



Appendix I

Minimum
Requirements
Analysis

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Valhalla in Sequoia National Park

NPS Photo

**APPENDIX I:
MINIMUM REQUIREMENTS ANALYSIS**

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SEQUOIA AND KINGS CANYON NATIONAL PARKS

MINIMUM REQUIREMENTS ANALYSIS

INSTRUCTIONS AND BACKGROUND MATERIALS

Worksheet Instructions

The Minimum Requirements Analysis (MRA) worksheet is designed to assist park employees and outside researchers with completing a Minimum Requirement Analysis for wilderness projects. These instructions refer directly to the MRA worksheet. For more information about MRAs, see the toolboxes on www.wilderness.net/toolboxes.

Use of this document assumes familiarity with the Wilderness Act, other relevant legislation, and agency policy. For training in the Wilderness Act or on conducting a Minimum Requirements Analysis, go to: www.wilderness.net/index.cfm?fuse=NWPS&sec=elearning.

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.

Any proposed administrative activity that has the potential to affect the wilderness or potential wilderness additions will be analyzed through the minimum requirement process. It is important to use professional judgment when deciding whether or not you need to complete the MRA Worksheet. Projects that have negligible impacts (e.g. observing wildlife, monitoring vegetation with a small crew, revisiting previously installed scientific equipment) do not need to go through the MRA process. If you are unsure about how to proceed, contact your Division Chief, the Research Coordinator, your supervisor, the Assistant Wilderness Coordinator (AWC), or the Environmental Protection Specialist (EPS).

The process will be used to determine if the action will be implemented and, if so, the tools or techniques that will be used. The analyses will clearly identify how minimum requirement decisions were developed and include reference to the applicable compliance documents (Categorical Exclusion, Environmental Assessment, and Environmental Impact Statement). Approval will be documented with the superintendent's signature, and a permanent record of the analyses will be retained in the parks' files.

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.*”

Step 1: Determine if any administrative action is necessary.

Description of Situation:

The description should explain, in general terms, the situation that may require action. However, it should neither assume that action will be taken, nor identify a specific method or tool to be used. The description helps determine whether *any* action is necessary in wilderness. ***The appropriate administrative response may be no action at all.***

The description should not justify the use of motorized equipment/mechanical transport or the placement of a structure, facility, or temporary road. If action is needed, the specific actions, methods, and tools will be identified and evaluated in Step 3.

The table below provides examples of correct/incorrect descriptions. The descriptions are abbreviated for training purposes. Actual descriptions should provide all relevant background information.

Correct examples of description	Incorrect examples of description
An administrative cabin is deteriorating and there is a proposal to reconstruct the structure. The cabin is located six miles inside the wilderness and is currently used by trail crews and wilderness rangers.	There is a need to use motorized tools to restore an administrative cabin
A windstorm has blown down trees which are blocking maintained trails. Approximately 47 miles of trail are currently blocked limiting access to 32% of the wilderness.	Chainsaws would be the quickest tool for clearing the downed trees.
There is a lack of information available to biologists about a wildlife species that has the potential for listing under the ESA.	A helicopter should be used to survey the population because all other methods would take too long.
A trail bridge has washed out. The bridge serves a main trail used by visitors and outfitter-guides to access approximately 20% of the wilderness. Alternatives to access this portion of the wilderness would add 18 miles to the travel route.	There is a need to replace the washed out trail bridge. A helicopter is needed to fly in a replacement bridge and would be the most cost effective and safest tool for the job.
Invasive plant species are present in the wilderness along the Clear Creek, Blue Lake, and Windy Pass Trails. The trails are the most popular access routes to the lake basin area of the wilderness and are used by both recreation livestock users and hikers.	A motorized herbicide sprayer is the most efficient tool to treat invasive plants.

Answer questions A through F with "Yes" or "No," and explain your answer. If one of the questions is not applicable to the proposal, answer "No" and explain why it is not applicable.

To ‘check’ or ‘uncheck’ a box, move your cursor into the box and double click to open the check box form field options menu. Alternatively, you may access the field menu by holding your cursor over the box, right click, and select properties.

Remember that in Step 1, the analysis is about whether or not there is a *need* to take action and not about specific proposed activities or techniques. The specific alternatives for implementing a decision and the positive and negative impacts of each action will be described and evaluated in Step 3.

A. Options Outside of Wilderness

Can actions taken outside of wilderness adequately address the situation and meet project goals?

Identify options outside of wilderness and discuss whether or not they can adequately address the situation described above.

Examples of administrative actions outside wilderness include:

- Installing nest boxes or conducting wildlife surveys outside of wilderness boundaries.
- Surveying visitors at the trailhead, rather than on the trail.
- Using quota reductions to address recreational impacts.
- Locating monitoring or other administrative structures outside of wilderness.

B. Valid Existing Rights or Special Provisions of Wilderness Legislation

Is action necessary to satisfy valid existing rights or special provisions in wilderness legislation (the Wilderness Act of 1964 or subsequent wilderness laws)?

Valid existing rights are granted only by provisions in law. These may include rights associated with mining, water, rights-of-way, or access to non-federal lands inside wilderness. Special provision language could be contained within the Wilderness Act of 1964 or the designating legislation for Sequoia-Kings Canyon Wilderness and/or John Krebs Wilderness.

Identify any valid existing rights or special provisions in wilderness legislation and cite the law and section. If there are none, state that none exist.

Examine the special provision and describe whether the law says that a specific action “shall” be taken or that an action “may” be taken. Remember that legislative history (i.e. Congressional committee reports) is useful background information that should be considered, but it does not have the same requirement for implementation as direction contained in law.

Some valid existing rights or provisions of special legislation may be satisfied by an option outside wilderness. Such possibilities would likely reduce impacts to the wilderness resource and character and should be explored.

Valid Existing Rights or Special Provisions that apply to Sequoia and Kings Canyon National Parks are:

- **Omnibus Public Land Management Act of 2009:**

- Section 1902. Designation of Wilderness Areas:

- (1) John Krebs Wilderness

- (C) Potential Wilderness Additions – The designation of the potential wilderness additions (A) shall not prohibit the operation, maintenance, and repair of the small check dams and water impoundments on Lower Franklin Lake, Crystal Lake, Upper Monarch Lake, and Eagle Lake. The Secretary is authorized to allow the use of helicopters for the operation, maintenance and repair of the small check dams and water impoundments on these same lakes.

- Section 1903 (c) – Hydrologic, Meteorologic, and Climatological Devices, Facilities, and Associated Equipment: The Secretary shall continue to manage maintenance and access to hydrologic, meteorologic, and climatological devices, facilities and associated equipment consistent with House Report 98–40.
- Section 1903(e) Horseback Riding – Nothing in this subtitle precludes horseback riding in, or the entry of recreational or commercial saddle or pack stock into, an area designated as wilderness by this subtitle (1) in accordance with section 4(d)(5) of the Wilderness Act and (2) subject to any terms and conditions determined necessary by the Secretary.

- **Other special provisions and valid existing rights included in the 1984 California Wilderness Act and Omnibus Public Land Management Act of 2009 and accompanying Committee Reports include:**

- The continued use of Bearpaw High Sierra Camp (a Potential Wilderness Addition).
 - Management of southern Hockett Plateau as Proposed Wilderness.
 - Existing Rights of private landowners at Oriole Lake to access their private lands

C. Requirements of Other Legislation

Is action necessary to meet the requirements of other federal laws?

Laws that do not directly address wilderness may influence the need for actions in wilderness. In some instances, the administrator is asked to satisfy the requirements of multiple laws. Identify and cite applicable provisions of other laws and describe any conflicts between the provisions of other laws and the Wilderness Act or enabling legislation for your area. If no other laws are applicable, state that there are no requirements.

Apparent conflicts between the Wilderness Act and other legislation may require innovative approaches and not all apparent conflicts are genuine. No law over-rides another law (unless specifically stated in the superseding law). The requirements of all applicable laws must be met.

For a list of laws that may apply to projects within SEKI, refer to Attachment 1 (pages 16-18).

D. Wilderness Character

Is action necessary to preserve one or more of the qualities of wilderness character?

Explain how taking action in wilderness is necessary to preserve each quality of wilderness character.

As you become increasingly familiar with analyzing effects on the qualities of wilderness character, you will realize that taking action often positively impacts one or more qualities of wilderness character while simultaneously negatively impacting others. Keep in mind that at this point in the analysis you are determining *if* any action is necessary, *not* looking at impacts from taking action (that analysis comes in Step 3, if you decide at the end of Step 1 that some action must be taken).

For more information about the qualities of wilderness character, refer to Attachment 2 (pages 19-21).

E. The Public Purposes of Wilderness

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?"

Identify which of the public purposes are applicable to the situation and describe whether it is necessary to take action to be consistent with that public purpose.

The public purposes are defined as follows:

Recreational: Wilderness is designated, in part, to provide for recreation opportunities that allow visitors to experience wilderness *as wilderness*. This public purpose is related to the direction for administration of wilderness areas Section 2 (a) "...and these shall be administered for the use and enjoyment of the American people in such a manner as will leave them unimpaired for future use and enjoyment as wilderness..." The recreational public purpose is also supported by the definition of wilderness found in Section 2 (c) "...has outstanding opportunities for solitude or a primitive and unconfined type of recreation..."

A management action is consistent with the recreational public purpose, and may be necessary, if the action will contribute to providing opportunities for visitors to experience wilderness. A management action is not necessary if it impacts these opportunities. The need to accommodate visitor use, or provide "easy" access, does not over-ride the mandate to preserve the qualities of wilderness character.

Scenic: The scenic public purpose of wilderness is the visual experience provided by the natural features of wilderness (vegetation, geology, water, etc.) obtained by visitors inside wilderness or as seen by others outside wilderness. This public purpose is closely related to the Natural, Undeveloped, and Opportunities for Solitude or Primitive and Unconfined Recreation qualities of wilderness character. It is also related to the Wilderness Act Section 2 (c) definition of wilderness and direction for management, "...which is protected and managed so as to preserve its natural conditions." In addition, Section 2 (c) lists "scenic" as a value that may be found in wilderness.

It may be necessary to take management action to be consistent with the scenic public purpose when there is a need to protect or restore natural conditions and, therefore, the scenic value of wilderness. An action

is not needed and is inconsistent if it impairs the natural scenery of wilderness (e.g., modern human structures or installations).

Natural events (such as fires, floods, mudslides, and insect or disease infestations) are not a negative impact to the scenic public purpose. The scenic public purpose does not include the view from the wilderness to other lands nor would it justify cutting trees inside wilderness to provide a view point along a trail.

Scientific: The Wilderness Act, in Section 2 (a) includes "...gathering and dissemination of information regarding their use and enjoyment" as part of the necessary administration of the area. In addition, Section 2 (c) lists "scientific" as one of several values that may be found in wilderness.

A management action is consistent with the scientific public purpose, and may be necessary, when an opportunity for research or other scientific activity is needed for the benefit of wilderness. This public purpose does not require that all proposals for research or scientific activities in wilderness be implemented. Instead, this purpose recognizes the value of research and scientific activities that are necessary for wilderness management or that have a significant value for society and, in certain unique circumstances, can only be accomplished in wilderness, even if it involves a use prohibited by Section 4(c) of the Wilderness Act. An action which does not directly support the scientific public purpose nonetheless may be allowed if it does not involve a prohibited use or otherwise degrade wilderness character.

For example, is a proposal to monitor air quality in wilderness consistent with the scientific public purpose? The scientific public purpose includes gathering information about the effects of outside forces (i.e. air pollution) on wilderness. If a suitable location outside wilderness cannot be found, and if the information to be gathered is needed to preserve wilderness character, monitoring in wilderness may be evaluated to determine if it is the minimum necessary action to meet management objectives for the management of the wilderness. In addition, air quality monitoring may also be consistent with the conservation public purpose if the information gathered can be used to ensure preservation of the Natural quality of wilderness character.

Educational: The educational public purpose of wilderness is the benefit to the American people that is provided through learning about wilderness and understanding the role of wilderness ecosystems and visitor opportunities in the broader social and biophysical landscapes. The Wilderness Act, in Section 2 (c) includes "educational" as a value that may be found in wilderness.

A management action is consistent with the educational public purpose, and may be necessary, if opportunities for education about the wilderness resource (either in general, or for a unique, specific element) are recognized and necessary to meet management objectives that preserve wilderness character. Activities such as interpretation inside wilderness (e.g. signs) or marketing that encourages use of specific locations for recreation opportunities is inconsistent with the educational public purpose and could impact the preservation of wilderness character if opportunities for solitude or a primitive and unconfined type of recreation are compromised.

Conservation: The conservation public purpose is closely related to both the Natural and Untrammeled qualities of wilderness character. The Wilderness Act in Section 2 (c) defines wilderness as a place "...where the earth and its community of life are untrammeled by man..." and that is "...protected and managed so as to preserve its natural conditions..." Also in Section 2 (c), the Wilderness Act, includes

“ecological” as one of the values that may be found in wilderness. These definitions and terms are consistent with the common definition of conservation which is to save or protect.

A management action is consistent with the conservation public purpose, and may be necessary, when actions benefit the natural conditions and the natural function of ecological processes in wilderness through protection or restoration. But not all biophysical management or restoration actions are consistent with the conservation public purpose.

For example, a proposal to alter existing habitat in wilderness to help prevent listing of a wildlife species may or may not be consistent with the conservation public purpose. It may be consistent if the action would help restore natural conditions that have been impacted by modern human activity to within the Historic Range of Variability (HRV).

If the action to alter existing habitat would create conditions outside the HRV, it would be inconsistent with the conservation public purpose (and possibly degrade the Natural quality of wilderness character). However, compliance with the Endangered Species Act or adoption of new scientifically-based goals for conserving ecosystem integrity in the face of rapid global changes may still require this or other actions to be considered and possibly implemented. In these cases the proposed action may need to be revised to minimize the use of motorized equipment, installations, structures, etc.

Historical: The historical public purpose of wilderness is represented by the historic and pre-historic sites, artifacts, structures, or other cultural landscapes that may be within the areas and by the human activities that once occurred there. Section 2 (c) lists “historical” as one of several values that may be found in wilderness.

A visitor to wilderness, or anyone learning about wilderness, becomes aware of or benefits from the associations between past human activities or influences and the wilderness. There may be a need for management action that is consistent with the historical public purpose if there is a need for protection of cultural resources. But the historical public purpose does not mean that every structure must be preserved or restored or that every past use of wilderness must continue.

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?

Describe any applicable guidance for the situation or project. If the issue has been addressed in agency policy, unit and wilderness management plans, species recovery plans, or agreements with tribal, state, and local governments or other federal agencies, cite the guidance here.

Carefully consider the context and requirements of the policy, plan or agreement. Plans developed using a NEPA analysis are decisions that provide stronger guidance than plans developed with less public or interdisciplinary involvement.

For a list of plans, policies, and agreements that may apply to projects within SEKI, refer to Attachment 3 (pages 22-28).

Decision:

Is administrative action necessary in wilderness?

Evaluate your responses to the questions above in order to determine whether or not administrative action is necessary in wilderness.

In making the determination, prioritize compliance with the Wilderness Act and the provisions of other laws (questions A-D). Second priority is given to question E, since the Public Purposes are subject to the clause: "Except as otherwise provided in this Act." Third priority is given to question F, since policies, plans, and agreements do not override the legal requirements used as the basis of the other questions.

Consider the following: If you do not accomplish the work, what would be the resulting impacts? Would there be adverse effects on wilderness? Would you fail to meet the mandate of other laws and/or policies?

If you are unable to determine if action is necessary, consult your Division Chief or supervisor. Researchers should consult the Research Permit Coordinator.

Step 2: Determine the need to develop alternatives.

Does your project propose a Section 4(c) prohibited activity?

If your project includes a Section 4(c) prohibited activity, skip Step 2 and proceed directly to Step 3.

Section 4(c) prohibited activities include: the use of mechanical transport (wheelbarrows, bicycles, etc.) and/or motorized equipment and vehicles (chainsaws, water pumps, rock drills, etc.); the landing of aircraft; and the installation of materials, equipment, and/or structures.

If your project does not include a Section 4(c) prohibited activity, answer the questions provided.

If you answer *yes* to any of the questions, you may be required to complete Step 3. Contact the AWC or the EPS for guidance.

If you answered *no* to all of the questions, provide a brief project description and retain the form in your permanent administrative record. Submit an electronic copy to the Assistant Wilderness Coordinator.

Step 3: Determine the minimum activity.

Description of Alternatives

Develop a minimum of two action alternatives plus a no-action alternative. The no-action alternative is used for comparison purposes and/or a baseline when evaluating effects. (In rare cases, it may be appropriate to develop only one action alternative.)

Develop reasonable and feasible alternatives. When you develop alternatives, consider existing laws, policies, and guidance. Also consider your specific project objectives. Only analyze alternatives that do not appear to be “too remote or speculative” to accomplish the project’s purpose.

For each alternative, describe: the methods and techniques that will be used; when the activity will take place; where the activity will take place; the necessary mitigation measures; and the general effects to the biophysical and social components of the wilderness resource and the qualities of wilderness character.

Identify and describe a full range of feasible alternatives, including (as applicable):

- No-action
- No Section 4(c) prohibited uses
- Minimal Section 4(c) prohibited uses (e.g. a combination of motorized and non-motorized methods or tools)

The level of detail required in the description of alternatives and effects varies by the complexity of the activity. For some projects, it may be necessary to reference agency policy, standards, or guidelines for construction of facilities and structures, safety, etc. A “no-action” alternative should be included to help confirm that action in wilderness is necessary and to facilitate a comprehensive comparison of effects (this is also useful for subsequent NEPA analysis).

Include mitigation measures that would be implemented for the various activities, methods, and tools that could be used. This is particularly important when describing the effects to the biophysical or social components of the wilderness resource from workers traveling or camping in the wilderness.

Include an explanation of how the impacts can be mitigated: through employee training; location of work areas, campsites and travel routes; project timing; temporary closures; and other actions. Also include any seasonal timing requirements or identified need for urgency based on protection of wilderness character or worker safety.

Describe the alternatives to highlight their differences. For instance, if *all* alternatives contain an identical action component and mitigation, evaluate it separately as an action common to all alternatives.

A. Wilderness Character

In Step 1, you used the qualities of wilderness character as criteria for determining whether or not action is necessary in wilderness. Here, describe the positive or negative effects ***of each alternative*** on wilderness character. Identify both short-term and long-term effects where necessary.

For more information on the five qualities of wilderness character, refer to Attachment 2 (pages 19-21).

- **Untrammelled**

Identify how this quality is positively impacted where a trammeling is reduced or eliminated or negatively impacted where trammeling occurs or increases. Discuss the degree to which the components or processes of ecological systems are ***intentionally*** controlled, manipulated, or hindered by the proposed actions.

This quality is degraded by modern human activities or actions that control or manipulate the components or processes of ecological systems inside the wilderness. Examples include the suppression of natural fire or managing vegetation and wildlife. ***Even when the manipulation is for a "good" purpose, such as eliminating a non-native species, it is considered a trammel and has a negative impact to this quality.*** A proposal which does not manipulate the biophysical environment has no impact on this quality. ***The only way a positive effect to this quality could be registered is if the proposal would stop a current manipulation of the biophysical environment.***

For projects that do not intend to manipulate "the earth and its community of life" (e.g. the installation of monitoring equipment, clearing trees from a trail, etc.), simply state that there is no effect on the Untrammelled quality of wilderness character.

- **Undeveloped**

This quality is degraded by the presence of structures, installations, habitations, and by the use of motor vehicles, motorized equipment, or mechanical transport that increases people's ability to occupy or modify the environment. Examples include: radio repeaters, monitoring installations, administrative cabins, helicopter landings, and the use of chain saws, pumps, motor vehicles, motor boats, etc.

An alternative that does not involve these prohibited activities would have no impact on this quality. An alternative that removes a structure or installation, or otherwise stops a prohibited use, would have a positive effect on this quality. Note that when a proposal is broken down into phases or components, more than one effect to this quality may be registered. For instance, an alternative to remove a sampling device by flying it out with a helicopter would both improve (by removing the structure) and degrade (by using an aircraft) this quality.

- **Natural**

Describe the potential positive or negative impacts to this quality in terms of protection or restoration of natural conditions (i.e. air, water, soil, wildlife, fish, plants, etc.). Include, where applicable, a discussion of the effects related to protecting natural conditions within the regional landscape (i.e. insects, disease, non-native species, wildlife migration corridors, etc.).

There are positive impacts to this quality if the alternative would improve natural conditions, negative impacts if the alternative would degrade natural conditions, and no impact if the alternative would have no effect on natural conditions.

Examples of degradation include: the results of suppressing a natural fire or allowing non-native invasive species to become established or expand. Examples of the preservation of this quality include: the effects from allowing natural fire, successful treatment of non-native species, and the restoration of native species.

Note that in some instances, an alternative might have both positive and negative impacts. For instance, providing artificial water to aid in the recovery of a sensitive species would be a positive impact (if the species increased) to this quality and also a negative impact because of the effects to other species due to an unnatural water source. (Of course, this alternative would have impacts to other qualities as well.)

- **Opportunities for Solitude or Primitive and Unconfined Recreation**

Identify how opportunities for solitude or a primitive and unconfined type of recreation will be protected or degraded. Include negative impacts to visitors from the use of motorized equipment, mechanical transport, landing of aircraft, structures, or installation, as well as the positive impacts from actions that preserve these opportunities.

If necessary, describe the positive or negative impacts separately for each sub-part of this quality: Solitude, Primitive Recreation, and Unconfined Recreation.

Examples of degradation include: management actions that cause (by action or inaction) crowding or too many visitor encounters (impacting solitude); facilities or other signs of modern civilization (impacting primitive recreation); and additional restrictions on visitor behavior (impacting unconfined recreation). An alternative which increases solitude, removes infrastructure that diminishes primitive recreation, or removes a management restriction would have a positive impact on this quality.

Because this quality has three sub-parts, the effects are not always straight forward. One alternative could produce multiple counterweighing impacts to this quality. For example, designating campsites negatively impacts unconfined recreation while positively impacts solitude.

- **Other Features of Value**

Identify any values or characteristics of this wilderness (i.e. "ecological, geological, or other features of scientific, educational, scenic, or historical value") that are not accounted for in the above qualities, and describe the effects on these unique features. Heritage and cultural resources including historic sites and paleontological localities are also included here.

B. Safety

Describe any safety concerns for visitors or workers directly associated with implementing the alternative. Identify which hazards can be mitigated and which hazards cannot be mitigated. Describe how mitigation might be achieved through providing information to the public, temporary area closures, training, or the use of protective equipment.

Identify the degree of risk for each alternative after considering both the rate of occurrence and severity of reported injuries. Base the determination of the safety risks of implementing an alternative on adequate supporting evidence (i.e. agency accident data, project specific Job Hazard Analysis, agency specific guidelines, or other documentation).

C. Other Criteria

Describe the alternative's effect on any other applicable criteria, such as maintaining traditional skills, other special provisions, economic and timing constraints, etc.

Note: While administrative activities should always be accomplished with economic efficiency, neither the cost nor the time required for implementation can be primary factors in allowing uses that would otherwise be prohibited. Identify and describe the costs and time required for each alternative, but avoid pre-selecting an alternative based on these criteria.

Additional Alternatives

Action alternatives which are not feasible to implement should be identified, when appropriate. Provide brief reasons as to why these alternatives were “considered but dismissed.”

Valid reasons for dismissing an alternative include: 1) actions that are impossible to accomplish by any means, 2) actions that are possible to accomplish but implementation would cause *significantly* greater negative impacts to wilderness character, or 3) actions that would cause a significant safety risk to workers or the public which cannot be mitigated. Alternatives should not be eliminated from full consideration simply because implementation would take more time or money or because the skills or equipment needed are not readily available. Other valid reasons for ruling out an alternative may relate to timing restrictions associated with the NPS budget cycle, or that the alternative does not conform to laws, regulations, or NPS policy.

Comparison of Alternatives

Compare the alternatives in the table provided using your best judgment on their level of effect, (both positive and negative, short- and long-term). The overall impact of an alternative can be roughly approximated by tallying the scores.

You are mandated by the Wilderness Act to “preserve wilderness character,” and this is the most important criteria for wilderness. Therefore, the impacts on the qualities of wilderness character are tabulated first.

Decision

What is the minimum activity?

Usually, the alternative that results in the least overall adverse effect to wilderness character and that represents the minimum requirement necessary to administer the area *as wilderness* will be the selected alternative. However, there may be other considerations. If you do not select the alternative with the least overall adverse effect, provide the rationale.

The selected alternative must conform to all applicable laws. Explain why the use of motorized equipment, aircraft landing, mechanical transportation, structures, or installations is the minimum requirement for the administration of the area as wilderness by briefly describing the benefits or adverse effects to the qualities of wilderness character and other legal requirements.

The selected alternative must also meet agency policy. Cite the specific criteria, direction, standard, or guideline that applies and explain how the alternative complies.

The rationale should demonstrate that the decision is clearly a result of objective evaluation of the alternatives and not the result of an inappropriate bias or justification of an alternative or method for non-wilderness reasons.

If your selection is based at least in part on the safety criterion, be sure to explain the rationale and include or reference supporting analysis or documentation. This analysis should explain why the use of motorized equipment or other prohibited uses is necessary because to do otherwise would cause increased

risks to workers or visitors that cannot be satisfactorily mitigated through training, use of personal protective equipment (PPE), or other actions.

Avoid selecting an alternative based primarily on costs and the amount of time needed for implementation. While administrative activities should always be accomplished with economic efficiency, both law and agency policy directs us away from considering either the cost or the time required for implementation as the over-riding factor for administrative use of otherwise prohibited activities.

Cumulative Effects

Do you know of any other projects in the vicinity of your project location(s) (past, present, or future) that have the potential to impact wilderness character?

If yes, describe the effects. If you are unsure, contact your Division Chief or supervisor.

Step 4: Signatures and Reporting

Review and Approval

Electronic copies of the MRA worksheet should be submitted concurrently to the Assistant Wilderness Coordinator and Environmental Protection Specialist for review to ensure legal adherence to the purposes of the Wilderness Act and for compliance review.

If the project is not included within the scope of a current compliance document (existing categorical exclusion, environmental assessment, or environmental impact statement), a project proposal form must be completed, and presentation to the Leadership Team will be required. **Follow the process as directed in MD-59.**

Other reviewers may be added as appropriate (e.g. Science Coordinator or other subject matter experts). Comments provided by the reviewers may need to be addressed in an updated worksheet.

After all comments or concerns are addressed, the updated worksheet will be submitted to the Division Chief for review. The Division Chief will determine if they will recommend the proposed alternative to the Superintendent.

The Division Chief will forward a printed MRA worksheet to the Superintendent for review and signature. If the Division Chief changes the MRA, they will return the updated version electronically to the AWC and EPS. **If the MRA is part of a larger environmental compliance or permitting package, the entire package must go to the Superintendent for signature at the same time.**

The signed MRA will be sent to the EPS for record keeping. Signed/scanned copies will be filed as PDFs under: S:\SUPT\Environmental Compliance Office\Wilderness\MRMTs and MRAs\Year\Signed MRAs. The EPS will email a PDF of the signed MRA Worksheet to the project proponent so that he/she can review mitigation, monitoring, and reporting requirements.

Note – The Minimum Requirements Analysis Worksheet is not a substitute for a NEPA analysis and decision where one is required.

**ATTACHMENT 1:
REQUIREMENTS OF OTHER LEGISLATION**

Laws that may apply to projects within SEKI include (but are not limited to):

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, 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.”

The Organic Act directs us "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."

The 1978 Amendment (a.k.a. Redwoods Act) strengthened the protective functions of NPS and influenced recent decisions regarding resource impairment. "...the protection, management, and administration of these areas shall be conducted in the light of the high public value and integrity of the NPS and shall not be exercised in derogation of the values and purposes for which these various areas have been established..."

The National Park Service Omnibus Management Act of 1998

The National Park Service Omnibus Management Act of 1998 directs the Secretary of the Interior "to assure that management of units of the National Park System is enhanced by the availability and utilization of a broad program of the highest quality science and information."

This act establishes the framework for fully integrating natural resource monitoring into the management process of the NPS. Section 5934 of the Act requires the Secretary of the Interior to develop a program of "inventory and monitoring of NPS resources to establish baseline information and to provide information on the long-term trends in the condition of the National Park System resources." The message of the Parks Omnibus Management Act of 1998 was reinforced by Congress in the FY 2000 Appropriations bill.

Endangered Species Act of 1973 (16 U.S.C. 1531-1544, 87 Stat. 884), as amended -- Public Law 93-205

This act and its amendments were enacted to provide a program for the conservation of wildlife and plant species that are threatened or endangered with extinction. The Act recognizes that several species of plants are in danger of extinction, and these species are of aesthetic, ecological, educational, historical, recreational and scientific value. The act sets up specific procedures to determine which plant and animal species are added or removed from protective status. It also sets up cooperative programs with states and establishes civil penalties for violation of the act. Subsequent amendments to this act were made in 1978

and 1982. The Act requires Federal agencies to ensure that any action authorized, funded or carried out by them is not likely to jeopardize the continued existence of listed species or modify their critical habitat.

National Historic Preservation Act, Antiquities Act, and the Archaeological Resources Protection Act

These laws provide the statutory basis for protecting and managing heritage resources on federal lands. Policies derived from this legal direction seek to balance the need for protecting heritage resources with the apparently conflicting mandate in the Wilderness Act to eliminate structures which do not have a legitimate administrative need. The intent and direction of all applicable laws must be met in wilderness.

National Trail System Act:

Sec.3.(2):” (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. SEC. 11. (a)(1) In addition to the cooperative agreement and other authorities contained in this Act, the Secretary of the Interior, the Secretary of Agriculture, and the head of any Federal agency administering Federal lands, are authorized to encourage volunteers and volunteer organizations to plan, develop, maintain, and manage, where appropriate, trails throughout the Nation. (2) Wherever appropriate in furtherance of the purposes of this Act, the Secretaries are authorized and encouraged to utilize the Volunteers in the Parks Act of 1969, the Volunteers in the Forests Act of 1972, and section 6 of the Land and Water Conservation Fund Act of 1965 (relating to the development of Statewide Comprehensive Outdoor Recreation Plans).

Americans with Disabilities Act (1990)

The purpose of this act is to provide a clear and comprehensive national mandate for the elimination of discrimination against people with disabilities in areas of employment, transportation, communication, from the discriminatory aspects of architecture, over protective rules and policies, failure to make modifications to existing facilities and practices, and relegation to lesser services, programs, activities, benefits, jobs, or other opportunities. This Act amends the Rehabilitation Act of 1973 which requires federal agencies to make facilities and programs accessible. ADA extends the mandate to all state and local governments and any facility or program receiving government funding. The Rehabilitation Act, ADA and the Wilderness Act appear to conflict dramatically if read literally without applying some common sense. The latter proposes to protect natural and undeveloped landscape values for future generations. ADA seeks to eliminate all discrimination to programs and facilities by tailoring facilities and programs to be universally accessible. The key point is that equal access will be provided and facilities will be 'universally accessible' by not discriminating against people with disabilities. Wheelchairs (as defined by the law) are allowed in wilderness. However, wilderness trail standards (management objectives) are applied and not the trail standards established for accessible non-wilderness trails. This approach allows equal access to all but does not alter the character of the wilderness.

Federal Noxious Weed Act of 1974 (PL 93-629)

The Federal Noxious Weed Act of 1974 ("FNWA") is a federal legislation enacted in 1975. The purpose of the FNWA was to manage and control the spread of noxious weeds. Pursuant to the Act, the U.S. Secretary of Agriculture was given the authority to declare plants "noxious weeds", and limit the interstate spread of such plants without a permit.

The FNWA was amended by the 1990 Farm Bill on November 28, 1990. The amendment requires the Bureau of Land Management, the National Park Service, the U.S. Fish and Wildlife Service, the U.S. Forest Service, and all other federal land managing agency to do the following: (a) Designate an office or person trained in managing undesirable plant species, to develop and coordinate a program to control such plants on the agency's land, (b) Ensure that the agency's budget process adequately fund the plant management program, (c) Develop and implement cooperative agreements with the States regarding undesirable plants on agency land, (d) Establish integrated management systems to control or contain undesirable plants targeted under the cooperative agreements.

The provisions relating to the FNWA were found under 7 USCS §§ 2801 through 2814. The FNWA was superseded in 2000 by the Plant Protection Act, except for the amendment of 1990. 7 USCS §§ 2801 through 2813 now stands repealed

Carson-Foley Act of 1968 (43 USC 1241)

This law provides for the control of noxious plants on land under the control and jurisdiction of the Federal Government by permitting the appropriate state agency to enter such lands to destroy noxious plants.

**ATTACHMENT 2:
 QUALITIES OF WILDERNESS CHARACTER**

<p>1. Untrammeled:</p> <p>“...an area where the earth and its community of life are untrammeled by man...”</p> <p>“...generally appears to have been affected primarily by the forces of nature.”</p> <p>Wilderness is essentially unhindered and free from modern human control or manipulation.</p> <p>Measures of this quality could include:</p> <ul style="list-style-type: none"> • spraying weeds • suppressing fire • collaring wildlife • eradicating fish • manipulating water flow • unauthorized trespass cattle • unauthorized marijuana cultivation 	<p>2. Natural</p> <p>“...is protected and managed so as to preserve its natural conditions.”</p> <p>Wilderness ecological systems are substantially free from the effects of modern civilization.</p> <p>Measures of this quality could include:</p> <ul style="list-style-type: none"> • species of concern • non-native species • visibility, ozone • acid deposition • water quality, loss of soil • loss of connectivity • pathways for nonnative species • fire regimes
<p>3. Undeveloped</p> <p>“...an area of undeveloped Federal land...without permanent improvement or human habitation”</p> <p>“...where man himself is a visitor who does not remain.”</p> <p>Wilderness retains its primeval character and influence and is essentially without permanent improvement or modern human occupation.</p> <p>Measures of this quality could include:</p> <ul style="list-style-type: none"> • authorized non-recreational physical development: scientific equipment, radio repeaters, fish barrier • unauthorized non-recreational physical development: illegal stock pond, irrigation systems for marijuana cultivation • inholdings • administrative mechanization: wheelbarrows, chainsaws, water pumps, rock drills, helicopters • emergency mechanization 	<p>4. Solitude or primitive and unconfined recreation</p> <p>“...has outstanding opportunities for solitude or a primitive and unconfined type of recreation”</p> <p>Wilderness provides outstanding opportunities for solitude or primitive and unconfined recreation.</p> <p>Measures of this quality include:</p> <ul style="list-style-type: none"> • visitor use • trail contacts • area affected by travel routes • night sky visibility • soundscape • authorized recreation facilities: trails, toilets, bridges, shelters (these decrease self-reliant recreation) • unauthorized recreation facilities: user-created campsites, climbing hardware, illegal motorcycle trail • visitor management restrictions

5. Other Features of Value

"...may also contain ecological, geological, or other features of scientific, educational, scenic, or historical value."

An individual wilderness may have unique qualities that cannot be characterized in the other four qualities.

Measures of this quality include: cultural sites, archeological resources, historic trails, cultural landscapes

The four qualities of wilderness character mentioned in Section 2(c) of the Wilderness Act are:

Untrammeled – In wilderness, the "earth and its community of life" are essentially unhindered and free from modern human control or manipulation, "in contrast with those areas where man and his own works dominate the landscape." This quality is important because it helps insure that wilderness is managed with the utmost humility and restraint, respecting the autonomy of nature that allows a place to be wild and free.

Undeveloped – Wilderness retains its "primeval character and influence," and is essentially "without permanent improvements" or modern human occupation. Preserving this quality keeps areas free from "expanding settlement and growing mechanization" and "with the imprint of man's work substantially unnoticeable" as required by the Wilderness Act.

Natural – A wilderness area is to be "protected and managed so as to preserve its natural conditions." Wilderness ecological systems are substantially free from the effects of modern civilization. Preserving this quality ensures that indigenous species, patterns and ecological processes are protected and allows us to understand and learn from natural features.

Outstanding Opportunities for Solitude or Primitive and Unconfined Recreation – The Wilderness Act defines wilderness as having "outstanding opportunities for solitude or a primitive and unconfined type of recreation." This quality is about the *opportunity* for people to experience wilderness; it is not directly about visitor experiences *per se*. The opportunities provided by wilderness include the chance to experience primitive recreation, natural sights and sounds, solitude, freedom, risk, the physical and mental challenges of self-discovery and self-reliance, and to use traditional skills free from the constraints of modern culture.

Other Features of Value -- In addition to the four required qualities of wilderness listed above, the Wilderness Act says these areas "may also contain ecological, geological, or other features of scientific, educational, scenic, or historical use" that reflect the character of this wilderness. Some of these unique features, such as the presence of threatened and endangered species, are also part of the Natural quality of a wilderness and could be evaluated for effects to that quality unless the specific species or habitat is unique to the wilderness area. Other components, however, such as the presence of important geologic features, cultural resources, historical sites, paleontological localities, or any features not in one of the other four qualities do not fit easily into one of the four statutory qualities. While many different types of features could be included, the intent is to include those that are significant or integral to the wilderness and that are decision factors that represent the unique characteristics and special features of this wilderness. Features mentioned in wilderness enabling legislation would likely qualify. The Unique Features that are present must be just as rigorously

protected as the other qualities of wilderness character, however, and so you should account for these separately in this section of the MRA.

The description of wilderness character qualities above is not comprehensive. For a detailed discussion of wilderness character refer to:

U.S. Forest Service Rocky Mountain Research Station, General Technical Report, RMRS-GTR-151: *Monitoring Selected Conditions Related to Wilderness Character: A National Framework*.

U.S. Forest Service Rocky Mountain Research Station, General Technical Report, RMRS-GTR-212: *Keeping It Wild: An Interagency Strategy to Monitor Trends in Wilderness Character Across the National Wilderness Preservation System*.

ATTACHMENT 3: OTHER GUIDANCE

Plans, policies, and agreements that may apply to projects within SEKI include (but are not limited to):

Executive Order 11990, Protection of Wetlands (42 Fed. Reg. 26961)

Direct the NPS and other federal agencies to protect and manage wetlands as follows:

Section 1. (a) Each agency shall provide leadership and shall take action to minimize the destruction, loss or degradation of wetlands, and to preserve and enhance the natural and beneficial values of wetlands in carrying out the agency's responsibilities for (1) acquiring, managing, and disposing of Federal lands and facilities; and (2) providing Federally undertaken, financed, or assisted construction and improvements; and (3) conducting Federal activities and programs affecting land use, including but not limited to water and related land resources planning, regulating, and licensing activities.

Executive Order 13112 (1998)

Established policy to limit the introduction and spread of invasive species. This federal directive provides overarching guidance for the management of invasive species, and requires federal agencies to act upon: leadership and coordination, prevention, early detection and rapid response, control, education, research, and restoration.

NPS Management Polices 2006

4.4.2 Management of Native Plants and Animals

The Service may intervene to manage individuals or populations of native species only when such intervention will not cause unacceptable impacts to the populations of the species or to other components and processes of the ecosystems that support them. Also management is necessary:

- because a population occurs in an unnaturally high or low concentration as a result of human influences (such as loss of seasonal habitat, the extirpation of predators, the creation of highly productive habitat through agriculture or urban landscapes) and it is not possible to mitigate the effects of the human influences; and
- to protect rare, threatened, or endangered species.

