

APPENDIX M:
PROGRAMMATIC MINIMUM REQUIREMENT ANALYSIS

This page intentionally left blank.

SEQUOIA AND KINGS CANYON NATIONAL PARKS WILDERNESS STEWARDSHIP PLAN MINIMUM REQUIREMENTS ANALYSIS FRAMEWORK

Part 1 - What Actions are Necessary in Wilderness?

The MRA Worksheet is based on the requirements of both the Wilderness Act and NPS Management Policies (2006):

Section 4(c) of the Wilderness Act states: “. . .except as necessary to meet 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 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.”

Section 6.3.5 of NPS Management Policies 2006 states that the Minimum Requirement concept will be a two-step process to [1] determine if the management action is necessary “for administration of the area as wilderness and does not cause a significant impact to wilderness resources and character; and [2] the techniques and types of equipment needed to ensure that impacts on wilderness resources and character are minimized.” Also: “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.”

This MRA process was used to help screen alternatives in anticipation of the need to authorize actions in the future while ensuring the preservation of wilderness resource and character. The MRA serves as a single analysis to determine the necessity for similar, current, and/or future actions where the social and biophysical values and potential effects will be nearly identical, and to assess the necessity for action involving the Section 4(c) uses as similar needs come along in the future.

Range of Reasonable and Feasible Alternatives per NEPA

The Sequoia and Kings Canyon National Parks (SEKI) Wilderness Stewardship Plan (WSP) will develop and analyze a range of reasonable and feasible alternatives to wilderness management. According to CEQ, the phrase "range of alternatives...includes all reasonable alternatives, which must be rigorously explored and objectively evaluated, as well as those other alternatives, which are eliminated from detailed study with a brief discussion of the reasons for eliminating them."

Alternative 2		Alternative 3		Alternative 4		Alternative 5	
<p>This alternative recognizes that SEKI wilderness can be broadly understood as three different types of locations: day use areas close to frontcountry, highest-use overnight areas like the HST, RLL, and PCT, and low-use overnight areas like the Middle Fork of the Kings and the Hockett Plateau. It further recognizes that current and projected visitor use levels pose few threats to wilderness character in the low-use areas under current management, but that there are some threats in highest use areas (or areas with very sensitive resources) that can be mitigated through targeted improvements to current management.</p>		<p>This alternative seeks to increase opportunities for primitive recreation by allowing additional use, which is mostly expected to occur at high-demand areas. Allowing increased use could result in decreased opportunities for solitude wilderness-wide. In order to preserve the natural quality of wilderness, SEKI's high use areas would require additional development and restrictions on visitor behavior.</p>		<p>This alternative seeks to emphasize the undeveloped and non-commercial qualities of SEKI wilderness. Removal of development and reduction of commercial services would increase the self-reliant nature of wilderness recreation. In order to preserve the natural quality of wilderness with less resource-protecting development, the amount of use would need to be reduced.</p>		<p>This alternative seeks to enhance the quality of solitude available in SEKI wilderness. Total numbers of visitors allowed and party sizes would be reduced, which would mean that reduced levels of development and reduced restrictions on visitor behavior would serve to protect natural resources.</p>	
Trail Structures	Allowable installations dependent upon trail classification and subject to MRA.	Trail Structures	Allowable installations dependent upon trail classification and subject to MRA.	Trail Structures	Allowable installations dependent upon trail classification and subject to MRA.	Trail Structures	Allowable installations dependent upon trail classification and subject to MRA.
Signs and Bulletin Boards	Allowable installations dependent upon trail classification and subject to MRA.	Signs and Bulletin Boards	Allowable installations dependent upon trail classification and subject to MRA.	Signs and Bulletin Boards	Allowable installations dependent upon trail classification and subject to MRA.	Signs and Bulletin Boards	Allowable installations dependent upon trail classification and subject to MRA.

Food Storage	Some proposed number (or range) of wilderness installations subject to MRA		Food Storage	Some proposed number (or range) of wilderness installations subject to MRA		Food Storage	no proposal for prohibited uses		Food Storage	no proposal for prohibited uses
Human Waste Mgmt.	Some proposed number (or range) of wilderness installations subject to MRA		Human Waste Mgmt.	Some proposed number (or range) of wilderness installations subject to MRA		Human Waste Mgmt.	no proposal for prohibited uses		Human Waste Mgmt.	no proposal for prohibited uses
Designated Campsites	Some proposed number (or range) of wilderness installations subject to MRA		Designated Campsites	Some proposed number (or range) of wilderness installations subject to MRA		Designated Campsites	no proposal for prohibited uses		Designated Campsites	no proposal for prohibited uses
Recreational and Administrative Stock Management	Some proposed number (or range) of wilderness installations subject to MRA		Recreational and Administrative Stock Management	Some proposed number (or range) of wilderness installations subject to MRA		Recreational and Administrative Stock Management	no proposal for prohibited uses		Recreational and Administrative Stock Management	no proposal for prohibited uses

Administrative and Recreational Structures (Non-Historic)	Some proposed number (or range) of wilderness installations subject to MRA		Administrative and Recreational Structures (Non-Historic)	Some proposed number (or range) of wilderness installations subject to MRA		Administrative and Recreational Structures (Non-Historic)	Some proposed number (or range) of wilderness installations subject to MRA		Administrative and Recreational Structures (Non-Historic)	Some proposed number (or range) of wilderness installations subject to MRA
Administrative and Recreational Structures (Historic)	Some proposed number (or range) of wilderness installations subject to MRA		Administrative and Recreational Structures (Historic)	Some proposed number (or range) of wilderness installations subject to MRA		Administrative and Recreational Structures (Historic)	Some proposed number (or range) of wilderness installations subject to MRA		Administrative and Recreational Structures (Historic)	Some proposed number (or range) of wilderness installations subject to MRA

Minimum Requirements Analysis per Wilderness Act

The Wilderness Act requires that the parks demonstrate the necessity for an otherwise prohibited use of wilderness, such as permanent and temporary installations in wilderness. This stems from Section 4 (c): "Except as specifically provided for in this Act, and subject to existing private rights, there shall be no commercial enterprise and no permanent road within any wilderness area designated by this Act and, **except as necessary to meet 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 Wilderness Act prohibits specific activities—the use of motor vehicles, motorized equipment, and mechanical transport, the landing of aircraft, and the installation of structures and equipment—when other reasonable alternatives are available. The MRA worksheet provides a formalized method for developing alternative ways to address an issue by evaluating and comparing the effects of various actions on wilderness character. Per NPS Management Policies, any proposed administrative activity that has the potential to affect the wilderness or potential wilderness additions will be analyzed through the minimum requirement process.

Part 1 of this Minimum Requirement Analysis determines if any administrative action in wilderness is necessary. If an action is determined necessary, Part 2 of the analysis determines which alternatives best meet the goals and objectives developed through the Wilderness Stewardship Plan process. Part 3 is the evaluation of effects of each alternative, including fully exploring the alternatives and analyzing the effects on wilderness character, which is contained within the WSP/FEIS. Step 1 answers the following questions:

A. Options Outside of Wilderness - Can actions taken outside of wilderness adequately address the situation and meet project goals?

B. Valid Existing Rights or Special Provisions of Wilderness Legislation - Is action necessary to satisfy valid existing rights or a special provision in wilderness legislation (the Wilderness Act of 1964 or subsequent wilderness laws)?

C. Requirements of Other Legislation - Is action necessary to meet the requirements of other federal laws?

D. Wilderness Character - Is action necessary to preserve one or more qualities of wilderness character?

E. Public Purposes - Is action necessary to achieve one or more of the public purposes for wilderness (as stated in Section 4(b) of the Wilderness Act): “recreational, scenic, scientific, educational, conservation, and historical use”?

F. Other Guidance - Is action necessary to conform to direction contained in agency policy, unit and wilderness management plans, species recovery plans, or agreements with tribal, state and local governments or other federal agencies?

G. Is the action necessary in wilderness?

H. Options and Criteria for Action

After determining if the 4(c) administrative action is necessary in wilderness, the actions will be evaluated through the WSP/FEIS process to determine how each prohibited action would affect wilderness character and meet the objectives of the proposed preferred alternative. The NEPA alternative that is identified as the preferred alternative must be congruent with the finding. The analysis contained within the MRA is interdependent with the NEPA analysis and with the logic behind the identification of the preferred alternative.

Minimum Requirements Analysis for Trails and Trail Structures per Wilderness Act
A. Options Outside of Wilderness - Can actions taken outside of wilderness adequately address the situation and meet project goals?
Visitors to wilderness have diverse appropriate recreational desires, including mountaineering and cross-country travel, travel on primitive and challenging trails, travel on trails that are easy to find, and travel by foot, horseback, or boat. Their desires for solitude range from no sight or sound of other people for days on end to the companionable solitude found on the Pacific Crest Trail. Wilderness travel can create landscape impacts, including denudation of vegetation with accompanying soil compaction and erosion. Since the recreational uses occur in wilderness, any measures taken to accommodate use or mitigate impacts must also happen wilderness.
B. Valid Existing Rights or Special Provisions of Wilderness Legislation - Is action necessary to satisfy valid existing rights or a special provision in wilderness legislation (the Wilderness Act of 1964 or subsequent wilderness laws)?
None.
C. Requirements of Other Legislation - Is action necessary to meet the requirements of other federal laws?
<p><u>The Organic Act of the National Park Service</u>: “Sec.1. The service thus established shall promote and regulate the use of the Federal areas known as national parks, monuments, and reservations hereinafter specified by such means and measures as conform to the fundamental purpose of the said parks, monuments, and reservations, which purpose is to conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations.”</p> <p><u>Kings Canyon Enabling Act of 1940 – Sec. 3</u>: “That the National Park Service shall... administer for public recreational purposes the lands withdrawn.” and “to insure (sic) the permanent preservation of the wilderness character of the Kings Canyon National Park.”</p> <p><u>Sequoia Enabling Act of 1890 – Preamble</u>: “...dedicated .and set apart as a public park, or pleasure ground for the benefit and enjoyment of the people...” and to “...provide for the preservation from injury of all timber, mineral deposits, natural curiosities or wonders within said park, and their retention in their natural condition” (Sec. 2).</p> <p><u>National Trail System Act: Sec.3.(2)</u>:” (2) National scenic trails, established as provided in section 5 of this Act, which will be extended trails so located as to provide for maximum outdoor recreation potential and for the conservation and enjoyment of the nationally significant scenic, historic, natural, or cultural qualities of the areas through which such trails may pass. Sec. 7 (j) (j) Potential trail uses allowed on designated components of the national trails system may include, but are not limited to, the following: bicycling, cross-country skiing, day hiking, equestrian activities, jogging or similar fitness activities, trail biking, overnight and long-distance backpacking, snowmobiling, and surface water and underwater activities.</p>
D. Wilderness Character - Is action necessary to preserve one or more qualities of wilderness character?
Yes. The formal trail system in SEKI predates wilderness designation. The trail system and structures both protect the natural quality by focusing use, but may also create adverse effects on the natural quality (barrier or attractant to wildlife, protect or modify hydrologic systems, etc.). The SEKI trail system has a dual effect on opportunities for solitude or primitive and unconfined recreation: on the one hand it facilitates opportunities

for primitive recreation for many user groups by providing access to wilderness; on the other hand trails tend to channel and concentrate use, which typically diminishes the unconfined and solitary nature of recreation available along the trail.
E. Public Purposes - Is action necessary to achieve one or more of the public purposes for wilderness (as stated in Section 4(b) of the Wilderness Act): “recreational, scenic, scientific, educational, conservation, and historical use”?
Yes. The trail system supports the recreational purpose of wilderness, and indirectly supports the scientific, education, and conservation uses by facilitating access to wilderness for those purposes.
F. Other Guidance - Is action necessary to conform to direction contained in agency policy, unit and wilderness management plans, species recovery plans, or agreements with tribal, state and local governments or other federal agencies?
<p><u>SEKI General Management Plan Record of Decision</u>: “Use of stock continues, both as a means of access to wilderness by visitors, and for the administration of wilderness and protection of wilderness values.” “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.”</p> <p><u>NPS Management Policies 2006 and NPS DO-41: 6.3.10.2 Trails in Wilderness</u>. “Trails will be permitted within wilderness when they are determined to be necessary for resource protection and/or for providing for visitor use for the purposes of wilderness. ... Trails will be maintained at levels and conditions identified within the approved wilderness management plan or planning document.” Trails will be maintained at levels and conditions identified within the approved wilderness management plan or other planning document. Trail maintenance structures (such as water bars, gabions) may be provided, under minimum requirement protocols, where they are essential for resource preservation or where significant safety hazards exist during normal use periods.</p> <p>9.2.2.9 Trail Bridges</p> <p>Trail bridges may be used for crossing swift waters areas prone to flash flooding, and other places that present potential safety hazards. Less obtrusive alternatives to bridges (such as, fords) and trail relocation will be considered before a decision is made to build a bridge. A bridge may be the preferred alternative when necessary to prevent stream bank erosion or protect wetlands or fisheries. If a bridge is determined to be appropriate, it will be kept to the minimum size needed to serve trail users, and it will be designed to harmonize with the surrounding natural scene and be as unobtrusive as possible.</p> <p><u>Comprehensive Management Plan for the Pacific Crest Trail (1982)</u> – (appendix C): Criteria for Location, Design, Signing, and User Facilities, p12, General Design Criteria) “The design of the Pacific Crest Trail should be in keeping with the nature and purpose of the trail. As a National Scenic Trail, it should exhibit high quality, permanence, and minimize disturbance to the environment. It should be designed, on a segment-by-segment basis, to accommodate, in a safe and enjoyable manner, the volume and types of traffic planned.” p 24“Maintenance of the Pacific Crest National Scenic Trail should be of sufficient frequency to ensure that all features of the trail, including drainage, tread clearing, signing, and related structures will be at the standards to which they were designed and constructed.”</p> <p><u>RM 41: 6.4.10. Accessibility for Persons with Disabilities</u>. The National Park Service has legal obligations to make available equal opportunities for people with disabilities in all programs and activities. This requirement includes the opportunity to participate in wilderness experiences. Management decisions responding to requests for special consideration to provide wilderness use by persons with disabilities must be in accord</p>

with the Architectural Barriers Act of 1968, The Rehabilitation Act of 1973 (as amended in 1978), and Section 507(c) of the Americans with Disabilities Act of 1990. Such decisions should balance the intent of access and wilderness laws and find a way of providing the highest level of protection to the wilderness resource.

Section 17.550 of the Secretary of the Interior’s regulations regarding “Enforcement of Nondiscrimination on the Basis of Disability in Department of Interior Programs” (43 CFR Part 17) states that agencies are not required to take any actions nor provide access that would result in a fundamental alteration in the nature of a program or activity. However, the agency has the burden of proving that compliance would result in a fundamental alteration. This concept is also found in Section 507 of the Americans with Disabilities Act.

G. Is the action necessary in wilderness?

Yes. Trails are necessary in SEKI to preserve the natural and primitive and unconfined recreation qualities of wilderness character, and in support of the recreational, scientific, and conservation public purposes of wilderness. Trails are also necessary to comply with the Organic Act of the NPS, the enabling legislation of Sequoia and Kings Canyon national parks, and the National Scenic Trails Act. Construction and maintenance of a trail system to provide diverse recreational opportunities in wilderness is also consistent with the guidance of the SEKI General Management Plan, the 2006 NPS Management Policies, RM 41, and the Comprehensive Management Plan for the Pacific Crest Trail.

H. Options for Action and Criteria for Installations

The only means of providing trail-based recreational experiences is by providing trails. The minimum requirements question is then how many trails and what level of development and maintenance they will receive. Since the goal is to provide a diverse set of recreational opportunities, it is necessary for different trails to have different levels of development. The level of development each trail has must be the minimum necessary to provide the desired balance of solitude and opportunities for primitive and unconfined recreation while protecting the natural quality of wilderness.

Forest Service Handbook 2309.18 - TRAILS MANAGEMENT HANDBOOK describes a range of trail development classes that are appropriate to the recreational opportunities desired for SEKI wilderness. The different alternatives of the WSP describe the number and development level of trails necessary to preserve wilderness character under the different articulated balances of opportunities for solitude and opportunities for primitive and unconfined recreation.

Trails and trail-related structures are the minimum required to preserve wilderness character if they are necessary and appropriate to the trail development class and designed use described in the selected alternative of the WSP.

Constructing new trails or changing the development class of a trail from that described in the selected alternative will require separate MRA, planning, and compliance.

Minimum Requirements Analysis for Signs (including bulletin boards) per Wilderness Act	
A. Options Outside of Wilderness - Can actions taken outside of wilderness adequately address the situation and meet project goals?	
In order to plan and execute wilderness trips with minimal impact to wilderness character, visitors need information about trails and landscape, about regulations and restrictions, and about current conditions and short-term closures. The purpose of signs is to provide information to visitors about wilderness navigation, current conditions, and wilderness regulations. Education efforts outside wilderness are very effective means of communicating this information. However, site-specific information is sometimes necessary on site to inform visitors who did not get the information, to remind some of those who did, and to answer questions that can only be addressed on-site (e.g. the exact location of a trail junction and which trail goes where).	
B. Valid Existing Rights or Special Provisions of Wilderness Legislation - Is action necessary to satisfy valid existing rights or a special provision in wilderness legislation (the Wilderness Act of 1964 or subsequent wilderness laws)?	
None.	
C. Requirements of Other Legislation - Is action necessary to meet the requirements of other federal laws?	
Yes. The Organic Act of the National Park Service: "Sec.1. The service thus established shall promote and regulate the use of the Federal areas known as national parks,...to conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations."	
D. Wilderness Character - Is action necessary to preserve one or more qualities of wilderness character?	
Yes. Without specific information delivered on site, visitors will inadvertently violate regulations to protect the natural and other features of value qualities of wilderness (e.g., trespass onto sensitive resources or into restoration areas, have fires at inappropriate locations, trample large areas in search of trail junctions). In addition, signs can protect opportunities for solitude by defining camp area in high-use areas. Although the presence of signs detracts from the opportunities for solitude for those who do not need them for navigation, they improve opportunities for primitive recreation for less experienced visitors. Signs also provide direction and information to wilderness users that allow them to have opportunities for recreation.	
E. Public Purposes - Is action necessary to achieve one or more of the public purposes for wilderness (as stated in Section 4(b) of the Wilderness Act): "recreational, scenic, scientific, educational, conservation, and historical use"?	
Yes. Specific information delivered on site in wilderness supports the recreational, educational, and conservation purposes of wilderness by providing wilderness users information that would serve to improve their recreational opportunities, expand their education, and allow them to conform to regulations that serve to protect wilderness resources.	
F. Other Guidance - Is action necessary to conform to direction contained in agency policy, unit and wilderness management plans, species recovery plans, or agreements with tribal, state and local governments or other federal agencies?	
RM 41: 6.3.10.4 Signs. Signs detract from the wilderness character of an area and make the imprint of man and management more noticeable.	

Only those signs necessary for visitor safety or to protect wilderness resources, such as those identifying routes and distances, will be permitted. Where signs are used, they should be compatible with their surroundings and the minimum size possible.
G. Is the action necessary in wilderness?
Yes. Specific information delivered on site is necessary in wilderness to preserve the natural and other features of value qualities of wilderness character, to preserve the desired variety in Opportunities for Solitude or Primitive Recreation quality, and to promote the recreational, educational, and conservation purposes of wilderness. Action is necessary to comply with the Organic Act of the NPS, and signing is allowed by RM 41.
H. Options for Action and Criteria for Installations
<p>The two ways available to provide specific information delivered on site in wilderness are staff contacts and sign installations. Staff contacts are limited by practical reasons as well as by their impacts to opportunities for solitude. Sign installations are an effective means of communicating information, but adversely impact the undeveloped quality of wilderness character.</p> <p>Informational and regulatory will sometimes be the minimum action required to preserve the natural quality in areas of high visitor use where it is most threatened. Informational and navigational sign installations will also be the minimum action required to provide opportunities for primitive recreation in areas most desired by relatively inexperienced visitors. Because trails are managed to higher levels of trail development in high use areas and to provide opportunities for primitive recreation for inexperienced users, the minimum requirement for sign installations will be the kind and amount of signing that is consistent with the trail development class.</p> <p>If specific areas need additional regulatory signs (e.g., closures for restoration, other information) then these signs will go through a separate analysis and review prior to placement.</p>

Minimum Requirements Analysis for Food Storage Regulations and Methods per Wilderness Act
A. Options Outside of Wilderness - Can actions taken outside of wilderness adequately address the situation and meet project goals?
<p>Visitors to the wilderness typically bring food with them. As this food is of high energy density, it is appealing to wildlife, and wildlife behavior (notably bear behavior) has been observed to change as a result of the rewards of obtaining human food. Visitors have had their recreational activities disrupted because of altered wildlife behavior and loss of their food.</p> <p>Visitor education efforts outside wilderness have had large effects in improving this problem, but action in wilderness is also necessary since the wildlife-human interactions of concern take place in wilderness.</p>
B. Valid Existing Rights or Special Provisions of Wilderness Legislation - Is action necessary to satisfy valid existing rights or a special provision in wilderness legislation (the Wilderness Act of 1964 or subsequent wilderness laws)?
<p>None.</p>
C. Requirements of Other Legislation - Is action necessary to meet the requirements of other federal laws?
<p>Action is necessary to meet the requirements of 16 USC § 1 (the National Park Service Organic Act). Ensuring that adequate food storage options remain available in the SEKI wilderness is necessary to "conserve ... the wild life therein" because food conditioned bears (1) exhibit unnatural behavior, ecology, and distribution and (2) often must be killed because of human safety concerns. It is also necessary to "provide for the enjoyment of the same" because food conditioned bears often become aggressive and destructive, resulting in a negative experience for visitors. Action is necessary to meet the requirements of Section 2(c) of the Wilderness Act. Ensuring that adequate food storage options remain available in the SEKI wilderness is necessary to "preserve its natural conditions."</p>
D. Wilderness Character - Is action necessary to preserve one or more qualities of wilderness character?
<p>Without appropriate food storage technology and techniques, bears will have access to human food sources, and their natural behavior, ecology, and distribution will be altered, impacting the natural quality of wilderness character. Food-conditioned bears would likely be the targets of management actions such as tagging, relocation, or removal, impacting the untrammelled quality. In addition, food-conditioned bears become aggressive and destructive in their search for human food. This behavior negatively impacts solitude and unconfined recreation because (1) bears may eat visitors' food, impacting their ability to complete their trip; (2) persistent bears can require all-day and all-night response from visitors (and as food-conditioned bears associate all humans with food, this will also affect visitors who store their food properly).</p> <p>Food storage regulations negatively impact opportunities for unconfined recreation, and installations (such as food storage boxes) negatively impact the undeveloped quality of wilderness character. Food storage boxes can improve opportunities for primitive recreation by providing some inexperienced visitors the extra security they need to engage in overnight wilderness trips, and in providing extra food storage for the first days of a longer trip. Food storage boxes can negatively affect opportunities for solitude if visitors are attracted to them for camping, but can improve opportunities for solitude at campsites that are not near the boxes.</p>

<p>E. Public Purposes - Is action necessary to achieve one or more of the public purposes for wilderness (as stated in Section 4(b) of the Wilderness Act): “recreational, scenic, scientific, educational, conservation, and historical use”?</p>
<p>Ensuring that adequate food storage options remain available is necessary to protect the recreational purpose of wilderness because without adequate food storage, food-conditioned bears will become aggressive and destructive in their search for human food. This behavior negatively impacts solitude and unconfined recreation because visitors could be dealing with persistent bears at all hours of the day and night-even visitors who store their food properly-since once food-conditioned, bears will associate all humans with food, not just those who store it improperly.</p>
<p>Reliance on alternative methods of food storage is inadequate because:</p> <p>(1) In YOSE, McCurdy and Martin (2007) found that where portable bear resistant containers were required, food was stored by visitors in portable bear resistant containers in only 59% of the nights. This means that even when visitors had portable bear resistant containers with them, they did not necessarily use them.</p> <p>(2) Visitors often carry more food than can fit into portable bear resistant containers.</p> <p>(3) Trash that would normally be placed in lockers-despite this practice being illegal-will be left on the ground.</p> <p>(4) YOSE, which relies almost exclusively on portable food storage containers, consistently has much higher levels of human-bear conflict in wilderness than SEKI does.</p> <p>Adequate food storage: Ensuring that adequate food storage options remain available is necessary to protect the conservation purpose of wilderness because without adequate food storage, (1) food-conditioned bears will be influenced by modern civilization (i.e., human foods)their natural behavior, ecology, and distribution will be altered, and (2) they will need to be manipulated by humans (e.g., radio-collared, ear tagged, or killed) to protect visitor safety.</p>
<p>F. Other Guidance - Is action necessary to conform to direction contained in agency policy, unit and wilderness management plans, species recovery plans, or agreements with tribal, state and local governments or other federal agencies?</p>
<p>Ensuring that adequate food storage options remain available is necessary according to the following policy documents:</p> <p>1) NPS Management Policies 2006 states in section 4.4.1 that parks will maintain native plants and animals by:</p> <ul style="list-style-type: none"> • "preserving and restoring the natural abundances, diversities, dynamics, distributions, habitats, and behaviors of native plant and animal populations and the communities and ecosystems in which they occur" and, • "minimizing human impacts on native plants, animals, populations, communities, and ecosystems, and the processes that sustain them." <p>2) The goal of the SEKI Bear Management Plan is to:</p> <ul style="list-style-type: none"> • "restore and perpetuate the natural distribution, ecology, and behavior of black bears free of human influences."
<p>Language from the ROD: 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.</p>

G. Is the action necessary in wilderness?

Yes. Maintaining availability of food storage technology and food storage regulations is necessary to protect the natural and opportunities for primitive recreation qualities of wilderness character, and to promote the recreational, conservation, and scientific purposes of wilderness. Action is also necessary to comply with the National Park Service Organic Act, and is consistent with the guidance of the 2006 NPS Management Policies, the SEKI Bear Management Plan, and SEKI's general management plan.

H. Options for Action and Criteria for Installations

Visitor education, food storage restrictions, installation of food storage boxes, and bear removal actions are the options available to achieve the desired condition of minimum development necessary to preserve wild bear populations and opportunities for primitive recreation. In many ways, food storage restrictions are part of education, in terms of emphasizing the importance of proper storage. Education can have a very large beneficial effect on ensuring proper food storage; restrictions reinforce education but have a negative effect on the unconfined quality of wilderness character; food storage boxes are very effective locally at preventing bears from accessing human food but have negative effects on the undeveloped quality and constitute a 4(c) generally prohibited installation in wilderness. Removal of problem bears is a trammeling action and will be a last-resort option when all others have failed.

