

Project Summary

Rocky Mountains Cooperative Ecosystem Studies Unit

Project Title: Natural Resource Inventory and Monitoring: technical and operational support to the Greater Yellowstone Network parks.

Discipline: Natural
Type of Project: Technical assistance
Funding Agency: National Park Service
Other Partners/Cooperators: Montana State University
Effective Dates: June 1, 2009 - June 30, 2013
Funding Amount: \$158,972

Investigators and Agency Representative:

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Project Abstract: The Big Sky Institute at Montana State University will work with the Greater Yellowstone I&M network to accomplish the following network support for inventory and monitoring:

1. Prepare and publish monitoring protocols (all or in part) by completing literature reviews, proof-reading and editing manuscripts, publishing protocols following the NPS Natural Resource Report series.
2. Prepare sample designs and associated metadata using Geographic Information Systems.
3. Prepare data analysis procedures and report templates
4. Host workshops and meetings with NPS and university collaborators.
5. Test methods and written protocols through the implementation of pilot projects which include field data collection, data management, analysis and reporting.
6. Update and maintain NPS service-wide databases (NPSPECIES, NatureBib, and NPSTORET) with natural resource related information.
7. Provide logistical support to field projects such as communications (satellite phone) and transportation.
8. Complete an inventory and compile a map of riparian willow distribution and height status in Yellowstone's Northern Range
9. Facilitate the development of communication products through independent sources.
10. Communicate resource status and trends through Greater Yellowstone Science Learning Center communication products, posters, presentation and other suitable communication reports and papers

Outcomes with Completion Dates: All final reports, MS theses and other products will be completed by June 30, 2012

1. A power analysis of water quality data including a tutorial and script in R language. Final report due: **July 30, 2009**
2. Willow mapping of Yellowstone's Northern Range. Final report due: Annual completion report due January 30, 2010.
3. Statistical analysis and report of multi-season amphibian occupancy data. Analysis and draft manuscript due by December 30, 2009.

Keywords: Montana State University, Greater Yellowstone I&M network, inventory and monitoring program, natural resources