Alaska Department of Fish and Game Wildlife Restoration Grant

GRANT NUMBER: AKW-C-2-2019

PROJECT NUMBER : 24.0

PROJECT TITLE: Fire Management Planning for Wildlife Habitat

PERIOD OF PERFORMANCE: July 1, 2018 to June 30, 2019

REPORT DUE DATE: Sept 28, 2019

PRINCIPAL INVESTIGATOR: Susanne U. Rodman

COOPERATORS: Thomas F. Paragi, Miles O. Spathelf, Mary Jo P. Hill

I. PROGRESS ON PROJECT OBJECTIVES DURING PERIOD OF PERFORMANCE

OBJECTIVE 1: Represent the department in fire planning and coordination venues.

ACCOMPLISHMENTS:

Sue Rodman in Anchorage served as the primary representative on the Alaska Wildland Fire Coordinating Group (AWFCG) and served as liaison to the Wildland Fire Prevention and Education Committee. Rodman attended monthly telephonic meetings and quarterly in-person meetings. She also attended the AWFCG Fall Fire Review and Spring Operations meetings in Fairbanks. Sue provided a review of ADF&G's interests in the season's wildland fires, plans for habitat enhancement projects in the next year, and provides a reminder on compliance with Alaska Fish Passage and Water Withdrawal reporting during fire operations. Further, she participated in the ADNR Division of Forestry Fall Fire Review in Fairbanks, and the corresponding Spring Operations meeting in Fairbanks with accompaniment from the program's Wildlife Biologist Mary Jo Hill. Rodman annually reviews the updates to the Alaska Interagency Wildland Fire Management Plan and Annual Operating Plan.

During the period from January to March 2019, the AWFCG held a series of teleconferences in addition to the March in-person meeting to address the Incident Management Teams in Alaska. The group reviewed the challenges of staffing two full teams at the Type 2 level and fulfilling Type 1 team requests in-state. Maintaining a list of qualified individuals to fill all of the requisite positions with Alaskans is not possible;

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successional planning to provide a 'career' path for staff advancing through the NWCG qualifications to eventually reach leadership positions has been addressed numerous times in-state and nationally. Retention and recruitment into these positions is challenged by opportunities to serve as 'single resources' and be assigned to more incidents during the fire season, thereby gaining more experience across varied positions. Serving on a team requires commitment to deploying only with the team and serving in one assigned position for the season. State and federal agencies in addition to tribal entities serving on the AWFCG share common concerns and differing perspectives on resolving the problems surrounding standing up one or two Type 1 teams in Alaska. Continued effort will likely continue in coming years.

Rodman reviewed the Incident Management Team for the Swan Lake Fire in Sterling with colleague Charlie Sink from Chugachmiut on June 25, 2019. This is a task associated with membership on the AWFCG. These visits are intended to ensure that communications between the Agency Administrators and Incident Management Team are effective and serving the objectives set for the fire's management.

Tom Paragi in Fairbanks served as the alternate representative on AWFCG and as the primary representative on the Fire Research committee, primarily by phone and email. Paragi and Rodman coordinate on Interior fire issues. Paragi presented proposals at the Division of Forestry Fall Fire Review (October 2018) for conversion of three areas near Fairbanks from the Full fire management option to Limited after earlier efforts to define areas for non-standard response proved unsuccessful. Implementing a non-standard response means to allow fires to burn in an area where the fire management option otherwise requires suppression; this is used in part to enhance habitat if the fire is not threatening identified resources or infrastructure.

At both the spring and fall interagency fire meetings, Rodman, Hill and Paragi attended the Alaska Fire Science Consortium workshops in Fairbanks.

Mike Taras, Education Associate in Region III Fairbanks, serves as the agency lead on the Wildland Fire Prevention and Education Committee. Miles Spathelf, GIS Analyst in Anchorage, serves as the agency lead on the Fire GIS committee.

OBJECTIVE 2: Participate in fire management decisions to benefit wildlife.

