Project Summary Rocky Mountains Cooperative Ecosystem Studies Unit

Project Title: Terrestrial Ecosystem Characterization in the Northern Rockies:

Vegetation, Phenology, Soil Sampling and Data Analysis for the

Wyoming Landscape

Discipline: Natural
Type of Project: Research
Funding Agency: USGS

Other Partners/Cooperators: Colorado State University

Effective Dates: 9/1/2013 - 8/31/2018

Funding Amount: \$87,000

Investigators and Agency Representative:

USGS Contact: Geneva Chong, Northern Rocky Mountain Science Center and North Central Climate Science Center, 2327 University Way Suite #2, Bozeman, MT 59751

Investigator: Gregory Newman, Natural Resource Ecology Laboratory, Colorado State University, Fort Collins, CO 80523; 970-491-0410; Gergory.Newman@colostate.edu

Project Abstract: Evaluation of vegetation and soil ecosystem functions provides direct indication of habitat quality; impacts form energy development, and changes from management actions or weather and climate. The study area provides critical wildlife habitat and experiences intensive energy development and other human use and impact. Results of work from this research will be applicable across the Rocky Mountain region, which is experiencing increased human-use and impacts, including energy development, and climate change. Effective realization of the research programs potential requires an interdisciplinary approach and leveraging of previous experiences.

The primary objective is to support ongoing and future work by collecting new data and managing analyzing expansive, existing data sets that include vegetation species composition and structure, temporal and spatial phenology responses, and characterization of soils and animal use. Essential to meeting this core objective is effective data management. Data management systems that meet and exceed agency standards are critical to keep research relevant and translate data into useful and used information.

Outcomes with completions dates: July 17, 2015

Keywords: Wyoming, terrestrial ecosystem, character, data analysis and data management, USGS, Colorado State University