

Project Summary

Rocky Mountains Cooperative Ecosystem Studies Unit

Project Title: The Yellowstone Science Agenda Workshop - May 2009

Discipline: Natural
Type of Project: Technical assistance/Education
Funding Agency: National Park Service
Other Partners/Cooperators: Montana State University
Effective Dates: July 1, 2008- June 30, 2010
Funding Amount: \$35,000

Investigators and Agency Representative:

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Project Abstract: In recent years, ecological stressors in the Greater Yellowstone Area (GYA) have shifted from local (e.g., site-specific visitor impacts; poaching; vandalism) to regional (changing patterns of land use) and global (climate change). These larger-scale stressors are expected to impact both ecosystem dynamics and services in ways that are hard to predict based on our current understanding. Most science at Yellowstone National Park (YNP) has been driven by local issues (e.g., bison ecology, wolf restoration, grizzly bear recovery, native fish preservation) and focused within park boundaries. However, basic science about the magnitude and direction of large-scale stressors and their impacts on the GYE (including native species preservation, native species restoration, and ecological integrity) is still sorely needed to support this monitoring effort, as well as inform YNP planning and management decisions. The objective of this project is to create a science agenda that will guide strategic science priorities and support monitoring and park planning and management over the next two decades. To this end, the steering committee and the Big Sky Institute will bring together approximately 40 state, federal, and academic scientists at a workshop in 2009 to 1) catalog ongoing research projects in the GYA related to climate change, land use change, invasive species, and biodiversity; 2) identify gaps in ongoing science and suggest the types of research projects needed to fill those gaps; 3) assist in formulating a prioritized list of research needs; and 4) suggest avenues for funding and implementing the highest-priority needs.

The workshop will be held in Bozeman, Montana in winter/spring 2009. This RM-CESU technical assistance grant will be managed by the Big Sky Institute, Montana State University to pay for travel, meal and lodging charges for non-federal government participants and incidental costs. The workshop agenda and list of invitees would be developed by a steering committee which would include Tom Olliff and Dr. Glenn Plumb (YELL); Dr. Andrew Hansen, Dr. Cathy Whitlock, and Dr. John Varley (Montana State University); Dr. Jeff Kershner (USGS Northern Rocky Mountain Science Center); Dr. Dan Tinker (University of Wyoming); Dr. Kathy Tonnessen (RM-CESU); Dr. Dan Tyers (Gallatin NF), and Cathie Jean (GRYN I&M Network). The list of invitees would include 15-20 state, federal, and academic specialists in the fields of climate change, land use change, native biodiversity, and ecological integrity.

Outcomes with Completion Dates: By December 31, 2008 a summary Final Report will be produced through the Big Sky Institute

Keywords: Montana State University, Yellowstone NP, science agenda, workshop, ecological stressors