

## **Project Summary**

### **Rocky Mountains Cooperative Ecosystem Studies Unit**

**Project Title:** Climate Change and Ecohydrology in Temperate Dryland Ecosystems: A Global Assessment

**Discipline:** Natural  
**Type of Project:** Research  
**Funding Agency:** USGS  
**Other Partners/Cooperators:** University of Wyoming  
**Effective Dates:** 6/1/2012 - 5/31/2013  
**Funding Amount:** \$25,300

**Investigators and Agency Representative:**

USGS Contact:

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**Project Abstract:** The University of Wyoming with the USGS will conduct research to address climate change and ecohydrology in temperate dryland ecosystems worldwide. Specifically, objectives include integrating a soil water model with daily weather data to characterize potential future hydrologic changes in water-limited ecosystems. Evaluation of commonalities, uncertainties, and vulnerabilities of the different dryland ecosystems and estimates of current and potential future ecosystem water balance and water availability will be produced.

The goal of this research is to characterize potential future hydrologic changes in specific dry grassland ecosystems by applying a well-tested soil water model, SOILWAT, to extensive data sets from South America, Asia, and the US.

**Outcomes with completions dates:** May 31, 2013

**Keywords:** climate change, ecohydrology, temperate dryland, from South America, Asia, and the US., USGS, University of Wyoming