

INTERIM ANNUAL PERFORMANCE REPORT	ALASKA DEPARTMENT OF FISH AND GAME SPORT FISH DIVISION PO Box 115526 Juneau, AK 99811-5526
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STATE WILDLIFE GRANT (SWG)

STATE: Alaska

GRANT AND SEGMENT NR.: T-19-P-1

Work Location: Statewide

Project Duration: September 1, 2010 – June 30, 2015

Project Reporting Period: September 1, 2012 – August 31, 2013

Project Title: Landscape Conservation Cooperative Coordination

Project Objectives:

1. Incorporate climate change into Alaska's Comprehensive Wildlife Conservation Strategy.
2. Coordinate and manage Department involvement in Alaska LCC efforts.

Summary of Project Objectives:

ADF&G employs Program Coordinator Sue Rodman and hired Habitat Biologist Miles Spathelf (7/01/13) to support the Department's role in LCCs, Western Governor's Wildlife Council and the North Slope Science Initiative, among other landscape scale projects. We used in-house GIS Analyst Carol Barnhill to cover the functions of the third staff member originally intended to be hired through this program. Through active participation in Western Alaska, Arctic and North Pacific LCCs, staff is working to integrate climate change research results into department operations to include the revision of the Comprehensive Wildlife Conservation Strategy (CWCS). For the North Pacific & Arctic LCCs, the respective Science Plans were completed in the last year while the draft Science Plan is under review for the Western Alaska LCC. Staff from Regions III and V have been integral in development of crucial habitat and corridors mapping on the North Slope in support of the Western Governor's Wildlife Council (WGWC) Crucial Habitat Assessment Tool (CHAT) and the North Slope Science Initiative (NSSI) with respect to developing a coarse-scale planning tool for conserving wildlife and aquatic species during the development of oil, gas, transportation and energy infrastructure. Further, the Divisions of Wildlife Conservation (DWC) and Sport Fish (DSF) began revisions to the State's Wildlife Action Plan. Specifically, DWC met in August 2013 to develop a timeline and strategy for completing this task by 2015, while DSF will be reviewing their sections in the coming year for anticipated minor adjustments.

Western Alaska LCC

- The Western Alaska LCC determined its long term science strategy with support from ADF&G and other member agencies. Over two-year periods, the focus of research will cycle among three primary themes: terrestrial systems, freshwater systems and coastal systems.
- WALCC hosted the Stream and Lake Temperature Monitoring workshop on November 5 & 6, 2012. State employees from Departments of Natural Resources, Transportation & Public Facilities and Fish & Game participated in the workshop. In this forum, participants from a

variety of state, federal and non-governmental organizations identified priority needs and information gaps along with recommendations on how to address these issues considering their scope and complexity. As a result, the WALCC issued an RFP in late winter 2013 to inventory project metadata and attributes of stream and lake temperature monitoring efforts across the state. ADF&G is invested in this effort through the Anadromous Waters Catalog, Freshwater Fish Inventory and In-stream Flow Reservations; thereby the benefit to the department of compiling this information in one on-line resource will enhance our operational efficiencies. Further, the WALCC issued two other RFPs in fall 2013 to 1) address stream temperature monitoring protocols, and 2) to establish regional coordinators for monitoring efforts. Both of these RFPs support the citizen or volunteer organizational efforts that contribute to the greater body of knowledge on freshwater systems in the WALCC geography. A fourth RFP topic addresses climate change impacts on freshwater systems. Selection of these RFPs occurs in the next reporting period for this grant.

- Reviewed and approved the 2014/15 Operating Plan which sets the stage for addressing LCC research themes into the next two years, implementation of the strategic plan and science plan, further engaging with the Alaska Climate Science Center, and other activities within the LCC.
- Sue Rodman served as the chair of this LCC for the period October 2012 through September 2013.
- The Western Alaska LCC submitted a multi-agency proposal to the National LCC RFP for improvement of the National Hydrography Dataset in Alaska; this effort would directly benefit ADF&G in our work on the Freshwater Fish Resource Inventory and culvert assessments for fish passage. This proposal was funded and is set to begin in early 2014. This project is aligned with the 2013 and 2014 Multi-State Conservation Grant funded proposals through the National Fish Habitat Partnership to Alaska.

Arctic LCC

- ADF&G staff participated in the initial workshops of the Arctic LCC to identify information needs and gaps during the formation of the Arctic LCC in November 2008, Fairbanks at “Wildlife Response to Environmental Arctic Change.” Additionally, department staff participated in the Species and Habitat Working Group to provide recommendations on how the work of the physical processes working groups could best address habitat condition and availability with respect to climate change. The ALCC Strategic Science Plan was released in December 2012 to guide research for the next 10 years. Implementation plans will refine science foci for the 1-2 year timelines within this decadal approach.
- We reviewed and funded proposals for four interdisciplinary study plans along with studying permafrost baseline information and thermokarst monitoring in the Arctic. Four interdisciplinary study plans were funded to 1) assess biological response to water temperature, 2) determine climate change effects on wetlands and waterbirds, 3) seek an integrated approach to arctic aquatic habitat change; and 4) evaluate marine food web response to runoff from permafrost melting. All of these topic areas are of import to the State both within ADF&G and other departments. Study plans give the PIs an opportunity to fully vet through a proposal and consider the needs of partner agencies in advance of funding a full study. This process requires a sincere commitment of time and effort and more adequately develops the research needs and logistics.

