

Research and Scientific Activities Toolbox



The Wilderness Act

Research and Scientific Activities can help preserve wilderness character and be compatible with the Wilderness Act of 1964 and subsequent wilderness legislation. The Wilderness Act identifies Scientific as both a public purpose (Section 4(b)) and a value (Section 2(c)4). These provisions help establish research and scientific activities as legitimate uses of wilderness to help provide the “benefits of an enduring resource of wilderness.” (Section 2(a)). But, the Wilderness Act also mandates preservation of wilderness character (Sections 2(a) and 4(b)) and prohibits, with exceptions, the use of motorized equipment, installations, landing of aircraft, etc. (Section 4(c)) which can create a dilemma for managers attempting to evaluate proposals for scientific activities.

If scientific activities are screened only to satisfy the public purpose of Scientific, virtually every proposal would be authorized. But because of the other mandates to preserve wilderness character and prohibit motorized equipment, etc., there often is a need for criteria to determine which activities are both necessary and dependent on a wilderness location. This criteria consists of three basic parts or categories:

Does the proposal help preserve wilderness character?

- This type of proposal is reflected in the Scientific public purpose found in the Wilderness Act.

Is the proposal wilderness dependent?

- A proposal that can only be done in wilderness may be compliant with law even if it does not directly preserve wilderness character. In this case the values and benefits of the research or scientific activities must be high and there are no locations outside wilderness where the activities could occur. This interpretation identifies research and scientific activities as one of the “benefits of the enduring resource of wilderness” as described in the law (Section 2(a)) and is supported by the listing of Scientific as one of the potential values of wilderness (Section 2(c)).

Does the proposal include the use of motorized equipment, installations, landing of aircraft, etc.?

- This type of proposal may also be compliant with the law if it is the minimum requirement necessary for the administration of the area as wilderness.

Any proposal should be evaluated and, if necessary revised to insure that the wilderness resource is not impaired and wilderness character is preserved. Wilderness Character may be defined by the four statutory qualities (WCM Framework reference here):

- Untrammeled – Natural ecological processes should not be hindered or manipulated

- Natural – There should be no effects on the natural conditions from both intentional and unintentional modern human activities
- Undeveloped – There should be no modern human presence in the form of installations, structures, motorized equipment, landing of aircraft, etc.
- Outstanding opportunities for solitude or a primitive and unconfined type of recreation – The proposal should not affect the experiences of visitors

Other Wilderness Laws

Subsequent wilderness legislation (enacted after the 1964 Wilderness Act) may contain special provisions that address certain activities or installations that would otherwise be prohibited by law or discouraged by policy. This may include activities such as monitoring installations for hydrological, meteorological, or air quality data, or access for data gathering that uses motor vehicles, motor boats, or aircraft. The exact language of the law should be examined, and if necessary interpreted by agency attorneys, to determine if the special provision allows for consideration of the otherwise prohibited activities or actually authorizes them. Typically the word “may”, when used in legislated special provisions, means the agency has the discretion to consider an otherwise prohibited use but may or may not authorize it. If the word “shall” is used the prohibited use must be allowed but typically the agency still has authority to specify when, where, and how this use will occur. For example, this provision from the Omnibus Public Lands Management Act of 2009, PL-111-11 allows consideration of monitoring devices in wilderness but does not mandate them:

Section 1972b(8) CLIMATOLOGICAL DATA COLLECTION.— “In accordance with the Wilderness Act (16 U.S.C. 1131 et seq.) and subject to such terms and conditions as the Secretary may prescribe, the Secretary may authorize the installation and maintenance of hydrologic, meteorologic, or climatological collection devices in the wilderness areas designated by subsection (a)(1) if the Secretary determines that the facilities and access to the facilities are essential to flood warning, flood control, or water reservoir operation activities.”

By contrast, a special provision that is included in a house or senate committee report but is not included in the law should be considered and analyzed using all applicable laws and processes (i.e NEPA, Minimum Requirements Analysis, etc.) but there is no requirement for implementation.

To locate special provisions in wilderness laws that apply to a specific area, go to: <http://www.wilderness.net/special> provisions.

Other Laws

Requirements of other applicable laws that pertain to designated wilderness must also be met though often the implementation actions in wilderness are different. For example, the Clean Air Act (P.L. 88-206, 1963, as amended) requires monitoring of certain Air Quality Related Values for Class I wilderness areas. In order to conduct the monitoring an installation may be needed to sample visibility or other indicators. Since a permanent installation in wilderness is a prohibited

use, every effort should be made to find comparable non-wilderness locations or modify the monitoring system to allow use of temporary installations or other techniques that don't require a prohibited use in wilderness. But, to comply with the Clean Air Act a permanent installation in wilderness could be authorized if it is the minimum necessary.

The Framework for Evaluation of Scientific Activities found in this toolbox contains a Law and Policy Filter useful for determining if a research or scientific activity proposal is consistent with the Wilderness Act, and subsequent wilderness legislation, and other laws.