Education outside of wilderness will always be used to prevent wildlife (including bears) from becoming food-conditioned. Regulations requiring the use of portable bear resistant containers will be part of the minimum action required where an area has a strong history of undesired bear-human interactions. However, a Yosemite study (McCurdy and Martin, 2007) found that regulations requiring use of portable bear resistant containers are inadequate to ensure their proper use. This can be because visitors often carry more food than can fit into portable bear resistant containers (a problem that is worst at "first night in" locations), or because they are not experienced enough ensure consistent proper use of portable containers. Installation of food storage boxes is therefore the minimum action required to preserve the natural quality of wilderness and opportunities for primitive recreation in areas with a strong history of undesired bear-human interactions that have not been mitigated by education and food storage restrictions, at "first night in" locations (when containers may not hold all scented and food items), and areas of high use/convergence of relatively inexperienced visitors (where numerous trails converge). A rare location where a box installation would be the minimum requirement necessary would be a logistically critical camping area with inadequate trees for counterbalancing food effectively.

<p align="center">Minimum Requirements Analysis for Human-waste Management (including privies, toilets, and pack-out requirements) per Wilderness Act</p>
<p>A. Options Outside of Wilderness - Can actions taken outside of wilderness adequately address the situation and meet project goals?</p>
<p>Visitors need to urinate and defecate while they are in wilderness, therefore human waste must be managed in wilderness.</p>
<p>B. Valid Existing Rights or Special Provisions of Wilderness Legislation - Is action necessary to satisfy valid existing rights or a special provision in wilderness legislation (the Wilderness Act of 1964 or subsequent wilderness laws)?</p>
<p>No.</p>
<p>C. Requirements of Other Legislation - Is action necessary to meet the requirements of other federal laws?</p>
<p>Yes. The Organic Act of the National Park Service: “Sec.1. The service thus established shall promote and regulate the use of the Federal areas known as national parks,...to conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations.”</p>
<p>D. Wilderness Character - Is action necessary to preserve one or more qualities of wilderness character?</p>
<p>Yes. Improper disposition of human waste in wilderness can negatively impact the natural quality of wilderness by polluting water resources. Opportunities for solitude or primitive and unconfined recreation can be negatively impacted by the presence of human waste and toilet paper, and by increased necessity of treating drinking water.</p>
<p>E. Public Purposes - Is action necessary to achieve one or more of the public purposes for wilderness (as stated in Section 4(b) of the Wilderness Act): “recreational, scenic, scientific, educational, conservation, and historical use”?</p>
<p>Yes. Proper disposal of human waste in necessary to achieve the conservation purpose, and effective management of toilet paper and waste piles is necessary to achieve the scenic and recreational purposes.</p>
<p>F. Other Guidance - Is action necessary to conform to direction contained in agency policy, unit and wilderness management plans, species recovery plans, or agreements with tribal, state and local governments or other federal agencies?</p>
<p>"RM-41: 6.4.3 Recreation Use Management in Wilderness. Recreational uses of National Park Service wilderness are generally those traditionally associated with wilderness and identified by Congress in the legislative record for the development of the Wilderness Act and in keeping with the language provided by Sections 2(a) and 2(c) of the Act itself. These recreational uses of wilderness will be of a type and nature that ensure its use and enjoyment will leave it unimpaired for future use and enjoyment as wilderness, provide for the protection of the area as wilderness, and provide for the preservation of the wilderness character.</p> <p>Recreational uses in National Park Service wilderness areas will be of a nature that enables the areas to retain their primeval character and influence; protect and preserve natural conditions; leave the imprint of man’s work substantially unnoticeable; provide outstanding opportunities for solitude or primitive and unconfined types of recreation; and preserve wilderness in an unimpaired condition.</p>

RM-41:6.3.10.3 Although the development of facilities to serve visitors will generally be avoided, campsites may be designated when essential for resource protection and preservation or to meet other specific wilderness management objectives. In keeping with the terms of the park's wilderness management plan, campsite facilities may include a site marker, fire rings, tent sites, food-storage devices, and toilets if these are determined by the superintendent to be the minimum facilities necessary for the health and safety of wilderness users, or for the preservation of wilderness resources and values. Toilets will be placed only in locations where their presence and use will resolve health and sanitation problems or prevent serious resource impacts, especially where reducing or dispersing visitor use is impractical or has failed to alleviate the problems. Picnic tables will not be allowed in wilderness

Recreational uses in National Park Service wilderness areas will be of a nature that enables the areas to retain their primeval character and influence; protect and preserve natural conditions; leave the imprint of man's work substantially unnoticeable; provide outstanding opportunities for solitude or primitive and unconfined types of recreation; and preserve wilderness in an unimpaired condition.

Language from the ROD: 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.

G. Is the action necessary in wilderness?

Yes. A system for human waste management in wilderness is necessary to preserve the opportunities for primitive recreation and natural qualities of wilderness character, and to support the public purposes of conservation, scenic value, and recreation. Action is necessary to comply with the Organic Act of the NPS and is consistent with the guidance of RM-41 and with the Record of Decision for the SEKI General Management Plan.

H. Options for Action and Criteria for Installations

Options for action to preserve wilderness character include visitor education about Leave No Trace practices, restrictions on methods of waste disposal (e.g., minimum distances from surface waters), requirements to pack out waste, and provision of privies or restrooms.

Visitor education will always be a method used, with restrictions on methods of waste disposal used to reinforce the educational messages. These two actions have minimal adverse effects on wilderness character, but can be inadequate to preserve opportunities for solitude and the natural quality where use is so concentrated that LNT techniques are inadequate for the volume of waste generated, where soil types do not allow for sufficient burial of waste, or where camp areas are close to water sources or other sensitive resources. At these locations pack-out requirements may be imposed, with the preservation of the natural quality and opportunities for solitude more than offsetting the impacts to the unconfined quality of recreation.

In some places with high visitor concentrations and/or soils unsuitable to burying waste, travel and use patterns make packing out waste impractical. In these locations the installation of a privy or toilet may be the minimum action required to preserve the natural and opportunities for solitude qualities of wilderness character. These locations may be evaluated in the WSP or through testing of pack-out requirements during implementation of the WSP as to whether installation of a toilet or privy is the minimum action required to preserve wilderness character.

<p align="center">Minimum Requirements Analysis for Managing Camping and Campsite Impacts (designated campsites) per Wilderness Act</p>
<p>A. Options Outside of Wilderness - Can actions taken outside of wilderness adequately address the situation and meet project goals?</p>
<p>Some routes and areas in SEKI wilderness are more popular with visitors than others. In these areas, concentrated camping can lead to proliferation of campsites. Since the camping occurs in wilderness, actions to influence camping patterns must take effect in wilderness.</p>
<p>B. Valid Existing Rights or Special Provisions of Wilderness Legislation - Is action necessary to satisfy valid existing rights or a special provision in wilderness legislation (the Wilderness Act of 1964 or subsequent wilderness laws)?</p>
<p>No.</p>
<p>C. Requirements of Other Legislation - Is action necessary to meet the requirements of other federal laws?</p>
<p>Yes. The Organic Act of the National Park Service: “Sec.1. The service thus established shall promote and regulate the use of the Federal areas known as national parks,...to conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations.”</p>
<p>D. Wilderness Character - Is action necessary to preserve one or more qualities of wilderness character?</p>
<p>Yes. Concentrated camping at popular areas leads to proliferation of campsites, with impacts to opportunities for solitude and the natural qualities of wilderness character.</p>
<p>E. Public Purposes - Is action necessary to achieve one or more of the public purposes for wilderness (as stated in Section 4(b) of the Wilderness Act): “recreational, scenic, scientific, educational, conservation, and historical use”?</p>
<p>Yes. Preventing concentrated camping impacts is necessary to achieve the conservation and scenic purposes of wilderness. Provision of appropriate camping opportunities is necessary to achieve the recreational purpose of wilderness.</p>
<p>F. Other Guidance - Is action necessary to conform to direction contained in agency policy, unit and wilderness management plans, species recovery plans, or agreements with tribal, state and local governments or other federal agencies?</p>
<p>RM 41: 6.3.10.3 Campsites and Shelters. The construction of new shelters for public use will generally not be allowed, in keeping with the values and character of wilderness. An existing shelter may be maintained or reconstructed only if the facility is necessary to achieve specific wilderness management objectives as identified in the park's wilderness and cultural resources management plans. The construction, use, and occupancy of cabins and other structures in wilderness areas in Alaska are governed by applicable provisions of ANILCA and by National Park Service regulations in 36 CFR 13, and may be permitted only under conditions prescribed in the park's wilderness management plan.</p> <p>Although the development of facilities to serve visitors will generally be avoided, campsites may be designated when essential for resource protection and preservation or to meet other specific wilderness management objectives. In keeping with the terms of the park's wilderness management plan, campsite facilities may include a site marker, fire rings, tent sites, food-storage devices, and toilets if these are determined by</p>

the superintendent to be the minimum facilities necessary for the health and safety of wilderness users, or for the preservation of wilderness resources and values. Toilets will be placed only in locations where their presence and use will resolve health and sanitation problems or prevent serious resource impacts, especially where reducing or dispersing visitor use is impractical or has failed to alleviate the problems. Picnic tables will not be allowed in wilderness.

Language from the ROD: 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.

G. Is the action necessary in wilderness?

Yes. Action is necessary to preserve the opportunities for solitude and natural qualities of wilderness character, and to achieve the conservation, scenic, and recreational purposes of wilderness. Action is necessary to comply with the Organic Act of the NPS, and is consistent with the guidance of RM-41 and the GMP ROD.