4.4.2.3 Management of Threatened or Endangered Plants and Animals

The Service will survey for, protect, and strive to recover all species native to national park systems units that are listed under the Endangered Species Act. The Service will fully meet its obligations under the NPS Organic Act and the Endangered Species Act to both proactively conserve listed species and prevent detrimental effects on these species.

4.4.4 Management of Exotic Species

Exotic species will not be allowed to displace native species if displacement can be prevented.

4.4.4.2 Removal of Exotic Species Already Present

All exotic plant and animal species that are not maintained to meet an identified park purpose will be managed—up to and including eradication—if (1) control is prudent and feasible, and (2) the exotic species interferes with natural processes and the perpetuation of natural features, native species or natural habitats, or disrupts the genetic integrity of native species.

4.5 Fire Management

All wildland fires will be effectively managed through application of the appropriate strategic and tactical management options as guided by the park's fire management plan.

4.6.5 Wetlands

The Service will implement a "no net loss of wetlands" policy. In addition, the Service will strive to achieve a longer-term goal of net gain of wetlands across the national park system through restoration of previously degraded or destroyed wetlands.

When natural wetland characteristics or functions have been degraded or lost due to previous or ongoing human actions, the Service will, to the extent practicable, restore them to predisturbance conditions.

When practicable, the Service will not simply protect but will seek to enhance natural wetland values by using them for educational, recreational, scientific, and similar purposes that do not disrupt natural wetland functions.

4.7.2 Weather and Climate

Parks containing significant natural resources will gather and maintain baseline climatological data for reference.

5.0 Cultural Resources Management

The cultural resource Management Policies of the National Park Service are derived from a suite of historic preservation, environmental, and other laws, proclamations, executive orders, and regulations. A comprehensive list can be found in the Cultural Resource Management Handbook issued pursuant to Director's Order #28. Taken collectively, this guidance provides the Service with the authority and responsibility for managing cultural resources in every unit of the national park system so that those resources may be preserved unimpaired for future generations. Cultural resource management will be carried out in a manner that is consistent with these legislative and regulatory provisions and with implementing policies and procedures such as the Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation (48 Federal Register (FR) 44716-740), and Standards and Guidelines for Federal Agency Historic Preservation Programs Pursuant to the National Historic Preservation Act (63 FR 20497-508).

5.3.1 Protection and Preservation of Cultural Resources

The National Park Service will employ the most effective concepts, techniques, and equipment to protect cultural resources against theft, fire, vandalism, overuse, deterioration, environmental impacts, and other threats without compromising the integrity of the resources.

5.3.5.4 Historic and Prehistoric Structures

The treatment of historic and prehistoric structures will be based on sound preservation practice to enable the long-term preservation of a structure's historic features, materials, and qualities. There are three types of treatment for extant structures: preservation, rehabilitation, and restoration.

6.3.5 Minimum Requirement

All management decisions affecting wilderness must be consistent with the minimum requirement concept. This concept is a documented process used to determine if administrative activities effecting wilderness resources or the visitor experience are necessary and how to minimize impacts. The minimum requirement concept will be applied as a two-step process that determines:

- Whether or not the proposed management action is appropriate or necessary for administration of the area as wilderness; and does not pose a significant impact to wilderness resources and character; and
- The techniques and type of equipment needed to ensure that impact to wilderness resources and character is minimized.

In accordance with this policy, superintendents will apply the minimum requirement concept in the context of wilderness management planning as well as to all other administrative practices, proposed special uses, scientific activities and equipment use in wilderness. When determining minimum requirement, the potential disruption of wilderness character and resources will be considered before, and given significantly more weight than, economic efficiency and convenience. If a compromise of wilderness resources or character is unavoidable, only those actions that preserve wilderness character and/or have localized, short-term adverse impacts will be acceptable.

While park managers have flexibility in identifying the method used to determine minimum requirement (See IV.C.2) within the approved wilderness management plan, the method used must clearly weigh the benefits and impacts of the proposal, document the decision process, and be supported by an appropriate environmental compliance document. Parks with no approved wilderness management plan must develop a separate process to determine minimum requirement until the plan is finally approved. Parks will complete a minimum requirement analysis on those administrative practices and equipment use that have the potential to impact wilderness resources or values. The minimum requirement concept cannot be used to rationalize permanent roads or inappropriate or unlawful uses in wilderness.

Administrative use of motorized equipment or mechanical transport will be authorized only:

- If determined by the superintendent to be the minimum requirement needed by management to achieve the purposes of the area as wilderness, including the preservation of wilderness character and values, or

- In emergency situations (search and rescue) involving the health or safety of persons actually within the area. Such management activities will be conducted in accordance with all applicable regulations, policies, and guidelines, including minimum requirement protocols as practicable.

Such management activities will also be conducted in accordance with all applicable regulations, policies, and guidelines and, where practicable, will be scheduled to avoid creating adverse resource impacts or conflicts with visitor use.

6.3.6.1 Scientific Activities in Wilderness, General Policy

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

Scientific activities are to be encouraged in wilderness. Even those scientific activities (including inventory, monitoring, and research) that involve a potential impact to wilderness resources or values (including access, ground disturbance, use of equipment, and animal welfare) should be allowed when the benefits of what can be learned outweigh the impacts on wilderness resources or values. However, all such activities must also be evaluated using the minimum requirement concept and include documented compliance that assesses impacts against benefits to wilderness.

6.3.7 Natural Resources Management (in wilderness)

Management should seek to sustain the natural distribution, numbers, population composition, and interaction of indigenous species. Management intervention should only be undertaken to the extent necessary to correct past mistakes, the impacts of human use, and influences originating outside of wilderness boundaries. Management actions, including the restoration of extirpated native species, the alteration of natural fire regimes, the control of invasive alien species, the management of endangered species, and the protection of air and water quality, should be attempted only when the knowledge and tools exist to accomplish clearly articulated goals.

6.3.8 Cultural Resources (in wilderness)

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 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.

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 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.

6.3.10.2 Trails in Wilderness

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 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.

9.2.2.9 Trail Bridges

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.

Director's Order #77-1: Wetland Protection (Section 2.7)

Where natural wetland characteristics or functions have been degraded or lost due to previous or ongoing human activities, the NPS will, to the extent appropriate and practicable, restore them to pre-disturbance conditions.

SEKI's Backcountry Management Plan (1986)

Section 2.2 Facilities

Facilities in the backcountry include trails, bridges, campsites, signs, ranger stations, resource monitoring and research devices, and toilets. Facilities are limited to those necessary for administrative activities and visitor use, to produce as little conflict as possible with visitors' wilderness experience.

Section 3.2 Philosophy

Provides guidance on the overall management philosophy of SEKI's backcountry.

Section 5.13.2 Management Policies

The ranger patrol cabins [stations] will be maintained for administrative use, including use by trail, research, or resources management crews, snow surveyors, etc.

Section 5.14 Administration

Provides guidance on how park managers are to treat generally prohibited actions of Section 4(c) of the Wilderness Act. Specifically treated are radio communications (5.14.2.1), helicopters (5.14.2.2), mechanized trail maintenance equipment (5.14.2.3), cabins (5.14.2.4), administrative camps (5.14.2.5), administrative stock use (5.14.2.6), NPS backcountry crews (5.14.2.7), and NPS personnel (5.14.2.8). Section 5.14.3 also provides reference to the Administrative Use Guideline Addendum (January 1985) which provides further clarification on administrative and management actions occurring in SEKI's Wilderness and backcountry.

Section 5.16 Scientific Study and Impact Monitoring

Provides guidance on how park managers are to conduct "scientific study and monitoring" in wilderness and backcountry areas.

SEKI 2007 General Management Plan/Record of Decision

The GMP provides direction for desired conditions and appropriate facilities in wilderness, and reiterates and reinforces the parks' purpose and significance.

Some key wilderness related information from GMP or ROD:

"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."

"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."

“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.”

Assess backcountry ranger stations and replace or rehabilitate as necessary.

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.



SEQUOIA AND KINGS CANYON NATIONAL PARKS

MINIMUM REQUIREMENT ANALYSIS

WORKSHEET

“ . . . except as necessary to meet minimum requirements for the administration of the area for the purpose of this Act...”

– The Wilderness Act, 1964

Instructions:

A Minimum Requirement Analysis (MRA) is required for *all* administrative actions in wilderness that either propose a Wilderness Act Section 4(c) prohibited use or have an effect on wilderness character (per Director’s Order 41). **See the Minimum Requirement Instructions for directions and background materials to assist you with this analysis.** Additional instructions may be found at:

<http://www.wilderness.net/mrdg/>

Routing Information:

- 1) Complete the Minimum Requirement Analysis Worksheet (MRA). Name the file as follows:
SubmissionDate_ShortTitle_LastName_Version1.docx.
- 2) Email the MRA (WORD version) to the Assistant Wilderness Coordinator (AWC) and the Environmental Protection Specialist (EPS) for review. **You must submit your MRA at least two weeks before your proposed action is to occur.**
- 3) **If revisions are necessary**, the EPS will:
 - a. Return the MRA to the project proponent for revisions. Once revisions are made, project proponent will rename file as Version2. Then, repeat Step 2.
- If no revisions are needed**, the EPS will:
 - a. Rename the file as Final and save it under: S:\SUPT\Environmental Compliance Office\Wilderness\MRMTs and MRAs\Year\Final
 - b. Forward the electronic copy to the Division Chief for review and signature and “cc:” the project lead.
- 4) Division Chief will review and forward a printed copy to the Superintendent for signature. If the Division Chief changes the MRA, they will return the updated version electronically to the AWC and EPS. **If the MRA is part of a larger environmental compliance or permitting package, the entire package must go to the Superintendent for signature at the same time.**
- 5) The signed MRA will be sent to the EPS for record keeping. Signed/scanned copies will be filed as PDFs under: S:\SUPT\Environmental Compliance Office\Wilderness\MRMTs and MRAs\Year\Signed MRAs
- 6) The EPS will email a PDF of the signed MRA Worksheet to the project proponent so that he/she can review mitigation, monitoring, and reporting requirements.

GENERAL INFORMATION:

Project Title: _____

Project Duration: _____

(For longer projects, review the MRA yearly to determine accuracy. Prepare a new MRA if the project is modified, new prohibited actions are proposed, or at a minimum every 5 years.)

Date Submitted: _____

Project Proponent: _____

Contact Information: _____

Tracking Number (Office Use Only): _____

STEP 1:

Determine if any administrative action is necessary.

Description of Situation:

What is the situation that may prompt administrative action? What is the reason that you are proposing an action (or actions) in wilderness? Do not describe the action itself. Rather, describe the desired goal or outcome.

A. Options Outside of Wilderness

Can actions taken outside of wilderness adequately address the situation and meet project goals?

Yes: No:

Explain:

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)? Cite law and section.

Yes: No:

Explain:

C. Requirements of Other Legislation

Is action necessary to meet the requirements of other federal laws? Cite law and section.

Yes: No:

Explain:

D. Wilderness Character

Is action necessary to preserve one or more qualities of wilderness character?

Untrammeled: Yes: No:

Explain:

Undeveloped: Yes: No:

Explain:

Natural: Yes: No:

Explain:

Outstanding Opportunities for Solitude or Primitive and Unconfined Recreation:

Yes: No:

Explain:

Other Features of Value (e.g. Cultural Resources):

Yes: No:

Explain:

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: No:

Explain:

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?

Yes: No:

Explain:

Decision:

Is administrative action necessary in wilderness?

To determine if an action is necessary in wilderness, review questions A-F above.

NOTE: The questions vary in weight. A-D have first priority, E has second priority, and F has third priority.

In addition, consider the following: If you do not accomplish the work, what would be the resulting impacts? Would there be adverse effects on wilderness? Would you fail to meet the mandate of other laws and/or policies?

If you are unable to determine if action is necessary based on Step 1 information, consult your Division Chief or supervisor. Researchers should consult the Research Permit Coordinator.

Yes: No:

Explain:

Compliance Pathway:

Yes: No:

If yes, provide document name and PEPC reference number:

If no (or if you are unsure), contact the Environmental Protection Specialist for instructions.

STEP 2:
Determine the need to develop alternatives.

Does your project propose a Section 4(c) prohibited activity?
 Section 4(c) prohibited activities include: the use of mechanical transport and/or motorized equipment and vehicles, the landing of aircraft, and the installation of materials, equipment and/or structures.

NOTE: Installations include items used to support activities such as communications, water development, stock use, or wildlife management. It includes debris such as old dump sites, plane crash sites, or locations of unexploded ordinance. It includes memorials or other monuments other than those placed during land surveys. It also includes unattended measurement or other device(s) left in place for the purpose of recording environmental data or marking a study plot.

Yes: No:

If yes, proceed to Step 3.

If no, continue with the questions below.

Wilderness Character Questions	Yes	or	No
Does the proposed activity include human actions that intentionally control or manipulate the components or processes of ecological systems inside the wilderness (i.e. does it involve a trammel)? <i>(This question does not include collecting abiotic samples or handling, removing or killing organisms for scientific identification or measurement.)</i>	<input type="checkbox"/>		<input type="checkbox"/>
Would the proposed activity include any of the following: 1) removing or killing rare or sensitive species/subspecies, 2) handling of threatened or endangered species/subspecies, 3) having more than negligible effects on the health or survival of a population of a species/subspecies, or 4) introducing plants and/or animals into the wilderness?	<input type="checkbox"/>		<input type="checkbox"/>
Would the proposed activity occur in a sensitive area (e.g. critical habitat) or at a sensitive time for a particular species?	<input type="checkbox"/>		<input type="checkbox"/>
Does the proposed activity necessitate the establishment of crew camps that exceed normal recreational use (e.g. the installation of food storage lockers, privy structures, or shower facilities)?	<input type="checkbox"/>		<input type="checkbox"/>
Would the proposed activity change the trail class of any given trail?	<input type="checkbox"/>		<input type="checkbox"/>
Does the proposed activity rely on crews that exceed the maximum group size for a particular area?	<input type="checkbox"/>		<input type="checkbox"/>
Would the proposed activity restrict (even temporarily) visitor access to or movement in a particular area?	<input type="checkbox"/>		<input type="checkbox"/>
Would the proposed activity result in a discernible and noticeable effect (beyond that expected if the crew were members of a typical/legal recreational group) on opportunities for solitude?	<input type="checkbox"/>		<input type="checkbox"/>
If the proposed activity is approved, is there a risk of long-lasting, cascading, or otherwise significant unintended effects?	<input type="checkbox"/>		<input type="checkbox"/>

Additional Questions	Yes or No	
Would the proposed activity likely be controversial with any publics?	<input type="checkbox"/>	<input type="checkbox"/>
Would the proposed activity pose other legal or policy issues?	<input type="checkbox"/>	<input type="checkbox"/>
Would the proposed activity occur in an area that already has past, ongoing, or future planned 4(c) prohibited activities?	<input type="checkbox"/>	<input type="checkbox"/>
Would the proposed activity result in more than a minor beneficial or adverse effect on park natural or cultural resources, which could require the preparation of an EA or EIS?	<input type="checkbox"/>	<input type="checkbox"/>

If you answered *yes* to any of the questions above, you may be required to complete Step 3. Contact the AWC or the EPS for guidance.

If you answered *no* to all of the questions, provide a brief project description below and retain this form in your permanent administrative record. Submit an electronic copy to the Assistant Wilderness Coordinator.

Project Description:

Prepared by:

Name	Position	Date
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STEP 3:
Determine the minimum activity.

Develop a range of reasonable and feasible alternatives. You should have at least two alternatives plus a “no-action” alternative. Add additional pages as necessary. Be sure to describe in detail those aspects of your project that involve 4(c) general prohibitions. These are usually contained in the Untrammelled and/or Undeveloped qualities.

