APPENDIX D: SEQUOIA AND KINGS CANYON MANAGEMENT DIRECTIVE 49

The following section is a copy of Sequoia and Kings Canyon Management Directive 49: Minimum Requirement Analysis and Determination, which addresses management of wilderness in the parks in accordance with the 1986 Backcountry Management Plan for Sequoia and Kings Canyon National Parks.

This area of page intentionally left blank.



United States Department of the Interior

NATIONAL PARK SERVICE Sequoia and Kings Canyon National Parks 47050 Generals Highway Three Rivers, Califomia 93271-9651 (559) 565-3341

September 15, 2009

MANAGEMENT DIRECTIVE NO. 49

Subject: Minimum Requirement Analysis and Determination

SCOPE AND PURPOSE:

This directive addresses management of wilderness in Sequoia and Kings Canyon National Parks.

Wilderness Unit	Acreage
The designated Sequoia-Kings Canyon Wilderness (the original 723,036 [1984] acres and the additional 45,186 acres [2009])	768,222 acres
The designated John Krebs Wilderness (2009)	39,740 acres
Potential Wilderness Areas: 1. Five potential designated wilderness areas as defined by the 2003 Final Wilderness Boundary (from 1984 CA W.A.): a.)Bearpaw Meadow Camp area, b). Pear Lake Ranger Station area, c). Oriole Lake private inholdings; d). a 60 foot wide powerline corridor running from Moro Rock Summit Benchmark to near the Middle Fork Road, and e). a 60 foot wide powerline corridor on the west side of Kings Canyon	82.4 acres consisting of: 31.6 acres Bearpaw Meadow Camp 5 acres Pear Lake Ranger Station 12 acres Oriole Lake inholdings 11.8 acres Moro Rock powerline 22 acres Cedar Grove powerline
National Park from near Lookout Peak to Cedar Grove vicinity. 2. Five potential designated wilderness areas as defined by the 2009 legislation: a). Empire Mine private land, b). Monarch Lake and dam area, c). Crystal Lake and dam area, d). Franklin Lake and dam area, and e). Eagle Lake and dam area	2. 128.1 acres consisting of; 16.7 acres Empire Mine 21.2 acres Monarch Lake 20.7 acres Crystal Lake 40.0 acres Monarch Lake 29.5 acres Eagle Lake
The recommended wilderness area of southern Hockett Plateau	~30,000 acres
The wilderness eligible area consisting of the non-developed portion of the large cherry stem area along the road of the Mineral King Addition of 1978	~1,000 acres
Total wilderness areas in Sequoia and Kings Canyon National Parks	~839,172.5 acres

This directive uses the term "park wilderness areas" to include all of the above described areas. NPS Management Policies (2006), Section 6.3.1 General Policy, states:

"For the purposes of applying these policies, the term "wilderness" will include the categories of eligible, study, proposed, recommended, and designated wilderness. Potential wilderness may be a

subset of any of these five categories. The policies apply regardless of category except as otherwise provided herein."

This Management Directive specifies the actions and activities which are [may be?] allowed to occur in all park wilderness areas. No distinction is made whether a specific wilderness unit is located in Sequoia or Kings Canyon National Parks. No distinction is made whether a specific wilderness unit is classified as designated, potential designated, recommended, or eligible. All these areas, regardless of category, will be managed in the same manner. The actions and activities described in this directive are only allowed when the procedures and safeguards defined below are properly and thoroughly followed.

INTRODUCTION:

In order to establish and maintain wilderness character in designated wilderness areas, the Wilderness Act of 1964, Section 4 (c) establishes the following standard:

... except as necessary to meet the minimum requirements for the administration of the area for the purpose of this Act (including measures required in emergencies involving the health and safety of persons within the area) there shall be no temporary road, no use of motor vehicles, motorized equipment or motorboats, no landing of aircraft, no other form of mechanical transport, and no structure or installation within any such area.

The National Park Service's Management Policies, Section 6.3.5 (2006), further define this process:

All management decisions affecting wilderness must be consistent with the minimum requirement concept.... When determining minimum requirements, the potential disruption of wilderness character and resources will be considered before, and given significantly more weight than, economic efficiency and convenience. If a compromise of wilderness resources or character is unavoidable, only those actions that preserve wilderness character and/or have localized, short-term adverse impacts will be acceptable.

