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National Park Service

Sequoia and Kings Canyon National Parks
California

Wilderness Stewardship Plan and Draft Environmental Impact Statement

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June 2014

FRONT COVER
Fin Dome in the Rae Lakes area
Photo Courtesy of Rick Cain

United States Department of the Interior

NATIONAL PARK SERVICE
Sequoia and Kings Canyon National Parks
47050 Generals Highway
Three Rivers, California 93271-9651

IN REPLY REFER TO:
1.A.1.

Dear Friends of Sequoia and Kings Canyon National Parks:

I am pleased to announce the release of the draft Wilderness Stewardship Plan / draft Environmental Impact Statement (WSP/DEIS) for Sequoia and Kings Canyon National Parks. When finalized, this plan will provide direction to the National Park Service (NPS) for the next 15 to 20 years as it makes decisions regarding the use and protection of the wilderness encompassed by these parks. The NPS will use the management framework established by the WSP to preserve wilderness character, to encourage and provide opportunities for public use and enjoyment of wilderness, and to improve conditions in areas where there may be unacceptable levels of impact.

The document addresses two designated wilderness areas, several potential wilderness additions, and an area of proposed wilderness. Together these comprise nearly 97% of the total acreage of the parks that must, by law or policy, be managed as wilderness. The WSP/DEIS analyzes the potential consequences of a range of management alternatives for protecting the outstanding resource values in this wilderness – from natural and cultural resources to diverse recreational and educational opportunities for visitors.

The WSP/DEIS is available for public and agency review and comment for 60 days beginning with the publication of the Environmental Protection Agency's notice in the Federal Register. I hope you will review this document carefully and provide us with your comments. Your engagement in this process is critical to the future management and protection of the park wilderness.

Public meetings will be held this summer in Oakland, Bishop, and Visalia, California. To find out more about the public meeting schedule, and to submit comments electronically, visit the NPS Planning, Environment and Public Comment website at http://parkplanning.nps.gov/sekiwild. You may also submit your written comments by mail or hand delivery to the address below; by fax to the number listed below; or at the public meetings.

After public review, we will revise this draft document as needed and release a final version, followed by a 30-day "no-action" period. Then, the alternative or actions constituting the approved plan will be documented in a record of decision signed by the Regional Director of the NPS Pacific West Region.

Your contributions to this planning effort make a difference in protecting the wilderness of Sequoia and Kings Canyon National Parks. Thank you for your involvement in this important plan.

Woody Smeck, Superintendent
Sequoia and Kings Canyon National Parks
47050 Generals Highway,
Three Rivers, CA 93271-9700
Fax: (559) 565-4202

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Wilderness Stewardship Plan and Draft Environmental Impact Statement

Sequoia and Kings Canyon National Parks

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EXECUTIVE SUMMARY

The wilderness areas of Sequoia and Kings Canyon National Parks (the parks) are visited by tens of thousands of people each year. Visitors to the parks' wilderness can enjoy a diverse array of opportunities while experiencing one of America's most superlative landscapes. Those who have yet to visit the wilderness are invited to consider their connection to wildlands, plan a trip, or enjoy it from afar.

This *Wilderness Stewardship Plan / Draft Environmental Impact Statement* (WSP/DEIS) provides direction for the National Park Service (NPS) to make decisions regarding the future use and protection of the parks' wilderness. The WSP/DEIS analyzes the consequences of creating a plan that would provide management direction for the many outstanding resource values present in the parks' wilderness, including natural and cultural resources, as well as diverse recreational and educational opportunities for visitors.

PURPOSE OF ACTION

This Wilderness Stewardship Plan (WSP or plan) will provide management direction for two designated wilderness areas, several potential wilderness additions, and an area of proposed wilderness. The California Wilderness Act of 1984 (Public Law [PL] 98-425) designated the Sierra Crest portion of both parks as the Sequoia-Kings Canyon Wilderness. The Omnibus Public Land Management Act of 2009 (PL 111-11) designated the John Krebs Wilderness in Sequoia National Park; it also expanded the Sequoia-Kings Canyon Wilderness to include the North Fork Kaweah area and Redwood Canyon area. The parks' total designated wilderness is now 808,078 acres — approximately 93.3% of the total park acreage of 865,964. In addition, because the southern end of the Hockett Plateau (approximately 29,500 acres) remains proposed wilderness, it is managed as wilderness, according to law (PL 111-11) and NPS policy. The parks also contain several designated potential wilderness additions (DPWA), including the area around the Pear Lake Ski Hut and Bearpaw Meadow High Sierra Camp. These would become wilderness when and if the non-conforming activities (e.g., commercial enterprise) and/or facilities are removed. Altogether, designated and proposed wilderness areas comprise nearly 97% of the total acreage of Sequoia and Kings Canyon National Parks (figure ES-1 on the following page).

The WSP/DEIS addresses recent servicewide guidance (NPS *Management Policies 2006*), reflects provisions of the California Wilderness Act of 1984 and the Omnibus Public Land Management Act of 2009, incorporates new research findings, and uses a new interagency planning framework for the preservation of wilderness character. The WSP also replaces the current plans of record, the 1986 *Backcountry Management Plan* (BMP) and its accompanying 1986 *Stock Use and Meadow Management Plan* (SUMMP).

This WSP will establish a framework for managing wilderness and areas managed as wilderness within Sequoia and Kings Canyon National Parks to meet these critical objectives:

- preserve wilderness character;
- provide opportunities for and encourage public use and enjoyment of wilderness in accordance with the Wilderness Act and other laws and policies;
- improve conditions in areas where there may be unacceptable levels of impacts on wilderness character; and
- protect the natural and cultural resources within wilderness.

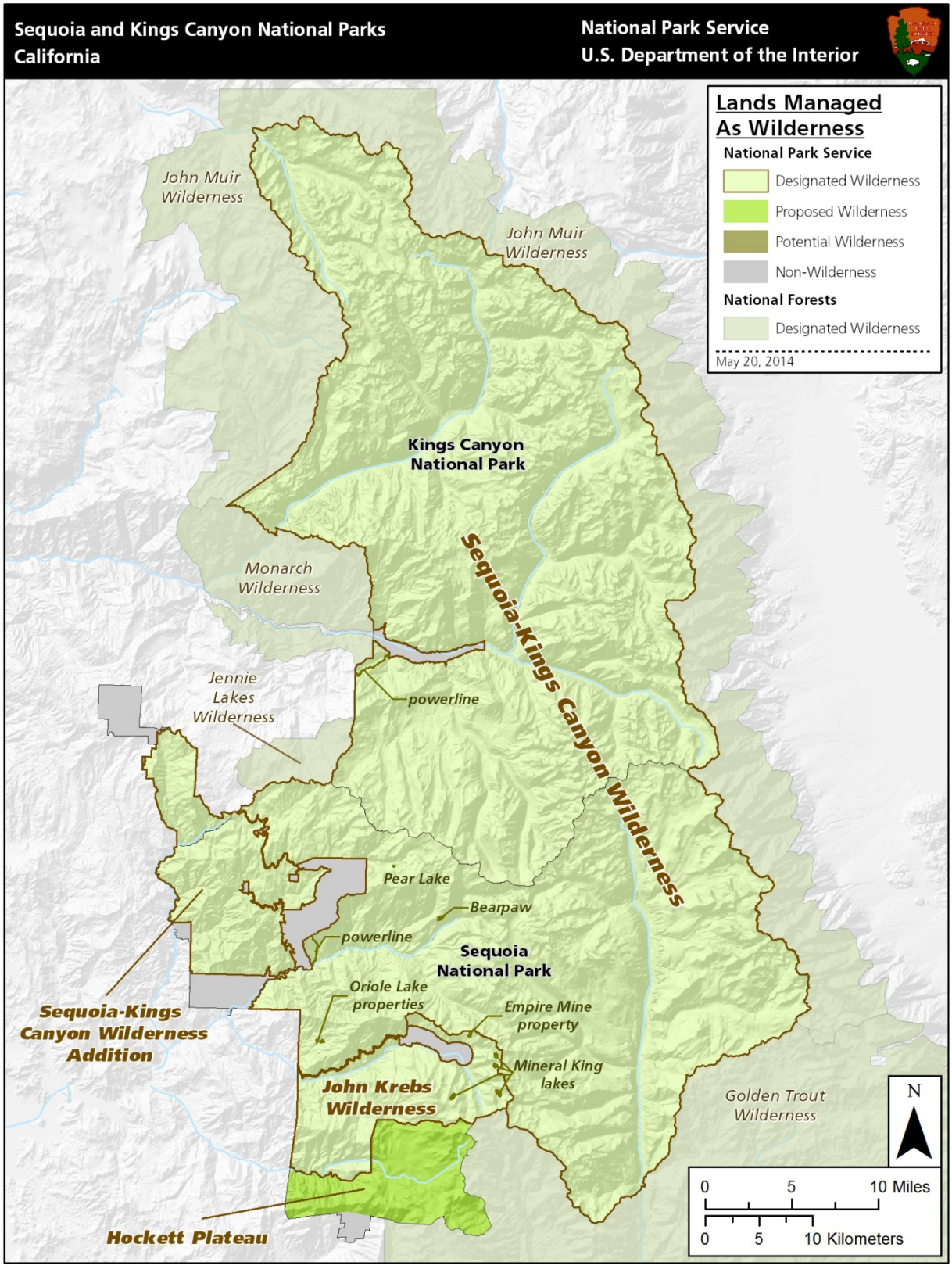

Figure ES-1: Wilderness Boundaries of Sequoia and Kings Canyon National Parks

NEED FOR ACTION

The WSP is needed to establish more specific goals and objectives for the management of visitors and certain administrative activities within the parks' wilderness. A variety of controversial or long-standing issues are addressed in the WSP, including visitor capacity, wilderness permitting, party (group) size limits for people and stock, campfire regulations, camping locations and regulations, food-storage requirements, human-waste management, stock access, stock grazing, maintenance of facilities and trails, and management of frontcountry facilities that support wilderness use. The WSP also analyzes and determines the types and levels of commercial services that may be performed for activities that are proper for realizing the recreational or other wilderness purposes of the areas, as required by §4(d)(5) of the Wilderness Act.

The framework of this WSP/DEIS is founded on describing the wilderness character of the parks, defining the goals and objectives for managing wilderness visitor use and impacts, describing desired conditions for the visitor experience and wilderness character, developing visitor-use capacities, and determining the types and levels of commercial services necessary to support wilderness purposes.

In accordance with §102(2)(C) of the National Environmental Policy Act of 1969 (NEPA; PL 91-190), the parks have prepared this WSP/DEIS to consider alternative strategies for future management of the parks' wilderness. Five alternatives for achieving wilderness-stewardship objectives, including the no-action alternative, are identified and analyzed. They describe five different ways to provide appropriate types and levels of access for visitors and authorized users, preserve wilderness character, protect cultural and natural resources, and adhere to legally required management and preservation objectives.

Mehrten Creek along the High Sierra Trail.

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, the parks' *General Management Plan* (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 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 (NPS 2009a). In the context of a wilderness stewardship plan, *desired conditions* qualitatively describe an ideal condition of wilderness character. Some desired conditions may not be fully attainable due to factors unrelated to visitor use or park management activities (e.g., due to external factors such as climate change and air pollution). However, the Wilderness Act requires that, as a minimum, wilderness character be preserved from the time of designation, although NPS *Management Policies 2006* 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

Additionally the NPS seeks to minimize adverse impacts caused by visitor use and administrative activities to cultural, historical and pre-historical resources.

- 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.
    - Visitors would have opportunities to experience solitude, a state of being alone or feeling remote from society, although these opportunities could vary by location and time.
    - Visitors would have opportunities to participate in a variety of primitive recreation activities, characterized by non-motorized, non-mechanical travel and reliance on personal skill; primitive recreation activities would be managed to preserve other wilderness character qualities.
    - Visitors would have opportunities to recreate in an unconfined, self-directed manner, subject only to those regulations that are necessary to preserve wilderness character.

