Project Summary Rocky Mountains Cooperative Ecosystem Studies Unit

Project Title: Restoration Implementation Plan for Drakesbad Meadow, Lassen Volcanic National Park, California

Discipline: Natural Type of Project: Technical Assistance Funding Agency: National Park Service Other Partners/Cooperators: Colorado State University Effective Dates: 8/1/2010-4/1/2012 Funding Amount: \$24,811

Investigators and Agency Representative:

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Project Abstract: Drakesbad Meadow in Lassen Volcanic National Park, California was modified by the original Caucasian settler who installed ditches to drain the meadow, and by the National Park Service to create a walk way across the meadow and a road to a water supply holding facility (Patterson and Cooper 2007). The National Park Service has completed a Draft Environmental Impact Statement that proposes the restoration of Drakesbad Meadow and its hydrologic regime and vegetation. We have previously analyzed Drakesbad Meadow and implemented a pilot ditch and road restoration plan. The goal of the proposed project is to quantify the restoration needs for the entire meadow and provide the National Park Service with a detailed restoration plan with locations, quantities of material to be removed or placed, methods for moving and/or placement of material, and other recommendations for restoration and a post-restoration monitoring plan.

Outcomes with Completion Dates: September 2011

A final report will include the following components:

- ditch locations, topographic surveys of ditches (including electronic files for survey data), volumes of fill needed for restoration, and methods to be used for filling

- topographic survey and volume of fill calculations for removal of the

causeway across the meadow (including electronic files for survey data) $% \left(\left({{{\left({{{\left({{{\left({{{\left({{{c}}} \right)}} \right.} \right.} \right)}}}} \right)} \right)$

- revegetation specifications for meadow restoration

- evaluation of available fill sources for appropriateness of use in ditch restoration

- recommended treatments for the Water Tank Road to improve hydrology
- a step by step implementation plan for all recommended restoration measures

Keywords: restoration plan, Drakesbad Meadow, Lassen Volcanic National Park, California, Colorado State University