Director's Order 41, Wilderness Preservation and Management, provides additional guidance on the minimum requirement concept:

Wilderness managers may authorize (using a documented process) the generally prohibited activities or uses listed in Section 4(c) of the Wilderness Act if they are deemed necessary to meet the minimum requirements for the administration of the area as wilderness and where those methods are determined to be the 'minimum tool' for the project. The use of motorized equipment and the establishment of management facilities are specifically prohibited when other reasonable alternatives are available.

The minimum requirement process first involves a determination of whether a proposed management action is appropriate and necessary for the administration of the area as wilderness and does not pose a significant impact to its wilderness resources and character. If the project is found to be appropriate and necessary, the second step is to determine the management method (tool or technique) that would result in the least amount of impact to the biophysical resources and experiential qualities of wilderness.

The purpose of this Management Directive is to define, as specified above, the Minimum Requirement for managing all park wilderness areas in Sequoia and Kings Canyon National Parks, California, and to identify and analyze those specific actions that represent the "minimum tool" approach to implementing the programs so defined.

Proposed actions that fall completely within the definitions contained herein therefore fall within the scope of Minimum Requirements for the management of all park wilderness areas. Proposed actions not

conforming to the following must be the subject of additional specific minimum requirement analysis to determine if the action is appropriate and necessary to resolve the issue, and to determine the action/alternative, techniques and tools that will have the least impact on the wilderness while successfully addressing the problem.

Actions having the potential to impact wilderness resources will be evaluated in accordance with NPS procedures for implementing the National Environmental Policy Act. Those procedures include the use of categorical exclusions, environmental assessments (EAs), or environmental impact statements (EISs). Administrative actions impacting wilderness must be addressed in either the environmental assessment or environmental impact statement accompanying the approved wilderness management plan or as a separate environmental compliance document.

These processes and procedures are consistent with and supported by these parks' Final General Management Plan (FGMP) and accompanying Environmental Impact Statement, 2006 and Record of Decision (ROD), 2007. The FGMP states that wilderness/backcountry areas:

"are natural areas – relatively remote, roadless portions of the parks Efforts are made to preserve a sense of remoteness and freedom from human-caused impacts. However simple amenities (e.g. ranger stations, hitch rails, and campsites) may be present to support administrative activities, reduce or control resource impacts, or provide for research and monitoring."

The ROD states:

"The parks' designated wilderness and other areas managed as wilderness are zoned to reflect the varying intensities of use of different areas. In heavily traveled zones, there exist engineered trails and bridges, food lockers, designated campsites, and toilets to protect park resources, while in less-used areas, amenities are minimal or non-existent. . . . The listing of categories of 'appropriate facilities' within the individual zone prescriptions serves only to exemplify the types of facilities that may now exist or that the parks may wish to consider at some point in the future. For a new facility to be considered, or for an existing facility to be repaired or replaced the parks would conduct the appropriate level of compliance under the National Environmental Policy Act. Incorporated into any such compliance would be appropriate consideration of the Wilderness Act. . . . "

This Management Directive is also consistent with the Sequoia and Kings Canyon National Parks Backcountry Management Plan (BMP) 1986, its supporting Environmental Assessment (EA) 1984, and its supporting Finding of No Significant Impact (FONSI) 1986.

Both the FGMP/FEIS/ROD, and the BMP/EA/FONSI provides overall, and in some cases, specific direction for the management of *park wilderness areas*.

MANAGEMENT GOALS:

Section 2 (c) (2) of the Wilderness Act states that a designated wilderness is an area that: has outstanding opportunities for solitude or a primitive and unconfined type of recreation.

This statement makes it clear that recreation is one of the purposes of designated wilderness.

Section 2(a) of the Wilderness Act states that wilderness areas:

shall be administered for the use and enjoyment of the American people in such manner as will leave them unimpaired for future use and enjoyment as wilderness, and so as to provide for the protection of these areas, the preservation of their wilderness character, and for the gathering and dissemination of information regarding their use and enjoyment as wilderness.

Section 2(c) defines wilderness as:

an area where the earth and its community of life are untrammeled by man, where man himself is a visitor who does not remain. . . . an area of undeveloped Federal land retaining its primeval character and influence, without permanent improvements or human habitation, which is protected and managed so as to preserve its natural conditions and which (1) generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable; (2) has outstanding opportunities for solitude or a primitive and unconfined type of recreation; (3) has at least five thousand acres . . .; and (4) may also contain ecological, geological, or other features of scientific, educational, scenic, or historical value.