PLANNING ELEMENTS TO BE ADDRESSED

Specific planning elements or topics to be addressed in the plan were developed for discussion and to set the framework for the alternatives. Each of these topics will be addressed under each alternative and a comparison of the environmental consequences of each alternative will be completed. These planning topics were identified based on internal and external scoping; federal laws, regulations, and executive orders; NPS *Management Policies 2006*; site visits; and public comments.

MANAGEMENT ACTIONS APPLICABLE TO ALL ALTERNATIVES

Wilderness Education: Education is a critical component of wilderness stewardship. Programs that help visitors and staff to understand wilderness values and ethics are extremely important across all alternatives. Information explaining proper wilderness behavior and how to access less-visited areas of wilderness could help reduce the impacts of visitors on the environment and one another's experiences, as well as disperse use (Cole et al. 1987). Understanding the qualities and benefits of wilderness also leads to improved stewardship. A wilderness information and education strategy has been developed as part of this plan.

Aviation (Military, Commercial, and Private): Managing military and private aviation above park wilderness is outside the scope of the WSP; however, the plan will determine the future of commercial air

tours over wilderness. As an outcome of this WSP/DEIS, air tours over the parks are determined to be counter to the preservation of wilderness character, and the parks will continue to pursue means for their exclusion from the Federal Aviation Administration (FAA) list of NPS units where air tours are allowed. The parks will continue to work cooperatively with regional and national military leadership to ensure that military aviation operations are no more than minimally disruptive to the experience of wilderness visitors. Private aircraft use would continue to be managed by the FAA, and the NPS will continue to work cooperatively with the FAA to resolve problems.

Administrative Communications in Wilderness: Effective radio-communication systems are necessary to support resource protection actions, emergency services, the safety of wilderness staff, and transmittal of information on wilderness conditions to the frontcountry to inform wilderness visitors. Radio repeaters in wilderness exist in strategic and remote locations and require maintenance. Helicopter use may be authorized to maintain radio repeaters if it is determined by the superintendent to be the minimum requirement needed to achieve the purposes of the area as wilderness, including the preservation of wilderness character. As future technologies are developed, the existing structures would be considered for replacement, with replacement outside of wilderness preferred. If structures are able to be removed, the installation sites would be restored to natural conditions.

Administrative Activities (e.g., Ranger Patrols and Operations, Maintenance Activities, Resource Management Activities, Park Aviation, etc.) and Minimum Requirement Standards: Administrative presence may impact opportunities for solitude and unconfined recreation. Rangers, trail crews, and resource management crews are stationed in the parks' wilderness to educate and assist visitors, enforce regulations and restrictions, carry out projects, and perform maintenance activities to protect and preserve wilderness character. Many of these actions, such as those requiring the use of helicopters, are approved only after a Minimum Requirement Analysis (MRA) determines that the actions are appropriate in wilderness.

Research: The parks are recognized for advancing scientific research and integrating knowledge gained from scientific inquiry into the management of wilderness resources. Researchers from outside entities submit approximately 60 to 80 requests for permits each year to study aspects of the wilderness environment. For some park visitors, interaction with agency personnel and researchers may reduce the unconfined feeling or opportunities for solitude (Fauth and Tarpinian 2011; NPS 2011a). Other research actions may result in a temporary trammeling of wilderness but may improve the natural quality of wilderness over time. Research that has the potential to affect wilderness character, or that proposes a prohibited action, is evaluated separately through a MRA.

Winter Use: A wide range of activities can be experienced in the wilderness during the winter, generally from November through mid-May. Due to the high-elevation, demanding terrain, and potentially extreme weather of the parks' wilderness, winter activities can be challenging and hazardous for the inexperienced user. However, users of the winter environment will find the quiet, solitude, and beauty of the parks' wilderness extraordinary and inspiring. The winter use of the wilderness will be managed consistently across the alternatives.

Climbing Management: Climbing management in National Park wilderness is directly guided by relevant NPS management policies, director's orders, and reference manuals. The U.S. Code of Federal Regulations and the parks' Superintendent's Compendium also provide indirect and direct management control of climbing and related activities. Director's Order #41: Wilderness Stewardship provides specific guidance on the management of climbing in wilderness. A Climbing Management Strategy has been developed as part of this WSP.

KEY ELEMENTS CONSIDERED IN THE ALTERNATIVES

Each alternative emphasizes different approaches to protecting wilderness character. The variations in these elements are what make the alternatives different. The overarching element-specific objectives for this plan are:

- Visitor-use Levels – Visitor use and enjoyment of wilderness would be promoted while ensuring 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 dispersed 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 ensures 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.

Because each alternative emphasizes different approaches to protecting wilderness character, alternative-specific objectives for the eleven planning elements were also developed and are included in chapter 2.

ALTERNATIVES CONSIDERED

This WSP/DEIS considers five alternatives that would manage the overall character of the parks' wilderness, including key aspects such as wilderness use levels, access and trails, stock use and grazing, and recreational and administrative infrastructure. Each alternative meets applicable laws, as well as the goals, objectives, and desired conditions described in chapter 1. The high standard for natural resource preservation required by the 1964 Wilderness Act means there is little variation across the alternatives in terms of how natural resources are addressed. The main differences between these alternatives lie in the key elements of wilderness management – use levels, access and trails, stock use and grazing, and infrastructure, both recreational and administrative. These differences are driven by the different approach

to management that each alternative offers. Each alternative serves visitor and/or operational needs in different ways.

DESCRIPTION OF THE ALTERNATIVES

A summary of the alternatives is presented in the following paragraphs. The details of the alternatives are presented in table ES-1.

Alternative 1: No-action / Status Quo. The overarching idea behind alternative 1 is that the current documents and actions used by the parks to oversee wilderness would remain the same. That does not mean that nothing could change, but changes would be driven by the same plans currently in use. Under alternative 1, the management of all wilderness and backcountry areas would continue to be guided by the Backcountry Management Plan (BMP) and Stock Use and Meadow Management Plan (SUMMP), each approved in 1986.

The BMP allows for recreational use in such a manner that park resources are preserved now and into the future. The BMP establishes trailhead quotas, a wilderness permit system, and management objectives for campfires, campsites, sanitation, food storage, special-use limits, area closures, stock use and grazing, education and interpretation, trails and travel, signs, commercial operations, ranger stations, administrative policies, and monitoring (e.g., meadows monitoring).

The SUMMP establishes the management system and tools for stock use and includes site-specific opening dates for grazing, grazing management, use levels, protection of Sierra Nevada bighorn sheep ewe-lamb ranges, installation of drift fences, stock and camp etiquette, implementation of temporary variances, and other closures. The SUMMP also establishes a monitoring program to inform and modify management as necessary to reduce resource impacts.

Alternative 2: Protect Wilderness Character by Implementing Site-specific Actions (NPS Preferred Alternative). The overarching idea behind alternative 2 is that the WSP would incorporate much of the current management strategies and tools used by the parks to protect wilderness. Rather than imposing restrictions on a broad scale, this alternative would evaluate conditions in specific areas and mitigate impacts through targeted actions. The goal is to encourage wilderness use and minimize restrictions while preserving wilderness character.

This alternative recognizes that there is variation in visitor-use levels throughout the wilderness: day use (close to frontcountry), popular overnight areas (e.g., HST, PCT, and Rae Lakes Loop), and less-visited areas (e.g., the Middle Fork of the Kings, the Hockett Plateau, and off-trail areas). It further recognizes that, under current management, prevailing projected visitor-use levels pose few threats to wilderness character in the less-popular or less-visited areas.

Alternative 2 acknowledges, however, that there are some challenges in the most popular areas and in areas with sensitive resources that can be mitigated through targeted improvements in management.

As with current management, this alternative would protect the wilderness character and resource values while providing for a range of visitor opportunities, but adds some limits in specific popular and sensitive resource areas to improve wilderness character.

TABLE ES-1: SUMMARY OF ALTERNATIVES BY ELEMENT

Topic	Alternative 1 No-action/Status Quo	Alternative 2 Protect Wilderness Character by Implementing Site-specific Actions (NPS Preferred Alternative)	Alternative 3 Provide More Opportunities for Primitive Recreation	Alternative 4 Emphasize Undeveloped Quality and Non-commercial Recreation	Alternative 5 Emphasize Opportunities for Solitude
Element 1: Visitor-use Levels Permitting/Quotas	Trailhead quotas exist at most locations.	Trailhead quotas would remain the same or be slightly reduced in high-use areas.	Trailhead quotas would be increased by 10% in some areas.	Daily trailhead quotas would remain the same or be slightly reduced in highest use areas compared to alternative 1. Trailhead quotas in low-use areas would be reduced from those of alternative 1.	Trailhead quotas would be reduced by 30% wilderness-wide.
Element 1: Visitor-use Levels Destination Quotas	Destination quotas apply for Emerald and Pear lakes.	Existing destination quotas would continue to be applied. Additional destination quotas may be added for specific areas (e.g., Bearpaw, Dusy Basin, Guitar Lake, Hamilton Lake, Monarch Lakes, Rae Lakes, and other areas).	Existing destination quotas would continue to be applied. No additional destination quotas would be added.	Existing destination quotas would continue to be applied. Additional destination quotas may be added in the future for specific areas including Bearpaw, Dusy Basin, Guitar Lake, Hamilton Lake, Monarch Lake, Rae Lakes, and potentially others.	Existing destination quotas would be discontinued. New destination quotas may be implemented for specific popular areas.
Element 1: Visitor-use Levels Day-use Permits and Quotas	There are no day-use permits/quotas.	No day-use permits/quotas would be implemented at this time but they may be considered in the future in the most popular areas to meet desired conditions.	No day-use permits/quotas would be implemented.	Same as alternative 2.	Day-use quotas would be applied in specific areas (e.g., Lakes Trail, Mist Falls, Monarch Lake, and potentially other areas).
Element 2: Trails	There is currently no trail classification system. Trails are maintained, relocated, or reconstructed per the NPS Trail Maintenance Handbook standards and the BMP and SUMMP. No new trail construction is authorized.	A trail classification system would be established and trails would be designated Class 1, 2 or 3 and maintained to trail class. Some Class 3 trails would be downgraded to Class 2. Some Class 2 trails would be downgraded to Class 1. New Class 1 trails would be established to protect resources; some Class 1 trails would be abandoned.	A trail classification system would be established and trails would be designated Class 1, 2 or 3 and maintained to trail class. Some Class 2 trails would be upgraded to Class 3. New Class 1 trails would be established or abandoned to protect resources. Some Class 1 trails would be upgraded to Class 2.	A trail classification system would be established and trails would be designated Class 1, 2 or 3 and maintained to trail class. Some Class 3 trails would be downgraded to Class 2. Most Class 2 trails would be maintained to Class 2, but some would be upgraded to Class 3 or downgraded to Class 1. Some Class 1 trails would be abandoned.	A trail classification system would be established and trails would be designated Class 1, 2 or 3 and maintained to trail class. Most trails would be maintained at their "current" class.
Element 2: Trails Signs	Trail signs with directional markers and mileages are present. Interpretive signs are generally not authorized.	Signs would be appropriate to trail class.	Same as alternative 2.	Same as alternative 2.	Same as alternative 2.
Element 3: Campfires Restrictions	Recreational campfires would be allowed in the foothill and montane forest areas where adequate wood supplies exist. Recreational campfires would continue to be allowed up to: 10,000 feet in the San Joaquin and Kings river drainages. 9,000 feet in the Kaweah River drainage. 10,400 feet in the Kern River drainage.	Recreational campfires would be allowed in the foothill and montane forest areas where adequate wood supplies exist. Recreational campfires would be allowed up to: 10,000 feet in the San Joaquin, Kern, and Kings river drainages. 9,000 feet in the Kaweah and Tule river drainages.	Recreational campfires would be allowed in the foothill and montane forest areas where adequate wood supplies exist. Recreational campfires would be allowed up to 9,000 feet wilderness-wide.	No campfires in wilderness.	Recreational campfires would be allowed in the foothill and montane forest areas where adequate wood supplies exist. Recreational campfires would be allowed above 10,000 feet wilderness-wide.

TABLE ES-1: SUMMARY OF ALTERNATIVES BY ELEMENT (CONTINUED)

Topic	Alternative 1 No-action / Status Quo	Alternative 2 Protect Wilderness Character by Implementing Site-specific Actions (NPS Preferred Alternative)	Alternative 3 Provide More Opportunities for Primitive Recreation	Alternative 4 Emphasize Undeveloped Quality and Non-commercial Recreation	Alternative 5 Emphasize Opportunities for Solitude
Element 3: Campfires Site-specific Variations	Additional site-specific prohibitions are in place in the Kings, Kaweah, Kern, and Tule River drainages.	In areas where available wood could be burned without unduly depleting ground fuels or consuming important resources, variances could be established. Site-specific prohibitions would be implemented at: Hamilton Lakes, Mineral King Valley, Pinto Lake, Redwood Canyon, and in selected sequoia groves.	No variances would be established. Site-specific prohibitions would be implemented in the most popular areas (e.g., Pacific Crest Trail (PCT) / John Muir Trail (JMT), Rae Lakes Loop, High Sierra Trail (HST), Mineral King Valley, and Rock Creek drainage) and in selected sequoia groves.	N/A: No campfires in wilderness.	No variances would be established. Site-specific prohibitions would be implemented in selected sequoia groves.
Element 3: Campfires Summary	Allows recreational campfires in 398,829 acres of 837,806 acres of wilderness.	Allows recreational campfires in 395,710 acres of 837,806 acres of wilderness.	Allows recreational campfires in 293,840 acres of 837,806 acres of wilderness.	Allows recreational campfires in 0 acres of wilderness.	Allows recreational campfires in 425,276 acres of 837,806 acres of wilderness.
Element 4: Food-storage Food-storage Boxes	There are 87 food-storage boxes currently in wilderness and these would remain.	Of the existing 87 food-storage boxes, 48 would be retained and 26 would be removed. An additional 13 food-storage boxes would be tested prior to removal. Food-storage boxes would be retained in highest use areas (e.g., Rae Lakes Loop, HST). Some boxes could be relocated.	Existing food-storage boxes would be retained; however, they may be relocated. Up to 35 new food-storage boxes would be added in key areas.	All food-storage boxes would be removed.	Same as alternative 4.
Element 4: Food-storage Portable Container Requirements	Portable food-storage containers are required for overnight use at Rae Lakes Loop and vicinity, Dusy and Palisades basins, and in the Rock Creek area.	Portable containers would be required for overnight use at North Dome, Dusy Basin, Rae Lakes Loop and Rock Creek areas, and may be required in other areas.	Existing portable container requirements would be modified based on the locations of additional food-storage boxes. Additional portable container requirements would be implemented in specific areas as needs arise.	Portable containers would be required for all overnight users wilderness-wide.	The NPS would retain the ability to require portable containers in specific areas.
Element 4: Food-storage Requirements – Commercial Guides	Commercial guides (stock and hiking) are required to use portable containers wilderness-wide (condition of commercial use authorization [CUA]).	Same as alternative 1.	Same as alternative 1.	Same as alternative 1.	Same as alternative 1.
Element 4: Food-storage Other Methods	Counterbalancing and hanging food is allowed. Guarding food items is not allowed.	Counterbalancing and hanging would be allowed in areas where containers are not required. Guarding food items is not allowed.	Same as alternative 2.	Counterbalancing and hanging and guarding food items would not be allowed.	Self-determined food storage methods would be required (counterbalancing and hanging food or portable containers). Guarding food items would not be allowed.
Element 5: Human Waste Cat-holes	Cat-holes are required where there are no privies/restrooms.	Same as alternative 1.	Cat-holes would be required where there are no privies/restrooms except in areas where pack-out waste kits are required.	Cat-holes would be required (except in areas with pack-out waste kit requirements).	Cat-holes would be required in all areas. Visitors may elect to use pack-out waste kits.

TABLE ES-1: SUMMARY OF ALTERNATIVES BY ELEMENT (CONTINUED)

Topic	Alternative 1 No-action / Status Quo	Alternative 2 Protect Wilderness Character by Implementing Site-specific Actions (NPS Preferred Alternative)	Alternative 3 Provide More Opportunities for Primitive Recreation	Alternative 4 Emphasize Undeveloped Quality and Non-commercial Recreation	Alternative 5 Emphasize Opportunities for Solitude
Element 5: Human Waste Privies and Restrooms	There are two restrooms and 21 privies in wilderness.	Existing privies and restrooms (Emerald and Pear lakes) would be evaluated and those beyond reasonable repair or in unsuitable locations (low-use, close-in areas, where soils allow for cat-holes) would be removed. Nine public-use privies would be retained; seven public-use privies would be removed; one public-use privy would be added at Rock Creek Crossing. New privies would be considered for high day-use areas. Five additional privies/restroom buildings could be removed if maintaining them becomes cost prohibitive or if pack-out waste kit testing is successful.	All existing privies and restrooms would be retained. New privies would be considered for popular day-use areas (e.g., Heather Lake) and popular overnight areas.	All existing privies and restrooms would be removed (including Emerald and Pear Lake restrooms), except those affiliated with administrative structures. No new privies, vault toilets, or restrooms would be constructed.	Same as alternative 4.
Element 5: Human Waste Pack-out Waste Kits	Pack-out waste kits are highly recommended in the Mount Whitney area.	Pack-out waste kits may be required in certain areas to minimize the need for privies and restrooms.	Pack-out waste kits would be required in the Mount Whitney area. Existing privies would remain and be maintained in their current locations.	Pack-out waste kits would be recommended or required in popular areas.	Pack-out waste kits would be recommended in certain areas.
Element 6: Party Size Hikers and Boaters *Note: Off-trail restrictions apply to both day users and overnight users.*	On-trail (day use) party size limit of 25 On-trail (overnight use) party size limit of 15. Off-trail party size limit of 15.	On-trail (day use) party size limit of 25 On-trail (overnight use) party size limit of 15. Off-trail party size limit of 12 except in areas with specific lower limits (see below).	On-trail (day use) party size limit of 25 On-trail (overnight use) party size limit of 15. Off-trail party size limit of 15.	On-trail (day use) party size limit of 25 On-trail (overnight use) party size limit of 12. Off-trail party size limit of 8.	On-trail (day-use) party size limit of 20. On-trail (overnight use) party size limit of 10. Off-trail party size limit of 8.
Element 6: Party Size Recreational Stock Users *Note: Off-trail restrictions apply to both day users and overnight users.*	Maximum party sizes include: On-trail (day-use) – (including day rides, spot and dunnage) – 25 people; 20 stock; combined maximum of 45. On-trail – 15 people; 20 stock; combined maximum of 35 (with some lower exceptions). Off-trail – 15 people; 20 stock; combined maximum of 35.	Maximum party sizes include: Day Rides – 20 people; 20 stock; combined maximum 40. On-trail – 15 people; 20 stock; combined maximum 28. Off-trail – 12 people; 12 stock; combined maximum 14.	Maximum party sizes include: Day Rides – 25 people; 25 stock; combined maximum 50. On-trail –15 people, 25 stock; combined maximum 40. Off-trail – 15 people; 25 stock; combined maximum 40.	Maximum party sizes include: Day Rides – 15 people; 15 stock; combined maximum 30. On-trail – 12 people; 15 stock; combined maximum 20. Off-trail – 8 people; 7 stock; combined maximum 11.	Maximum party sizes include: Day-rides – 13 people; 13 stock; combined maximum 26. On-trail – 10 people; 13 stock; combined maximum 18. Off-trail – No off-trail stock use allowed.

TABLE ES-1: SUMMARY OF ALTERNATIVES BY ELEMENT (CONTINUED)

Topic	Alternative 1 No-action / Status Quo	Alternative 2 Protect Wilderness Character by Implementing Site-specific Actions (NPS Preferred Alternative)	Alternative 3 Provide More Opportunities for Primitive Recreation	Alternative 4 Emphasize Undeveloped Quality and Non-commercial Recreation	Alternative 5 Emphasize Opportunities for Solitude
Element 6: Party Size Area-specific Restrictions	Temporary party-size limits of 8 (number of people and stock combined) in 5 off-trail areas (Darwin Canyon, Dusy Basin, , Mount Whitney / Mount Langley, Sixty Lake Basin, and Sphinx Lakes).	Existing off-trail temporary party-size limits of 8 would be adopted permanently at Darwin Canyon/Lamarck Col (includes Class 1 trail area), Dusy Basin, Mount Whitney / Mount Langley (includes Class 1 trail area), Sixty Lake Basin, and Sphinx Lakes. Upper Goddard Canyon/Martha Lake would have a party-size limit consistent with the off-trail party size (12 people, 12 stock, combined maximum of 14). Combined party size of 8 (people and stock) for day rides into Sixty Lake Basin. Trail closed to stock beyond a point 1.8 miles from the junction of the JMT and the Sixty Lakes Trail. Combined party size of 8 (people and stock) for day rides above Penned Up Meadow on the Class 1 trail into Miter Basin.	Existing temporary party-size limits would be removed (party size of 8). A party-size limit of 4 would be implemented for camping at North Dome.	Existing temporary party-size limits would be removed and replaced with a wilderness-wide off-trail party size of 8.	Existing temporary party-size limits would be removed and replaced with a wilderness-wide off-trail party size of 8. Consider more restrictive party size for day-use in specific highly visited areas (Lakes Trails, Mist Falls, Monarch Lake, and potentially other areas).
Element 6: Party Size – General Area-specific Restrictions – Redwood Canyon	Redwood Canyon: maximum of 10 stock and maximum hiker party size of 10 people.	A party-size limit of 10 people or 10 people with 10 stock (combined maximum of 20) would be retained for Redwood Canyon.	A party-size limit of 10 people or 10 people with 10 stock (combined maximum of 20) would be retained for Redwood Canyon.	A party-size limit of 8 people or 8 people with 8 stock (combined maximum of 16) would be implemented for Redwood Canyon.	A party-size limit of 6 people or 6 people with 6 stock (combined maximum of 12) would be implemented for Redwood Canyon.
Element 6: Party Size – General Area-specific Restrictions – Milestone Basin	Milestone Basin maximum of 8 stock, by special permit only.	N/A: Closed to stock.	Same as alternative 1.	N/A: Closed to stock	N/A: Closed to stock.
Element 7: Camping/Campsites Hikers Allowable camping relative to wilderness boundary or trailhead	Camping would continue to be prohibited within 1 mile of any road and generally within 4 miles of a developed area or trailhead complex.	Camping would be prohibited within specified distances from each trailhead and 1 mile from any frontcountry development.	Same as alternative 2.	Same as alternative 2.	Same as alternative 2.
Element 7: Camping/Campsites Close-in Camping Areas	Not applicable	Allow camping in specific close-in areas (e.g., Colony Mill Trail, Don Cecil Trail, and North Dome).	Same as alternative 2.	No camping in specific close-in areas (e.g., within 2 miles of either trailhead on the Colony Mill Trail; on the entire Don Cecil Trail).	Same as alternative 2.
Element 7: Camping/Campsites Existing Designated Campsites Hikers	Designated camp area exists at Bearpaw Meadow and designated campsites exist at Emerald and Pear lakes and Paradise Valley.	Existing designated sites at Emerald and Pear lakes, lower Paradise Valley, and the designated camp area at Bearpaw Meadow would be retained.	Same as alternative 2.	All existing designated sites at Emerald and Pear lakes, Paradise Valley, and the camp area at Bearpaw Meadow would be removed.	Existing designated sites at Emerald and Pear lakes, Paradise Valley, and the camp area at Bearpaw Meadow would be removed.
Element 7: Camping/Campsites New Designated Campsites Hikers	No additional designated campsites would be established.	Additional designated sites or camp areas could be established at selected high-use areas, including but not limited to: Dusy Basin, Guitar Lake, Kearsarge Lakes Basin, Middle and Upper Rae Lakes, and Woods Creek Crossing.	Additional designated sites would be established in selected popular areas, including but not limited to Dusy Basin, Evolution Valley, Guitar Lake, JMT, Kearsarge Lakes Basin, Middle and Upper Rae Lakes, Mineral King Lake Basins, PCT, Redwood Canyon, and Woods Creek Crossing.	No new designated sites would be established at this time.	Same as alternative 4.

