FEDERAL AID FINAL PERFORMANCE REPORT

ALASKA DEPARTMENT OF FISH AND GAME DIVISION OF WILDLIFE CONSERVATION PO Box 115526 Juneau, AK 99811-5526

Alaska Department of Fish and Game State Wildlife Grant

Grant Number: T-24 Segment Number: 1

Project Number: 1.0

Project Title: State Endangered Species Act Team: Coordination, Management, and

Planning

Project Duration: 16 September 2011 – 30 June 2014 **Report Period**: 16 September 2011 – 30 June 2014

Report Due to HQ: 28 September 2014

PRINCIPAL INVESTIGATORS: Kelly Nesvacil, Wildlife Biologist, DWC

WORK LOCATION: Statewide

I. PROBLEM OR NEED THAT PROMPTED THIS RESEARCH

The conservation of sensitive species identified in Alaska's Comprehensive Wildlife Conservation Strategy (CWCS) is a large undertaking, involving many species and stakeholders across a broad geographical range. The ever changing status of identified sensitive species requires continued monitoring to assure that species conservation concerns are updated and timely addressed. This requires close coordination between State and Federal agencies, and communication with all stakeholders, to streamline the flow of information between managers, and policy-makers, including those associated with proposed ESA listings.

II. REVIEW OF PRIOR RESEARCH AND STUDIES IN PROGRESS ON THE PROBLEM OR NEED

This project provided State comments and information regarding many species listed in the CWCS. Species that this position focused on included formerly and currently federally listed endangered and threatened species, such as:

Polar Bear (Appendix 4, page 404), Short-tailed Albatross (Appendix 4, page 180), Humpback Whale (Appendix 4, page 417), Bowhead Whale (Appendix 4, page 413), North Pacific Right Whale (Appendix 4, page 424), Blue Whale (Appendix 4, page 409), Steller Sea Lion (Eastern and Western U.S. stocks; Appendix 4, page 398), Spectacled Eider (Appendix 4, page 150), Steller's Eider (Appendix 4, page 151), Cook Inlet Beluga Whale (Appendix 4, page 399), Bearded Seal (Beringia Distinct Population Segment; Appendix 4, page 404), Ringed Seal (Arctic Distinct Population Segment; Appendix 4, page 404), and Northern Sea Otter (Southwest Alaska Population; Appendix 4, page 427)

And formerly and current candidate and petitioned species, including:

• Kittlitz's Murrelet (Appendix 4, page 216), Yellow-billed Loon (Appendix 4, page 175), Alexander Archipelago Wolf, and Pacific Walrus (Appendix 4, page 404).

III. APPROACHES USED AND FINDINGS RELATED TO THE OBJECTIVES AND TO PROBLEM OR NEED

This project provided funds to coordinate efforts to provide summary comments on existing and proposed state conservation efforts for sensitive species and those undergoing status reviews for listing under the ESA. This project also aided in the collection of data that will contribute to the conservation of sensitive species, both by conducting and participating in data collection in the field, and by identifying and applying for funding for such efforts. This project highlighted research needs identified in the CWCS, worked to fill information gaps, and solicited and prioritized funding for species with the highest conservation needs. Information gained by this position will greatly enhance future CWCS revisions.

IV. MANAGEMENT IMPLICATIONS

For Objectives 1 and 2, expanded cooperation and facilitation of the exchange of relevant wildlife and policy information aid all agencies involved in the management of sensitive fish and wildlife species in Alaska. This exchange of information further informed work for Objectives 3 and 4. Besides the project deliverables and knowledge gained regarding a suite of sensitive species in Alaska, this position has also worked collaboratively in the field with USFWS, NPS, and USFS employees on projects concerning the species. This on-the-ground-collaboration promotes future working opportunities to ensure continued dialogue and research on sensitive species in Alaska.

V. SUMMARY OF WORK COMPLETED ON JOBS

Objective 1: Update State Endangered Species List.

Accomplishments:

AS 16.20.190 (a) states that a species or subspecies of fish or wildlife is considered endangered when the commissioner of fish and game determines that its numbers have decreased to such as extent as to indicate that its continued existence is threatened. In making this determination the commissioner of fish and game shall consider

- 1. the destruction, drastic modification, or severe curtailment of its habitat;
- 2. its overutilization for commercial or sporting purposes;
- 3. the effect on it of disease or predation; and,
- 4. other natural or man-made factors affecting its continued existence.

The State Endangered Species List currently includes two birds (Short-tailed Albatross and Eskimo Curlew) and three marine mammals (blue whale, humpback whale, and right whale). ADF&G conducted a review of the State list

and created a Special Status Species webpage for ease of public access to the information. The Alaska Species Ranking System has been finalized (available online at AKNHP). We are in discussions with the AKNHP currently to see how to best use the information provided to inform future updates of SoA species of concern.

Objective 2: Assist in the coordination of the development of State comments to Federal actions regarding endangered and sensitive Alaska species (e.g., status reviews, listing proposals, de-listing proposal, etc.).

