Project Summary Rocky Mountains Cooperative Ecosystem Studies Unit

Project Title: Applying Soil Survey Data from Glacier National Park to Climate Modeling

Type of Project: Technical Assistance Project Discipline: Natural Funding Agency: NRCS Other Partners/Cooperators: University of Montana Effective Dates: 7/11/2014 - 9/30/2014 Funding Amount: \$38,394

Investigators and Agency Representative: Agency Contact: Charles Gordon, Federal Building, Room 443, 10 E Babcock Street, Bozeman, MT 59715; 406-587-6818; charles.gordon@mt.usda.gov

Investigator: Kelsey Jencso, Watershed Hydrologist, University of Montana, Missoula, MT 59812; 406-243-6793; kelsey.jencso@umontana.edu

Project Abstract: The Natural Resources Conservation Service (NRCS) has the responsibility of conducting and overseeing soil surveys of the U.S. Soils data is an important component of available ground observations that could potentially contribute to downscaling and validating climate and water balance hydrologic models developed by the work group of Dr. Kelsey Jencso and the Montana Climate Office. The NRCS is currently engaged in a soil survey of Glacier National Park, Montana. Observations of the soils will contribute to assessing the water holding capacity and other hydrologic properties of soils in the park. Information derived from the soil observations will contribute to soil water balance models as they relate to climate and the distribution of vegetation. Information from the climate models may provide added-value in understanding the broader trends of climatic impacts on soil and vegetation relationships in the water and energy-limiting systems within mountainous areas of western Montana.

Outcomes with completion dates: September 30, 2014

Keywords: soil survey, Glacier National, NRCS, University of Montana