



## ***BARRIERS TO THE ADOPTION OF INNOVATIONS BY PUBLIC LAND MANAGERS***

**PROJECT OVERVIEW - FEBRUARY 2003**

### **GOAL**

To develop a framework that will help researchers, upper-level managers, and research application specialists prioritize research application and technology exchange activities for innovations (i.e., knowledge or technology that is either new or perceived as new).

### **OBJECTIVES**

For each partner management agency (BLM, USFS, NPS), for each of three resource functional areas (fire, recreation, invasive plants), and for decision makers vs. staff resource specialists:

- 1) Characterize individuals and organizational influences of target audiences (e.g., age, education level, work experience, comfort with risk-taking, what contributes to self-renewal, desire for innovations, social characteristics, access to research community and resources, communication networks, and resources to carry out innovations). These characteristics are likely to affect technology exchange method effectiveness and the rate of adoption of innovations.
- 2) Identify current technology exchange media and communication channels that are perceived as either more or less effective for learning about innovations.
- 3) Identify barriers and potential solutions for adopting innovations at each stage of adoption (e.g. awareness, understanding, ownership, application).
- 4) Compare characteristics of audiences (Obj. #1) to effective technology exchange media and communication channels (Obj. #2), and to barriers and potential solutions (Obj. #3).
- 5) Provide a framework that ties these characteristics together to help researchers and managers prioritize technology exchange methods for specific products and specific audiences.

### **APPROACH**

This study will consist of two phases. The first phase will consist of a qualitative exploration of the perceived barriers to science-based management by decision makers and resource staff specialists within each management agency. This phase will provide the opportunity to investigate various barriers in depth, as well as various frameworks within which the barriers can be placed.

During the second phase, a quantitative survey will be used to determine how widespread the barriers are among a national population of federal land managers. We will use this survey to test hypotheses about how the characteristics of managers, such as their responsibility level, discipline, and background relate to the barriers they perceive, and about how these barriers fit within the "diffusion of innovation" stages of adoption. We will also use the survey to compare barriers among the management agencies and among disciplines.

Combining the depth of understanding that we gain during the qualitative phase with generalizations based on the quantitative phase, we will synthesize the results into a general framework that both managers and researchers can use to prioritize technology exchange and research application activities.

## **STATUS**

We are currently seeking and strengthening partnerships within the resource functional areas of each agency, and soliciting funding for this project. Strengthening partnerships early will ensure that we design the study to reflect the culture and administrative structure of each agency, identify the most appropriate study sites, and design the project so results are applicable to each agency. We look forward to implementing the first phase of this project as soon these steps are completed.

## **FOR ADDITIONAL INFORMATION OR THE FULL PROJECT PROPOSAL CONTACT:**

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