

RECORD OF DECISION

Sequoia and Kings Canyon National Parks Wilderness Stewardship Plan / Environmental Impact Statement

INTRODUCTION

The Department of the Interior, National Park Service (NPS) has prepared this Record of Decision (ROD) on the Wilderness Stewardship Plan / Final Environmental Impact Statement (WSP/FEIS) for Sequoia and Kings Canyon National Parks (the parks). This ROD includes a description of the selected action, the basis for decision, synopses of other alternatives considered, the identification of the environmentally preferable alternative, and an overview of public involvement in the decision-making process. Figures that are referenced in the ROD are available in the WSP/FEIS; a description of measures that will be implemented to minimize or avoid environmental harm are included as attachment A; and the determination of non-impairment, as required by NPS Management Policies 2006, is included as attachment B. References for citations included in the ROD and for attachments are available in the WSP/FEIS.

BACKGROUND

PURPOSE AND NEED

The Wilderness Act of 1964 mandates federal land-management agencies to manage wilderness areas “for the use and enjoyment of the American people in such manner as will leave them unimpaired for future use and enjoyment as wilderness, and so as to provide for the protection of these areas, [and] the preservation of their wilderness character (§2(a)).”

The Sequoia and Kings Canyon National Parks Backcountry Access Act (PL 112-128), enacted on June 5, 2012, mandates a deadline for completion of the WSP within three years, by June 5, 2015.

The Wilderness Stewardship Plan (WSP or plan) establishes a framework for managing wilderness and areas managed as wilderness within the 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.

The purposes of the WSP include implementing the long-term vision for protecting wilderness character that is contained in the parks’ *Final General Management Plan (GMP) / Final Environmental Impact Statement* (except as noted below), as well as enhancing established programs and actions for managing these areas as wilderness.

In an order dated May 29, 2012, the U.S. District Court for the Northern District California “vacate[d] all portions of the GMP and Record of Decision (ROD) which provide programmatic guidance regarding the type or level of commercial stock services necessary in the Sequoia and Kings Canyon National Parks wilderness or direction as to need, appropriateness, or size of developments, structures, or facilities used completely or partially for commercial stock services.” The term stock as used in the plan refers to those animals—horses, mules, burros/donkeys, or llamas—that can be ridden or used to carry supplies. Because the WSP could not rely on vacated portions of the GMP, the WSP considered anew a range of options for managing the type and level of commercial stock services in wilderness and the need for and size of developments, structures and facilities related to commercial stock use.

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).

A variety of controversial or long-standing issues are addressed in the WSP, including visitor capacity, wilderness permitting, party (group) size for people and stock, campfires, camping, food storage, 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.

In accordance with §102(2)(C) of the National Environmental Policy Act of 1969 (NEPA; Public Law [PL] 91-190), the parks have prepared the WSP and FEIS 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.

GOALS AND OBJECTIVES

Wilderness goals and objectives were derived from the enabling legislation for these parks, the Wilderness Act, park and wilderness management policies, GMP objectives that were not vacated, public input, and more. The following identify what the WSP addressed 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 Trace⁴⁹ minimum-impact practices.
- Promote safety within the context of wilderness where users are expected to be self-reliant.

DESIRED CONDITIONS

In the context of a wilderness stewardship plan, *desired conditions* qualitatively describe an ideal condition of wilderness character. In the WSP, desired conditions are defined for the four primary qualities of wilderness character.

- The untrammeled quality of wilderness character will be preserved by limiting deliberate manipulation of ecological systems except as necessary to promote another quality of wilderness character.
- The natural quality of wilderness will 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 will 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 will 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 be encouraged to 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 will 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.

DECISION

BASIS FOR DECISION

All of the alternatives presented in the WSP/EIS were designed to meet the requirements of the Organic Act, Wilderness Act, the establishing legislations of the parks, other relevant laws, and NPS policies. Accordingly, each alternative, to a varying degree, addresses the preservation of wilderness character, supports continued public use and enjoyment of the wilderness, protects cultural and natural resources, and improves conditions in areas where there may be unacceptable impacts. Each alternative meets, in differing ways, the objectives and desired conditions for wilderness management in the parks as detailed above and in Chapter 1 and 2 of the WSP/EIS.

Under alternative 1, no-action, the management of all wilderness areas would continue to be guided by the *Backcountry Management Plan* (BMP) and *Stock Use and Meadow Management Plan* (SUMMP), each approved in 1986. These plans were developed prior to wilderness designation; therefore, they do not fully address the requirements of the Wilderness Act, primarily in regards to the mandate to preserve wilderness character. In addition, the BMP and SUMMP did not formally establish visitor capacities and encounter standards, did not establish comprehensive mechanisms for addressing unacceptable impacts, create a classification system and strategy for managing trails, or address the extent to which commercial services are necessary.

Alternative 3 would allow for the highest levels of visitor use, but would have the most impacts on the undeveloped quality and reduce opportunities for solitude. Increased visitor use also has the highest potential to impact natural and cultural resources. The NPS concluded that alternative 3 would allow higher levels of potential risk to some aspects of wilderness character (e.g. natural and opportunities for solitude) in order to accommodate additional visitor use.

Alternative 4 would protect the natural quality of wilderness and would reduce development, but would limit opportunities for primitive and unconfined recreation. Alternative 4 would also reduce use for specific visitor groups (e.g. those visitors who require commercial services to support introductory experiences). The NPS concluded that alternative 4 would create unnecessary limitations on opportunities for visitor experience in order to gain marginal improvements to the natural quality of wilderness, and opportunities for solitude.

