

Project Summary

Rocky Mountains Cooperative Ecosystem Studies Unit

Project Title: Assessing the Effectiveness of Core Areas for Greater Sage-Grouse Conservation: Implications of Future Climates and Oil and Gas Development

Discipline: Natural
Type of Project: Research
Funding Agency: USGS
Other Partners/Cooperators: Colorado State University
Effective Dates: 9/30/2014 - 9/30/2019
Funding Amount: \$95,931

Investigators and Agency Representative:

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Project Abstract: The objectives of this research are to explicitly model 1) habitat loss and fragmentation resulting from future oil and gas and associated road infrastructure development and 2) changes in habitat suitability resulting from climate change scenarios, and 3) possibly include the effects of increasing fire resulting in habitat loss, pending data availability. Using this information to 4) assess the resulting population outcomes within the spatially explicit population model and 5) evaluate the adequacy of habitat protections (i.e., core areas) under individual and combinatory development and climate scenarios.

Outcomes with completions dates: September 30, 2019

Keywords: sage grouse, model, fragmentation, habitat loss, oil and gas, climate change, USGS, Colorado State University