Research Protocols in National Park Service Wilderness

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Abstract—While the National Park Service encourages the use of its wilderness resource for research, management policies require that all research apply “minimum requirement” protocols to determine: 1) if the research is needed to support the purposes of wilderness and, 2) if it is appropriate, determine the minimum tool needed to accomplish the work.

The National Park Service (NPS) currently administers 43,079,219 acres of designated wilderness within 44 national park areas and has an additional 16,000,000+ acres identified as recommended or potential wilderness in 31 additional park units. The number and types of requests by NPS scientists and academic institutions wanting to conduct research within park wilderness makes it necessary for managers to evaluate the merits of individual research projects against their responsibilities to preserve the letter and spirit of wilderness as defined by the 1964 Wilderness Act.

In 1997 the National Park Service adopted a three-tiered Directive System regulating the issuance of Service guidelines.

Level 1 instructions consists of policies included within the NPS Management Policies handbook. Level 2 guidelines are issued as “Director’s Orders.” Director’s Order’s articulate new or revised policy on an interim basis between the publication date of NPS Management Policies and are intended to provide specific instructions and outline requirements applicable to NPS functions, programs, and activities. Director’s Order’s also provide a means by which the Director can delegate specific authorities and responsibilities. The main target audience for Director’s Orders is park superintendents and managers. Level 3 materials include handbooks, reference manuals and other documents containing comprehensive information in support of field activities and planning operations.

The need for more specific guidelines directing the administration of NPS research activities in wilderness was identified by field staff as one of several critical issues which needed to be addressed in the agencies revised Management Policies handbook.
The project will not significantly interfere with other wilderness purposes (recreational, scenic, educational, conservation or historical) over a broad area or for a long period of time.

- The project information is determined to be necessary to the understanding, health, or management of the wilderness area.
- Implementation of the project will apply the minimum requirement concept.

The revised policies further provide for the installation of research and monitoring devices (video cameras, data loggers, meteorological stations) within wilderness if: 1) the desired information is essential for the administration and preservation of wilderness and cannot be obtained from a location outside of wilderness without significant loss of precision and applicability, and 2) the proposed device is the minimum requirement necessary to accomplish the research objective safely.

These policies are designed to ensure that research projects, regardless of the agency or institution conducting the research, apply a minimum requirement assessment similar to that applied to all other management actions affecting wilderness.

Instructions for performing a minimum requirement assessment, including those needed for research projects, are included as a separate section (Chapter 6. Section 6.3.6, Minimum Requirement) within the revised policy statements. The minimum requirement concept is to be applied as a two-step process which: 1) determines whether or not the proposed research project is needed and necessary for the purposes of wilderness, and 2) the techniques and type of equipment needed to ensure that impact to wilderness resources and values is minimized. In the determination of minimum requirement, park superintendents are instructed to give the disruption of wilderness character and resources significantly more weight than economic efficiency and staff convenience during the decision making process. While the parks are provided with considerable license in the use and development of minimum requirement decision tools, the process finally adopted must be recorded and accompanied by appropriate environmental compliance documentation. Examples of minimum requirement decision tools are provided in the appendices of Reference Manual 41# Wilderness Preservation and Management.

Director’s Order #41, accompanying the revised NPS policy statements for wilderness preservation and management, provides further guidance for applying the policy requirements concerning research in park wilderness. Section 8 (Scientific Activities) encourages the use of park wilderness for scientific purposes, provided that the benefits of research projects outweigh the negative impacts on wilderness values and the work is conducted “in accord with wilderness stewardship and preservation principles.”

Conclusions

The increasing number of requests to conduct research in National Park Service wilderness, and the capacity of these activities to adversely impact wilderness values, have necessitated the need to establish agency guidelines which: 1) promote the use of established wilderness for legitimate scientific activities, and 2) preserves wilderness values through the application of minimum requirement protocols in assessing individual research projects. Guidelines for conducting research activities in wilderness have been issued in NPS Reference Manual #41: Wilderness Preservation and Management.

References