National Park Service wilderness policy is from its 2006 Management Policies, Chapter 6: Wilderness Preservation and Management.

6.3.6 – Scientific Activities in Wilderness
The statutory purposes of wilderness include scientific activities, and these activities are encouraged and permitted when consistent with the Service’s responsibilities to preserve and manage wilderness.

6.3.6.1 – General Policy
The National Park Service has a responsibility to support appropriate scientific activities in wilderness and to use science to improve wilderness management. The Service recognizes that wilderness can and should serve as an important resource for long-term research into and study and observation of ecological processes and the impact of humans on these ecosystems. The National Park Service further recognizes that appropriate scientific activities may be critical to the long-term preservation of wilderness.

Scientific activities are to be encouraged in wilderness. Even those scientific activities (including inventory, monitoring, and research) that involve a potential impact to wilderness resources or values (including access, ground disturbance, use of equipment, and animal welfare) should be allowed when the benefits of what can be learned outweigh the impacts on wilderness resources or values. However, all such activities must also be evaluated using the minimum requirement concept and include documented compliance that assesses impacts against benefits to wilderness. This process should ensure that the activity is appropriate and uses the minimum tool required to accomplish project objectives. Scientific activities involving prohibitions identified in section 4(c) of the Wilderness Act (16 USC 1133(c)) may be conducted within wilderness when the following occur:

• The desired information is essential for understanding the health, management, or administration of wilderness, and the project cannot be reasonably modified to eliminate or reduce the nonconforming wilderness use(s); or if it increases scientific knowledge, even when this serves no immediate wilderness management purposes, provided it does not compromise wilderness resources or character. The preservation of wilderness resources and character will be given significantly more weight than economic efficiency and/or convenience.

• Compliance with the National Environmental Policy Act (including completion of documented categorical exclusions, environmental assessments/findings of no significant impact, or environmental impact statements/records of decision) and other regulatory compliance (including compliance with section 106 of the National Historic Preservation Act (16 USC 470(f)) are accomplished and documented.
• All scientific activities will be accomplished in accordance with terms and conditions adopted at the time the research permit is approved. Later requests for exceptions to the Wilderness Act will require additional review and approval.

• The project will not significantly interfere with other wilderness purposes (recreational, scenic, educational, conservational, or historical) over a broad area or for a long period of time.

• The minimum requirement concept is applied to implementation of the project.

Research and monitoring devices (e.g., video cameras, data loggers, meteorological stations) may be installed and operated in wilderness if (1) the desired information is essential for the administration and preservation of wilderness and cannot be obtained from a location outside wilderness without significant loss of precision and applicability; and (2) the proposed device is the minimum requirement necessary to accomplish the research objective safely.

Park managers will work with researchers to make NPS wilderness area research a model for the use of low-impact, less intrusive techniques. New technology and techniques will be encouraged if they are less intrusive and cause less impact. The goal will be for studies in NPS wilderness to lead the way in “light on the resource” techniques.

Devices located in wilderness will be removed when determined to be no longer essential. Permanent equipment caches are prohibited within wilderness. Temporary caches must be evaluated using the minimum requirement concept.

All scientific activities, including the installation, servicing, removal, and monitoring of research devices, will apply minimum requirement concepts and be accomplished in compliance with Management Policies, director’s orders, and procedures specified in the park’s wilderness management plan. (See Studies and Collections 4.2; Social Science Studies 8.11)

6.3.6.2 – Monitoring Wilderness Resources
In every park containing wilderness, the conditions and long-term trends of wilderness resources will be monitored to identify the need for or effects of management actions. The purpose of this monitoring will be to ensure that management actions and visitor impacts on wilderness resources and character do not exceed standards and conditions established in an approved park plan.

As appropriate, wilderness monitoring programs may assess physical, biological, and cultural resources and social impacts. Monitoring programs may also need to assess potential problems that may originate outside the wilderness to determine the nature, magnitude, and probable source of those impacts.