ACCOMPLISHMENTS:

The Swan Lake Fire on the Kenai Peninsula ignited on June 5, 2019. This fire occurred within the planned prescribed fire unit for the East Fork project that ADF&G was planning with the Kenai NWR in 2020. Because this area in in the Limited fire management option, it was allowed initially to burn. Rodman contacted Refuge staff and State Forestry, as lead suppression agency, to understand their respective objectives and thresholds. Partly because of the pre-work done to plan the East Fork prescribed fire, allowances were made to allow fire to move toward the west: KNWR had constructed a fuel break along that boundary where the Moose River runs north and south. This was

one example of how prescribed fire planning supported a wildland fire in terms of managing a wildfire for multiple objectives, including wildlife habitat objectives.

Paragi assisted area biologists in Regions III and V by creating fire option maps and alerting them as necessary on wildland fire status during the fire season.

Rodman is working with Delta area staff to change the fire management options within the Delta Junction Bison Range. This process takes time to communicate across landowners and we expect to continue this fall and winter.

OBJECTIVE 3: Develop and promote department policies and positions relative to fire management.

ACCOMPLISHMENTS:

Rodman briefed Division staff on various fire management issues throughout the winter including those brought to the agenda of the AWFCG. Rodman communicates regularly with State Forestry administrators about forestry and fire issues in various geographic areas where wildlife habitat is of interest for specific game animals. Further, Rodman maintains rapport with agency staff on the principles of fire management, how prescribed fire fits into Alaska wildland fire operations, and advancing technologies, staff qualifications, and effectiveness of project implementation by unit cost. Challenges and risk associated with prescribed fire are often discussed with respect to its benefits for multiple objectives including wildlife habitat and mitigating risk of wildland fire threatening people and infrastructure.

Rodman reviewed the proposed new forest plan for the Chugach National Forest with respect to wildlife and fire management and provided comments to ADF&G's liaison to federal programs Ashley List for compilation into one letter.

Regarding integration of guidelines for firefighters on water withdrawals and fish passage requirements, Alaska Fire Service decided not to put ADF&G information in the Handy Dandy (reference guide for firefighters). Instead, we agreed to keep them in the Agency Administrator's Guide and in briefing materials given to crews from out of state. Rodman annually reviews these requirements with fire management staff at the Spring Operations meeting in Fairbanks. Rodman also communicates with the Habitat Division to facilitate communications and compliance with these regulations during the fire season.

Rodman and Hill participate in interagency briefings to government officials and legislators on active wildfires, fuel break projects, and wildfire planning efforts to apprise them of the departments position and involvement in Alaska fire management activities.

OBJECTIVE 4: Support and participate in the development and implementation of state and interagency fire management principles, operating plans, and strategies.

ACCOMPLISHMENTS:

Rodman reviewed the annual update to the Alaska Interagency Wildland Fire Management Plan for 2019.

As a member of the Kenai Peninsula All Lands All Hands Interagency Group, Rodman edited and published the final revision of the 5-year action plan. <u>https://www.kpb.us/images/KPB/OEM/AHMP/Annexes/Annex_H_All_Lands_All_Hands_Action_Plan.pdf</u>

In Rodman's work on companion habitat enhancement grants, she writes portions of the prescribed burn plans that also include the guidance from AIWFMP, Cohesive Strategy, and are based on NWCG templates. She coordinates with staff biologists to ensure that burn plan objectives are consistent with wildlife habitat needs for that location.

OBJECTIVE 5: Contribute to the advancement of fire science in Alaska and address information needs regarding fire ecology, fire behavior, and the relationship to fire and wildlife.

ACCOMPLISHMENTS:

Rodman serves on the Advisory Board of the Alaska Fire Science Consortium and attended the annual meeting telephonically. Further, discussions on fire ecology and wildlife response occur at the spring and fall interagency fire reviews and operational meetings during the Consortium's workshops.

In planning for several habitat enhancement projects, Rodman participates in the literature reviews and discussions to ensure that the treatments will result in benefits to wildlife with respect to vegetation, timing, and wildlife benefits intended.

Rodman and Hill contributed to the assessment of prescribed fire application on the Delta Junction Bison Range for the Range Manager Clint Cooper. Rodman and Hill coordinate the operations each spring with State Forestry. Hill serves as a Fire Effects Monitor on these prescribed burns to document fire behavior and weather conditions.

Paragi attended the Fall 2018 and Spring 2019 workshops of the Alaska Fire Science Consortium. He summarized research findings on wildlife habitat topics and participated in the AWFCG Research Committee's creation of a process for nomination of research topics to include point of contact with agency sponsors. He also reviewed the assessment of prescribed fire results for the manager of the Delta Junction Bison Range. Prescribed fire on the Range is implemented by State Forestry through coordination from the WHESAP team (Rodman, Hill, and Spathelf).

OBJECTIVE 6: Foster communication and technology transfer between agencies, private entities and the public on the science and ecology of wildland and prescribed fire, including preparedness and mitigation for communities.

ACCOMPLISHMENTS:

As the liaison to the AWFCG Wildland Fire Education and Prevention Committee, Rodman supported the revision of the Firewise Alaska booklet. Rodman lead the revision of this booklet in 2006 in another capacity; she worked closely with National Park Service's Deb Coble to re-format the booklet in a condensed version for wider distribution. Several ADFG staff members have contributed to a WSFR kiosk in Delta to describe how fire and mechanical treatment enhance habitat for moose, grouse, and bison; this project is still in progress for posting in 2020 on site at the bison range. This poster is reportable on AKW-5 but describes forest succession and the wildlife associated with early seral boreal forests.

OBJECTIVE 7: Develop and support planning and implementation of fire management practices, hazardous fuel management, and prescribed fire.

ACCOMPLISHMENTS:

Rodman and Hill support the planning and implementation of prescribed fires with agency colleagues. ADF&G and Division of Forestry burned portions of the Delta Junction Bison Range again in 2018. Spathelf contributes to these efforts and data collection and analysis by providing georectified maps for use in the field, data collection tools on the iPad, and support in analyzing data for project summaries and conclusions on effectiveness.

The following tasks are linked to accomplishments for AKW-5 and AKW-16 with respect to habitat enhancement statewide and specific to the Kenai Peninsula. Hill coordinated with staff from the Kenai NWR, USFWS Fire Management, and BLM Alaska Fire Service to develop monitoring objectives and protocols for the East Fork and Alphabet Hills prescribed fires. Pre-fire monitoring establishes the baseline of vegetation on sight and current foraging architecture by species to assess moose use of the site. This information helps us determine effectiveness of the project after treatment. Rodman supported the operational planning of East Fork in coordination with the Kenai NWR fire staff. Rodman and Hill participated in the combined class RX-341 Prescribed Fire Plan Preparation and RX-301 Prescribed Fire Implementation. During this week, the entire class worked on the Alphabet Hills burn plan which contributed greatly to considerations for complexity, operational strategies, and other elements of the plan.

Rodman coordinated with the BLM's Glennallen Field Office and Alaska Fire Service staff to continue preparations for the 2020 Alphabet Hills prescribed fire. Hill coordinated reconnaissance flights for ADF&G, the State History and Archeology Office, BLM staff, and State Forestry staff to review the project from a helicopter as we plan for the project's implementation. Pictures and video from these flights also support the writing of the plan. Most of this effort is reported under AKW-5 but attributable here for general support of fire management and planning.

Work continues on developing guidelines and protocols for implementing prescribed fire for habitat enhancement.

Rodman and Hill are members in the Kenai Peninsula Fuel Break Working Group, a subsidiary of the Kenai Peninsula All Hands All Lands group. This group works on hazardous fuel management by supporting the planning and implementation of fuel breaks. Again, fuel breaks in this context serve multiple objectives including the use of fire for enhancing wildlife habitat.

