

## **Project Summary**

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

**Project Title:** Soil Resources Inventory Project

**Discipline:** Natural  
**Type of Project:** Technical Assistance  
**Funding Agency:** National Park Service  
**Other Partners/Cooperators:** Colorado State University  
**Effective Dates:** August 1, 2009 - December 31, 2013  
**Funding Amount:** \$1,504,892 [FY13:\$189,952; FY12: \$286,858; FY11: \$374,999; FY10: \$393,120; FY09: \$259,963]

**Investigators and Agency Representative:**

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**Project Abstract:** The purpose of this project is to create the resource data management and information framework or infrastructure and the analytical tools that will enable the NPS to fulfill its mission of ensuring that park resources remain unimpaired for the enjoyment of both present and future generations. This research is intended to enable the NPS to analyze and manage soil resources in parks. Information and data will be collected, stored, archived, analyzed, and disseminated to foster temporal and spatial analysis at all levels of the NPS. Questions that could be answered will vary depending on the level of analysis. For example, a park may utilize the Soil Resources Inventory database (SRI) to determine priorities for restoring disturbed lands. Program Offices may use the data on soils to assist in the development of Desired Future Conditions (DFC), or within the concepts of Resource Stewardship Strategies. Soil interpretations may also be used to determine potential damage to soil resources from visitor impacts and planned park development activities. To answer these types of questions (and their many variants) the data and information must be current, accurate, accessible, and properly formatted for the use within the various analytical and geospatial tools. This project will help ensure that the data are able to address these issues.

**Objectives:**

The major objectives of this project are as follows:

1. To design, develop, implement, and manage effective and efficient data management strategies to accommodate the current and emerging needs of the NPS Soil Resources Inventory;
2. To design, develop, and implement decision-support systems to facilitate the use of the Soil Resources Inventory products to respond to emerging soil resource management issues within the NPS;
3. To produce national, regional, network, and park assessments of the status of the Soil Resources Inventory in the NPS;
4. To provide GIS and remote sensing technical assistance on the use of the Soil Resources Inventory products and to coordinate with the NPS Soils Program Coordinator to evaluate the use of new technology in the utilization and visualization of soils information on NPS lands.

**Outcomes:** List of Products: Soil Resources Inventory Database, Soil Resources Inventory Decision Support Tools, Soil Resources Inventory Status Maps, Soil Interpretive Products, Soil Visualization Products, Soil Resources Inventory website enhancements.

**Keywords:** Soil Resources Inventory Database, NPS-Geologic Resources Division, Colorado State University