Project Summary Rocky Mountains Cooperative Ecosystem Studies Unit

Project Title: Dust Flux Measurement in Western US

Type of Project: Research
Project Discipline: Natural
Funding Agency: USGS
Other Partners/Cooperators: University of Colorado at Boulder
Effective Dates: 9/1/2012 - 8/31/2013
Funding Amount: \$24,000

Investigators and Agency Representative:

Investigator: Jason Neff, University of Colorado, 3100 Marine Street, Room 479, 572 UCB, Boulder, CO 80309-0572, Phone: 303-492-6187 Fax: 303-492-2606; Jason.C.Neff@colorado.edu

Agency: Richard L. Reynolds, US Geological Survey, MS 980, Box 25046, DFC, Denver, CO 80225; Phone:303-236-1303; Fax: 303-236-5349; rreynolds@usgs.gov

Project Abstract:

The project objectives are:

- Measure fluxes of atmospheric dust at several locations and determine the compositions of the dust to evaluate the effects of dust on people and ecosystems exposed to dust disposition.
- Examine interactions among geologic, hydrologic, biologic, land use, and atmospheric processes in drylands to i)understand contemporary physical and ecological landscapes; ii)determine how physical and ecological processes interact to influence ecosystem dynamics; and iii) document how sediment (soil) erosion and deposition by wind and water over time are affected by climatic variability and by geologic, physiographic, and land-use setting.

Outcomes with completion dates: The final report shall be submitted within 90 days of the end of the project period.

Keywords: monitoring, dust, chemistry, western US, USGS, University of Colorado at Boulder