TABLE ES-1: SUMMARY OF ALTERNATIVES BY ELEMENT (CONTINUED)

Topic	Alternative 1 No-action / Status Quo	Alternative 2 Protect Wilderness Character by Implementing Site-specific Actions (NPS Preferred Alternative)	Alternative 3 Provide More Opportunities for Primitive Recreation	Alternative 4 Emphasize Undeveloped Quality and Non-commercial Recreation	Alternative 5 Emphasize Opportunities for Solitude
Element 7: Camping/Campsites Universally Accessible Sites Hikers	None	One or more universally accessible campsites closer to the trailhead would be considered (Potential location to consider – near the confluence of Bubbs Creek and South Fork Kings River).	Same as alternative 2.	None	None
Element 7: Camping/Campsites Stock Users	No camps would be designated for the exclusive use of stock users with the exception of Upper and Lower Funston Meadows. No other camps are designated for the exclusive use of stock users.	In specific high-use locations, stock users may be required to camp in designated stock camps. (e.g., Big Pete Meadow, Rock Creek Crossing, and Woods Creek Crossing). These sites would be stock user only camps. Upper and Lower Funston would no longer be designated stock camps.	In specific, high-use locations, stock users may be required to camp in designated stock camps, These sites would be stock user only camps.	There would be no designated stock camps.	Same as alternative 4.
Element 7: Camping/Campsites Night Limits	Visitors are limited to 14 consecutive nights at a single location, 21 consecutive nights per trip, and 63 total nights per year except for the specific areas below.	Visitors would be limited to 14 consecutive nights at a single location, 25 consecutive nights per trip, and 75 total nights per year except for the specific areas below.	Visitors would be limited to 7 consecutive nights at a single location, 20 consecutive nights per trip, and 60 total nights per year except for the specific areas below.	Visitors would be limited to 10 consecutive nights at a single location, 21 consecutive nights per trip, and 63 total nights per year except for the specific areas below.	Visitors would be limited to 10 consecutive nights at a single location, 21 consecutive nights per trip, and 63 total nights per year except for the specific areas below.
Element 7: Camping/Campsites Area-specific Night Limits	2-night limit at Charlotte Lake, Hamilton Lake, Kearsarge Lakes, Paradise Valley, and Redwood Canyon. 1-night limit at Rae Lakes, per lake.	3-night limit at Emerald and Pear lakes (combined) and at Soldier Lake. 2-night limits at Charlotte Lake, Colony Mill Trail, Crabtree area, Don Cecil Trail, Dusy Basin, Guitar Lake, the JMT from Woods Creek Crossing to Vidette Meadow, Kearsarge Lakes Basin, North Dome, Paradise Valley, and Redwood Canyon. 1-night limit at Hamilton Lake and 1-night limit per lake at Rae Lakes.	2-night limit at Charlotte Lake, Colony Mill Trail, Crabtree area, Don Cecil Trail, Dusy Basin, Emerald and Pear lakes (combined), Guitar Lake, Hamilton Lake, Kearsarge Lakes Basin, North Dome, Paradise Valley, Redwood Canyon, and Soldier Lake. 1-night limit per lake at Rae Lakes, at any one location on the JMT between Vidette Meadow and Woods Creek Crossing.	4-night limit at Crabtree area and Soldier Lake. 3-night limit at Charlotte Lake, Colony Mill Trail, Emerald and Pear lakes (combined), Guitar Lake, the JMT from Woods Creek Crossing to Vidette Meadow (at any one location), North Dome, and Redwood Canyon. 2-night limits at Dusy Basin, Hamilton Lake, Kearsarge Lakes Basin, Paradise Valley, and Rae Lakes (per lake).	4-night limits at Colony Mill Trail, Crabtree area, Guitar Lake, and the JMT from Woods Creek Crossing to Vidette Meadow. 3-night limits at Don Cecil Trail, Dusy Basin, Emerald and Pear lakes (combined), Kearsarge Lakes Basin (combined), Paradise Valley (whole valley), Redwood Canyon, and Rae Lakes (per lake). 2-night limit at Hamilton Lake.
Element 8: Stock Use Access and Travel On-trail	On-trail: Currently nearly all maintained wilderness trails in the parks are open to stock (636 of 647 miles). Stock travel is also permitted on 78 miles of informal and abandoned trails. (Note: Not all trails open to stock are maintained to stock standards)	On-trail: Stock travel would be allowed on 653 of 695 miles of maintained trails.	On-trail: Stock travel would be allowed on 669 of 707 miles of maintained trails.	On-trail: Stock travel would be allowed on 527 of 637 miles of maintained trails.	On-trail: Stock travel would be allowed on 663 of 695 miles of maintained trails.
Element 8: Stock Use Access and Travel On-trail Camping Access	Approximately 597 miles of maintained and unmaintained trails are open to camping with stock.	Approximately 534 miles of maintained trails would be open to camping with stock.	Approximately 562 miles of maintained trails would be open to camping with stock.	Approximately 379 miles of maintained trails would be open to camping with stock.by all user groups (private, commercial, and administrative) with an additional 70 miles of maintained trails open to overnight travel by private stock or administrative stock parties only (closed or day-use only for commercial stock).	Approximately 552 miles of maintained trails would be open to camping with stock.

TABLE ES-1: SUMMARY OF ALTERNATIVES BY ELEMENT (CONTINUED)

Topic	Alternative 1 No-action / Status Quo	Alternative 2 Protect Wilderness Character by Implementing Site-specific Actions (NPS Preferred Alternative)	Alternative 3 Provide More Opportunities for Primitive Recreation	Alternative 4 Emphasize Undeveloped Quality and Non-commercial Recreation	Alternative 5 Emphasize Opportunities for Solitude
Element 8: Stock Use Access and Travel Off-trail	Off-trail: Travel more than 0.5 mile from trails open to camping with stock is allowed in four areas of the parks: on the Hockett Plateau, along the western side of the Kern River watershed south from the Chagoopa Plateau, on the Monarch Divide including Hotel Creek, and in the Roaring River area. Travel is allowed up to 0.5 mile from trails and routes to reach campsites.	Off-trail: Travel more than 0.5 mile from trails open to camping with stock would be allowed in four areas of the parks: on the Monarch Divide, in the Roaring River area, on the Hockett Plateau, and along the western side of the Kern River watershed south from the Chagoopa Plateau (except lower Big Arroyo). In other areas open to camping with stock, travel would be allowed up to 0.5 mile from trails and routes in areas where they are allowed to camp and up to 100 yards from day-use trails.	Off-trail: Travel more than 0.5 mile from trails open to camping with stock would be allowed in four areas of the parks: on the Monarch Divide, in the Roaring River area, on the Hockett Plateau, and along the western side of the Kern River watershed south from the Chagoopa Plateau (except lower Big Arroyo). In other areas open to camping with stock, travel would be allowed up to 0.5 mile from trails and routes in areas where they are allowed to camp and up to 100 yards from day-use trails.	Off-trail: Travel more than 0.5 mile from maintained trails open to camping with stock would be allowed for private stock parties in four areas of the parks: on the Hockett Plateau (except for Tar Gap), on the Monarch Divide (except for Kennedy Canyon), in the Roaring River drainage (except for Elizabeth and Colby passes), and along the western side of the Kern River watershed south from the Chagoopa Plateau (except for Lower Big Arroyo and Willow Meadow Cutoff). In other areas open to camping with stock, travel would be allowed up to 0.5 mile from trails and routes in areas where they are allowed to camp, and up to 100 yards from day-use trails.	Off-trail: Travel more than 0.5 mile from trails open to camping with stock would be prohibited. In areas open to overnight stock use, travel would be allowed up to 0.5 mile from trails and routes in areas where they are allowed to camp. Stock would be allowed to travel up to 100 yards from day-use trails.
Element 8: Stock Use Grazing	Grazing is generally allowed in areas open to camping with stock (within 0.5 mile of maintained trails open to camping with stock, along designated unmaintained routes, or in off-trail travel areas). Grazing is not allowed in those areas open only to stock travel.	Grazing would generally be allowed in areas open to camping with stock (within 0.5 mile of maintained trails open to camping with stock or in off-trail travel areas). Grazing would not be allowed in those areas open only to travel.	Grazing would generally be allowed within 0.5 mile of maintained trails open to camping with stock. Grazing would generally be prohibited in areas open to off-trail travel with the following exceptions: Ansel Lake, Chagoopa Treehouse Meadow, Crytes Lakes, Laurel Creek Basin, Long Meadow (Ferguson Creek), Sugarloaf Creek Confluence, and West Fork Ferguson Creek. Grazing would not be allowed in those areas open only to stock travel.	No administrative, private, or commercial grazing would be allowed. Visitors and park staff traveling with stock would be required to carry feed for their animals and confine them on durable non-vegetated surfaces in camp.	Grazing would generally be allowed within 0.5 mile of maintained trails open to camping with stock. Grazing would not be allowed in those areas open only to travel.
Element 8: Stock Use Stock Use Structures	There are 52 existing hitch rails and 54 existing drift fences, pasture fences, and gates in the parks' wilderness managed under the SUMMP.	23 hitch rails would be removed and 29 hitch rails would be retained. 12 fences/gates would be removed and 42 would be retained.	14 hitch rails would be removed and 38 would be retained. 5 fences/gates would be removed, 49 would be retained, and 1 new fence with a gate would be constructed.	All hitch rails not associated with administrative facilities would be removed. All drift fences and gates would be removed. Groups traveling with stock would be required to hold their stock while camping (e.g., set up high lines) on durable, non-vegetated surfaces.	28 hitch rails would be removed and 24 would be retained. A total of 18 fences and gates would be removed, 36 fences/gates would be retained, and 1 gate would be added.
Element 9: Administrative Structures Ranger Stations	Ranger Stations: 15 Patrol Cabins: 3	Ranger Stations: Retained: 14 Removed: 1 Patrol Cabins: Retained: 3 Removed: 0	Ranger Stations: Retained: 15 Removed: 0 Patrol Cabins: Retained: 3 Removed: 0	Ranger Stations: Retained: 8 Removed: 7 Patrol Cabins: Retained: 1 Removed: 2	Ranger Stations: Retained: 11 Removed: 4 Patrol Cabins: Retained: 3 Removed: 0

TABLE ES-1: SUMMARY OF ALTERNATIVES BY ELEMENT (CONTINUED)

Topic	Alternative 1 No-action / Status Quo	Alternative 2 Protect Wilderness Character by Implementing Site-specific Actions (NPS Preferred Alternative)	Alternative 3 Provide More Opportunities for Primitive Recreation	Alternative 4 Emphasize Undeveloped Quality and Non-commercial Recreation	Alternative 5 Emphasize Opportunities for Solitude
Element 9: Administrative Structures Administrative Pastures	Stock pastures associated with ranger stations are located at Hockett Meadow, Kern, Redwood Meadow, and Roaring River. Facilities such as hitching rails are associated with structures at Hockett Meadow, Quinn, and Redwood Meadow.	Existing administrative pastures and associated structures would be retained in their current location (Hockett Meadow, Kern, Redwood Meadow, and Roaring River).	Same as alternative 2.	Existing administrative pastures and associated facilities would be removed (Hockett Meadow, Kern, Redwood Meadow, and Roaring River).	The existing administrative pasture (and fence) at Redwood Meadow would be removed. The Hockett Meadow and Kern pastures would be reduced in size. The administrative pasture at Roaring River would be retained.
Element 9: Administrative Structures Crew Camps	There would continue to be 15 established and long-term trail crew camps within Kings Canyon National Park and 10 established and long-term trail crew camps within Sequoia National Park. Other project crew camps (for administration of wilderness) would continue to be established as needed on case-by-case basis.	Existing trail crew camps would be retained, but the number of installations would be reduced to one at each camp. Other project crew camps would be established as needed on case-by-case basis.	The number of trail crew camps in Kings Canyon National Park would be increased to 20. The number of trail crew camps in Sequoia National Park would be increased to 15. Other project crew camps (for administration of wilderness) would be established as needed on case-by-case basis.	Trail crews would conduct trail maintenance through use of mobile operations; there would be no long-term established camps. Short-term project crew camps (for administration of wilderness) would be established as needed on case-by-case basis.	Same as alternative 4.
Element 9: Administrative Structures Other Administrative Facilities	The Redwood Canyon Cabin and associated infrastructure is operated under a Memorandum of Understanding with a non-governmental organization for the purposes of research.	Use of the Redwood Canyon Cabin by researchers would be terminated within one year of WSP approval. The cabin and all associated installations would be removed over a two-year period after WSP approval. Future research activities in Redwood Canyon could continue but without the use of a permanent structure.	The Redwood Canyon Cabin would be retained as research support with reduced affiliated infrastructure. Use would include park staff, cooperators, research organizations, and universities (non-park staff would be required to obtain a permit). The supporting infrastructure (e.g., water system, shower, tables, etc.) would be removed, and the area rehabilitated.	Use of the Redwood Canyon Cabin by researchers would be terminated within 1 year of WSP approval. The cabin and all associated installations would be removed over a two-year period after WSP approval. Future research activities in Redwood Canyon could continue, but without the use of the cabin or associated permanent infrastructure.	Use of the Redwood Canyon Cabin by researchers would be terminated within two years of WSP approval. The cabin and all associated installations would be removed within three years of WSP approval. Future research activities in Redwood Canyon could continue but without the use of a permanent structure.
Element 10: Frotcountry *Refer to table 52 in chapter 2 for details.*					
Element 11: Commercial Services in Wilderness	Commercial service levels and types would continue to be managed to provide high-quality visitor experiences while protecting wilderness resources.	Commercial services would be allowed but would be restricted in specific popular areas and areas with other limiting factors (e.g., Mount Whitney Management Area)	There would be increased opportunities for provision of commercial services (types and amounts of services).	Overall the types, amounts, and areas in which commercial services are allowed would be notably reduced compared to alternative 1.	Overall the types, amounts, and areas in which commercial services are allowed would be reduced commensurate with reduced use.
Element 11: Commercial Services in Wilderness Bearpaw Meadow High Sierra Camp	The Bearpaw Meadow High Sierra Camp would continue to be operated by a park concessioner.	Commercial services would be provided at the Bearpaw Meadow High Sierra Camp as in alternative 1.	The Bearpaw Meadow High Sierra Camp would be retained and would continue to be operated by a concessioner. Some expansion (season of use and/or size of facilities) would be considered provided it can be accomplished within the existing footprint and would not cause additional adverse impacts on resources.	The Bearpaw Meadow High Sierra Camp, including any historic elements, would be removed and the area rehabilitated.	The Bearpaw Meadow High Sierra Camp would be reduced in size and its season of operation would be shortened.
Element 11: Commercial Services in Wilderness Pear Lake Ski Hut	The Pear Lake Ski Hut would continue to be operated during winter months as a ski hut (lodging facility) by a cooperating association under a cooperative agreement.	Commercial services would be provided at the Pear Lake Ski Hut as in alternative 1.	Use of the Pear Lake Ski Hut would continue through a cooperating association or as a concession-operated facility.	Use of Pear Lake Ski Hut as a commercial facility would be discontinued.	The Pear Lake Ski Hut would be used as a warming hut with no overnight use and operated by the NPS.

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Some popular areas would have additional restrictions (e.g., closing additional meadows along the JMT and HST to grazing), but less popular areas would have some restrictions eased (e.g., allowing campfires in specific areas, increased night limits, etc.). Education would be essential to inform visitors of where they could expect fewer encounters and how to practice Leave No Trace© travel and camping techniques in wilderness.

The most popular areas where concerns regarding visitation levels exist include Bishop Pass (Dusy Basin), Bubbs Creek (Rae Lakes Loop), Cottonwood Lakes / New Army Pass (Mount Whitney and Mount Langley), Cottonwood Pass (Mount Whitney), HST (from Crescent Meadow and Wolverton), Lakes Trail (Emerald and Pear lakes), Sawtooth Trail (Monarch Lakes), and Woods Creek (Rae Lakes Loop). Lamarck Col (Darwin Canyon), while not busy, may have increasing use and is a sensitive area.

Visitors traveling with stock would continue to have access to most trails in the parks, with some trails reserved for hiker use only. The combined length of trails open to hiker or backpacker traffic only (i.e., closed to stock) would increase by approximately 30 miles over current conditions. Stock access and grazing would be constrained primarily by ecological parameters, with a limited number of new restrictions adopted to provide for visitor safety and to accommodate social values (e.g., scenic and aesthetic values). Grazing would be managed to optimize protection of natural and cultural resources while allowing visitors traveling with stock access to forage for their animals. Recognizing that the opportunity to observe and experience ungrazed meadows is of value to many park visitors, a selection of meadows along popular travel routes would be closed to grazing.

To meet the objectives of this alternative, commercial services would be retained at levels similar to alternative 1 (no-action / status quo) in most locations. Commercial services would be reduced in some of the most frequently visited areas and in some areas with particularly sensitive resources. More types of commercial services could be permitted to support a range of recreational opportunities consistent with the objectives of this alternative. Commercial services would be allowed to the extent necessary to provide opportunities for visitors of diverse abilities and interests to engage in a variety of wilderness activities that are proper for realizing the public purposes of wilderness.

Alternative 3: Provide More Opportunities for Primitive Recreation. The overarching idea behind alternative 3 is that the WSP would focus on increasing opportunities for primitive recreation by allowing additional use, which would be expected to occur mostly in popular areas.

Allowing use to increase under this alternative would result in more visitors in the parks' wilderness. This would result in decreased opportunities for solitude and more visitors could have an increased impact on the resources. Therefore, to preserve the natural quality of wilderness, the popular use areas in wilderness would require additional development and restrictions on visitor behavior.

Quotas would generally remain at current levels in low-use areas, as there is no demand above current levels, but quotas would be increased for some of the most popular areas.

Most wilderness trails in the parks would remain open to stock under this alternative. Stock would continue to be allowed to travel up to one-half mile off maintained trails to reach campsites. Off-trail stock travel would continue to be allowed in four areas of the parks: on the Monarch Divide, in the Roaring River area, on the Hockett Plateau, and along the western side of the Kern River watershed south from the Chagoopa Plateau.

To increase access for visitors traveling with stock along the most popular trail corridors (JMT, HST, and PCT), additional controls would be placed on grazing, night limits, and party-size limits. In areas subject to high visitation or vulnerable to resource impacts, designated camping areas may be established.

There would be increased opportunities for commercial services commensurate with increased use (types of services and amount of use). Increased commercial services would be necessary to support a wider range of visitor skill levels and recreational opportunities.

Alternative 4: Emphasize Undeveloped Quality and Non-commercial Recreation. The overarching idea behind alternative 4 is that the WSP would focus on emphasizing the undeveloped and non-commercial qualities of the parks' wilderness. Removal of development and reduction of commercial services would increase opportunities for solitude and encourage self-reliance in wilderness recreation.

This alternative would eliminate some of the development currently in wilderness to emphasize the undeveloped quality of wilderness. There would be fewer signs, bridges, stock-related facilities, and ranger stations. Restrooms/privies and food-storage boxes would be removed and there would be no designated campsites.

Because fewer resource-protecting developments would remain in place, the amount of use would need to be reduced to protect the natural quality of wilderness.

Trailhead quotas would remain at current levels or be slightly reduced in the most popular areas. In low-use areas, current trailhead quotas would be reduced to prevent increasing use by visitors who cannot get a permit when quotas for the most popular trailheads fill.

Commercial services would be notably reduced in both quantity and area where they would be available. Types of commercial services would be similar to similar to current conditions. The majority of wilderness would be managed for self-directed exploration and self-reliant travel, increasing the primitive and unconfined qualities of recreation.

Private parties traveling with stock would continue to have access to most trails in the parks, and stock would continue to be allowed to travel off-trail in four designated areas. However, commercial stock use would be limited to certain destinations and trails. No private, commercial, or administrative stock grazing would be allowed under this alternative.

Campfires would not be allowed in wilderness under this alternative.

Alternative 5: Emphasize Opportunities for Solitude. The overarching idea behind alternative 5 is that the WSP would focus on enhancing the quality of solitude available in wilderness. To achieve this, the total number of wilderness visitors allowed in wilderness would be reduced, as would party size.

The presence of fewer visitors in wilderness would in turn allow for reduced levels of development, along with reduced restrictions on visitor behavior (fewer people need fewer facilities). Reducing the numbers of visitors would also result in reduced impacts on resources.

Trailhead quotas would be reduced to protect against future increases in use wilderness-wide, even at trailheads that currently do not meet quotas.

Because there would be reduced use, stock use and grazing would be allowed in most areas where overnight use is permitted.

Commercial services would be allowed, but less use would be expected overall with reduced trailhead quotas for all visitors (including commercial service providers) and reduced party sizes.

IMPACT TOPICS SELECTED FOR DETAILED ANALYSIS

The following impact topics were identified based on internal and external scoping; federal laws, regulations, and executive orders; NPS *Management Policies*; site visits; NPS knowledge of limited or easily impacted resources; and the potential for measurable effects on these resources. These topics were evaluated in this WSP/DEIS in "Chapter 4: Environmental Consequences." Table ES-2 (page xxiv) summarizes the impacts of each alternative

Wilderness Character: This WSP/DEIS would establish a framework for managing wilderness, replacing the current guiding documents, the BMP and the SUMMP. Preserving wilderness character is the fundamental purpose of wilderness, per the Wilderness Act. For that reason, the evaluation of how each alternative affects wilderness character is an integral part of this WSP/DEIS. Activities occurring in wilderness have the potential to impact wilderness character and values through recreational and management activities.

Soils: Several elements of the alternatives have the potential to affect soils, including constructing, maintaining, or restoring trails, placing or removing food-storage boxes, establishing designated camps, and general visitor use.

Water Quality: Visitor use and administrative actions near lakes, streams, ponds, and rivers has the potential to impact water quality through increased turbidity from runoff, and from human and stock waste.

Mount Stewart and Black Spur.

Vegetation: Vegetation can be affected by activities such as trampling by visitors and stock, grazing in meadows, collecting wood for campfires, administrative actions, and transporting and establishing nonnative vegetation. Vegetation subtopics included in this WSP/DEIS are wetlands and meadows, subalpine trees, alpine vegetation, park sensitive plant species, and invasive species.

Wildlife: Wildlife, particularly bears, can be affected by visitor use and administrative activities related to food storage. Native birds could be negatively affected by stock use if it increases nest parasitism by cowbirds. Invertebrates can be affected by grazing and visitor use.

Special-status Species: Some special-status species can be affected by visitor use and administrative activities. Special-status species analyzed in this WSP/DEIS include Yosemite toad (*Anaxyrus canorus*), the northern distinct population segment of mountain yellow-legged frog (*Rana muscosa*), and the Sierra Nevada yellow-legged frog (*Rana sierrae*), and the Sierra Nevada bighorn sheep (*Ovis canadensis sierrae*).

Cultural Resources: The alternatives considered in the WSP/DEIS have the potential to affect historic structures and archeological sites.

Socioeconomics: Alternatives related to visitor use and access and commercial use, have the potential to affect the region's socioeconomic resources.

Visitor Use: There are a number of elements within the alternatives that could affect visitor use and experiences (other than those addressed in the "Wilderness Character" section), including actions that affect aesthetic and social values of wilderness.

Park Operations: Park operations may be affected by changes to visitor use and wilderness infrastructure and facilities.

NPS PREFERRED AND ENVIRONMENTALLY PREFERABLE ALTERNATIVE

Alternative 2 is the NPS preferred alternative. It was selected by comparing the relative advantages of each alternative and examining how each alternative met the goals, objectives, and desired conditions for wilderness stewardship. Park managers believe that alternative 2 provides the most balanced, comprehensive approach to protecting wilderness character when compared with any other alternative. Overall, alternative 2 provides the best combination of management strategies, resulting in a practical, common sense approach to wilderness management. It protects the qualities of wilderness, supports a balance of resource preservation and use over the long term, and welcomes visitors to participate in stewardship and use of one of the world's finest wilderness areas.

The Council on Environmental Quality (CEQ) regulations for implementing the National Environmental Policy Act (NEPA) requires that an agency identify its preferred alternative or alternatives in a final EIS [1502.14(e)]. The preferred alternative is the alternative "which the agency believes would fulfill its statutory mission and responsibilities, giving consideration to economic, environmental, technical and other factors" (Question 4a of the Council on Environmental Quality's "Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations" (1981)). The NPS has identified alternative 2 as the preferred alternative. All of the alternatives would fulfill all of the above CEQ requirements to some degree. The action alternatives (alternatives 2 – 5) would fulfill these requirements somewhat equally, through continuation of existing wilderness and resource management policies, ecological restoration of fragile meadow and riparian areas, protection of water quality, and protection of archeological resources. The alternatives would vary primarily in protection of historic resources,

sensitive meadows and riparian areas, protection of downed wood and sensitive species, and the diversity of recreational (primitive and unconfined) opportunities and opportunities for solitude provided to the public. All alternatives provide for as safe an environment as possible, given that wilderness recreation involves inherent risks.

The NPS has determined that alternative 5 is the environmentally preferable alternative. Alternative 5 best promotes the requirements of the national environmental policy expressed in section 101(b) of NEPA. It is the alternative that causes the least amount of impacts on the biological and physical environment and that best protects, preserves, and enhances historic, cultural, and natural resources, and best achieves the short- and long-term goals for protecting and improving wilderness character. Alternative 5 best meets these requirements.

ENVIRONMENTAL CONSEQUENCES

The summary of environmental consequences considers the actions being proposed and the cumulative impacts on resources from occurrences inside and outside the park. The potential environmental consequences of the actions are addressed for wilderness character, soils, water quality, vegetation, wildlife, special-status species, historic structures and districts, cultural landscapes, ethnographic resources, socioeconomics, visitor use, and park operations. Table ES-2 presents a comparison of the effects of the alternatives on the resources of the parks (see page xxiv).

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TABLE ES-2: SUMMARY OF IMPACTS

Resource	Alternative 1 No-action / Status Quo	Alternative 2 Protect Wilderness Character by Implementing Site-specific Actions (NPS Preferred Alternative)	Alternative 3 Provide More Opportunities for Primitive Recreation	Alternative 4 Emphasize Undeveloped Quality and Non-commercial Recreation	Alternative 5 Emphasize Opportunities for Solitude
Wilderness Character Untrammeled Quality	Impacts on the untrammeled quality would be of a limited intensity and duration, and wilderness would in general remain dominated by natural processes.	Impacts on the untrammeled quality would be of a limited intensity and duration, and wilderness would in general remain dominated by natural processes.	Impacts on the untrammeled quality would be of a limited intensity and duration, and wilderness would in general remain dominated by natural processes.	Impacts on the untrammeled quality would be of a limited intensity and duration, and wilderness would in general remain dominated by natural processes.	Impacts on the untrammeled quality would be of a limited intensity and duration, and wilderness would in general remain dominated by natural processes.
Wilderness Character Natural Quality	The natural quality of wilderness would continue to be preserved.	The natural quality of wilderness would continue to be preserved. Overall visitor-use levels would remain similar to current use levels; on a wilderness-wide scale this alternative would have few detectable effects on the natural quality of wilderness. However, site-specific changes would result in improvement of this quality that would be detectable at a local scale. These local effects result from changes in the way that campfires, food storage, human waste, camping, and hiker and stock use, and commercial services are managed.	The natural quality of wilderness would continue to be preserved. Daily trailhead quotas would be increased; however, on a wilderness-wide scale this alternative would result in few detectable impacts on the natural quality of wilderness. Localized improvements on the natural quality could occur as a result of changes in the way that trails, campfires, food storage, human waste, camping, and hiker and stock use, and commercial services are managed.	The natural quality of wilderness would continue to be preserved. This alternative would result in few detectable effects on the natural quality of wilderness. The local improvements result from changes in food storage, human waste, and campsite management. The more substantial effects would result from the changes in campfire restrictions, elimination of grazing, and lower levels of commercial services.	The natural quality of wilderness would continue to be preserved. Under alternative 5, overall visitor-use levels would be reduced; however, on a wilderness-wide scale this alternative would have few detectable effects on the natural quality of wilderness. The local improvements would result from changes in campfire, food storage, human waste, camping, stock-use, and commercial services.
Wilderness Character Undeveloped Quality	The level of development related to visitor management would remain constant. There would be no change to the undeveloped quality.	Alternative 2 would result in a decrease in privies and food-storage boxes resulting in a slight improvement to the undeveloped quality.	Alternative 3 would result in more development in wilderness and therefore would result in adverse effects on the undeveloped quality.	Alternative 4 reduces development more than any other alternative, resulting in beneficial effects on the undeveloped quality.	Alternative 5 would result in a decrease in privies and food-storage boxes resulting in a slight improvement to the undeveloped quality.
Wilderness Character Opportunities for Solitude or Primitive and Unconfined Recreation	Under current conditions, the parks' wilderness provides outstanding opportunities for solitude and primitive and unconfined recreation, except at a few locations where visitor densities are relatively high and impacts on solitude occur. There would be no change to opportunities for solitude or primitive and unconfined recreation.	Alternative 2 would continue to provide outstanding opportunities for solitude and primitive and unconfined recreation in many areas, but in a few areas additional management controls would reduce the unconfined aspect, and slightly improve the solitude aspect.	Alternative 3 would result in improvements to opportunities for primitive and unconfined recreation in many areas, but in a few areas additional management controls would reduce the unconfined aspect. Alternative 3 would allow for increased overall wilderness use, reducing the opportunity for solitude, particularly in popular areas.	Alternative 4 would result in site-specific improvements in opportunities for solitude and primitive and unconfined recreation in many areas, but additional management controls would reduce the unconfined aspect.	Alternative 5 would result in improvement to opportunities for solitude and decrease opportunities for primitive and unconfined recreation throughout wilderness due to decreases in the number of visitors allowed in the wilderness.
Wilderness Character Other Features of Value	This alternative does not provide for a focused assessment of trails and other historic features, thus, until such assessment is undertaken under another program or project, the historic features may not be adequately protected. There would be no changes to scientific study.	One historic feature, the Mission 66-era ranger station at Bearpaw Meadow, would be removed. There are no changes proposed for scientific activities.	One historic feature, the Mission 66-era ranger station at Bearpaw Meadow, would be removed. There are no changes proposed for scientific activities.	One historic district and three historic features (the Bearpaw Meadow High Sierra Camp, Redwood Meadow and Tyndall Creek ranger stations, and the Simpson Meadow Patrol Cabin) would be removed. There would be no changes to scientific study.	One historic district would be reduced in size. The Mission 66-era Bearpaw Meadow Ranger Station would be removed. There would be no changes to scientific study.
Soils	The effects of current visitor and administrative activities are not currently posing recognizable threats to soils. There would be no change under this alternative.	In general, this alternative seeks to maintain visitation into the parks' wilderness. Therefore, the impacts from continued visitor use would be similar to current conditions as described under alternative 1. Additional beneficial effects could result from removal of some installations, and establishment or restoration of trails. Adverse impacts could occur from installation of new privies and the establishment of campsites. Impacts would be localized and not measurably different from current conditions.	In general, this alternative would allow for increased visitation in wilderness. As a result, adverse impacts on soils may increase slightly in localized areas from an increase in visitors, stock, and development wilderness-wide.	This alternative seeks to maintain or slightly reduce visitation into the parks' wilderness. As a result, adverse impacts on soils may decrease slightly overall from reduced use. Beneficial effects would occur from a decrease in the number of stock, the elimination of grazing wilderness-wide, and the removal of installations. Adverse effects would result from the establishment of stock hold and feed areas. Beneficial and adverse effects would be localized and slight; and would not result in a measurable change on a wilderness-wide scale.	Visitor use would be reduced from current levels. Fewer visitors could result in fewer effects from visitor use overall, such as the development of social trails and new campsites. Beneficial effects would occur from a decrease in the number of stock and hikers and the removal of installations. Beneficial and adverse effects would be localized and slight; and would not result in a measurable change.

TABLE ES-2: SUMMARY OF IMPACTS TABLE (CONTINUED)

Resource	Alternative 1 No-action / Status Quo	Alternative 2 Protect Wilderness Character by Implementing Site-specific Actions (NPS Preferred Alternative)	Alternative 3 Provide More Opportunities for Primitive Recreation	Alternative 4 Emphasize Undeveloped Quality and Non-commercial Recreation	Alternative 5 Emphasize Opportunities for Solitude
Water Quality	No changes to the management of parks' wilderness would occur. Humans and stock appear to have had little impact on water quality or on the overall health of the aquatic ecosystem when compared to environments with very little use. Some measurable impacts have occurred, especially near the most heavily visited locations; however, the impacts remain below accepted thresholds of health or ecological concern. It is likely that the prevailing environmental conditions would persist under this alternative.	Under alternative 2, visitor use would remain at about the same levels. Therefore, the impacts from continued visitor use would be similar to current conditions as described under alternative 1. The prohibition of grazing in selected meadows may result in a small, beneficial effect on water quality.	Alternative 3 provides for increased visitor use levels in certain areas. Studies indicate that visitors have some small adverse impact on water quality, and it is reasonable to assume that additional users will likely result in more impacts, but the impacts should remain small and would remain below accepted thresholds of health or ecological concern.	Alternative 4 provides for a slight decrease in visitor use levels in certain areas. A reduction in users may result in small beneficial effects, but at a scale too small to measure. This alternative would likely result in some beneficial effects on water quality in the areas which had been open to grazing.	Alternative 5 provides for a reduction of visitor use levels wilderness wide. Wilderness visitors have a small, but adverse impact on water quality. A reduction in users would likely result in small, beneficial effects, but likely at a level below any detectable limits.
Vegetation Wetlands and Meadows	Impacts from human traffic would remain similar to current levels and insignificant at the landscape scale. The extent and severity of trampling, grazing, and nonnative species impacts due to stock use would be expected to remain comparable to current levels. Stock parties would have access to 64% of the meadow area; 51% of meadow area would be open to grazing The amount of grazing would be similar to current levels. Grazing capacities would be adopted in popular destinations. Grazing intensity outside of these areas would be a function of variable annual stock use patterns and productivity.	Impacts from human traffic would remain similar to current levels and insignificant at the landscape scale. The extent and severity of trampling, grazing, and nonnative species impacts due to stock use would be reduced from current levels. Stock parties would have access to 54% of the meadow area; 46% of meadow area would be open to grazing. The amount of grazing would be similar to current levels. The intensity of grazing in named forage areas (and therefore the extent and severity of impacts) would be limited by grazing capacities.	Impacts from human traffic would increase but remain insignificant at the landscape scale. There would be a decrease in the extent but an increase in the severity of trampling, grazing, and nonnative species impacts due to stock use as higher use would be concentrated in fewer destinations. Stock parties would have access to 55% of the meadow area in the parks; 37% of all meadow area would be open to grazing. The amount of grazing would be greater than current levels. The intensity of grazing in named forage areas (and therefore the extent and severity of impacts) would be limited by grazing capacities.	Impacts from human traffic would remain similar to current levels and insignificant at the landscape scale. The extent and severity of impacts due to stock use would be greatly reduced. Parties traveling with stock would continue to have access to 43% of the meadow area in the parks. Total stock use would decrease relative to current levels. Grazing would be prohibited throughout the park; therefore, grazing impacts would be eliminated. Trampling impacts would be nearly eliminated. Nonnative species impacts due to stock use would be expected to decrease, with a chance for increased impacts due to a greater amount of carried feed used.	Impacts from human traffic would decrease and remain insignificant at the landscape scale. The extent and severity of trampling, grazing, and nonnative species impacts would decrease with lower overall stock use and fewer areas open to grazing. Stock parties would have access to 42% of the meadow area; 36% of meadow area would be open to grazing. The amount of grazing would be less than current levels. The intensity of grazing in named forage areas (and therefore the extent and severity of impacts) would be limited by grazing capacities.
Vegetation High-elevation Long-lived Trees	Campfires would be prohibited in 439,515 acres while being allowed in 44,212 acres of high-elevation conifer habitat that supports the four subalpine long-lived tree species.	Campfires would be prohibited in 442,096 acres while being permitted in 35,857 acres of high-elevation conifer habitat that supports the four subalpine or upper montane long-lived tree species (whitebark pine, foxtail pine, limber pine, and Sierra juniper).	Campfires would be prohibited in 543,965 acres while being permitted in 13,126 acres of high-elevation conifer habitat that supports the four subalpine long-lived tree species.	Campfires would be prohibited in 837,806 total acres of the parks or 100% of wilderness. It would include all areas of high-elevation conifer habitat where the four long-lived tree species occur within the parks. This would include a wide range of vegetation types distributed throughout wilderness from low to high elevations.	Campfires would be prohibited in 412,530 total acres of the parks, while being permitted in 37,144 acres of high-elevation conifer habitat that supports the four subalpine long-lived tree species.
Vegetation Alpine Vegetation	Direct removal of alpine vegetation would continue to occur infrequently. Trampling of alpine vegetation along trail corridors, at popular destinations, and in alpine meadows would continue, particularly in areas of concentrated visitor use and where grazing occurs. Under current use levels and patterns, vegetation in untrailed alpine areas would remain largely undisturbed. Approximately 64% of mapped alpine vegetation areas would be closed to stock, which would serve to protect these areas from potential grazing and trampling impacts.	Impact types would be the same as described for alternative 1. If visitor use increases in off-trail areas, impacts on alpine vegetation could increase in extent and severity. Impacts would be reduced by limiting certain areas to pass through or day-use and by closing certain trails and meadows to stock access completely. Under this alternative 70% of the mapped alpine vegetation areas would be closed to stock, providing increased protection from potential grazing and trampling impacts.	Impact types would be similar to alternative 1; however, the increased use levels and use patterns would likely increase trampling impacts on alpine vegetation, particularly in popular areas and around new food-storage boxes. Impacts along trails would continue, and if visitor use increases in off-trail areas, impacts on alpine vegetation could increase in extent and severity. Under this alternative, 69% of the mapped alpine vegetation areas would be closed to stock, providing increased protection from potential grazing and trampling impacts.	Impacts on alpine vegetation would be similar to alternative 1, but could be reduced by limitations on visitor use, which could result in reduced use in off-trail areas. Trampling in alpine meadows by stock would largely cease due to grazing restrictions. However, the areas used for holding and feeding stock could be subject to increased trampling impacts. Under this alternative, 76% of the mapped alpine vegetation areas would be closed to stock, providing increased protection from potential grazing and trampling impacts.	Impacts on alpine vegetation would be expected to decrease relative to current conditions, as a result of overall decreased visitor use. There could continue to be trampling impacts associated with grazing where it occurs. Under this alternative, 83% of the mapped alpine vegetation areas would be closed to stock, providing increased protection from potential grazing and trampling impacts.

TABLE ES-2: SUMMARY OF IMPACTS TABLE (CONTINUED)

Resource	Alternative 1 No-action / Status Quo	Alternative 2 Protect Wilderness Character by Implementing Site-specific Actions (NPS Preferred Alternative)	Alternative 3 Provide More Opportunities for Primitive Recreation	Alternative 4 Emphasize Undeveloped Quality and Non-commercial Recreation	Alternative 5 Emphasize Opportunities for Solitude
Vegetation Plants of Conservation Concern	Direct removal and trampling of the plants of conservation concern by visitors would be expected to be infrequent under current levels and patterns of use. Although species in the meadows and uplands may suffer incidental trampling by visitors traveling through meadows or on cross-country routes, this would not be expected to result in population level impacts. Localized impacts from stock use could affect plants of conservation concern. There is no evidence that current use levels and patterns are resulting in population level impacts on these species.	Impacts on vascular plants and mosses of conservation concern would be similar to alternative 1. Restrictions and closures of certain areas to stock grazing and access would reduce the potential for impacts from trampling and grazing. Because grazing intensity in meadows would be managed through the implementation of site-specific grazing capacities, impacts on these species would continue to be localized and would not be expected to result in large scale losses or declines that could lead to the listing of any of the species.	The potential for trampling of the plants of conservation concern by hikers could rise with the increased visitor use. Species in the meadows and uplands may be subject to incidental trampling by visitors traveling through meadows or on cross-country routes, although this would not be expected to result in population level impacts. Localized impacts from stock use and grazing could affect plants of conservation concern. Because grazing intensity in meadows would be managed through the implementation of site-specific grazing capacities, impacts on these species would continue to be localized and would not be expected to result in large scale losses or declines that could lead to the listing of any of the species.	The potential for impacts on plants of conservation concern would be reduced due to the reduction in overall use and the elimination of grazing.	The potential for impacts on plants of conservation concern would be reduced as a result of reduced visitor use, smaller party sizes, and the elimination of cross country travel by stock. Because grazing intensity in meadows would be managed through the implementation of site-specific grazing capacities, impacts on these species would continue to be localized and would not be expected to result in large scale losses or declines that could lead to the listing of any of the species.
Vegetation Nonnative Plants	Disturbance associated with visitor use, including off-trail travel and grazing, would remain the same, and there would be no change in the use of unprocessed hay and hay cubes. Thus there would continue to be the potential for the introduction and spread of nonnative species in popular areas of the wilderness and those frequented by stock.	The overall probability of nonnative introductions would be approximately the same as current conditions. However, beneficial effects would occur from slightly less off-trail stock travel and grazing, and the required use of processed (i.e. weed-seed free) feed. Although the probability of nonnative introductions would be less than current conditions, the spatial distribution of impacts would be similar to current conditions.	The overall probability of nonnative introductions would be approximately the same as current conditions. A slight reduction in off-trail travel and grazing, coupled with requirements for processed feed would mitigate some of the impacts from increased visitor and stock use and administrative activities. More meadows would have a lowered risk of nonnative plant introduction, as they would be closed to stock access.	The extent of disturbed land would be lowered due to reduced visitor and group sizes, and a reduction in facility maintenance. Overall, propagule pressure, the probability of nonnative introduction into wetlands, and the spatial distribution of impacts would be substantially lower than current conditions due to the elimination of grazing and a reduction in off-trail stock travel.	Similar to alternative 4, there would be beneficial effects on native plant communities due to reduced visitor use wilderness wide.
Wildlife Black Bear	Under alternative 1, bears would continue to have benign encounters with people throughout wilderness, which would lead to habituation, which is often a precursory behavior to food-conditioning that occurs when bears associate people with food. Incidents would continue to remain relatively rare and bear population dynamics in wilderness would be dominated by natural processes.	Because the visitor use levels would be similar to present levels, there would be little change in undesirable bear behavior under this alternative. However, the removal of nearly half of the existing food-storage boxes and establishing new campsites could increase habituation and food-conditioning, leading to adverse impacts. If proper food storage is regularly practiced, increases in human/bear conflicts as a result of this action would be expected to be minimal.	Potential increases in human/bear encounters (and thus, increased habituation and food-conditioning) would result from increased visitor use and additional established campsites. These impacts would be mitigated by adding 35 new food-storage boxes, moving existing food-storage boxes to more appropriate locations, and increasing portable food container requirements. Overall, the change in impacts from current conditions would be minimal.	Reduced visitor use could result in a reduction of bear-human encounters. Beneficial effects from reducing visitor use, however, would be outweighed by the adverse impacts of removing all food-storage boxes. There would likely be a net increase in food-conditioned bears because a percentage of visitors would likely not properly store their food.	Beneficial effects from reducing visitor use would be outweighed by the adverse impacts of removing all food-storage boxes. There would likely be a net increase in food-conditioned bears because a percentage of visitors would likely not properly store their food.

TABLE ES-2: SUMMARY OF IMPACTS TABLE (CONTINUED)

Resource	Alternative 1 No-action / Status Quo	Alternative 2 Protect Wilderness Character by Implementing Site-specific Actions (NPS Preferred Alternative)	Alternative 3 Provide More Opportunities for Primitive Recreation	Alternative 4 Emphasize Undeveloped Quality and Non-commercial Recreation	Alternative 5 Emphasize Opportunities for Solitude
Wildlife Birds	In wilderness, brown-headed cowbird abundance and parasitism would continue to be uncommon and impacts on native bird species would continue to be minimal because of the lack of development although there could be potential for localized problematic areas near ranger stations or other highly visited sites. Brown-headed cowbird abundance and parasitism rates could be relatively high near frontcountry developments (e.g., campgrounds, picnic areas, administrative and stock facilities, etc.), particularly for species restricted to lower elevations, and could limit population growth.	Additional meadow closures and decreases in stock party sizes could cause a reduction in available brown-headed cowbird habitat, limiting their impact on native bird species in wilderness. However, any increase in the use of supplemental feed products could increase habitat and food sources for the cowbird, potentially increasing opportunities for nest parasitism. Increased development in frontcountry sites may cause a slight increase in brown-headed cowbird abundance at these sites. However, the impacts on native bird species from brown-headed cowbird parasitism are not expected to increase substantially from current conditions.	Increased stock party sizes, establishment of stock campsites, and any increase in the use of supplemental feed products could increase habitat quality for brown-headed cowbirds, thus increasing the potential for parasitism of host species. Slight beneficial effects on native bird species would occur from reducing stock grazing in off-trail areas, reducing brown-headed cowbird habitat.	The closure of all meadows to grazing could contribute to reduced habitat quality for brown-headed cowbirds and could result in a decrease in parasitism to host species near these sites, relative to alternative 1. This would result in a beneficial effect on native birds. However, adverse impacts could result from use of supplemental feed carried into wilderness and the development of frontcountry sites, as described for alternative 2.	Abundance of brown-headed cowbirds would likely be reduced by the reduced stock party sizes, removal of stock campsites, and the reduced number of meadows open to grazing. However, adverse impacts could result from the use of supplemental feed carried into wilderness and the development of frontcountry sites, as described for alternative 2.
Wildlife Invertebrates	Invertebrates would continue to be adversely affected by human and stock trampling, stock grazing, and stock fording of streams. The impact intensity would be scale dependent. Wilderness-wide, impacts would be undetectable; however, on a localized scale, measureable impacts would continue to occur.	Similar visitor use levels would result in impacts similar to those described under alternative 1. The closure of additional meadows to grazing would result in beneficial effects on invertebrates at these sites. These beneficial effects are anticipated to be minimal.	Increased visitor use would provide increased opportunities for invertebrates to be affected by trampling; however, the difference in impacts would not be measurable relative to alternative 1. Additional areas would be closed to grazing, providing beneficial effects on invertebrates in the newly closed meadows when compared to current conditions. These beneficial effects are anticipated to be minimal.	Reduced visitor use levels would result in a slight beneficial effect on invertebrates, but the effects would be similar to those described under alternative 1. The closure of all meadows to grazing would result in beneficial effects on invertebrates at these sites. These beneficial effects are anticipated to be minimal.	Reduced visitor use levels would result in a slight beneficial effect on invertebrates, but the effects would be similar to those described under alternative 1. The closure of additional meadows to grazing and off-trail stock travel would result in beneficial effects on invertebrates. These beneficial effects are anticipated to be minimal.
Special-status Species Yosemite Toad	Visitors would continue to encounter Yosemite toads in wilderness, which could result in disturbance and/or trampling. Disturbance would not have an impact on toad populations. The small amount of potential trampling that may affect Yosemite toads under this alternative would be expected to result in no effect on their populations. Under this alternative stock use and grazing would continue to be managed to prevent unacceptable habitat degradation; therefore, while there may be adverse impacts on individual toads, the potential for population-wide effects is small.	As in alternative 1, the potential for disturbance to Yosemite toads from visitor encounters and trampling would continue to occur. However, additional stock access restrictions, and the elimination or reduction in grazing in known toad habitat would reduce the potential of trampling and habitat degradation, and would be expected to result in a beneficial effect on Yosemite toads.	With an increase in use, there is an increased potential for visitors to disturb or trample Yosemite toads. However, additional stock access restrictions, and the elimination or reduction in grazing in known toad habitat would reduce the potential of trampling and habitat degradation, and would be expected to result in a beneficial effect on Yosemite toads.	As in alternative 1, the potential for disturbance to Yosemite toads from visitor encounters and trampling would continue to occur, but would be reduced with reduced visitor access in toad habitat. Additional stock access restrictions and the elimination of grazing in known toad habitat would reduce the potential of trampling and habitat degradation, and would be expected to result in a beneficial effect on Yosemite toads.	With decreased use overall, the potential for disturbance to Yosemite toads from visitor encounters and trampling would be reduced from current levels. Additional stock access restrictions, and the elimination or reduction in grazing in known toad habitat would reduce the potential for trampling and habitat degradation, and would be expected to result in a beneficial effect on Yosemite toads.

TABLE ES-2: SUMMARY OF IMPACTS TABLE (CONTINUED)

Resource	Alternative 1 No-action / Status Quo	Alternative 2 Protect Wilderness Character by Implementing Site-specific Actions (NPS Preferred Alternative)	Alternative 3 Provide More Opportunities for Primitive Recreation	Alternative 4 Emphasize Undeveloped Quality and Non-commercial Recreation	Alternative 5 Emphasize Opportunities for Solitude
Special-status Species Mountain Yellow-legged Frog	Visitors would continue to encounter mountain yellow-legged frogs in wilderness, which could result in disturbance and/or trampling of frogs. Disturbance would not have an impact on frog populations. Trampling could adversely impact individual frogs, but would not have an impact on frog populations. The degradation of mountain yellow-legged frog habitat could occur in high use areas or near trails, but given the few locations where frog populations inhabit areas near trails, the potential for habitat degradation has been shown to be small.	The potential for visitors to disturb or trample mountain yellow-legged frogs would be similar as described under alternative 1. Additional stock access and grazing restrictions would protect frogs and frog habitat, and thus would be expected to result in beneficial effects.	With increased use, there is an increased potential for visitors to disturb or trample mountain yellow-legged frogs. However, additional stock access and grazing restrictions would protect frogs and frog habitat, and thus would be expected to result in beneficial effects.	The potential for visitors to disturb or trample mountain yellow-legged frogs would be similar as described under alternative 1. Additional stock access restrictions and the elimination of grazing would protect frogs and important frog habitat, and thus would be expected to result in beneficial effects.	The potential for visitors to disturb or trample mountain yellow-legged frogs would be reduced from alternative 1 due to reduced visitor use. Additional stock access and grazing restrictions would protect frogs and important frog habitat, and thus would be expected to result in beneficial effects.
Special-status Species Sierra Nevada Bighorn Sheep	Visitors would continue to encounter Sierra Nevada bighorn sheep in wilderness, which could result in disturbance. There is no evidence of adverse impacts on bighorn sheep from hikers and stock use under current use levels; therefore, these disturbances would not be of biological importance.	There could be an increased frequency of bighorn sheep/human encounters if new Class 1 trails are established in bighorn sheep habitat. However, such trails could concentrate visitor use and benefit bighorn sheep by making human activity more predictable. Reducing stock party sizes and areas open to grazing could benefit bighorn sheep in portions of their habitat. These beneficial effects are anticipated to be minimal. There could be short-term adverse effects from project activities in bighorn sheep habitat.	Trailhead quotas could increase on trails that intersect bighorn sheep habitat and new Class 1 trails could be established in bighorn sheep habitat; these actions could result in an increase in bighorn sheep-human interactions. It is probable that adverse impacts of increased bighorn-human interactions would continue to remain below the level of biological significance, and new Class 1 trails could concentrate use and benefit bighorn sheep by making human activity more predictable. Reducing areas open to grazing could benefit bighorn sheep in portions of their habitat. These beneficial effects are anticipated to be minimal. There could be short-term adverse effects from project activities in bighorn sheep habitat.	There would be beneficial effects on bighorn sheep because trailhead quotas would be reduced, stock would be allowed to travel on fewer trails, and party size would be reduced. Overall the effects would be beneficial and long-term; however, the beneficial effects are anticipated to be minimal. There could be short-term adverse effects from project activities in bighorn sheep habitat.	There would be beneficial effects on bighorn sheep from decreased visitor use and closures of areas to stock, specifically off-trail areas. Overall the effects would be beneficial and long-term; however, the beneficial effects are anticipated to be minimal. There could be short-term adverse effects from project activities in bighorn sheep habitat.
Cultural Resources	Cultural resources in wilderness would continue to be protected. There would be no adverse effects on cultural resources.	Most cultural resources in wilderness would continue to be protected. The ranger station at Bearpaw Meadow would be removed, resulting in an adverse impact on an historic resource. The level of impact could be somewhat mitigated through documentation strategies developed in consultation with the California State Historic Preservation Office (CA SHPO).	Most cultural resources in wilderness would continue to be protected. The ranger station at Bearpaw Meadow would be removed, resulting in an adverse impact on an historic resource. The level of impact could be somewhat mitigated through documentation strategies developed in consultation with the CA SHPO.	Most cultural resources in wilderness would continue to be protected. The removal of Bearpaw Meadow High Sierra Camp, including the ranger station, and the ranger stations or patrol cabins at Redwood Meadow, Simpson Meadow, and Tyndall would result in an adverse impact on those historic resources. The level of impact could be somewhat mitigated through documentation strategies developed in consultation with the CA SHPO.	Most cultural resources in wilderness would continue to be protected. The removal of the ranger station at Bearpaw Meadow would result in an adverse impact on an historic resource The level of impact could be somewhat mitigated through documentation strategies developed in consultation with the CA SHPO.

TABLE ES-2: SUMMARY OF IMPACTS TABLE (CONTINUED)

Resource	Alternative 1 No-action / Status Quo	Alternative 2 Protect Wilderness Character by Implementing Site-specific Actions (NPS Preferred Alternative)	Alternative 3 Provide More Opportunities for Primitive Recreation	Alternative 4 Emphasize Undeveloped Quality and Non-commercial Recreation	Alternative 5 Emphasize Opportunities for Solitude
Socioeconomics	There would be little change from current conditions. At the regional level, the effects on socioeconomics related to park wilderness visitation and operations would be both beneficial and adverse.	Similar to alternative 1; however, the more direct consequences of the restrictions placed in the busiest areas of wilderness (i.e., reductions in quotas for specific busy trails, limits on commercial services in the Mount Whitney Management Area, and limits on grazing), could result in lower use and the redistribution of use geographically and could adversely affect individuals or businesses. Alternative 2 would result in beneficial and adverse impacts over the long term.	Increased visitor use may result in long-term increases in the economic and social benefits from increased spending by wilderness visitors at local stores, motels and hotels, and other tourism-related businesses and attractions. Alternative 3 would result in beneficial effects over the long term.	This alternative may result in limited, reductions in economic and social effects. The decreased use could reduce income and increase costs for outfitters, adversely affecting the long-term economic viability of some outfitters, potentially to the point that one or more outfitters may choose to forego pursuit of Commercial Use Authorizations. Such a decision could have indirect effects in one or more gateway communities. Some individual outfitters and guides could be affected differentially by changes associated with this alternative.	Same as alternative 4.
Visitor Use and Experience	Alternative 1 provides a positive visitor experience for the majority of visitors throughout the parks' wilderness. In the most popular areas, visitor experience could be adversely or beneficially impacted due to the condition of the wilderness (campsite conditions), the existence of facilities, and the availability of commercial services to support visitor use.	Alternative 2 would continue to provide a positive experience for the majority of visitors throughout the parks' wilderness, with localized improvements occurring in selected areas. However, some visitors may not be able to travel in the area of their choice due to new restrictions on access and stock use, campfire limits, and reductions in commercial services in the Mount Whitney Management Area. Visitor-related facilities would be reduced, resulting in both adverse and beneficial effects on the visitor experience, depending on their expectations.	Alternative 3 would continue to provide a positive experience for the majority of visitors throughout the parks' wilderness. However, increased use in the most popular areas and increased level of restrictions would result in adverse effects on the visitor experience when compared with the other alternatives. Visitor –related facilities would be increased, resulting in both adverse and beneficial effects on the visitor experience, depending on their expectations.	Under alternative 4, certain uses would be limited. Campfires would not be allowed. All food-storage boxes would be removed. Grazing would be prohibited. There would be decreased opportunities wilderness-wide for visitors to use commercial service providers. The increased restrictions and decreased visitor-related facilities would result in both adverse and beneficial effects on the visitor experience depending on their expectations.	Under alternative 5, visitor access would be limited to the lowest amount when compared with the other alternatives. There would be reduced opportunities for visitors traveling with stock due to off-trail restrictions. There would be fewer visitor-related facilities. There would be decreased opportunities wilderness-wide for visitors to use commercial service providers. Overall this alternative would result in both adverse impacts to those visitors who are unable to gain access to the wilderness, and beneficial effects on those visitors who gain access and experience wilderness.
Park Operations	There would be no change to current operations.	There would be cost and work associated with the removal of facilities, but a reduction in long-term expenditures with reduced maintenance requirements. After initial changes to the wilderness-related programs, this alternative would result in impacts that are not substantially different from alternative 1 (no-action / status quo).	There would be cost and work associated with the installation of new facilities, and long-term maintenance requirements. After initial changes to the wilderness-related programs, this alternative would result in impacts that are not substantially different from alternative 1 (no-action / status quo).	There would be cost and work associated with the removal of facilities, but a reduction in long-term expenditures with reduced maintenance requirements. There would be long-term costs associated with having to buy feed to allow the continued use of administrative stock. For other wilderness-related programs, this alternative would result in impacts that are not substantially different from alternative 1 ((no-action / status quo)).	There would be cost and work associated with the removal of facilities, but a reduction in long-term expenditures with reduced maintenance requirements. Fewer visitors in wilderness would likely result in a decrease in administrative activities resulting from wilderness management.

CONTENTS

APPENDIXES

TABLES

FIGURES

ACRONYMS AND ABBREVIATIONS

ACHP	Advisory Council on Historic Preservation
APE	Area of Potential Effect
BMP	Backcountry Management Plan
CCC	Civilian Conservation Corps
CDFW	California Department of Fish and Wildlife
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CFU	Colony Forming Units
CNDDB	California State Natural Diversity Database
CNPS	California Native Plant Society
CPRE	Comprehensive Plan for Resource Education
CUA	Commercial Use Authorization
DEIS	Draft Environmental Impact Statement
DPS	Distinct Population Segment
DPWA	Designated Potential Wilderness Additions
EA	Environmental Assessment

EIS	Environmental Impact Statement
END	Extent Necessary Determination
EPH	Encounters per Hour
ESA	Endangered Species Act
FAA	Federal Aviation Administration
FY	Fiscal Year
GMP	General Management Plan
HST	High Sierra Trail
IDT	Interdisciplinary Planning Team
JMT	John Muir Trail
KICA	Kings Canyon National Park
MRA	Minimum Requirements Analysis
NEPA	National Environmental Policy Act of 1969
NF	National Forest
NHPA	National Historic Preservation Act
NPATMA	National Parks Air Tour Management Act
NPS	National Park Service
National Register	National Register of Historic Places
NWPS	National Wilderness Preservation System
Parks	Sequoia and Kings Canyon National Parks
PCT	Pacific Crest National Scenic Trail
PEPC	Planning, Environment, and Public Comment
PL	Public Law
RMP	Resources Management Plan
ROD	Record of Decision
RSS	Resources Stewardship Strategy
SEIS	Supplemental Environmental Impact Statement
SEKI	Sequoia and Kings Canyon National Parks
SEQU	Sequoia National Park
SHPO	State Historic Preservation Office(r)
SNFPA	Sierra Nevada Forest Plan Amendment
SUMMP	Stock Use and Meadow Management Plan
USEPA	Environmental Protection Agency
USFS	United States Forest Service
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
VUD	Visitor-use days

WSP	Wilderness Stewardship Plan
WVCM	Weighted Value per Campable Mile
YOSE	Yosemite National Park