

Wildlife Restoration MULTI-YEAR GRANT INTERIM 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 Wildlife Restoration Grant

GRANT NUMBER: AKW-5

PROJECT NUMBER:

PROJECT TITLE: Habitat Enhancement for Wildlife

PERIOD OF PERFORMANCE: October 1, 2014 – June 30, 2021 (extended per amendment #2)

PERFORMANCE YEAR: October 1, 2019 – September 30, 2020; year 6 of a 7-year grant

REPORT DUE DATE: Submit to Coordinator December 24, 2020; due to FAC December 29, 2020

PRINCIPAL INVESTIGATOR: Sue Rodman, Program Coordinator and Dan Thompson, Wildlife Biologist

COOPERATORS: Mary Jo Hill, Wildlife Biologist; Miles Spathelf, GIS Analyst; Jeff Wells, Assistant Area Biologist; and Clint Cooper, Manager Delta Junction Bison Range, ADF&G.

Authorities: 2 CFR 200.328
2 CFR 200.301
50 CFR 80.90

I. PROGRESS ON PROJECT OBJECTIVES DURING PERFORMANCE YEAR

OBJECTIVE 1: Develop local or regional plans to moderate environmentally-driven changes in moose populations through habitat enhancement; address both short and long-term options.

Although part of our work under the WHESAP Fire Management grant, we have been contributing to the update of Community Wildfire Protection Plans on the Kenai Peninsula in partnership with the Kenai Peninsula Borough and other agencies. That process was impacted by Covid-19 and they expect to resume in 2021.

ADF&G staff continue edits on the Moose Habitat Guidelines technical bulletin; this project is scheduled for completion in spring 2021. This product will provide guidance on habitat enhancement strategies primarily for internal ADF&G use. It summarizes how to prepare for mechanical and prescribed fire treatments, discusses biological characteristics of moose relative to browse and habitat needs, and provides decision support for developing new projects.

OBJECTIVE 2: Improve habitat quality for moose populations by increasing quality and quantity of forage, especially during winter.

Staff continued preparations for two large prescribed burns planned within this grant: Alphabet Hills and Delta Junction spruce islands. At the Delta Junction Bison Range (DJBR), the roller chopper was used to put in 14.5 miles of control lines that divided the larger spruce units into sub-units for increased flexibility in burn implementation. Roller chopped fuel breaks totaling 3 miles were created around the private parcels to separate the Bison Range from private lands.

Wildlife biologist Kassidy Colson based in the Palmer ADFG office captured drone videos and photographs of roller chopping work done by State Forestry. She traveled to Delta to film the roller chopper in January 2020. This footage will be used for education and outreach materials related to fire management on the DJBR.

The DEC Open Burn Permit applications were prepared for DJBR and Alphabet Hills prescribed fires along with associated smoke management plans by Mary Jo Hill and Sue Rodman with technical support from Miles Spathelf.

All burns were postponed this year due to Covid-19. While concern over disease transmission delayed both phases I and II of the DJBR burns, Alphabet Hills would have been considered had the burn plan and NEPA been ready for implementation. Several challenges held up progress on the Alphabet Hills prescribed burn plan: BLM was unable to complete the NEPA on the Gulkana Wild and Scenic River Corridor because Covid-19 delayed work on the cultural resource review for state lands, compliance with the Migratory Bird Treat Act and the Eagle Act was too late for a 2020 ignition because the eagle nest and eagle take permit application require eagle nest surveys prior to leaf-out, and technical support from fire operations staff to complete the burn plan was delayed due to Covid-19.

WHESAP staff met with Region IV staff to consider how post-wildfire vegetation and browse surveys in GMUs 14 and 16 could support their moose census information. Staff made a tentative plan to conduct surveys in 2021 within the wildfire perimeters of the Moose Creek, Deshka Landing, Sockeye, and McKinley fires.