H. Options for Action and Criteria for Installations

Options for action include visitor education on LNT practices, reducing trailhead quotas, imposing destination quotas, and requiring the use of designated campsites. Education will always be used. Reducing trailhead quotas reduces opportunities for primitive recreation while having a questionable effect on camping at the popular areas (since visitors can access popular sites from different trailheads). Imposing destination quotas can reduce number of people at a time in a popular area with less impact on opportunities for primitive recreation than reducing trailhead quotas. However, destination quotas have additional impacts the unconfined nature of primitive recreation and can fail to control proliferation of campsites as any given party may camp on virgin ground in pursuit of greater solitude.

Of the available options to prevent proliferation of campsite impacts in a popular areas, designated campsites has the least impact on opportunities for primitive recreation and similar impact on the unconfined nature of recreation as destination quotas. Designated campsites can preserve opportunities for solitude in popular areas by separating groups from one another. However, designated campsites impact the undeveloped quality of wilderness character, and managing designated campsites may affect the untrammelled quality if site hazards (e.g., hazard trees) require mitigation.

Installing designated campsites is the minimum action necessary to preserve the opportunities for solitude or primitive and unconfined recreation and natural qualities of wilderness character where use is concentrated, limited campsites exist in a given area, there is a risk of rapidly increasing campsite impacts from levels of use, and opportunities for solitude may be compromised, but where site hazards require only minimal mitigation."

Minimum Requirements Analysis for Managing Administrative and Recreational Stock Facilities (drift fences, gates, and hitch rails) per Wilderness Act	
A. Options Outside of Wilderness - Can actions taken outside of wilderness adequately address the situation and meet project goals?	
No. Recreational and administrative stock use is an allowed activity in SEKI wilderness, and grazing of stock may be allowed. Any structures or methods to manage the effects of wilderness stock use will have occurred or be located in wilderness.	
B. Valid Existing Rights or Special Provisions of Wilderness Legislation - Is action necessary to satisfy valid existing rights or a special provision in wilderness legislation (the Wilderness Act of 1964 or subsequent wilderness laws)?	
No.	
C. Requirements of Other Legislation - Is action necessary to meet the requirements of other federal laws?	
Yes. The Organic Act of the National Park Service: "Sec.1. The service thus established shall promote and regulate the use of the Federal areas known as national parks,...to conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations." Installations may be needed to protect natural resources and provide for enjoyment of the park.	
D. Wilderness Character - Is action necessary to preserve one or more qualities of wilderness character?	
Yes. If stock is allowed to graze, some provision must be made to prevent grazing in inappropriate areas to preserve the natural quality and opportunities for solitude. In order to provide a range of opportunities for recreational stock use, some structures may be needed.	
E. Public Purposes - Is action necessary to achieve one or more of the public purposes for wilderness (as stated in Section 4(b) of the Wilderness Act): "recreational, scenic, scientific, educational, conservation, and historical use"?	
Yes. Facilitating stock use is necessary to promote the recreational purpose, and controlling stock use is necessary to promote the conservation purpose.	
F. Other Guidance - Is action necessary to conform to direction contained in agency policy, unit and wilderness management plans, species recovery plans, or agreements with tribal, state and local governments or other federal agencies?	
RM 41: 6.3.10.1 Administrative Facilities. Administrative facilities (e.g., ranger stations and/or patrol cabins, fire lookouts, radio and/or cellular telephone antennas, radio repeater sites, associated storage or support structures, drift fences, and facilities supporting trail stock operations) may be allowed in wilderness only if they are determined to be the minimum requirement necessary to carry out wilderness management objectives and are specifically addressed within the park's wilderness management plan or other supporting environmental compliance documents.	
RM 41: 6.4.6. Noncommercial grazing of trail stock used as part of an approved livestock management program within wilderness may be authorized in accordance with National Park Service regulations and conditions outlined in the wilderness management plan or stock use management plan. All approved livestock use must ensure preservation of wilderness resources and character. Superintendents will be responsible	

for monitoring livestock use in wilderness to the same degree as human use, and may use the same management tools and techniques, including the application of the minimum requirement concept to manage livestock use that are available for managing other wilderness uses.
RM 41: 6.4.4. The only structures or facilities used by commercial services that will be allowed in wilderness will be temporary shelters, such as tents, or other specifically approved facilities that may be required (within the wilderness management plan) for resource protection and the preservation of wilderness values. Temporary facilities will generally be removed from the wilderness after each trip unless such removal will cause additional degradation of the wilderness resources.
G. Is the action necessary in wilderness?
Yes. Action is necessary to preserve the natural and opportunities for solitude or primitive and unconfined recreation qualities of wilderness character, and to promote the recreational and conservation purposes of wilderness. Action is also necessary to support the NPS Organic Act, and is consistent with the guidance of RM 41.
H. Options for Action and Criteria for Installations
The options for managing impacts associated with stock use include education, use restrictions, and installation of drift fences and hitch rails. Drift fences can preserve the natural quality of wilderness by preventing grazing stock from drifting into areas with sensitive resources. Drift fences can preserve opportunities for solitude by preventing stock from leaving the forage area where they were released and disturbing visitors on trails or in campsites in their travel line. Drift fences can assist in providing opportunities for primitive recreation for relatively inexperienced stock users who cannot effectively use other means of holding stock, and for experienced stock users on challenging trips, and drift fences may be necessary to support administrative action near logistically critical administrative camps. Hitch rails can preserve the natural quality in areas where high-lining would impact sensitive resources, and can assist in providing opportunities for primitive recreation for relatively inexperienced stock users who cannot effectively use other means of holding stock. Both drift fences and hitch rails negatively impact the undeveloped quality, and drift fences impact opportunities for solitude for all visitors who must open and close them to travel.
Installation of a drift fence is the minimum required action where there is significant risk of stock released in an allowed forage area leaving that forage area and impacting sensitive resources or disturbing travelers or campers on their likely travel routes. Installation of drift fences is also the minimum action required to preserve opportunities for primitive recreation in areas chosen to support inexperienced stock users' access to wilderness, and in select locations is the minimum required action to support administration of wilderness. Other options brought forward during the public review of this WSP included using collars or GPS devices to track stock. While these options can be used to track stock, they are not effective in preventing stock travel into places that they are not allowed to go, and would not help protect park resources and visitor experiences. Therefore this option was considered but dismissed.

Minimum Requirements Analysis for Historic Buildings per Wilderness Act	
A. Options Outside of Wilderness - Can actions taken outside of wilderness adequately address the situation and meet project goals?	
Several historic buildings are located within wilderness, so it is necessary to determine if they are appropriate in wilderness and whether to remove them, maintain them, or allow them to molder. Some of the historic buildings are currently used for wilderness administration (e.g., ranger stations and patrol cabins).	
B. Valid Existing Rights or Special Provisions of Wilderness Legislation - Is action necessary to satisfy valid existing rights or a special provision in wilderness legislation (the Wilderness Act of 1964 or subsequent wilderness laws)?	
No.	
C. Requirements of Other Legislation - Is action necessary to meet the requirements of other federal laws?	
<p>Yes. The Organic Act of the National Park Service: “Sec.1. The service thus established shall promote and regulate the use of the Federal areas known as national parks,...to conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations.</p> <p>Historic properties eligible for the National Register of Historic Places that have been included within wilderness will be protected and maintained according to the pertinent laws and policies governing cultural resources, using management methods that are consistent with preservation of wilderness character and values. These laws include the Antiquities Act of 1906 and the Historic Sites Act of 1935, as well as the subsequent historic preservation legislation, including the National Historic Preservation Act, the Archeological Resources Protection Act, the Native American Grave Protection and Repatriation Act, and the American Indian Religious Freedom Act.</p>	
D. Wilderness Character - Is action necessary to preserve one or more qualities of wilderness character?	
Yes. Historic buildings may contribute to the other features of value quality of wilderness character, and may detract from the undeveloped quality. Maintaining buildings may require the removal of hazard trees, a trammeling action. The Pear Lake Ski Hut supports opportunities for primitive recreation in winter.	
E. Public Purposes - Is action necessary to achieve one or more of the public purposes for wilderness (as stated in Section 4(b) of the Wilderness Act): “recreational, scenic, scientific, educational, conservation, and historical use”?	
Yes. Historic buildings may support the public purposes of scenic, scientific, educational, and historical use.	
F. Other Guidance - Is action necessary to conform to direction contained in agency policy, unit and wilderness management plans, species recovery plans, or agreements with tribal, state and local governments or other federal agencies?	
<p>Yes.</p> <p>Management Policies 2006, 6.3.10 Management Facilities</p> <p>Part of the definition of wilderness as provided by the Wilderness Act is “undeveloped federal land retaining its primeval character and influence,</p>	