This section clearly identifies the responsibility of agencies to manage wilderness areas. As implied by the legislation, this management should provide for:

- The safety of visitors, within wilderness character parameters, which enhances enjoyment;
- The protection of the wilderness resource through educational efforts and repair of impacted areas;
 and
- "Gathering and dissemination" of information on wilderness use patterns and activities, which is
 utilized in planning processes for long and short term wilderness preservation and stewardship.

These outcomes are achieved through trail patrols, public contact activities, rehabilitation of impacted areas, emergency medical actions, search and rescue actions and the preparation of reports detailing wilderness conditions and public use patterns.

Section 4(a) (3) of the Wilderness Act stipulates that wilderness areas in national parks remain subject to national park legislation:

Nothing in this Act shall modify the statutory authority under which units of the national park system are created. Further, the designation of any area of any park, monument, or other unit of the national park system as a wilderness area pursuant to this Act shall in no manner lower the standards evolved for the use and preservation of such park, monument, or other unit of the national park system in accordance with the Act of August 25, 1916, the statutory authority under which the area was created, or any other Act of Congress which might pertain to or affect such area...

Section 4(b) of the Wilderness Act reinforces this concept by stating:

Except as otherwise provided in this Act, wilderness areas shall be devoted to the public purposes of recreational, scenic, scientific, educational, conservation, and historical use.

Together, these statements confirm that all park wilderness areas should continue to be managed under the Acts of 1890, 1926, and 1940 that created and enlarged Sequoia and Kings Canyon National Parks (SEKI), and the Act of 1916 that created the National Park Service in a manner that is consistent with the Wilderness Act of 1964, the California Wilderness Act of 1984, and the Omnibus Public Land Management Act of 2009.

These acts collectively address the responsibility of National Park Service units to protect and understand natural and cultural resources, and preserve wilderness character.

The Management Goals of *park wilderness areas* follow from and are mandated by the above legislation, and are supported by the desired future conditions as stated in these parks' FGMP, 2006:

- 1. To properly administer the area and provide for appropriate activities and facilities that support and facilitate primitive and unconfined wilderness recreation and visitor enjoyment in a manner that is attuned with the Wilderness Act and the legislation creating Sequoia and Kings Canyon National Parks;
- To implement appropriate administrative activities and facilities that support visitor management and resource protection so as to provide for enjoyment of the wilderness resource while preserving wilderness character; and

3. To protect, restore (in certain cases), and gain knowledge to thoroughly understand and provide effective stewardship of natural and cultural resources in wilderness.

These three goals generate a suite of management programs, which, taken together, constitute the Minimum Requirement for Management of all park wilderness areas. Management and administrative programs and actions will strive to optimize wilderness stewardship by ensuring the four elements of wilderness character: undeveloped; natural; untrammeled; and providing opportunities for solitude and primitive recreation, are emphasized and sustained. All actions undertaken and supporting facilities must be in compliance with the laws, policies, and guidance of the National Park Service and Sequoia and Kings Canyon National Parks.

Management will strive, first and foremost, to achieve administrative wilderness goals by using primitive methods and "tools" to accomplish actions before seeking and or applying minimum requirement variances as allowed in Section 4(c).

MINIMUM REQUIREMENT FOR MANAGEMENT:

1. PROGRAM FOR VISITOR RECREATION AND ENJOYMENT

A. Goal: To provide outstanding opportunities for primitive and unconfined wilderness recreation and visitor enjoyment.

To provide for visitor enjoyment in park wilderness areas, the National Park Service maintains a trail system of approximately 800 miles of foot and horse routes in SEKI. Trails are maintained and improved by trail work crews that are often based in wilderness, with subsequent logistical support facilities and actions. Trails in park wilderness areas are constructed primarily of available native materials including earth, rock, gravel, and logs. Causeways of timber, rock and earth may be constructed in wet areas. Trails are generally 2-3 feet wide, but may be wider in areas of heavy use or rough terrain, where additional space is required for appropriate uses (e.g. stock with pack boxes, or extreme exposures).

