Project Summary Rocky Mountains Cooperative Ecosystem Studies Unit

Project Title: Rocky Mountain National Park Subalpine Forest Fire History Study

Type of Project: Research

Funding Agency: National Park Service, Rocky Mountain National Park

Effective Dates: August 15, 2002 - December 30, 2003

Funding Amount: \$4000.00

Investigators and Agency Representative:

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Project Abstract:

Despite the importance of fire in the southern Rocky Mountains, knowledge of fire history and the ecological effects of past fires within Rocky Mountain National Park is extremely limited. Site-specific information is required to adequately and effectively restore fire to the Park and to manage fire as an ecological process. Research is needed to provide fire management personnel with information regarding:

- 1. Fire regimes within the major forest types in the Park prior to Euro-American settlement
- 2. Impacts of past fires on forest development, structure, and composition
- 3. Changes in fire frequency, extent, and intensity following Euro-American settlement and subsequent fire suppression policies

This information is critical in developing a new fire management plan as well as developing burn plan objectives and desired future stand conditions within the Park. Incorporation of fire regime information (past and present) into a GIS layer would allow exploration of the linkages between fire regimes and various environmental factors such as vegetation, slope, and aspect. This would be an invaluable resource for fire management personnel in determining areas best suited for natural and prescribed fire use.

The objective of this proposed effort is to date and map past fires in the subalpine zone on the eastern slope in Rocky Mountain National Park. The study area extends from near Estes Park to the northern border of Rocky Mountain National Park. Fieldwork for this project has already been initiated. However, completion of this important study is dependent on securing adequate funding. Specifically, the funding provided by this task agreement would enable researchers from the University of Wyoming to process approximately 1100 increment cores collected during the 2002 field season and to interpret those cores in cooperation with the NPS staff.

Outcomes with completion dates:

- 1. A final report on the findings of the research including maps, data, and a discussion of the potential management significance of the findings (by Dec. 30, 2003).
- 2. An oral presentation to Park personnel on the findings of the study

Keywords: Rocky Mountain National Park, fire, fire history, subalpine forest

For Administrative use only:

Date Annual Report Received:

Date Final Report Received:

Publications, etc. on file: