## Project Summary Rocky Mountains Cooperative Ecosystem Studies Unit

Project Title: BLM-AK Forty-mile Caribou Habitat Relationship

Type of Project: Research Project Discipline: Natural Funding Agency: Bureau of Land Management Other Partners/Cooperators: University of Montana Student Involvement: Yes, 1-2 graduate students Effective Dates: 9/1/2016 - 9/30/2021 Funding Amount: \$108,000

## Investigators and Agency Representative:

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**Project Abstract:** Understanding how the Forty-mile herd is using the landscape and where it may use it in the future (across all seasons) is of direct management interest. More specifically:

- 1. Using available GPS and conventional VHF telemetry data, describe how caribou utilize available habitats.
- 2. Identify the habitats and habitat features using Resource Selection Functions (RSFs), across the historical herd range, which are most important to maintain widespread and productive caribou populations.
- 3. Project the availability and relative importance of these habitats in the future (including under different climate and fire scenarios) and at varying population levels.
- 4. Characterize caribou diet and forage qualities of seasonal diets.
- 5. Dependent on availability of additional funding from partners, gain insight into limiting factors and sustainable population levels by examining the nutritional ecology of the herd and relationships between variations in indices of nutritional condition (calf weights and parturition rates) and variations in weather/climate, caribou density, and distribution.

Keywords: Caribou, habitat, Alaska, BLM, University of Montana