To support recreational use of these trail systems and to manage human impacts associated with use, the Service also maintains the following trail-associated items of human manufacture:

- The trails
- Trail crew camp facilities (food storage lockers, stock accounterments)
- Signing (directional)
- Footlogs and bridges
- Designated trailside camps with limited improvements (pit toilets, site markers, campfire rings)

B. Analysis and Justification:

The use of a system of defined trails to facilitate recreation in the high Sierra of California is a long-recognized attribute of Sierra Nevada wilderness recreation. All of the major trail routes in *park wilderness areas* predate the establishment of designated wilderness in 1984 and 2009. Many of the routes date back to the 19th century and a number follow prehistoric Native American routes.

Park wilderness areas are among the most rugged in the 48 contiguous states. Altitudes vary from 2,000 feet to near 14,500 feet above sea level. Huge canyons (several rivaling the Grand Canyon of Arizona in depth) cut through the range. High ridges separate the various watersheds. A dozen passes exceed 12,000 feet and two are more than 13,000 feet above the sea. Thick vegetation clothes the middle altitude country and thickets can impede travel up to 10,000 feet. Above about 9,000 feet, where Pleistocene glaciers scoured the ground across the landscape as recently as 12,000 years ago, the terrain is rocky and sometimes

unstable. The southern Sierra has few roads above the foothills, and much of the park wilderness areas are accessible only by several days of foot or stock travel.

For all these reasons, trail construction began early in the Sierra, and the existing system was essentially complete by 1940. Little has changed over the years, and trails remain the primary means of access. Almost all park wilderness users rely on them for access. Even experienced hikers who enjoy cross-country (off-trail) travel in the high country usually approach their destinations on maintained trails.

Almost all trails in these parks were constructed, over the past 125 years and prior to wilderness designation, to meet the access needs of stock users and hikers. Trails are maintained to continue to meet standards that address the needs of hikers and stock users (private public, commercial, and administrative). In order to assure the existence and upkeep of these valuable trail systems, staffing for trail crews is regularly provided in the parks and is supported through a variety of means.

Associated with the parks' trail system is a number of supporting facilities, and a suite of actions required which are necessary to meet the goal of providing for appropriate wilderness recreation.

Certain facilities and actions are necessary for proper and efficient conduct of wilderness trail maintenance and improvement. Temporary trail crew camps provide the point from which crews work. These provide for shelter, storage of supplies and normal day-to-day living activities. The camps, in order to effectively meet trail maintenance actions, may contain sanitary facilities (privy or other low impact style). Toilets at crew camps prevent human waste from being scattered throughout an area. These are required to prevent unsanitary and unhealthy conditions. Food storage lockers may also be required in order to prevent wildlife from obtaining human food and preventing potentially dangerous human/animal encounters. Equipment storage via lockers may also be required to protect equipment from weather, theft and misuse by the public.

In order for the wilderness trail work crews to sustain themselves and to conduct their duties, it is necessary to supply them regularly. Food, clothing, tools, communication devices, and emergency medical supplies must be maintained at the temporary camps. There are times when it is necessary to deliver these supplies via helicopters. This is limited to when stock access is precluded, such as when passes are snowed in, supplies are too heavy or large, when time-sensitive materials are being transported, stock is not available, in emergency situations, or when it is determined that stock use will cause greater impacts than the helicopter.

Trail crew work actions may at times require the use of motorized equipment or mechanical transport. In order to facilitate timely trail maintenance to prevent off-trail resource damage, crews will occasionally use motorized chainsaws, rock drills, and wheelbarrows.

Trailside signing is limited to that necessary to provide visitors with required orientation (trail junctions, for example), and that required to help visitors avoid the most serious safety hazards (such as lightning on the summit of Mt. Whitney).

Several major rivers emanate in park wilderness areas. Crossing them can be dangerous, particularly during the first half of the summer when the snow is still melting. To facilitate access, a small number of footlogs and bridges are maintained where crossings over major streams are particularly dangerous or difficult. The majority of stream crossings are without bridges.

These parks provide for "a primitive and unconfined type of recreation." Thus, camping is allowed over nearly the entire extent of *park wilderness areas*. Most camping, however, tends to be concentrated near level terrain and water, and adjacent to trails. Many sites have been in use as long as the trails themselves and as a result, some are heavily used.

Without this trail system and associated trailside improvements, it would be impossible to sustain wilderness recreation in *park wilderness areas* in the manner that has developed over more than a century and a quarter in the High Sierra of California. Since this form of recreation is, quite literally, one of the forms of wilderness use that helped inspire the Wilderness Act, it is clear that the wilderness should be managed to sustain these uses in a manner that, as the Acts of 1916 and 1964 require, "provides for their enjoyment by future generations..."