The WHESAP team met with State Forestry staff Kato Howard and Mike Trimmer to review the Alphabet Hills burn units and identify additional and alternate units within the Project Area for future treatment. This could expand the utility of the work done to date on the Alphabet Hills prescribed fire with respect to planning, habitat studies, moose population and movement studies, and related cultural and natural resource assessments in the area.

While outreach to the public was continued for the DJBR phase II burn of the spruce islands, outreach was expanded substantially for the Alphabet Hills burn. Fairbanks and Delta staff contributed to planning of continued outreach in spring 2021 for the DJBR burns and they began design work on a kiosk for the DJBR with respect to many habitat enhancement projects completed in recent years for bison, moose, and grouse under this and other grants. This effort is led by Jen Curl and Mike Taras from Fairbanks. Sierra Doherty based in Region IV's Palmer office designed flyers, postcards, and contributed to articles for the Alphabet Hills burn. Sue

Rodman, Jeff Stetz, and Sierra Doherty conducted in-field outreach from along the Glenn, Richardson, and Denali highways including Lake Louise. Products include a flyer, poster, postcard, web page, and an article in the July 2020 issue of the Alaska Fish & Wildlife News. Support from Miles Spathelf, Riley Woodford, and Maen Caka were instrumental in developing these products. Additionally, Sue Rodman attended the Lake Louise community council meeting in July 2020 and the Copper Basin Land Managers meeting hosted by the BLM in October 2020, and contents from the AKFWN article were re-published in the Copper Basin Country Journal blog.

OBJECTIVE 3: Develop partnerships with local, state, and federal entities to leverage treatment prescriptions with other land management objectives and actions.

In partnership with the Division of Forestry, a series of fuel breaks were roller chopped on the perimeter of the DJBR over three miles during the winter of 2019-2020. This fire break reduces the risk of fire escaping the DJBR toward the homes bordering the Bison Range. The treatments interrupt the contiguous spruce stands through a combination of re-opening an old dozer line and new roller chopping. Not only does this decrease the probability of fire moving off the range onto private lands, but it also gives fire personnel a safer place to work. The fuel break serves as a contingency line for the moose habitat prescribed fire projects under this grant and alleviates some risk of fire impacting private lands in the event that a wildfire occurs on the DJBR. This also gives fire managers an option to allow wildfire to burn on the DJBR in the case of a natural ignition for the benefit of moose habitat.

An informal habitat reconnaissance survey with Region IV staff along the Susitna River suggests that additional partnering of habitat enhancement with fire management would benefit both moose and the residents in that area. Much of this area is impacted by the spruce beetle and is expected to continue to have problematic wildfires in coming years. By addressing both of these issues across agency plans, greater benefit may result from coordinated efforts to manage this mid to late successional forest.

BLM staff at the Glennallen Field Office and the Alaska Fire Service contributed to the Alphabet Hills prescribed burn planning effort. AFS Fire Analyst Chris Moore updated the prescription for the burn plan; GFO Archeologist John Jangala coordinated BLM's NEPA for the Gulkana Wild and Scenic River Corridor. USFWS biologists contributed to BLM's NEPA with respect to support for the Migratory Bird Treaty Act and Eagle Act compliance guidelines.

Nick Carter, State Forestry's Area Forester in Tok inquired to WHESAP staff about seeking opportunities to enhance moose habitat with timber sale operations through post sale scarification and prescribed burning in the Copper River Basin. Nick also contributed to the Alphabet Hills prescribed burn plan and logistics for operations. He is interested in partnering with ADFG to plan future prescribed burns for habitat enhancement.

II. SUMMARY OF WORK COMPLETED ON PROJECT TO DATE.

Job/Activity 1: Kenai Peninsula – GMU 15

Activities and planning conducted for the Kenai Peninsula is reported under the AKW-16 federal aid project.

Regarding the Sterling fuel break, Chugachmiut's Yukon Fire Crew continued work on land owned by the Kenai Natives Association along the Robinson Loop Road. The USFWS plans to continue work on their perimeter to the north and west.

Analysis began on the moose movement and utilization study in GMU 15B after the 2014 Funny River Fire. ADF&G conducted field work reported under AKW-16 to correct the Forest Service cover type map so that movement can be correctly reconciled with plan communities within the fire scar.

Job/Activity 2: Matanuska – Susitna Drainages – GMU 14 (subunits A and B)

No new work was initiated in GMU 14 aside from tentative plans to evaluate browse and vegetation response after recent wildfires.

Job/Activity 3: Susitna River Area – GMU 16

No new work was initiated in GMU 16 aside from tentative plans to evaluate browse and vegetation response after recent wildfires.

Job/Activity 4: Nelchina & Upper Susitna – GMU 13

Planning continued for the Alphabet Hills prescribed fire; impacts from Covid-19 delayed much of the planned work for 2020. Two calves were found dead shortly after birth in the unit; ADFG Veterinarian secured the carcasses for further study.

Job/Activity 5: Delta Area - GMU 20D

No prescribed fires were conducted in 2020 on the Delta Junction Bison Range due to Covid-19. Risk of disease transmission was addressed in State Forestry and Interagency fire operations planning for fire management in 2020; the operational plans for these burns created unjustified risk for transmission across personnel. Roller chopping in 2019-2020 however was successful in installing control lines within the spruce islands to support ignition operations.

The roller chopper was delivered to support fire operations at the Shovel Creek wildfire near Fairbanks in July 2020. The work to improve the Murphy Dome fuel break allowed fire managers to consider using fire to support habitat enhancement; the physical chopping of the site

in summer also stimulated herbs and shrubs to regenerate and thereby directly benefitted habitat on the fuel break.

Job/Activity 5: Tok Area – GMU 12

In early June 2020, Jeff Wells, Tok assistant area biologist, coordinated moose pellet transects in the treated areas with technicians from Fairbanks. WHESAP staff conveyed this duty to the technicians due to Covid-19 circumstances. This was the third sampling effort in these plots; the final sample will be taken in 2021. These data will be used to reconcile moose use of the roller chopped sites.

Job/Activity 6: Acquire Roller Chopper

The ADFG Roller Chopper continues to operate in the Delta Junction Bison Range. Some mechanical features require redesign. The weight of the unit filled with glycol in combination with the terrain and nature of the work have taken a toll on the hitch assembly. ADFG and the manufacturer have agreed on terms to redesign and repair the unit.

III. SIGNIFICANT DEVELOPMENT REPORTS AND/OR AMENDMENTS.

None.

IV. PUBLICATIONS

Attached are selected publications that expand on work completed in this reporting period:

Alphabet Hills outreach material published and distributed for notification of the prescribed burn.

- ADFG Habitat Enhancement Web Page updated at <http://www.adfg.alaska.gov/index.cfm?adfg=habitatrestoration.wildlifehabitatenhancement&tab=overview>
- Copper River Country Journal 2020 – June 2020 publication <https://www.countryjournal2020.com/2020/06/53000-acres-of-moose-forage-olanned-in.html> (attached)
- Alaska Fish & Wildlife News July 2020 http://www.adfg.alaska.gov/index.cfm?adfg=wildlifeneews.view_article&articles_id=963 (attached)

- September 2019 Project update (attached)
- May 2020 Project flyer (attached)

V. RECOMMENDATIONS FOR THIS PROJECT

ADF&G continues to pursue the large prescribed burns to enhance moose habitat in Delta and the Alphabet Hills. Substantial interagency support has contributed to the planning of these projects. The nature of implementing prescribed fire challenges hard timelines and set schedules; all of the agencies and stakeholders involved attend to waiting for the alignment of conditions once all of the planning is attended to.

Prepared by: Sue Rodman, Mary Jo Hill, and Miles Spathelf

Date: December 24, 2020