Accomplishments:

Coordination and development of State comments to Federal actions and development of petitions and proposals were completed for the following species: yellow-billed loon, pinto abalone, Steller's eider, Steller sea lion Eastern DPS, Kittlitz's murrelet, polar bear, beluga whale Cook Inlet DPS, Aleutian tern, and humpback whale.

Objective 3: Collaborate with the Wildlife Diversity Program manager to identify projects that, if funded, would benefit endangered and sensitive Alaska species.

Accomplishments:

Selection and administration of a multitude of research projects using Section 6 and SWG funds were conducted with this grant that benefit endangered and sensitive species in Alaska. Research projects focused on the following species, subspecies, or DPS: Alexander Archipelago wolf, Pacific walrus, polar bear, Aleutian tern, Kittlitz's and marbled murrelets, yellow-billed loon, and the Southwest Alaska DPS of northern sea otter.

Projects include but are not limited to: Habitat Modeling and Diet of Yellow-billed Loons in Northern AK (T-13), Evaluation of survey methods to assess Aleutian Tern population status (T-9-1-3), Adaptive genetic diversity in Marbled Murrelets (T-9-1-11), By-catch of Kittlitz's Murrelet (*Brachyramphus brevirostris*) in Alaskan Gillnet Fisheries: A Risk Assessment (E-14), Causes of mortality for threatened northern sea otters in Kamishak Bay, Alaska (E-15), Comparison of techniques to detect denning polar bears (E-16), Pacific Walrus Harvest Sample Analysis (E-17/18), Wolf Population Estimation on Prince of Wales Island, Alaska (E-19), Spatial monitoring of sea otter bycatch through a Dungeness pot survey in the Kodiak Area of the Gulf of Alaska (E-21), Assessment of Kittlitz's Murrelet Occurrence and Abundance in Yakutat Bay, Tracy Arm, and Endicott Arm (E-20), Monitoring of Kittlitz's and marbled murrelets in Thomas and LeConte Bay, AK.

Objective 4: Fill information gaps through research of sensitive species in Alaska. Accomplishments:

CIAP funding was awarded to study the effects of hydrocarbons on the Pribilof rock sandpiper; this project is ongoing. This position identified research gaps, current state of knowledge, and co-authored a letter to discuss with NMFS about conducting a workshop to begin a biopsy program for Cook Inlet beluga whales. This position has also been involved in research and monitoring projects for the Kittlitz's and marbled murrelets each summer. New projects at ADF&G are beginning with these two species and participation in current projects is still ongoing.

Cooperative agreements with NMFS and USFWS have been updated every year to retain ability to accept Section 6 funds from both agencies as well as to update species available to receive Section 6 funding.

Objective 5: Provide expertise and assistance for updating specific sections of Alaska's CWCS.

Accomplishments:

Persons funded by this position have been very active in the update of Alaska's CWCS, especially in the development of the Alaska Species Ranking System by the AKNHP. Staff has been hired to oversee the plan revision and Kelly Nesvacil will review and provide input on the following sections of the CWCS: Methodology and approach, Challenges for wildlife and fish conservation, Conservation action plans in the near future.

VI. PUBLICATIONS

Many letters, comments, technical, and project reports have been produced, but most findings from Objective 3 are awaiting peer-reviewed publications. Selected publications follow:

Wright, S.K. and J.R. Moran. 2011. Ocean going vessels: A possible conduit for the introduction of white-nose syndrome fungus (*Geomyces destructans*) into bats in Alaska. Northwest Naturalist 92:133-135.

Blewjas, K.M. and S.K. Wright. 2012. By-catch of Kittlitz's Murrelet (*Brachyramphus brevirostris*) in Alaskan Gillnet Fisheries: A Risk Assessment. Wildlife Research Report ADF&G/DWC/WRR-2012-8. Alaska Department of Fish and Game, Juneau, Alaska.

Haynes, T.B., A.E. Rosenberger, M.S. Lindberg, M. Whitman, and J.A. Schmutz, 2013. Method- and species-specific detection probabilities of fish occupancy in Arctic lakes: implications for design and management. Can. J. Fish. Aquat. Sci. 70: 1055–1062.

Pyare S., M. I. Goldstein, D. Duffy, S. Oehlers, N. Catterson, and J. Frederick. 2013. Aleutian Tern (*Onychoprion aleutica*) Research in Alaska: Survey Methodology, Migration, and Statewide Coordination. Final Report to ADF&G, received via email September 2013.

VII. ADDITIONAL FEDERAL AID-FUNDED WORK NOT DESCRIBED ABOVE THAT WAS ACCOMPLISHED ON THIS PROJECT DURING THIS SEGMENT PERIOD

CIAP and Sections 6 funds were used on some projects for operating costs, but all personnel time for this project was funded through this project.

Prepared by: Kelly Nesvacil

Date: 9/23/2014