Project Summary Rocky Mountains Cooperative Ecosystem Studies Unit

Project Title: Development of Wildlife Indicators for VERP at Mount Rainier National

Park

Type of Project: Research

Discipline: Interdisciplinary
Funding Agency: National Park Service
Other Partners/Cooperators: University of Montana

Effective Dates: 8/15/2006 - 4/30/2008

Funding Amount: \$23,383

Investigators and Agency Representative:

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Project Abstract:

Mount Rainier National Park is working toward management of visitor use through the Visitor Experience and Resource Protection planning framework (VERP; NPS 1997) by critically assessing the effectiveness and applicability of potential indicators and methods for data collection and analysis. In the VERP process, indicators and standards are used to address visitor carrying capacity issues. *Indicators* are measurable features of the park environment (e.g., bare ground) that reflect the quality of biological or experiential resources. *Standards* are the minimum acceptable condition for each indicator in a particular zone.

Development of wildlife indicators will follow four stages: 1) literature review, 2) development of a study plan, 3) field implementation of the study plan, and 4) analysis of field data and written summary. This project will fund the first two stages and we will work toward obtaining funding for stages three and four. The first stage is the review of potential wildlife indicators and standards that could be used to monitor and assess the influence of recreation on wildlife within Mount Rainier National Park. The review process will include a literature search, summary of search findings, and a proposed list of potential indicators. The review of both published and "gray" literature to produce a list of wildlife indicators that are currently in use, have been used, or have been proposed as indicators. Results of this search should provide a summary of where they have been used, standards proposed, and success of use. The cooperators will discuss the format of this summary report during or before the October 15, 2006.

The second stage of the project will consist of a study plan for one of the potential indicators identified during stage one. The study plan will either be a research plan or a monitoring plan. By December 15, the cooperators will come to an agreement as to one of two course for the next stage of work: 1) if there is enough information to nominate one wildlife indicator and standards and methods, a monitoring plan will be developed to field test this indicator in the summer of 2007 or 2) if the literature review has indicated that field research is need to refine one standard and indicator, then a research plan will be developed. Development of either plan will include field methodology, data analysis, and a budget. During the second stage, both parties will pursue funding for the implementation of the plan and report funding during stage four.

Outcomes with Completion Dates: A report on stage 1 and 2 and a study plan are due in draft by May 15, 2007. Final is due by December 30, 2007.

Keywords: Visitor Experience and Resource Protection, wildlife indicator, recreation, Mount Rainier

National Park, University of Montana

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Date Annual Report Received: Date Final Report Received: Publications, etc. on file: