Project Summary Rocky Mountains Cooperative Ecosystem Studies Unit

Project Title: Assessment and Determination of Transportation-Related Aspects of

Carrying Capacity for Yosemite Valley, Yosemite National Park

Type of Project: Research

Funding Agency: National Park Service

Other Partners/Cooperators: Colorado State University, University of Vermont

Effective Dates: 9/15/2004 - 11/30/2005

Funding Amount: \$26,775

Investigators and Agency Representative:

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Project Abstract:

The purpose of this study is to: assess important transportation-related aspects of the visitor experience and resource protection in Yosemite Valley; determine which transportation-related variables could potentially serve as "indicators" in a carrying capacity program (do they capture or define the quality of visitor experience and resource protection); develop an empirical basis for formulating standards of quality for these indicators; and, model and evaluate alternative (transportation) operations and management actions to achieve these standards as part of a carrying capacity/visitor use management program. The purpose also includes providing recommendations for use in the development of both short and long-term solutions to the transportation of park visitors and employees in Yosemite Valley, and address transportation-related actions needed to maintain standards that relate to other aspects of a carrying capacity program, including actions to protect natural and cultural resources and the visitor experience. This scope of services is to outline the following tasks:

- •Conduct an evaluation of transportation systems in Yosemite Valley, and develop data to support formulation of transportation-related indicators and standards.
- •Apply the transportation-related concept of Levels of Service for the Merced River Corridor and service areas within Yosemite Valley.
- •Review and analyze existing data related to transportation needs in Yosemite Valley.
- $\bullet \text{Develop}$ a computer simulation model of transportation flow in relation to visitor use in Yosemite Valley.

Outcomes with Completion Dates:

List of Products for Phase 1:

Draft Work - December 15, 2004

Draft Study Plan/Proposal - February 1, 2005

Preliminary Literature/ Existing Data Review - March 1, 2005

Final Study Plan/Proposal - March 1, 2005

Draft Survey Instrument - March 1, 2005

OMB Approval of Survey Instrument - April 1, 2005

Final compilation of existing data - April 15, 2005

Keywords: carrying capacity, transportation plan, Yosemite Valley, computer simulation model, Yosemite National Park, Colorado State University

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