Alternative 5 focuses on enhancing the quality of solitude available in wilderness, reducing visitor use significantly more than any other alternative. While this affords better protection of the natural environment more than any other alternative (thus it is the environmentally preferable alternative, see below) alternative 5 results in a substantial reduction in opportunities for primitive and unconfined recreation (i.e. use and enjoyment). The NPS considered these lost opportunities to be unwarranted in light of the marginal improvements in certain other aspects of wilderness character that would result.

The Selected Action, Alternative 2, provides a targeted approach to preserving wilderness character by focusing on those areas where conditions warrant management actions. When compared to the other alternatives, alternative 2 provides the most balanced and reasoned approach to wilderness management. Alternative 2 allows for current types and levels of use, and builds on existing management practices to protect wilderness character and the natural and cultural resources in the parks. While alternative 5 is the environmentally preferable alternative, existing resource conditions do not indicate a compelling basis to reduce use levels wilderness-wide, which is why alternative 5 is not the selected action.

Alternative 2 is determined to be most likely to accomplish the critical, and sometimes competing, objectives identified in the Purpose and Need (defined in Chapter 1 of the WSP/EIS and summarized previously in this ROD). Examples of how alternative 2 meets these critical objectives include:

Preserve wilderness character

- Implements wilderness character monitoring that will ensure the protection of wilderness resources and experiences for the next 15-20 years;
- Sets standards for visitor encounter frequency to ensure that opportunities for solitude are preserved;
- Sets standards for campsite conditions to protect the natural quality of camping areas; and,
- Reduces the number of installations such as food storage-boxes, fences, and privies, improving the undeveloped quality.

Provide opportunities for and encourage public use and enjoyment of wilderness in accordance with the Wilderness Act and other laws and policies

- Implements a Trail Classification and Management System that will promote an appropriate range of choices for experiencing the wilderness, and will provide trail maintenance and design elements that facilitate reasonable access to wilderness;
- Maintains the opportunity for visitors to select their own campsites in most places;
- Identifies a system of meadows with high logistical value (e.g. with regard to forage availability) for visitors engaged in multi-day stock trips to ensure that this remains a viable recreational opportunity;
- Ensures that visitors have the opportunity to enjoy wilderness campfires in appropriate areas;
- Allows for necessary commercial support for a range of recreational activities that are proper for wilderness purposes;
- Maintains a trailhead quota system that gives visitors flexibility with their trip itineraries and ensures that there is a reasonable availability of overnight permits; and,
- Maintains party size limits at appropriate levels to allow for a variety of visitor experiences and activities while protecting other aspects of wilderness character. .

Improve conditions in areas where there may be unacceptable levels of impacts on wilderness character

- Creates a Mount Whitney Management Area in which stock and non-stock commercial services will be reduced and new visitor capacity standards will be applied, leading to greater opportunities for solitude and reduced biophysical impacts in this high-use area; and,
- Formalizes some long-standing and well-established social trails, such as on Mount Langley and in Darwin Canyon.

Protect the natural and cultural resources within wilderness.

- Improves the Stock Use and Meadow Monitoring and Management Strategy to better protect the ecological and aesthetic qualities of park meadows;
- Updates campfire restrictions to better protect the paleo and down wood resources of the parks;

- Protects soil and water quality by retaining necessary restrooms and privies in areas where risk of contamination and degradation is highest;
- Reduces the probability of new social trail development by reducing off-trail party size;
- Maintains designated camping areas in some areas with a history of camping impacts; and,
- Establishes the framework for performing assessments of eligibility for historic trails.

SELECTED ACTION

After reviewing the foreseeable environmental impacts of each alternative, the purpose and need for action, and all public and agency comments, alternative 2 is the selected action. In reaching a decision on the selected action, the NPS carefully considered the multiple laws and policies that apply to wilderness and NPS administered lands, the large body of scientific information regarding the impacts of visitor use in wilderness, including stock use, and the public comments that were received during the planning process.

The overarching idea behind the selected action 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, the selected action evaluates conditions in specific areas and mitigates impacts through targeted actions. The goal is to encourage wilderness use and minimize restrictions while preserving wilderness character.

The selected action addresses 11 key elements as summarized below.

Element 1: Visitor-use Levels

Planning Objective: Visitor use and enjoyment of wilderness will be promoted while ensuring the preservation of wilderness character. In the selected action, visitor use levels will be managed in some popular areas to preserve opportunities for solitude or other wilderness-character qualities.

Permits and Quotas — Under the selected action, all overnight visitors in the parks' wilderness, whether self-supported or traveling with the support of a commercial service provider, will be subject to the trailhead quota system as presented in table 46 of the WSP/FEIS, and must obtain a wilderness permit from an approved source (e.g., NPS, U.S. Forest Service [USFS], or Pacific Crest Trail Association).

Existing daily trailhead quotas would not change from current conditions, with the possibility of some future quota reductions in specific targeted areas and adding trailhead quotas where they do not currently exist. Select higher use areas would be monitored for undue impacts, and quotas could be adjusted in the future if necessary.

Those visitors entering the parks' wilderness via trailheads managed by the USFS on the east side of the parks are subject to the trailhead quotas of Inyo National Forest.

Current destination quotas at Emerald and Pear lakes would continue to apply. Additional destination quotas may be added to protect wilderness character at specific locations such as Bearpaw Meadow, Dusy Basin, Guitar Lake, Hamilton Lake, Monarch Lakes, Rae Lakes, and other areas.