- ADF&G biologists participated in webinars and workshops related to historical snow levels and polar bear den site modeling. Two ADF&G biologists attended the workshop hosted by Glenn Liston in developing their research of paring historical snow levels with wildlife response. This impacts caribou, musk ox and polar bears with respect to winter forage and den sites. Workshops of this nature engage other researchers into a study before the field work commences thereby addressing additional elements of the processes to be studied, enriching the utility and application of the results.
- The Arctic LCC conducted a “Future Needs Assessment” with respect to the partner agencies to the LCC; this effort helped shape the final version of the science plan and address how the partner agencies intend to use information from the LCC. A consultant out of Juneau was hired to interview agency staff in an effort to gain an understanding of how various researchers and administrators expect to use the products of the LCC. The final version of the science plan was approved at the December 20, 2012 meeting.

North Pacific LCC

- The NPLCC Science Strategy, Technical Supplement and current Implementation Plan were all completed in Winter 2012/13. Kelly Nesvacil participated in this process through her involvement in the Science / Traditional Ecological Knowledge Subcommittee (S/TEK). During this process, ADF&G staff was engaged in workshops focusing on freshwater, marine and terrestrial ecosystems enabling our agency’s priorities to be incorporated into the matrix of research priorities identified in the Science Strategy. Staff was again involved in the ranking of these priorities to establish an implementation plan for 2013/2014. In developing the foundation to house research products and data, NPLCC sought agency input on building an appropriate data management system to provide for access and search functions. ADF&G staff participated in the Juneau workshop to address agency needs and preferences in Winter 2013.
- In the past few years, NPLCC RFPs served issues in Traditional Ecological Knowledge (TEK) and subsistence fishery concerns with climate change. ADF&G did submit proposals to these announcements, however they were not funded. This LCC is particularly sensitive to TEK and how it can inform the changes we experience now. ADF&G Subsistence Division wrote a proposal with support from NPLCC to the National LCC Network and was funded to provide an online spatial mapper of subsistence information consistent with the current tabature format of this data across the state. This project furthers the utility of data collected by ADF&G through its subsistence interview process that occurs in select bush Alaska villages annually.
- NPLCC is actively working on its long range strategic plan; the science strategy being one component of that plan. The Communication & Outreach Strategy was approved at the May 2013 steering committee meeting. Development of the Partnership Development Group strategy is in progress. The Tribal / First Nation Strategy is also in progress. Collectively, all of these components work to deliver the mission of the NPLCC through its work in climate change and outreach of that information to the agencies and organizations that can apply it to management and extended research.
- NPLCC reviewed proposals submitted to its Spring 2013 RFP, selecting projects that include the following topics: stream temperature database, interactive map to display

climate change effects, database for NPLCC information discovery and access, climate change vulnerability of pacific lamprey, and hydrologic regime shifts.

Western Governor's Wildlife Council

- Nesvacil served as the lead for the technical development of ADF&G's Crucial Habitat Assessment Tool (CHAT) through her participation on the working groups of the Wildlife Council through the end of her employment with this program in March 2013. Subsequently, Miles Spathelf took over this role July 1, 2013. This is a regional project that spans all western states and supports Alaska's interests in communicating wildlife and habitat information to stakeholders for planning of oil, gas and energy infrastructure projects in the interest of conservation and economic development.
- North Slope caribou herd mapping for calving grounds are in the final phase of completion. From this point, additional caribou habitats will be added to the suite of terrestrial game habitat maps: moose, musk ox, wolves, black bear, brown bear and wolverine along with mountain goats and Dall's sheep are on the schedule for 2013 / 2014. Methodologies for analyzing data and creating map products are slightly different for all of these species, pending the data collected for each.
- The (non-game) species & habitat layer was finished in July 2013 with respect to species richness and species of concern (based on the Alaska State Wildlife Action Plan). The Alaska Natural Heritage Program delivered these layers and proposed a plan for developing layers depicting landscape integrity and wetlands across the state.
- The web tool development with technical staff from the Sport Fish Division will begin in Winter 2014. While the Western Governors' version of the CHAT is to be published December 12, 2013 with the layers Alaska has submitted to date, the state version of the CHAT is scheduled for publication in December 2014.

North Slope Science Initiative

- ADF&G delivery of products to the North Slope Science Initiative and GINA is on hold as products for the CHAT are yet in development. Considering the multiple agency coordination involved in collecting species data such as for caribou, ADF&G must develop a data sharing agreement to address the use of all data for a complete representation of each species habitat / specific use area.

Incorporating climate change into the 2015 Revision of the CWCS

- ADF&G staff from the Wildlife Diversity Program met in August 2013 to outline a strategy to review and update the CWCS for climate change impacts. SWG funds are designated to support this process through the hiring of a coordinator to manage the revision process.

Stakeholder interests

- ADF&G was requested to participate in three BLM Rapid Ecoregional Assessments along with the DNR North Slope Area Plan. Both of these initiatives seek similar data products to what ADF&G is producing for the WGA and Alaska CHATs.
- ADF&G is actively participating in the North Slope REA and has just begun its involvement in the Central Yukon REA with peripheral involvement in the Yukon-

Kuskokwim-Lime Hills REA. It is clear that sensitive habitat delineation is a high priority need for agencies and resource developers alike. While Sue Rodman is serving as the coordinator for these projects, Miles Spathelf serves as the technical lead along with various regional staff respective of the specific geography of interest.

- ADF&G met with Conoco Phillips in July 2013 to evaluate how the CHAT products could meet industry needs. While there are limitations in utility, there are also opportunities for ADF&G to provide meaningful planning data and mapping products to support industry intentions for oil and gas development. Future meetings are planned with both Conoco and BP.

Prepared by: Sue Rodman

Date: December 9, 2013