OBJECTIVE 8: Maintain and advance expertise and develop capacity in fire management and fire ecology issues and skills.

ACCOMPLISHMENTS:

Rodman and Hill attended the combined Prescribed fire classes referenced above in March 2019 to improve our capacity in writing burn plans. Both complete the wildland refresher and pack test to maintain their Incident Qualification System, or "Red", cards.

Rodman and Hill use literature reviews and technical articles to support burn plan writing, design of treatments for projects, and advance ecological understanding of specific plant community trajectories. Both also attend the two workshops of the Alaska Fire Science Consortium each spring and fall.

Paragi gave a presentation on woody vegetation response within hazardous fuel breaks with respect to moose forage and berry production during the spring meeting of the Alaska Fire Science Consortium.

OBJECTIVE 9: Identify funding sources and appropriate staff to support interagency fire management projects.

ACCOMPLISHMENTS:

Rodman coordinated with BLM to develop a cooperative agreement that allows BLM staff to work on ADF&G projects and implements a funding instrument for services. This expands the capacity of ADF&G with experience and skills from BLM staff in an effort to plan and implement projects.

OBJECTIVE 10: Prepare an annual budget, work plan, and documents needed to satisfy Federal Aid and other reporting requirements.

ACCOMPLISHMENTS:

Paragi, Rodman, Hill and Spathelf all contributed to drafting the Federal Aid performance report and reviewed program needs for FY20 budget preparation. They also revised the Project Statement for this project for FY20 to combine all staff and related tasks of the Wildlife Habitat Enhancement and Spatial Analysis program.

II. SUMMARY OF WORK COMPLETED ON PROJECT TO DATE.

Many objectives in this grant are on-going over the years and some progress can be made each year on communication with the protection agencies (USFS, State Forestry, and BLM-AFS) with respect to fire management option changes, non-standard responses, and long term policy changes regarding the use of wildfire and prescribed fire. ADF&G coordinates with other agencies to support fire management strategies, fuel breaks, and prescribed fires in areas where allowing a wildfire to burn is meaningful with respect to infrastructure, communities, and wildlife habitat.

III. SIGNIFICANT DEVELOPMENT REPORTS AND/OR AMENDMENTS.

In the FY2019 application, the budget submitted was as follows:

71000 Staff time	\$49.0
72000 Travel	\$10.2
73000 Contractual	\$2.0
74000 Supplies	\$1.0
75000 Equipment	\$0
Total Project Direct Costs	\$62.2

This budget reflected an increase from previous years because ADF&G did not previously account for all staff time or all required travel in this grant until FY18. Further a new biologist was added to the program in March 2018 for support in fire management planning and related project work.

When this budget was submitted, Region III had agreed to cover all 12 months of Tom Paragi's time. In August 2018, Region III requested that this grant cover 0.7 month of time for Paragi for his contributions to these objectives. Staff time consequently increased by \$8.8K from \$49.0 to \$57.8.

The remaining over-expenditure of \$8,488 is a result of a timing mismatch of the state accounting system which does not reflect real time charges posted for payroll. Although detailed records are kept to track hours worked by code by pay period, this mismatch yields a personnel balance that is higher than actual which indicated that we had more hours than were available to charge on work defined under this project statement.

Another discrepancy is the planned purchase of shotguns for field work for \$1,236; this order was not filled in time to charge this expense to FY19.

IV. PUBLICATIONS

Not applicable

V. RECOMMENDATIONS FOR THIS PROJECT

This project is expected to continue annually through the Wildlife Habitat Enhancement and Spatial Analysis Program with support from Tom Paragi in Region III. Committees and processes are ongoing in the interagency fire community. As federal policies are developed nationally, down-scaling at the state level continues to refine local programmatic operations and procedures.

Prepared by: Susanne U. Rodman

Date: September 3, 2019