No day-use permits or quotas will be implemented at this time but they may be considered in the future in popular areas to achieve desired conditions.

The NPS would continue to work with the USFS to manage and improve the quota and permitting systems (e.g., adjust the Mount Whitney exit quota), to add trailheads currently not included in the quota system (e.g., Tehipite Valley and Kern River), and on other relevant cooperative cross-boundary wilderness-management issues.

Visitor Capacities and Encounter Standards — The selected action would retain existing types and levels of use that will be allowed in wilderness in an attempt to provide opportunities and access for appropriate wilderness experiences. Limited and targeted controls will be applied only in those areas where levels and types of use may be leading to some localized impacts on wilderness character. Based on the objectives for the selected action, the overnight visitor capacity will be set at 134,000 visitor-use days (VUD). Ten-year average overnight use will be limited to 108,000–114,000 VUDs/year. Each year, total annual VUDs will be discussed and analyzed by an interdisciplinary group at an annual meeting on wilderness management. If determined to be out of standard, management actions to bring the measure back into standard will be adopted as described in table 14 in the WSP/FEIS. Appendix A of the WSP/FEIS contains a detailed description of the methods used to develop the visitor capacity framework.

To ensure that there are opportunities for solitude, the parks will adopt a measure of the number of people encountered per hour (EPH) on trails and will take action based on established standards. The standards will vary depending on the desired condition of solitude in a given area. For this measure, each trail will be assigned to one of four encounter-rate standards: very high use (primarily Mount Whitney and day-use areas), high use (generally Class 3 trails, with some exceptions), moderate use (generally Class 2 trails, with some exceptions), and low use (generally Class 1 trails, with some exceptions). Each has a specified EPH that serves as a standard. The standards for the selected action are shown in table 1.

Table 1 : Encounters per Hour Standards for the Selected Action

Measure	Standard ¹			
	Very High	High	Moderate	Low
Trail Encounters – People Encountered Per Hour – by area	45	25	15	6

¹ Interpreted as the maximum number of people encountered per hour on 90% of days within the quota season (generally from the Friday before Memorial Day through the last Saturday in September) for selected monitored trail segments.

Element 2: Trails

Planning Objective: The trail system will facilitate access for visitor use and enjoyment of the wilderness. Trails will be well suited to the types and levels of visitor use (targeted actions will be taken to maintain or improve desired wilderness conditions).

Most park trails are already designed and constructed to provide for appropriate access while preserving wilderness character. A few existing trail segments are inadequately constructed to support projected use patterns under the selected action and will be improved in the future with site specific compliance. Some trails are more developed than projected use patterns require, and they will be maintained to a lower development class. A few trails will be designated hiking only where there are threats to sensitive resources or visitor safety issues. Trails that are open to stock use will be improved and maintained in their designated classification standard and will be passable for stock travel. Site specific compliance will be performed as required. Other designated unmaintained routes will be abandoned and landscape restoration considered. With additional site-specific planning and compliance, new Class 1 or Class 2 trails could be established to fulfill desired wilderness conditions and protect resources when visitor use may cause undue impacts. Volunteer service projects will be identified and used to help improve and maintain trails to classification standards.

More details on the trail management and classification system and trail management can be found in appendix K of the WSP/FEIS.

Element 3: Campfires

Planning Objective: Visitors will have the opportunity to enjoy campfires where campfires are compatible with the protection of vegetation and downed wood resources. In the selected action, targeted areas will be opened or closed to campfires, depending on availability of wood and resource sensitivity.

Recreational campfires will be allowed in the foothill and montane forest areas where adequate wood supplies exist. To protect downed wood resources, campfires will be prohibited in most of the high-elevation forests and woodlands. Recreational campfires will be allowed up to the following elevations:

- 10,000 feet in the San Joaquin River drainage
- 10,000 feet in the Kings River drainage
- 10,000 feet in the Kern River drainage
- 9,000 feet in the Kaweah River drainage
- 9,000 feet in the Tule River drainage

In areas where available wood could be burned without unduly depleting ground fuels or consuming paleo resources, variances could be established for specific areas above these elevations in the future. In addition, site-specific prohibitions will be implemented where downed wood resources cannot sustain campfires, including: Hamilton Lakes, Mineral King Valley, Pinto Lake, and Redwood Canyon.

The selected action allows recreational campfires in 395,710 acres of the 837,806 acres of wilderness in the parks (47% of the wilderness). Figure 13 in the WSP/FEIS depicts campfire restrictions for the selected action.

Element 4: Food Storage

Planning Objective: Native wildlife will subsist only on naturally obtained food, uninfluenced by the presence of human food. In the selected action, food-storage boxes will be provided in areas where the risk of affecting native wildlife is high.

Portable containers will be required for overnight use at North Dome, Dusy Basin, Rae Lakes Loop, and Rock Creek areas, and may be required in other areas in the future if there is an increase in incidents of wildlife obtaining human food. In areas where portable containers are not required, counterbalance hanging will be allowed.

Under the selected action, 48 of the existing 86 food-storage boxes will be retained, and 25 will be removed. An additional 13 food-storage boxes will be considered for removal. Boxes will be retained at the most popular areas and new ones will be considered for areas meeting criteria for placement. Criteria for retention or placement include proximity to trailheads, area visitation levels, quality of bear habitat, and frequency and severity of wildlife-human food incidents. Installation of a new box would only occur if it satisfied the criteria in a minimum requirements analysis.

Table 15 in the WSP/FEIS provides a list of the food-storage boxes to be retained and removed and the justification for each decision.

Element 5: Human-waste Management

Planning Objective: Human waste will not contaminate water or create unsanitary or unsightly conditions. In the selected action, restrooms and privies will be provided in targeted areas where the risk of contamination is high.

Cat-holes will be required where there are no privies or toilets. Requirements to pack out used toilet paper will be retained. Pack-out waste kits will be recommended for use in popular areas or where privies or restrooms are not feasible (e.g., lack of suitable soils, archeological concerns, or other resource concerns). Pack-out waste kits may be required in specific areas to minimize the need for privies and restrooms.

Existing privies and restrooms will be evaluated and when they are beyond reasonable repair, or if they are located in unsuitable locations (low-use, close-in areas, where soils allow for cat-holes), they will be removed. The remaining privies will be retained and maintained. New privies will be considered for a few popular day-use areas where other methods have proved unsuccessful. Ten public-use privies will be retained, and three additional public-use privies could be removed, but only after pack-out waste kits prove successful in the test areas. The public-use restroom buildings at Emerald and Pear lakes could be removed in the future if maintenance of the facility becomes cost prohibitive or if repairs or renovations are not cost efficient. Table 16 of the WSP/FEIS provides a list of public privies and restrooms and the justification for retaining or removing.

The NPS will consider future implementation of new technologies for human-waste management as they are developed. The use of new technologies may require site-specific planning and compliance. Some technologies may require visitors to be more self-sufficient.

Element 6: Party Size

Planning Objective: Party size will 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. In the selected action, changes to party-size limits will occur for stock groups and in targeted popular and off-trail areas.

The selected action includes party-size limits for people and stock. These limits are based on three numbers: the total number of people, the total number of stock, and the combined total of people and stock. The party-size limits differ for on-trail and off-trail travel. The total number of people allowed per party will be the same for hikers and stock users and is limited primarily to protect opportunities for solitude. The total number of stock allowed per party is limited primarily to protect the natural quality of wilderness in campsites, stock tie areas, and off-trail travel areas. The combined total of people and stock allowed in a party may be lower than the sum of the maximum allowed numbers of people and stock; it is limited primarily to protect opportunities for solitude and to control impacts from very large groups on the natural quality at camps.

The selected action keeps the current maximum numbers of people and stock for on-trail travel, but reduces the combined party size. Lower party-size limits are set for off-trail travel to preserve opportunities for solitude and to discourage development of informal trails. The combined party size for stock plus people is reduced to prevent impacts on solitude by the largest stock parties. Party-size limits for hikers will apply to boaters under all alternatives. Variances to party size limits may be granted through written request to the superintendent; a Special Use Permit would be issued with terms and conditions to promote safety and protect natural and cultural resources. Tables 2 and 3 present party size limits under the selected action.

Table 2: Party-size Limits for Hikers and Boaters for the Selected Action

Type of Trip	Maximum Party Size
On-trail (day use)	25, consider future more restrictive party size for day-use in specific areas (e.g., Mist Falls, Watchtower, and Monarch Lakes).
On-trail (overnight use)	15*
Off-trail (day and overnight use)	12, except in areas with specific lower limits (see below).
Area-specific	Existing off-trail temporary party-size limits of 8 will be adopted permanently at Darwin Canyon / Lamarck Col (includes Class 1 trail area), Dusy Basin, Mount Whitney Management Area / Mount Langley (includes Class 1 trail area), Sixty Lake Basin, and Sphinx Lakes. Existing party size of 10 will be retained at Redwood Canyon. A party-size limit of 8 is established for the Don Cecil Trail and the Colony Mill Road Trail.

*Consistent with neighboring USFS areas.

Table 3: Party-size Limits for Stock Parties for the Selected Action

Type of Stock Trip	Maximum Party Size for People and Stock
Day Rides (not including spot and dunnage)	People: 20 Stock: 20 Combined: 40
On-trail (including spot and dunnage trips that support overnight use for those trails where stock is allowed, except where area-specific exceptions apply)	People: 15 Stock: 20 Combined: 28
Off-trail (in areas specifically designated for off-trail stock use, except where area-specific exceptions apply)	People: 12 Stock: 12 Combined: 14
Area-specific	Upper Goddard Canyon/Martha Lake will 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 Lake Basin 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 limit of 10 people and 10 stock at Redwood Canyon will be retained (combined maximum of 20).

Element 7: Camping/Campsites and Night Limits

Planning Objective: Visitors will have the opportunity to choose camping locations, except in areas where camping would result in unacceptable impacts. In the selected action, camping restrictions will be adjusted in targeted areas.

Camping will be allowed in specific areas close to the frontcountry (e.g., Colony Mill Trail, Don Cecil Trail, and North Dome) to allow a diversity of recreational opportunities where risks to resources are low. One or more universally accessible campsites could be constructed closer to a trailhead (e.g., near the confluence of Bubbs Creek and the South Fork Kings River), designed to meet wilderness standards.

The locations of established stock camps will be identified and the NPS will recommend their use. In specific popular areas, stock users may be required to camp in designated stock camps. These areas may include Woods Creek Crossing, Rock Creek Crossing, and Big Pete Meadow. If an area is designated as a required stock camping site/area, backpacker camping will be prohibited. Criteria used for establishing stock-only campsites will include the areas' historic visitation by both backpackers and stock users.

First Allowable Campsite — The first allowable camps by trailhead under the selected action are presented in table 19 in the WSP/FEIS. Camping is prohibited on these trails prior to the listed first-camp locations.

Length of Stay/Night Limits for All Campers (stock-supported and backpackers) — Under the selected action, campers will be limited to stays of 14 consecutive nights at a single location, 25 total nights per trip, and 75 total nights per year. Exceptions will exist for specific areas and are presented in table 4.

Table 4: Site-specific Exceptions to the Night Limits under the Selected Action

Location	Night Limits Exceptions (Consecutive Nights in One Location)
Night limits will be implemented at Emerald and Pear lakes (combined), and Lower and Upper Soldier lakes (combined).	3-night limit
Current site-specific night limits will continue to apply at Charlotte Lake, Kearsarge Lakes Basin (basin-wide), Paradise Valley (valley-wide), and Redwood Canyon (area-wide). New night limits will be applied at Colony Mill Trail, Crabtree / Whitney Creek area, Don Cecil Trail, Dusy Basin (basin-wide), Guitar Lake, North Dome, and along the JMT from Woods Creek Crossing to Vidette Meadow (any one location).	2-night limit
Current limit at Rae Lakes (per lake) will be retained. Hamilton Lake camping limit will be reduced.	1-night limit
Continue current situation of no area specific night-limits in Evolution Valley and Evolution Basin. If encounter rate standard is exceeded after additional monitoring, establish an appropriate night limit for the area. This could apply to either or both Evolution Valley or Evolution Basin.	To be determined based on site/area conditions.

Designated Campsites — The use of designated campsites/camp areas will be mandatory in areas where past visitation has impacted resources, including Emerald and Pear lakes, Lower Paradise Valley, and Bearpaw Meadow. There will no longer be designated campsites in Middle and Upper Paradise Valley. Additional designated camp areas may be established in areas where concentrated use and limited campsites could create a risk of rapidly increasing physical or social campsite impacts. Higher use areas will be monitored for impacts and potentially changed to designated sites if conditions warrant. Designation of campsites or areas will require site-specific analysis to address issues such as hazard trees and archeological resources.

Campsite Condition Standards — The measure of campsite condition will be adopted to ensure that the number of campsites and their condition does not exceed standards. The metric of aggregate campsite impacts (Weighted Value per Campable Mile [WVCM]), derived from Parsons and Stohlgren (1987), will be used to measure campsite condition. Each area of the parks will be assigned to one of three levels of a campsite condition standard based on desired conditions: high use, moderate use, or low use. These areas, or subzones, are based on long-established wilderness travel zones, each of which is comprised of several subzones. The metric will be calculated at the subzone level. Each subzone has a specified WVCM that serves as a standard. Under the selected action, the standard will be: 1000 for high use subzones, 500 for

moderate use subzones, and 250 for low use subzones. A monitoring plan will be developed to establish protocols and schedule monitoring frequencies to ensure that subzones remain within their applied standard (for information on determining campsite condition and standards, see appendix A of the WSP/FEIS).

Element 8: Stock Use

Planning Objective: Visitors will have opportunities to travel with stock, from day rides to multi-day trips, in a manner that ensures the protection of wilderness character. Access and grazing will be managed to protect resources, provide other types of primitive recreation, and reduce conflict of user groups. Under the selected action, the number of meadows available to grazing will be reduced.

Figures 14a and 14b in the WSP/FEIS depict stock access and grazing restrictions for the selected action.

Stock Access and Travel

On-trail — Visitors traveling with stock will continue to have access to most maintained trails in the parks (650 of 691 miles). Stock parties will be allowed to travel up to 0.5 mile from trails in areas where they are allowed to camp. In areas open to day-use only, stock parties will be allowed to travel up to 100 yards from trails.

Approximately 530 miles of maintained trails will be open to camping with stock. Some trails will be open to stock parties for travel only, some will be open to camping for walking parties with burros and llamas but limited to travel only for parties with horses or mules, and some will be closed to stock travel entirely for reasons including visitor safety, resource protection, and/or popular day-use by hikers. Trails with restricted stock access under the selected action will include:

Trails open for travel only (120 miles; includes mileages to first camps from trailhead):

- Alta Trails
- Big Baldy Trail
- Buena Vista Trail
- Center Basin Trail (to Golden Bear Lake)
- Charlotte Lakes Trail from JMT to Charlotte Creek drift fence
- Dusy Basin Trail (to 10,600 feet)
- JMT from Dollar Lake to Vidette Meadow
- Kearsarge Lakes, Kearsarge Pass, and Bullfrog Lake trails
- Ladybug Trail
- Lake 11,092 Trail (shown as Lake 11,106 on older maps)
- Lake Reflection Trail above the abandoned Harrison Pass trail junction
- Lakes Trail (Hump Trail only)
- Martha Lake Trail from 1 mile above Hell-for-Sure Junction
- Miter Basin Trail above Penned-Up Meadow to 11,300 feet in elevation below Sky Blue Lake
- Oriole Lake Trail
- Redwood Canyon area trails
- Upper Blue Canyon Trail (no travel above 10,000 feet in elevation)

- Upper Sixty Lake Basin Trail
- Wallace Lake Trail above 11,200 feet in elevation
- Whiskey Log Trail
- Wright Creek Trail above 11,200 feet in elevation

Trails open to travel only for parties with horses or mules; camping for walking parties with burros and llamas allowed (4 miles):

- Eagle Lake Trail
- JMT from above the Crabtree Ranger Station to the base of the Mount Whitney switchbacks (except Timberline Lake, day-use only)
- Mosquito Lakes trails
- White Chief Trail

Trails closed to stock travel (41 miles):

- Admiration Point
- Baxter Pass Trail
- Crabtree Lakes Trail (no travel above camp at 11,000 feet in elevation)
- HST from Crescent Meadow to Wolverton Cutoff
- Lamarck Col Trail
- Little Baldy Trail
- Lower Sixty Lake Basin Trail
- Marble Falls Trail
- Monarch Lake Trail
- Mount Langley Trail
- Mount Whitney Trail – base of switchbacks to Trail Crest and summit
- Muir Grove Trail
- Paradise Creek Trail
- South Side Cedar Grove Sand Flats Trail
- Upper Soldier Lakes Trail
- Tokopah Falls Trail
- Watchtower Trail

Off-trail — Stock parties will continue to be allowed to travel up to 0.5 mile from trails to reach camps. Travel more than 0.5 mile from maintained trails will continue to be allowed in four areas of the parks: on the Hockett Plateau, on the Monarch Divide, in the Roaring River drainage, and along the western side of the Kern River watershed south from the Chagoopa Plateau.

Stock Grazing — Grazing will be managed to maximize protection of resources while allowing visitors traveling with stock continued access to forage. Grazing will generally be allowed in areas open to camping with stock (within 0.5 mile of maintained trails open to overnight stock use or in off-trail travel areas). Grazing will not be allowed in those areas open to stock travel only (i.e. pass through only, no camping).

Grazing will continue to be managed and informed by the results of the Stock Use and Meadow Monitoring and Management Strategy (see appendix D of the WSP/FEIS), which describes the strategy for monitoring and managing stock use that will be implemented by the NPS under the selected action.. Traditional methods of adjusting use levels and patterns will continue to be employed when necessary, including:

- adjusting the number of nights a given party may graze an area;
- adjusting the number of stock per party that may graze an area;
- adjusting opening dates to reflect moisture conditions, which are designed to prevent unacceptable mechanical disturbance to surface soil and vegetation; and
- temporarily closing an area to stock access or grazing.

Estimated grazing capacities for wilderness meadows have been developed using a model of biomass production and forage consumption that takes into account the elevation, soil moisture, and condition of the meadow. These capacities will continue to be used to inform grazing management, and will be refined as additional information is acquired. The capacity of individual meadows and uplands to sustain grazing will continue to be informed by each meadow's vulnerability to erosion or change in hydrologic function, susceptibility to invasion by nonnative plants, habitat requirements of sensitive plants and animals, productivity and the ability to sustain herbage removal, and the requirements of unique ecological communities such as peat-accumulating wetlands. Site-specific grazing capacities will be refined on an ongoing basis to protect resource integrity and to protect the natural quality of wilderness in the face of a changing climate.

These capacities also reflect the importance of key meadows and forage areas for long-distance stock travel, and those areas popular with visitors traveling with stock. The methodology for developing grazing capacities for all park meadows open for grazing, including those identified as important for those traveling with stock, is provided in appendix D of the WSP/FEIS.

Areas closed to grazing will remain open to camping by visitors traveling with stock, but visitors will be required to hold and feed their animals. Administrative grazing will be managed to limit impacts on public grazing (Note: with rare exceptions, recreational stock groups are given preference over administrative groups for limited grazing resources).

To minimize the introduction of nonnative plants, California or Nevada certified weed-free forage (baled or loose hay, hay cubes, or straw bedding) will be required when using hay products as supplemental forage or bedding in frontcountry zones. Feed carried into wilderness will be limited to commercially processed pellets, rolled grains, or fermented hay (e.g., ChaffhayTM). These products have a high level of mechanical milling, heat treatment, and/or anaerobic fermentation that result in much lower seed viability. Baled or loose hay and compressed hay cubes, which have little to no processing, will not be allowed in wilderness.

The monitoring system described in appendix D of the WSP/FEIS will be employed to track use, document conditions, and provide information for preventing and mitigating impacts. This monitoring program takes into account variation in annual climate, the characteristics of specific forage areas, and the inherent abilities of different species to withstand grazing and trampling pressure. Monitoring of species composition will continue in five pairs of grazed and ungrazed meadows on a five-year rotation, and repeat photography points will be updated as time and resources allow. Monitoring of residual biomass and bare ground, initiated in 1993, will continue to be implemented and the results used to inform decisions regarding grazing management. The NPS will continue to support research to further understand

the effects of grazing on Sierran ecosystems, and to modify management of grazing and monitoring protocols as new information becomes available.

The meadows closed to grazing for scientific and social value by the SUMMP will remain closed to grazing. The meadows closed to grazing due to high levels of visitation and resource concerns by the SUMMP will remain closed with the following exception: Tom Sears Meadow will be reopened to grazing.

The following additional locations which are otherwise open to overnight use will be closed to grazing due to high levels of visitation and resource concerns: Crabtree Lakes (closed to stock access and grazing above existing camp west of lowest lake), Darwin Meadow proper, Forester Lake Meadow, Guyot Creek Meadows (expanding the existing closure to the meadows east of the trail), Kern Hot Spring Meadow, Kettle Dome (Randle Corral) Meadows, Mineral King basin, Summit Lake Meadow, Upper LeConte Canyon above 10,000 feet in elevation, and Whitney Creek drainage above the Crabtree Ranger Station.

Meadows are a popular scenic destination for travelers in the wilderness. Recognizing that the opportunity to observe and experience ungrazed meadows is of value to many park visitors, the following meadows along popular travel routes which are otherwise open to camping by stock will be closed to grazing: Bighorn Plateau and the meadow 0.6 mile south of Bighorn Plateau; Chagoopa Plateau #3 Meadow; Darwin Meadow; Grouse Meadow; Lower Crabtree Meadow; and Taboose Pass Meadow. These meadow closures will make it possible for visitors traveling along the JMT and HST to experience at least one ungrazed meadow in each drainage through which the trails pass. The NPS will monitor these closures to assess their impact on long-distance stock travel and the impacts on nearby open meadows. Adjustments to the closures could be considered through a separate compliance process to address any significant concerns identified during monitoring.

The following restrictions in areas otherwise open to grazing will be adopted:

- Closed to grazing until Evolution and Colby meadows reach capacity: McClure Meadow
- Open to grazing by walking parties with burros or llamas, closed to grazing by parties with horses or mules: Bubbs Creek below Junction Meadow, Evolution Lake to Muir Pass, Kern Headwaters, Evolution Lake to Muir Pass, and Woods Lake Basin
- Open to grazing by private parties only: Lower Soldier Lake Meadow, Lower Whitney Creek (Strawberry) Meadow, and Upper Vidette Meadow
- Open to administrative use and grazing only: Hockett Pasture, JR Pasture, Kern Ranger Station Pastures, Lackey Pasture, and Upper Redwood Meadow

Table 5 presents the site-specific night and/or head grazing limits on meadows in the parks.

Table 5: Site-specific Night and/or Head Limits on Grazing under the Selected Action

Location	Stock Head Limit	Night Limit
Bubbs Creek (below Junction Meadow)	20	1
Castle Domes Meadow	15	1
Charlotte Creek (below drift fence)	20	2
East Lake	12	2
Junction Meadow (Bubbs)	15	1
Redwood Meadow	15	14*

Location	Stock Head Limit	Night Limit
Scaffold Meadow	15	2
Shorty's Meadow	20	2
Upper Crabtree and Sandy Meadows	10	14*
Upper Evolution Valley (above Evolution Meadow)	20	1
Upper Rock Creek (Rock Creek Lake and above)	20	2
Wallace Creek Waterfall Meadow	6	1

*Default length of stay

Stock Use Structures — Under the selected action, 29 hitch rails will be retained, and 23 hitch rails will be removed. Also, 42 fences/gates will be retained; 12 will be removed (see tables 51a and 51b of the WSP/FEIS).

Element 9: Administrative Structures

Planning Objective: Administrative structures and developments will be the minimum necessary for the administration of wilderness, similar to current conditions.

Ranger Stations — The following ranger stations will be retained in their current location:

- Charlotte Lake
- Crabtree
- Hockett Meadow
- Kern Canyon
- LeConte Canyon
- Little Five Lakes (yurt)
- McClure Meadow
- Pear Lake
- Rae Lakes
- Roaring River
- Rock Creek
- Tyndall Creek

The patrol cabins at Quinn, Redwood Meadow, and Simpson Meadow will be retained.

Three ranger stations could be relocated, modified, considered for conversion, or replaced:

- Bench Lake tent platform could be moved to a more suitable location for patrol functions.
- Bearpaw Meadow Ranger Station will be removed and reconstructed to better meet the area's historic character.
- The Monarch tent platform will be converted to an administrative camp and the footprint will be reduced.

Each of the above actions will be subject to separate site-specific planning, design and compliance.

Other Administrative Structures — Use of the Redwood Canyon Cabin will be authorized by permit for activities appropriate for the administration of wilderness. The footprint of the facility will be reduced and the external installations (e.g., privy, equipment storage boxes, woodshed, and water system) will be removed. If future use of the structure is determined by the parks to not sufficiently support wilderness purposes, the cabin will be removed, and the area restored. The action of removal will be subject to additional planning and compliance tiered to the WSP/EIS.

Administrative Pastures — Existing administrative pastures and associated structures will be retained (Hockett Meadow, Kern, Redwood Meadow, and Roaring River) in their current locale and within their current footprint.

Crew Camps — Existing trail crew camps will be retained, but the number of long-term (v. portable) food-storage boxes in each camp will be reduced to one. Other project crew camps (for administration of wilderness) will be established as needed on a case-by-case basis with no equipment left on-site after project completion.

Element 10: Frontcountry Facilities to Support Wilderness Access and Use

Planning Objective: Frontcountry facilities that support activities in wilderness will encourage and/or facilitate visitor use and enjoyment of wilderness.

The types and levels of commercial services that may be performed in wilderness are discussed in detail in the Extent Necessary Determination (appendix B of the WSP/FEIS), the specialized finding to determine which commercial services are appropriate in wilderness and to what extent they will be authorized.

Kings Canyon National Park

Cedar Grove Pack Station — The Cedar Grove Pack Station will continue to be operated under concession authority based on a contractual relationship with NPS with approved use types and levels. Stock camping sites will be developed at the Cedar Grove Pack Station primarily for private users. Holding pen/corral space, hitch rail(s), adequate parking and turnaround space for stock trailers, campfire pit, picnic tables, restrooms, food-storage boxes, and water supply will be installed.

