Rocky Mountains Cooperative Ecosystem Studies Unit Project Summary

Project Title: Assessing Range-Wide Connectivity of Sage=Grouse priority Areas of Conservation

Task Agreement #: G19AC00422

Discipline:NaturalType of Project:ResearchFunding Agency:USGS

Other Partners/Cooperators: University of Waterloo

Students Involvement:

Effective Dates: 9/23/2019 – 9/22/2020

Funding Amount: \$ 66,694

Investigators and Agency Representative:

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Project Abstract: The goal of this research is to address two highly relevant management issues using a range-wide genetic data and newly developed connectivity models.

The objectives for this component of the research are:

- _ Integration of genetic and demographic data to assess the relative importance of connectivity and habitat in sage-grouse populations.
- _ Generate maps of genetic connectivity among all active leks and associated GIS surfaces.
- _ Compile data set summarizing estimates of genetic and habitat connectivity at multiple scales around all active leks.
- _ Develop models comparing the importance of each of these patterns connectivity in driving variation in lek size.