Project Completion Report
Rocky Mountains Cooperative Ecosystem Studies Unit (RM-CESU)

Project Title: Soil Analysis of the Northern Portion of the NPS Weippe Prairie Site

Project Code (such as UMT-72 and/or the "P" number): UID-32

Type of Project (Research, Technical Assistance or Education): Technical Assistance

Funding Agency: National Park Service

Partner University: University of Idaho

NPS Agreement Technical Representative (with complete contact information):
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Start Date of Project: August 1, 2010

End Date of Project: November 30,2013

Funding Amount: $15,096

Project Summary, including descriptions of products, work accomplished and/or major results. If the information is restricted (e.g. location of endangered species or cultural resources), indicate the title and location of the final report. Also add web sites where project-related information may be found.

This project was a follow-up to the 2007-2009 efforts aimed at providing baseline information about soils of the northern portion of the Nez Perce National Historical Park (NEPE) Weippe Prairie site. In Fall 2010, three study sites were selected across the northern portion of the property sampling the three remaining distinct landform and possible soil types at the park site. The soils for each of the study sites were described and sampled for a suite of chemical, physical, mineralogical analyses. In addition, equipment was installed at all three sites to monitor seasonal changes in soil moisture content at 15- and 40-cm depths, soil temperature at 15 cm, and water overall table levels.

Results indicate that soils of the Weippe Prairie are primarily of alluvial and lacustrine origin. Because they occupy a broad, relatively low-lying plain, they are often waterlogged during the winter and spring months. This is due, in part, to the presence of dense, slowly permeable subsoil horizons that impede drainage and help create perched water tables. Laboratory analyses revealed that these soils tend to have textures dominated by silt and clay, and are very strongly acid. Kaolin is the predominant mineral found in the clay fractions of these soils, which

have also been influenced by more recent additions of volcanic ash and loess.

The final report is titled: Analysis of Soils and Hydrological Monitoring of the National Park Service Weippe Prairie Site, Northern Portion. The final report is located at the Resource Management Program, Nez Perce National Historical Park. The park is working on getting it into the NPS Natural Resource Technical Report Series and once completed it can be accessed through IRMA.

Number of students participating in this project: undergraduates, graduate students, degrees conferred. 1 undergraduate participated in the fieldwork and soil descriptions. No Degree was conferred based on the work conducted here.

Lessons Learned from this project: None

Other RM-CESU agencies or research partners who participated in this project: None.