Therefore the Minimum Requirement for recreation in *park wilderness areas* thus consists of a trail system supported by the actions of trail crews and with limited trailside signs, bridges and footlogs, and a few areas with designated campsites.

2. PROGRAM FOR VISITOR MANAGEMENT AND RESOURCE PROTECTION

A. Goal: To provide for visitor management in a manner that facilitates protection of the wilderness resource and enhances wilderness character.

In order to protect the wilderness resource, to mitigate unacceptable impacts of use, and to assure appropriate access and education for wilderness users, Sequoia and Kings Canyon National Parks undertake specific management actions and maintain an organized administrative system. This provides for pre-visit information and wilderness based stewardship, protection and restoration activities and is supported by a cadre of wilderness rangers. In order to provide adequate support for the actions of the rangers, and to assure impacts from wilderness visitors are minimized, certain facilities are permitted to exist and to be maintained. These include:

- wilderness ranger stations and associated storage facilities
- small-scale utility systems (directly affiliated with stations)
- toilet facilities (at ranger stations and in high-use areas)
- communication systems (specifically for wilderness administration)
- signs (regulatory)
- · drift fences and hitch rails
- limited camp facilities (food storage lockers & campfire rings)
- cultural resource features

B. Analysis and Justification:

Due to its size and high level of use, it is necessary to maintain a system that provides for controlled levels of use of *park wilderness areas*. This consists of a seasonal wilderness permit system with use quotas, regulatory actions for resource protection (e.g. food canister and fire limit requirements), restoration and closure actions, and the subsequent necessity for rangers conducting these actions to reside temporarily within the wilderness. This means that wilderness ranger stations are essential intrusions to protect resources and provide education and emergency services. Options that do not provide for stations do not allow adequate patrol coverage of the vast area. In order to enhance enjoyment and protect the wilderness resource, the presence of rangers deep within the wilderness is required.

Rangers in the wilderness are required to enforce necessary resource protection regulations (e.g. no fires, campsite closed, closed to grazing).

Certain facilities and actions are necessary for proper and efficient conduct of wilderness ranger duties. Ranger stations are the largest facilities. These provide a point from which rangers work. They provide for shelter, storage of supplies (both inside and outside of the station) and normal day-to-day living activities. They also serve as a place for visitors to ask questions and receive assistance. The stations, in order to

effectively meet protection actions, may contain small utility systems (water, electric and sanitary [privy or other low impact style]). The electric systems are primarily solar generated electricity. This is necessary in order to recharge batteries that power communication equipment. Toilets, both at stations and high use camp areas help prevent human waste from being scattered throughout an area. These are required to prevent unsanitary and unhealthy conditions.

In order for the rangers to sustain themselves and to provide visitor management and assistance, it is necessary to supply the rangers and their stations. Food, clothing, tools, communication devices, and emergency medical and search and rescue supplies must be maintained at the stations. There are times when it is necessary to bring these supplies and occasionally insert or remove rangers from their stations via helicopters. This is limited to when stock access is precluded, such as when passes are snowed in, supplies are too heavy or large, when time-sensitive materials are being transported, stock is not available, or in emergency situations.

The system of wilderness rangers requires effective radio communication systems to provide support responses for emergency services, to provide updated information to the frontcountry about trail and other wilderness conditions for the purpose of educating wilderness visitors, and to provide for the safety of wilderness staff. In order to adequately cover the large size of park wilderness areas, radio repeaters exist in strategic and extremely remote locations and need to be maintained. It is necessary to provide scheduled maintenance and upgrades to these facilities, and due to their remote inaccessibility this is done via helicopter.

Wilderness rangers conducting rehabilitation and restoration of impacted areas, may also require the ability to erect temporary regulatory resource protection signs to assure long-term effectiveness and sustainability of these actions.

High levels of use concentrated in specific areas necessitates that campsites be designated in certain areas and the campsites may contain (when necessary) constructed fire pits (where fires are legal), food storage lockers (where bears are common and raid camps), or toilets (privy type). At Emerald and Pear Lakes there are two composting toilet buildings. These are necessary as this high use area is underlain by bedrock and pit toilets are not feasible.