You should also include a list of alternatives that were considered but dismissed, with a brief explanation for dismissal. Alternatives should not be eliminated simply because of the cost or time involved. The potential disruption of wilderness character and resources will be considered before, and given significantly more weight than, economic efficiency and convenience.

Please refer to the MRA Instructions for additional information on developing alternatives and identifying effects.

Description of the Alternative:

What are the details of this alternative? When, where, and how frequently will the action occur? What methods and techniques will be used? How long will the activity last? What mitigation measures will be taken?

NOTE: *The positive and negative effects of this alternative should not be included in the description.*

A. Wilderness Character:

Does this alternative affect the qualities of wilderness character? What mitigation measures will be taken? *For definitions of wilderness character qualities, see the MRA Instructions.*

Untrammeled: **Yes:** **No:**

Explain:

Undeveloped: **Yes:** **No:**

Explain:

Natural: **Yes:** **No:**

Explain:

Opportunities for Solitude or Primitive and Unconfined Recreation:

Yes: **No:**

Explain:

Other Features of Value (e.g. Cultural Resources):

Yes: **No:**

Explain:

B. Safety:

How does this alternative affect visitor and/or employee safety? Does it present a new or changed situation that threatens visitor safety? If there are adverse effects, what mitigation measures will be taken? Which hazards cannot be mitigated?

Visitor Safety:

Employee Safety:

C. Other Criteria

Does this alternative help maintain proficiency in the use of primitive and traditional skills? Does it affect the special provisions (grazing, mining, water developments, access to non-federal land, etc.) identified in Sections 4 and 5 of the Wilderness Act? Are there any timing requirements or cost constraints that need to be considered?

Yes: No:

Explain:

Alternative #2

Description of the Alternative:

What are the details of this alternative? When, where, and how frequently will the action occur? What methods and techniques will be used? How long will the activity last? What mitigation measures will be taken?

NOTE: *The positive and negative effects of this alternative should not be included in the description.*

A. Wilderness Character:

Does this alternative affect the qualities of wilderness character? *For definitions of wilderness character qualities, see the MRA Instructions.*

Untrammeled: Yes: No:

Explain:

Undeveloped: Yes: No:

Explain:

Natural: Yes: No:

Explain:

Opportunities for Solitude or Primitive and Unconfined Recreation:

Yes: No:

Explain:

Other Features of Value (e.g. Cultural Resources):

Yes: No:

Explain:

B. Safety:

How does this alternative affect visitor and/or employee safety? Does it present a new or changed situation that threatens visitor safety? If there are adverse effects, what mitigation measures will be taken? Which hazards cannot be mitigated?

Visitor Safety:

Employee Safety:

C. Other Criteria

Does this alternative help maintain proficiency in the use of primitive and traditional skills? Does it affect the special provisions (grazing, mining, water developments, access to non-federal land, etc.) identified in Sections 4 and 5 of the Wilderness Act? Are there any timing requirements or cost constraints that need to be considered?

Yes: No:

Explain:

Alternative #3

Description of the Alternative:

What are the details of this alternative? When, where, and how frequently will the action occur? What methods and techniques will be used? How long will the activity last? What mitigation measures will be taken?

NOTE: *The positive and negative effects of this alternative should not be included in the description.*

A. Wilderness Character:

Does this alternative affect the qualities of wilderness character? *For definitions of wilderness character qualities, see the MRA Instructions.*

Untrammeled: Yes: No:

Explain:

Undeveloped: Yes: No:

Explain:

Natural: Yes: No:

Explain:

Opportunities for Solitude or Primitive and Unconfined Recreation:

Yes: No:

Explain:

Other Features of Value (e.g. Cultural Resources):

Yes: No:

Explain:

B. Safety:

How does this alternative affect visitor and/or employee safety? Does it present a new or changed situation that threatens visitor safety? If there are adverse effects, what mitigation measures will be taken? Which hazards cannot be mitigated?

Visitor Safety:

Employee Safety:

C. Other Criteria

Does this alternative help maintain proficiency in the use of primitive and traditional skills? Does it affect the special provisions (grazing, mining, water developments, access to non-federal land, etc.) identified in Sections 4 and 5 of the Wilderness Act? Are there any timing requirements or cost constraints that need to be considered?

Yes: No:

Explain:

Additional Alternatives

Yes: No:

If yes, list alternatives and explain reason for dismissal:

Comparison of Alternatives						
Rate each alternative on a scale of +3 to -3.						
-3	-2	-1	0	+1	+2	+3
High	Moderate	Low	No Impact/	Low	Moderate	High
Negative	Negative	Negative	Undeterminable	Positive	Positive	Positive

WILDERNESS CHARACTER	short-term	long-term	short-term	long-term	short-term	long-term
	Alternative 1 No-action	Alternative 1 No-action	Alternative 2	Alternative 2	Alternative 3	Alternative 3
Untrammeled						
Undeveloped						
Natural						
Solitude or Primitive and Unconfined Recreation						
Unique / Other Features						
TOTAL						

SAFETY	short-term	long-term	short-term	long-term	short-term	long-term
	Alternative 1 No-action	Alternative 1 No-action	Alternative 2	Alternative 2	Alternative 3	Alternative 3
VISITOR						
EMPLOYEE						
TOTAL						

OTHER CRITERIA SUMMARY	short-term	long-term	short-term	long-term	short-term	long-term
	Alternative 1 No-action	Alternative 1 No-action	Alternative 2	Alternative 2	Alternative 3	Alternative 3
TOTAL						

Decision:
 What is the minimum activity?

Select an alternative. Usually, the alternative that has the least overall adverse effect on wilderness character is preferred. However, there may be other considerations.

Note: When selecting the preferred alternative the potential disruption to wilderness character and resources will be considered before, and given significantly more weight than, economic efficiency and convenience. If a compromise of wilderness character or resources is unavoidable, only those actions that preserve wilderness character and/or have localized, short-term acceptable adverse impacts will be allowed.

Selected alternative: _____

Rationale (include safety criterion, if appropriate):

Cumulative Effects:
 Do you know of any other projects in the vicinity of your project location(s) (past, present, or future) that have the potential to impact wilderness character?

Yes: No:

If yes, please describe.

Provide details on Wilderness Act Section 4(c) uses proposed in this alternative:

4(c) Prohibition	Frequency and/or Quantity	Duration
mechanical transport		
motorized equipment		
motor vehicles		
motorboats		
landing of aircraft		
structure(s)/installation(s)		
temporary road		

Additional mitigation, monitoring and reporting requirements (Reviewers provide input):

Follow-Up Form Required: Yes: No:

**STEP 4:
Signatures and Reporting**

Prepared by:

Name	Position	Date
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Review and Comments

Name/Position	Comments	Date
Assistant Wilderness Coordinator		
Environmental Protection Specialist		
Other reviewer as appropriate		

Approvals	Print Name	Signature	Date
Recommended:	Division Chief		
Approved:	Superintendent		

Return to Office of Compliance and Planning for administrative record once document has been approved by the Superintendent.

Minimum Requirement Analysis
Follow-Up Form

Project Title:

Tracking Number:

General:

1) Did you complete your proposed action? Yes: No: Partial:

If “partial,” please explain:

2) Did your work include a 4(c) prohibited action (e.g. the use of helicopters or motorized tools, the installation of equipment, etc.)? Yes: No:

Installations:

Did your work include the installation of equipment (e.g. tarping, gill nets, RAWs stations, wildlife cameras, etc.)? Yes: No:

If “yes,” please list the type, location, and duration of each installation.

Installation Type	Location	Duration

Helicopters:

Did your work include the use of a helicopter? Yes: No:

Motorized Tools:

Did your work include the use of motorized tools or mechanical transport (e.g. chainsaws, rock drills, hand drills, water pumps, wheelbarrows, etc.)? Yes: No:

If “yes,” please list the tool type, the location where it was used, and the approximate hours of run time.

Tool Type	Location	Hours of Run Time

Please email the completed form to the assistant wilderness coordinator.