without permanent improvements.” Accordingly, authorizations of NPS administrative facilities in wilderness will be limited to the types and minimum number essential to meet the minimum requirements for the administration of the wilderness area. A decision to construct, maintain, or remove an administrative facility will be based primarily on whether or not the facility is required to preserve wilderness character or values, not on considerations of administrative convenience, economic effect, or convenience to the public or park staff.
Management Policies 6.3.8 Cultural Resources - The Wilderness Act specifies that the designation of any area of the park system as wilderness “shall in no manner lower the standards evolved for the use and preservation of” such unit of the park system under the various laws applicable to that unit (16 USC Section 1133(a)(3)). Thus, the laws pertaining to historic preservation also remain applicable within wilderness but must generally be administered to preserve the area’s wilderness character. The responsible decision maker will include appropriate consideration of the application of these provisions of the Wilderness Act in analyses and decision-making concerning cultural resources. Cultural resources that have been included within wilderness will be protected and maintained according to the pertinent laws and policies governing cultural resources using management methods that are consistent with the preservation of wilderness character and values. These laws include the Antiquities Act and the Historic Sites, Buildings and Antiquities Act, as well as subsequent historic preservation legislation, including the National Historic Preservation Act, the Archaeological Resources Protection Act, and the Native American Graves Protection and Repatriation Act. The Secretary of the Interior’s Standards and Guidelines for Archeology and Historic Preservation projects provide direction for protection and maintenance. Cemeteries or commemorative features, such as plaques or memorials, that have been included in wilderness may be retained (including approved access to these sites), but no new cemeteries or additions to existing cemeteries may be made unless specifically authorized by federal statute, existing reservations, or retained rights.
RM 41: 6.3.10.1 Administrative Facilities. Administrative facilities (e.g., ranger stations and/or patrol cabins, fire lookouts, radio and/or cellular telephone antennas, radio repeater sites, associated storage or support structures, drift fences, and facilities supporting trail stock operations) may be allowed in wilderness only if they are determined to be the minimum requirement necessary to carry out wilderness management objectives and are specifically addressed within the park’s wilderness management plan or other supporting environmental compliance documents. New roads will not be built in wilderness. Temporary vehicular access may be permitted only to meet the minimum requirements of emergency situations, and will be restored, per an approved restoration plan, as rapidly as possible. Where abandoned roads have been included within wilderness, they may be used as trails, restored to natural conditions, or managed as a cultural resource.
From the GMP: “Within the wilderness, efforts will be made to preserve a sense of remoteness and freedom from human-caused impacts. However, simple amenities such as ranger stations may be present to support administrative activities, reduce or control resource impacts, or provide for research and monitoring. Facilities used to support the administration and protection of wilderness may be provided.”
From the GMP: “Preserve or rehabilitate historic ranger cabins, Smithsonian Institution shelter (Mount Whitney shelter), Pear Lake ski hut, and other structures. Preserve and / or stabilize the Shorty Lovelace Historic District cabins or allow them to molder. Evaluate some trails to determine their eligibility for the National Register of Historic Places, plus provide historic trails information.”
G. Is the action necessary in wilderness?
Yes. Action is necessary to preserve the other features of value and undeveloped qualities of wilderness character, and in support of the scenic, scientific, educational, and historic public purposes of wilderness. Action is also necessary to comply with the Organic Act of the NPS, the

Antiquities Act of 1906, the Historic Sites Act of 1935, and the National Historic Preservation Act. Action must be consistent with the guidance of the SEKI General Management Plan, the 2006 NPS Management Policies, and RM 41.

H. Options for Action and Criteria for Installations

Any given historic building may be maintained, removed, or allowed to molder. Any building that is necessary for the administration of wilderness under the selected alternative must be maintained. All historic buildings detract from the undeveloped quality of wilderness character, but some may also contribute to the other features of value quality. Removal of an historic building is an adverse action under NHPA.

Historic buildings necessary to support administration of wilderness under a given alternative pass the minimum requirement test for installations, and will be maintained. Historic buildings that are not necessary for the administration of wilderness are evaluated under each alternative based on the building's contribution to the other features of value quality and on the weight the alternative gives to the undeveloped quality relative to the other qualities of wilderness character. If their contributions to the other features of value outweigh their impacts to the undeveloped quality, they pass the minimum requirement test. If they do not pass this second test, then the WSP prescribes analysis under NHPA to determine if their contributions under NHPA outweigh their impacts to the undeveloped quality of wilderness character. This final determination will then prescribe maintenance, removal, or moldering for the building in question.

<p align="center">Minimum Requirements Analysis for Non-Historic Recreational and Administrative Structures per Wilderness Act</p>
<p>A. Options Outside of Wilderness - Can actions taken outside of wilderness adequately address the situation and meet project goals?</p>
<p>Several buildings are currently located within wilderness, so it is necessary to determine if they are appropriate in wilderness and whether to remove them or maintain them. Some of the buildings are currently used for wilderness administration as ranger stations; other buildings are not currently used for administration of wilderness, but have been used in the past.</p>
<p>B. Valid Existing Rights or Special Provisions of Wilderness Legislation - Is action necessary to satisfy valid existing rights or a special provision in wilderness legislation (the Wilderness Act of 1964 or subsequent wilderness laws)?</p>
<p>No.</p>
<p>C. Requirements of Other Legislation - Is action necessary to meet the requirements of other federal laws?</p>
<p>Yes. The Organic Act of the National Park Service: “Sec.1. The service thus established shall promote and regulate the use of the Federal areas known as national parks,...to conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations.” Removing unneeded buildings is necessary to conserve scenery, and facilitating wilderness patrol is necessary to protect the natural and cultural resources in wilderness.</p>
<p>D. Wilderness Character - Is action necessary to preserve one or more qualities of wilderness character?</p>
<p>Yes. Buildings in wilderness impact the undeveloped quality of wilderness character, so any removal of buildings would improve that quality. Administrative presence and patrol in wilderness is necessary to preserve all qualities of wilderness character by facilitating natural and cultural resource protection, wilderness character and natural resources monitoring and restoration activities, enforcement of regulations and restrictions to protect wilderness character, prevent unauthorized trammeling actions.</p>
<p>E. Public Purposes - Is action necessary to achieve one or more of the public purposes for wilderness (as stated in Section 4(b) of the Wilderness Act): “recreational, scenic, scientific, educational, conservation, and historical use”?</p>
<p>Yes. Removal of unnecessary buildings supports the scenic and conservation purposes, and facilitating administrative patrol supports the recreational, scientific, educational, and conservation purposes.</p>
<p>F. Other Guidance - Is action necessary to conform to direction contained in agency policy, unit and wilderness management plans, species recovery plans, or agreements with tribal, state and local governments or other federal agencies?</p>
<p>Management Policies 2006, 6.3.10 Management Facilities Part of the definition of wilderness as provided by the Wilderness Act is “undeveloped federal land retaining its primeval character and influence, without permanent improvements.” Accordingly, authorizations of NPS administrative facilities in wilderness will be limited to the types and minimum number essential to meet the minimum requirements for the administration of the wilderness area. A decision to construct, maintain, or</p>

remove an administrative facility will be based primarily on whether or not the facility is required to preserve wilderness character or values, not on considerations of administrative convenience, economic effect, or convenience to the public or park staff.
RM 41: 6.3.10.1 Administrative Facilities. Administrative facilities (e.g., ranger stations and/or patrol cabins, fire lookouts, radio and/or cellular telephone antennas, radio repeater sites, associated storage or support structures, drift fences, and facilities supporting trail stock operations) may be allowed in wilderness only if they are determined to be the minimum requirement necessary to carry out wilderness management objectives and are specifically addressed within the park's wilderness management plan or other supporting environmental compliance documents. New roads will not be built in wilderness. Temporary vehicular access may be permitted only to meet the minimum requirements of emergency situations, and will be restored, per an approved restoration plan, as rapidly as possible. Where abandoned roads have been included within wilderness, they may be used as trails, restored to natural conditions, or managed as a cultural resource.
From the GMP: "Within the wilderness, efforts will be made to preserve a sense of remoteness and freedom from human-caused impacts. However, simple amenities such as ranger stations may be present to support administrative activities, reduce or control resource impacts, or provide for research and monitoring. Facilities used to support the administration and protection of wilderness may be provided."
G. Is the action necessary in wilderness?
Yes. Action is necessary to preserve all five qualities of wilderness character, and in support of the recreational, educational, scenic, and scientific purposes of wilderness. Action is required by the Organic Act of the NPS and is consistent with the guidance of the SEKI GMP, the 2006 NPS Management Policies, and RM 41..
H. Options for Action and Criteria for Installations
<p>The methods available for administrative patrol of wilderness are aerial patrol, day patrol by staff stationed in the frontcountry, multi-day trips by staff stationed in the frontcountry, and patrol by staff (hereafter "rangers") stationed in wilderness. Rangers stationed in wilderness may be based out of temporary camps or permanent buildings. Aerial patrol is limited in what it can accomplish, and negatively impacts the undeveloped and opportunities for solitude qualities of wilderness character. Day patrol is very effective in areas close to the frontcountry but is impractical for locations further than 8 or 10 miles from trailheads. Stationing rangers in temporary camps for long periods reduces their effectiveness in patrolling the wilderness due to the large amount of time and effort required to operate temporary camps, and leaves equipment and supplies vulnerable to depredation by wildlife or visitors while the ranger is patrolling. Temporary camps also impact the undeveloped quality of wilderness character, though less than permanent buildings. Due to the added threats to wilderness character in relatively high visitor use areas, administrative patrol must be more frequent in those locations.</p> <p>Maintaining buildings for facilitating administrative patrol of wilderness is the minimum required action to preserve wilderness character in heavily used areas of the wilderness more than a half day's travel from a trailhead. In less-visited areas more than a half-day's travel from trailheads, the minimum required action to preserve wilderness character will be installation of temporary camps. In areas closer than a half-day's travel from trailheads, day patrol is the minimum required action. At locations where buildings are not the minimum required action, and where removal will not unduly impact wilderness, non-historic buildings should be removed to improve the undeveloped quality.</p>

SEQUOIA AND KINGS CANYON NATIONAL PARKS WILDERNESS STEWARDSHIP PLAN MINIMUM REQUIREMENTS ANALYSIS FRAMEWORK

Part 2 - How Does Each Alternative Meet the Goals, Objectives, and Desired Conditions of the WSP

Alternatives Comparison Criteria

PLANNING FRAMEWORK

The WSP provides direction for the management of visitors and administrative activities within the parks' wilderness. The framework of this WSP is founded on defining the goals and objectives for wilderness management, defining wilderness character for the parks, describing desired conditions for wilderness, developing visitor use capacity, and determining the types and levels of commercial services that support wilderness purposes.

Goals and Objectives

Goals and objectives are key elements of a wilderness stewardship plan, as they establish and provide the direction for the parks' wilderness management program and reflect the purpose and need for planning. Wilderness goals and objectives flow from law, policies, park and wilderness enabling legislation, GMP objectives, public input, and more. The following identify what the WSP needs to address to achieve long-term successful management and protection of wilderness:

- Preserve ecological, geological, scientific, educational, scenic, and historical values of wilderness, including culturally significant resources and paleontological resources within wilderness, as important and prominent values, consistent with the Wilderness Act, California Wilderness Act, and applicable planning guidance from the GMP.
- Manage archeological, historical, and ethnographic sites in a manner that is compatible with wilderness and historic-preservation laws.
- Preserve dark night skies.
- Preserve natural soundscapes.
- Work to reduce conflicts between user groups as well as between users and sensitive resources.
- Determine the types and levels of commercial services that will be allowed in wilderness and manage these services subject to applicable laws and policies.
- Foster an inspired and informed public and park staff who value preservation of the parks' wilderness.
- Promote the Leave No Trace® minimum-impact practices.
- Promote safety within the context of wilderness where users are expected to be self-reliant.

Desired Conditions

Desired conditions are the natural and cultural resource conditions that the NPS aspires to achieve and maintain over time, and the conditions necessary for visitors to understand, enjoy, and appreciate those resources (from the planner's sourcebook). In the context of a wilderness stewardship plan, desired conditions qualitatively describe an ideal condition of wilderness character. The Wilderness Act requires that as a minimum, wilderness character be preserved from the time of designation, although Management Policies also allows for improvements to wilderness character. In this WSP, desired conditions are defined for the four primary qualities of wilderness character. More specific desired conditions are also provided under the qualities that relate specifically to visitor use management.

- The untrammeled quality of wilderness character would be preserved by limiting deliberate manipulation of ecological systems except as necessary to promote another quality of wilderness character.
- The natural quality of wilderness would be preserved by mitigating the impacts of modern civilization on ecosystem structure, function, and processes. The NPS aspires to minimize or localize adverse impacts caused by visitor use and administrative activities. In the wilderness, natural processes would dominate:
 - ecosystem structure and function
 - native biodiversity
 - water quality and quantity
 - decomposition, nutrient cycling and soil forming processes
 - meadow and wetland productivity
 - fire regimes
 - soundscapes, dark skies and viewsheds
- The undeveloped quality of wilderness character would be preserved through the removal of installations that are unnecessary for the protection of other wilderness character qualities.
- Outstanding opportunities for solitude or primitive and unconfined recreation would be provided to support visitor use and enjoyment of the parks' wilderness areas in balance with the protection of other wilderness character qualities.
 - Visitors with diverse backgrounds and capabilities would have opportunities to use and enjoy wilderness.

These overarching element-specific objectives are:

Visitor-use Levels – Visitor use and enjoyment of wilderness would be balanced with the preservation of wilderness character.

Trails – The trail system would facilitate access for visitor use and enjoyment of the wilderness. Trails would be well suited to the types and levels of visitor use.

Campfires – Visitors would have the opportunity to enjoy campfires where campfires are compatible with the protection of vegetation and downed wood resources.

Food Storage – Native wildlife would subsist only on naturally obtained food, uninfluenced by the presence of human food.

Human-waste Management – Human waste would not contaminate water or create unsanitary or unsightly conditions. Management of waste would not unduly impact the undeveloped quality.

Party Size – Party size would be set at levels high enough to allow for a variety of experiences, but low enough to protect wilderness character from impacts associated with large groups.

Camping/Campsites – Visitors would have the opportunity to choose camping locations, except in areas where camping would result in unacceptable impacts.

Stock Use – Visitors would have opportunities to travel with stock, from day rides to multi-day trips, in a manner that is compatible with the protection of wilderness character.

Administrative Structures and Development – Installations and developments would be the minimum necessary for the administration of wilderness.

Frontcountry Facilities to Support Wilderness – Frontcountry facilities that support activities in wilderness would encourage and/or facilitate visitor use and enjoyment of wilderness.

Commercial Services – Commercial services may be performed to the extent necessary for activities which are proper for realizing the recreational or other wilderness purposes of the areas. Commercial services would support visitor use and enjoyment of wilderness in a variety of appropriate ways.

Alternative 2	Alternative 3	Alternative 4	Alternative 5
<p>This alternative recognizes that SEKI wilderness can be broadly understood as three different types of locations: day use areas close to frontcountry, highest-use overnight areas like the HST, RLL, and PCT, and low-use overnight areas like the Middle Fork of the Kings and the Hockett Plateau. It further recognizes that current and projected visitor use levels pose few threats to wilderness character in the low-use areas under current management, but that there are some threats in highest use areas (or areas with very sensitive resources) that can be mitigated through targeted improvements to current management.</p>	<p>This alternative seeks to increase opportunities for primitive recreation by allowing additional use, which is mostly expected to occur at high-demand areas. Allowing increased use could result in decreased opportunities for solitude wilderness-wide. In order to preserve the natural quality of wilderness, SEKI's high use areas would require additional development and restrictions on visitor behavior.</p>	<p>This alternative seeks to emphasize the undeveloped and non-commercial qualities of SEKI wilderness. Removal of development and reduction of commercial services would increase the self-reliant nature of wilderness recreation. In order to preserve the natural quality of wilderness with less resource-protecting development, the amount of use would need to be reduced.</p>	<p>This alternative seeks to enhance the quality of solitude available in SEKI wilderness. Total numbers of visitors allowed and party sizes would be reduced, which would mean that reduced levels of development and reduced restrictions on visitor behavior would serve to protect natural resources.</p>

Alternative 2		Alternative 3		Alternative 4		Alternative 5	
Element	To what degree does this alternative meet goals, objectives, and desired conditions?	Element	To what degree does this alternative meet goals, objectives, and desired conditions?	Element	To what degree does this alternative meet goals, objectives, and desired conditions?	Element	To what degree does this alternative meet goals, objectives, and desired conditions?
Permits and Quotas		Permits and Quotas		Permits and Quotas		Permits and Quotas	
Trails and Signs		Trails and Signs		Trails and Signs		Trails and Signs	
Campfires		Campfires		Campfires		Campfires	
Food Storage		Food Storage		Food Storage		Food Storage	
Human Waste Mgmt.		Human Waste Mgmt.		Human Waste Mgmt.		Human Waste Mgmt.	
Party Size		Party Size		Party Size		Party Size	
Camping		Camping		Camping		Camping	
Stock use access and travel		Stock use access and travel		Stock use access and travel		Stock use access and travel	
Stock Grazing		Stock Grazing		Stock Grazing		Stock Grazing	
Administrative Structures and development		Administrative Structures and development		Administrative Structures and development		Administrative Structures and development	
Frontcountry Facilities		Frontcountry Facilities		Frontcountry Facilities		Frontcountry Facilities	
Commercial Services		Commercial Services		Commercial Services		Commercial Services	

KEY	
Mostly Meets Goals, Objectives, Desired Conditions	
Partially Meets Goals, Objectives, Desired Conditions	
Does Not Meet Goals, Objectives, Desired Conditions	

SEQUOIA AND KINGS CANYON NATIONAL PARKS WILDERNESS STEWARDSHIP PLAN MINIMUM REQUIREMENTS ANALYSIS FRAMEWORK

Part 3 - How Does Each Alternative Affect Wilderness Character?

This table includes a summary of the analysis. A complete analysis is found in the WSP Chapter 4,
Environmental Consequences - Wilderness Character.

