whales for photos ID and health indices. Two studies are using beluga whales from the Bristol Bay population to study diet using live animals and stomach contents from subsistence harvested animals. These studies will contribute to the understanding of CIB that have such a limited population that they are no longer hunted or handled for research and impose a significant impact on development in Cook Inlet.

Steller Sea Lions: Part, or all, of the Steller sea lion population has been on the ESA list for almost 30 years. Studies from Alaska Department of Fish & Game contributed to the delisting of one segment of the population in 2013. There are currently seven active capital projects on Steller sea lions. The studies include vital rates (reproduction and survival), potential impact to health from contaminants, boundaries of definable stocks of sea lions, disentanglement of sea lions from marine debris, tagging efforts for distribution, and habitat use as well as assessing residual and emerging threats to population recovery.

Polar Bears: Polar bears were listed as threatened under the ESA in 2008. Two subpopulations occur in the U.S. (Alaska) and each are shared with other countries; the Southern Beaufort Sea subpopulation is shared with Canada and the Chukchi Sea subpopulation is shared with Russia. These shared populations require international agreements for their management and therefore current knowledge of population structure and diet are needed for best management practices. There are two studies underway on polar bears. The first study is using non-invasive collecting stations to collect hair from which DNA can be extracted from the follicles. The DNA will be used to identify (mark) individual polar bears for genetic mark-recapture analysis to eventually contribute to a collaborative Chukchi Sea subpopulation abundance estimate. The second study is using data collected for the US Geological Service to model polar bear diets.

Fur Seals: Fur seal have potential to be the next marine mammal considered for listing under the ESA. There is currently one operating study on fur seals with the focus on fur seal diet and reproductive rates.

Bowhead Whales: The operating bowhead study used tags that collect whale movement data as well as acoustic and environmental data. Bowhead whale summer habitat and fall migration coincides with areas of interest for oil and gas development therefore information is needed to better understand whale migration routes and to plan lease sales, permit development activities, and design shipping lanes with effective mitigation measures.