Stock use (mainly horses and mules) is common and traditional in *park wilderness areas*, and stock is allowed to graze in many locations. Drift fences primarily protect park resources but also subsequently facilitate stock camping and travel. In some areas, drift fences are maintained where free-grazing is an appropriate use. Drift fences help to protect sensitive resources near camps from which stock tends to drift away. Hitching posts may also be advantageous in areas where tethered stock would otherwise damage vegetation.

Tree hazard (TH) management in wilderness will adhere to legislative mandate and NPS policy. TH actions will take into account considerations of wilderness character, staff and public safety, and other pertinent factors. Specific guidance (e.g. what gets protected, methods of removal/disposal, etc.) on TH management are provided in SEKI's varied planning documents.

Without these organized systems and the actions of the wilderness rangers and the logistical support of wilderness ranger stations, enjoyment of the wilderness by the visiting public and the protection of wilderness resources would be compromised. The quality of the wilderness experience and the quality of the wilderness resource would be impacted.

Therefore the Minimum Requirement for managing visitor use, enhancing wilderness enjoyment, and assuring resource protection in park wilderness areas thus consists of a system of management controls and

actions combined with a cadre of wilderness rangers performing specific resource protection measures and supported by wilderness stations as defined above.

3. PROGRAM FOR RESOURCE MANAGEMENT AND RESEARCH

A. Goal: To provide for the preservation, restoration, and understanding of natural and cultural resources in wilderness.

In order to provide for scientific, educational, conservation, and historical use in park wilderness areas, the National Park Service conducts a broad resource management and research program. This program assists in preserving and understanding natural and cultural resources in wilderness through methodologies of studying, inventorying, monitoring, protecting, restoring, and maintaining. These actions are conducted through a variety of means and on occasion may require the existence and maintenance of certain support facilities. These include:

- Site markers
- Wells, weirs and Nets
- crew camp facilities (food storage lockers, pit toilets, temporary stock accounterments)
- · informational signing for public understanding
- barriers including cave exclusion gates to protect resources from impacts
- boundary fences
- enclosures to protect structures and installations from wildlife depredation
- containment and diversion devices to protect resources from hazardous wastes and other unnatural flows
- · the use of motorized equipment, such as saws and drills, to install or maintain the above
- power sources as needed for the above

B. Analysis and Justification:

Scientific, educational, conservation, and historical use of *park wilderness areas* predate the formal designation of the wilderness in 1984. These uses are wholly compatible with the Wilderness Act, and are based on the legislation which established the National Park Service, and Sequoia and Kings Canyon National Parks. These acts give the Park Service a clear mandate to manage and study natural and cultural resources.

Without the parks' resource management and research program and associated facilities and actions, it would not be possible to manage for scientific, educational, conservation, and historical use in park wilderness areas in a manner necessary to sustain the quality and integrity of the wilderness resource. This program also aids in providing for the wilderness character element of natural by restoring ecosystem health.

Implementation of the resource management and research program requires that crews enter park wilderness areas to do field work. A number of facilities are necessary to meet the goal of scientific, educational, conservation, and historical use. These are temporary and limited to that necessary to support field crews, mitigate safety hazards, and minimize impacts in the wilderness. Project review is conducted to assure full compliance with wilderness character guidelines, and projects are required to remove all structures and installations upon their completion.

To mitigate the impacts of field crew camps, the parks have found it necessary over the years to selectively provide facilities as indicated above. Field-crew camp infrastructure is provided to the minimum extent necessary and disturbed areas are rehabilitated when the facilities are no longer required.

In order to study resources and natural systems; the establishment of plots, and placement of temporary and long-term monitoring devices; the collection of pertinent samples by way of people or devices; the removal of trash and other manmade materials; the removal of non-native plants and animals; and the removal or relocation of hazardous plants and animals, is essential. These actions may require the temporary or potentially long term installation of various devices, as indicated above.

In order to sustain natural fire regimes in wilderness, actions such as prescribed fires, management of natural fire, hazard fuel removal, and fire suppression and control may be necessary. These actions may also require the protection of specific natural and cultural resources, certain structures, and installations.

Stock (mainly horses and mules) are used to support field crews in *park wilderness areas*. Stock traditionally grazes in many locations within the wilderness. Stock-related infrastructure is provided to the minimum extent necessary and is rehabilitated and removed as appropriate when no longer required.