Alternative 2	Alternative 3	Alternative 4	Alternative 5
This alternative recognizes that SEKI wilderness can be broadly understood as three different types of locations: day use areas close to frontcountry, highest-use overnight areas like the HST, RLL, and PCT, and low-use overnight areas like the Middle Fork of the Kings and the Hockett Plateau. It further recognizes that current and projected visitor use levels pose few threats to wilderness character in the low-use areas under current management, but that there are some threats in highest use areas (or areas with very sensitive resources) that can be mitigated through targeted improvements to current management.	This alternative seeks to increase opportunities for primitive recreation by allowing additional use, which is mostly expected to occur at high-demand areas. Allowing increased use could result in decreased opportunities for solitude wilderness-wide. In order to preserve the natural quality of wilderness, SEKI's high use areas would require additional development and restrictions on visitor behavior.	This alternative seeks to emphasize the undeveloped and non-commercial qualities of SEKI wilderness. Removal of development and reduction of commercial services would increase the self-reliant nature of wilderness recreation. In order to preserve the natural quality of wilderness with less resource-protecting development, the amount of use would need to be reduced.	This alternative seeks to enhance the quality of solitude available in SEKI wilderness. Total numbers of visitors allowed and party sizes would be reduced, which would mean that reduced levels of development and reduced restrictions on visitor behavior would serve to protect natural resources.

Alternative 2	Alternative 3	Alternative 4	Alternative 5
Natural	Natural	Natural	Natural
Designated campsites could protect the natural quality of wilderness by restricting where people camp. Grazing would be managed so as to maximize protection of natural and cultural resources while allowing visitors traveling with stock continued access to forage for their animals.	Designated campsites could protect the natural quality of wilderness by restricting where people camp. Grazing would be managed so as to maximize protection of natural and cultural resources while allowing visitors traveling with stock continued access to forage for their animals.	No grazing. Improvement to the natural from the removal of developments and the restoration of those areas to natural conditions.	Current methods of grazing management (such as opening dates, head limits and night limits, grazing capacities, and temporary closures) would continue to be implemented.
Protects the natural quality	Protects the natural quality	Protects the natural quality	Protects the natural quality
Untrammeled	Untrammeled	Untrammeled	Untrammeled
Trammeling associated with the restoration of trails, campfires, and the removal of development.	Trammeling associated with the restoration of trails, campfires, and the removal of development.	Trammeling associated with the restoration of trails, campfires, and the removal of development.	Trammeling associated with the restoration of trails, campfires, and the removal of development.
Short-term adverse effect on untrammeled.	Short-term adverse effect on untrammeled.	Short-term adverse effect on untrammeled.	Short-term adverse effect on untrammeled.

Alternative 2	Alternative 3	Alternative 4	Alternative 5
Undeveloped	Undeveloped	Undeveloped	Undeveloped
<p>Development associated with campfires would be restricted (depending on location) above certain elevations. Some privies and restrooms would be removed. The park would retain 48 of the existing 86 food-storage boxes (FSB), and would remove 25. An additional 13 food-storage boxes would be considered for removal. Under this alternative, 29 hitch rails would be retained, and 23 hitch rails would be removed. Also, 42 fences/gates would be retained; 12 would be removed.</p> <p>Most ranger stations would be retained; the Monarch tent platform would be removed and the Bearpaw Ranger Station would be relocated and reconstructed. The facilities at the Redwood Canyon cabin would be reduced in size and unnecessary installations would be removed. Existing pastures/fences would remain. Existing crew camps would be retained, but reduced in size and with fewer installations.</p>	<p>Development associated with campfires would be removed above 9,000 ft but would continue to exist below that elevation. FSB would be retained; more could be added. Privies and restrooms would be retained; more may be installed. Designated campsites would be retained and more would be developed. 14 hitch rails would be removed, and 38 would be retained. Under this alternative, 14 hitch rails would be removed and 38 hitch rails would be retained. Five fences/gates would be removed, 49 would be retained, and one new fence with a gate would be constructed. All existing ranger stations and patrol cabins would be retained. Some would be improved/ relocated/ converted to hard sided stations. The Redwood Canyon research cabin would be retained. Existing pasture/fences would be retained. The number of crew camps would be increased to support additional trail development.</p>	<p>All evidence of campfires would be removed. All FSB would be removed. All privies and restrooms would be removed. All designated campsites would be removed. All grazing facilities would be removed. Seven ranger stations and two patrol cabins removed. Redwood Canyon Cabin would be removed. Administrative pasture fences would be removed. Permanent crew camps would be removed.</p>	<p>All privies and restrooms removed. Under this alternative, 24 hitch rails would be retained and 28 hitch rails would be removed. A total of 36 fences or gates would be retained, 18 fences and gates would be removed, and one gate would be added. Five ranger stations would be removed. Redwood Canyon cabin would be removed. Permanent crew camps would be removed.</p>
Improves undeveloped quality.	Increases development more than any other alternative.	Improves undeveloped quality more than any other alternative.	Improves undeveloped quality.

Alternative 2	Alternative 3	Alternative 4	Alternative 5
Solitude or Primitive and Unconfined Recreation	Solitude or Primitive and Unconfined Recreation	Solitude or Primitive and Unconfined Recreation	Solitude or Primitive and Unconfined Recreation
<p>Quotas would remain similar to current conditions. On-trail party size would remain similar to alternative 1 (no-action), with some reduction in the largest allowable stock party sizes to reduce trail and social impacts. Off-trail party sizes would be reduced for stock and foot parties. Camping would be allowed in a few close in areas. Designated campsites would be retained and more may be developed. Stock would be allowed on most trails, and in four off trail areas.</p>	<p>Quotas would be increased. Campfires would be allowed up to 9,000 feet. Party size limits would be increased more than other alternatives. Night limits would be more restrictive than current conditions. Designated campsites would be retained and more may be developed. Stock would be allowed on most trails, and in four off trail areas.</p>	<p>Quotas would be reduced slightly. There would be fewer permits for commercial service providers. No campfires would be allowed wilderness-wide. Party size would be reduced from current conditions. Night limits would be established. Stock would be allowed on most trails. Off trail travel by private stock parties would be allowed in four areas of the wilderness (but prohibited for commercial and admin). Grazing would be prohibited.</p>	<p>Quotas would be reduced and day use permits would be instituted in some locations. Party size most restrictive when compared to other alts. More restrictive night limits than the other alternatives. Designated campsites would be removed. Stock use would be allowed on trail (but not off trail).</p>
<p>Improves solitude in highest use areas; maintains opportunities for primitive and unconfined recreation similar to existing levels.</p>	<p>Decreases solitude; decreases unconfined character of wilderness with increased restrictions. Increases opportunities for primitive recreation.</p>	<p>Increases solitude; decreases opportunities for primitive and unconfined recreation.</p>	<p>Increases solitude; decreases opportunities for primitive and unconfined recreation.</p>
Other features of Value	Other features of Value	Other features of Value	Other features of Value
<p>Retains the historic structures in wilderness. Removes one historic structure (Bearpaw Meadow Ranger Station).</p>	<p>Retains the historic structures in wilderness. Removes one historic structure (Bearpaw Meadow Ranger Station).</p>	<p>Removes four historic structures and one historic district from wilderness.</p>	<p>Retains the historic structures in wilderness. Removes one historic structure (Bearpaw Meadow Ranger Station).</p>
<p>Beneficial and adverse effect on historic features.</p>	<p>Beneficial and adverse effect on historic features.</p>	<p>This alternative results in the removal of the most historic structures.</p>	<p>Beneficial and adverse effect on historic features.</p>

SEQUOIA AND KINGS CANYON NATIONAL PARKS WILDERNESS STEWARDSHIP PLAN MINIMUM REQUIREMENTS ANALYSIS FRAMEWORK

Part 4 - Recommended Alternative and Justification

All of the alternatives serve to protect wilderness character to different degrees.

Some alternatives protect the undeveloped quality better (alternatives 4 and 5); alternative 2 would reduce development slightly; alternative 3 would increase levels of development.

Some alternatives provide more opportunities for solitude by reducing trailhead quotas and commercial services (alternatives 4 and 5). However, alternatives 4 and 5 both limit opportunities for primitive and unconfined recreation. Alternative 2 provides opportunities for primitive and unconfined recreation near current levels, and Alternative 3 expands opportunities. Alternative 2 better protects solitude in popular areas, while alternative 3 would reduce opportunities for solitude. All alternatives have similar levels of trammeling.

All alternatives protect the natural quality of wilderness from the impacts associated with visitor use, however the natural quality is more at risk in alternatives that remove food-storage boxes (alternatives 4 and 5) and other facilities that help the park manage wilderness impacts (such as ranger stations and privies). Alternative 4 protects the natural quality by prohibiting grazing, but it does this at the expense of providing opportunities for primitive and unconfined recreation. Alternative 3 provides the greatest opportunities for primitive and unconfined recreation, but it does so at the expense of opportunities for solitude, particularly in the most popular areas.

Conclusion

Overall, alternative 2 best meets the goals, objectives and desired conditions while preserving wilderness character. While it does not result in the most reduction in development, the developments maintained in wilderness, such as designated campsites, food storage boxes, privies, ranger stations, and fences, serve to protect the natural quality of wilderness, and promote opportunities for primitive and unconfined recreation. Opportunities for solitude would be enhanced in the most popular areas by reducing use (reductions in trailhead quotas, reductions in commercial services, reduced night limits), while opportunities for a range of primitive and unconfined recreation would continue to be available.

This page intentionally left blank.