Stock and by foot are the preferred method of supporting field crews in *park wilderness areas*. Helicopter support may be used on specific occasions when: (1) equipment is too fragile for transport by other methods, (2) samples and/or other cargo is time-dependent, or requires stable conditions, or is of large volume or weight as to be compromised by ground travel, (3) stock are not allowed or would damage natural or cultural resources, or (4) areas are inaccessible to stock.

The actions, activities, and services of the resource management and research program ensure that park wilderness areas are provided with appropriate resource protection and limited impact on visitor management. These actions, activities, and services are thus categorically defined as the minimum requirement and are carried out with the purpose of appropriate and necessary administration of the area as wilderness and are not a significant impact to wilderness resources and character.

The minimum requirement for scientific, educational, conservation, and historical use in *park wilderness* areas thus consist of the above described resource management and research program.

MINIMUM TOOL:

In order to carry out those actions that are defined above as the Minimum Requirement for Management of park wilderness areas, managers must "identify the management method (tool) that causes the least amount of impact to the physical resources and experiential qualities (character) of wilderness." This is defined as the "Minimum Tool."

As defined in Director's Order 41, Section C.2: "Minimum Tool: means a use or activity, determined to be necessary to accomplish an essential task, which makes use of the least intrusive tool, equipment, device, force, regulation, or practice that will achieve the wilderness management objective. This is not necessarily the same as the term "primitive tool," which refers to the actual equipment or methods that make use of the simplest available technology (i.e., hand tools)."

PROHIBITED ACTIVITIES:

The following management actions are prohibited within park wilderness areas (unless approved by the parks' superintendent through a separate and thorough Minimum Requirement Analysis and decision):

- Construction, maintenance, or use of any temporary road in wilderness.
- Use of any motor vehicle in wilderness, other than approved helicopter use as described above.
- Use of any motorized equipment or motorboats in wilderness, other than described above.
- Landing of any aircraft in wilderness, other than described above.

- Use of any mechanical transport in wilderness.
- Maintenance, placement, or construction of any structure or installation or related facility in wilderness, other than described above.
- Any management action or activity not described above.

SCOPE AND DURATION:

The Minimum Requirement defined by this Analysis and Determination applies specifically to park wilderness areas as defined in the Scope and Purpose section of this Management Directive.

The decisions herein documented are valid for five years from the date of approval of this document unless amended by the Superintendent of Sequoia and Kings Canyon National Parks. The three Minimum Requirement Programs as defined above will be reviewed annually by the park's Environmental Management Committee to assure the practices and actions of the programs are still valid and necessary and in compliance with park and service policies and regulations. If changes are needed, EMC will adjust the contents and direction of this document, with the approval of the Superintendent.

IMPLEMENTATION:

To ensure that the decisions documented herein are implemented consistently and appropriately, each of the operating divisions of Sequoia and Kings Canyon National Parks that intend to work in *park wilderness areas* under the authority of this decision will develop and maintain project, or action, specific Minimum Requirement – Minimum Tool (MR-MT) decision analyses. These documents will provide detailed analyses, with alternatives, of all actions to be taken and equipment to be used in wilderness in carrying out the three programs detailed above. These analyses will assure that the parks' MR-MT procedures and safeguards defined in this document, and by supporting NPS policy documents, are consistently and stringently followed. The MR-MT analyses will be reviewed by the sponsoring Division Chief and approved by the Superintendent. Responsibility for following the procedures and safeguards of this Management Directive for actions in wilderness rests with the supporting Division Chief.

/s/Craig C. Axtell	9/16/2009	
Approved - Craig C. Axtell, Superintendent	Date	

SUPPORTING REFERENCES:
NPS ORGANIC ACT – 1916
THE WILDERNESS ACT – 1964
CALIFORNIA WILDERNESS ACT – 1984
OMNIBUS PUBLIC LAND MANAGEMENT ACT OF 2009
SEKI FGMP/EIS/ROD – 2006/2007
NPS MANAGEMENT POLICIES – 2006
NPS DIRECTORS' ORDER 41 AND REFERENCE MANUAL 41 - 1999
BMP/EA/FONSI/ADMIN. ADDENDUM/ADDENDUM – 1986/1984/1986/1984/1986/1988
SUMMP/EA/FONSI/ADDENDUM – 1986/1983/1983/1988

WILDERNESS CHARACTER DOCUMENT- Keeping It Wild – An Interagency Strategy to Monitor Trends in Wilderness Character Across the National Wilderness Preservation System - 2008