Sequoia National Park

Middle Fork Kaweah Trailhead — At the Middle Fork Kaweah Trailhead the NPS will provide improved parking and turnaround space for stock trailers and a hitch rail; no other stock amenities will be provided. Commercial service providers will be allowed to use this trailhead. No camping for stock or backpackers will be allowed.

Mineral King Area — Selected sites within the Atwell Mill Campground will be adapted to accommodate stock camping in two or three sites. Site specific planning and design will occur prior to developing stock sites, and considerations will include distance from non-stock sites, drainage, and natural and cultural resource concerns. Facilities may include a holding pen, hitch rail(s), table, campfire pit, picnic table, and stock trailer parking. The sites will be maintained through an agreement between the NPS and a cooperating partner. Commercial service providers will be allowed to use the Atwell/Hockett trailhead.

There will be no concessions operations at the Mineral King Pack Station. Existing facilities at Mineral King administrative corrals in east Mineral King Valley will continue to be used for park administrative purposes at the existing location or at a new location to reduce and minimize environmental impacts on

wetlands and water quality. Existing stock facilities could be modified to allow for short-term public camping or staging and/or short-term camping by commercial use authorization (CUA) holders. Modifications to the site to provide for use by private individuals and/or CUA holders could include adequate parking and turnaround space for stock trailers, a small corral, water, a picnic table, and a vault toilet or restroom. These facilities will provide for stock camping for private parties (1 to 2 sites, one- or two-night limit). The site will be maintained through an agreement between the NPS and a cooperating partner.

North Fork Kaweah Trailhead — At the North Fork Kaweah Trailhead improved parking and turnaround space for stock trailers and additional hitch rail(s) will be provided. Commercial service providers will be allowed to use this trailhead and controlled through conditions of a permit. The area will be maintained through an agreement between the NPS and a cooperating partner. No camping for stock or backpackers will be allowed.

South Fork Kaweah Campground and Trailhead — Stock use will continue to be allowed at the South Fork Kaweah Trailhead. The South Fork Kaweah Trailhead will be slightly modified to improve the existing parking and turnaround space for stock trailers at the trailhead, and a hitching post will be provided. Site specific planning and design will occur prior to any modifications, with the intent to minimize impacts on the natural resources in the area. Use will be primarily for private users, with limited commercial use by CUA holders (managed via permit conditions) and administrative users. The site will be maintained through an agreement between the NPS and a cooperating partner.

Wolverton Area (trailheads and administrative corrals) — The facilities in the Wolverton area will continue to be used for park administrative purposes. The Wolverton facilities could be modified to provide for short-term use for private parties and commercial service providers. There will be no permanent occupancy of the Wolverton corrals by a commercial service provider to operate wilderness stock trips.

The above modifications to frontcountry facilities and trailheads will require site-specific planning, design, and compliance.

Element 11: Commercial Services in Wilderness

Planning Objective: Commercial services will be performed to the extent necessary for activities which are proper for realizing the recreational or other wilderness purposes of the areas. Commercial services will support visitor use and enjoyment of wilderness in a variety of appropriate ways. Visitors with diverse backgrounds and skill levels will be encouraged to experience wilderness and to explore primitive recreation activities such as hiking, backpacking, stock trips, fishing, over-snow travel, or mountaineering, or to build skills in these activities. In order to protect wilderness character, commercial services will be reduced in the very popular Mount Whitney Management Area.

Specific wilderness activities that have been determined to necessitate support from commercial services consist of backpacking and hiking, stock trips (riding, packing, day rides, and overnight camping with stock), overnight camping with gear hauling support (stock spot, and stock and porter dunnage), oversnow travel (ski and snowshoe touring and winter overnight camping), climbing and mountaineering (summer and winter), fishing, river running, and photography (appendix B of the WSP/FEIS).

Under the selected action, based on the commercial services evaluation and determination for wilderness (appendix B of the WSP/FEIS), and consistent with the overall desired conditions of the selected action,

the levels and types of commercial services to be performed will be similar to current conditions. However, the levels and types of commercial services allowed will be specifically limited in the Mount Whitney Management Area (figure 11 in the WSP/FEIS), an approximately 37,200 acre area around Mount Whitney within Sequoia National Park, roughly defined as bordered on the north by the Wallace Creek watershed, on the east by the Sierra Crest, and on the west by the lip of the Kern Canyon, and on the south by the PCT. Table 6 presents the levels and types of commercial services.

Also, under the selected action, all overnight visitors in the parks' wilderness, whether self-supported or traveling with the support of a commercial service provider, will be subject to the trailhead quota system, and must obtain a wilderness permit from an approved source (e.g., NPS, USFS, and Pacific Crest Trail Association).

Table 6: Levels and Types of Commercial Services under the Selected Action

Activity	Proposed Visitor Capacity under the Selected Action	Proposed Allocation of Commercial Service Days
Total Visitor-use Days – private and supported by commercial services (this does not take into account use by PCT and JMT visitors that are not recorded by the parks' wilderness permit system).	111,000 average 134,000 maximum	For all, day and overnight, non-stock and stock-based: 8,400
Non-stock Activities Backpacking and Hiking Trips. Overnight Camping – gear support by human porters Climbing and Mountaineering (summer and winter). Oversnow Travel (ski and snowshoe touring and winter camping – winter only [Nov. 15 to Apr 15]).	Wilderness-wide: activities that are supported by non-stock based commercial services. Mount Whitney Management Area: activities that are supported by non-stock based commercial services.	For all, day and overnight, non-stock based services: 5,040 (60% of all commercial services) Of the above total allocation, the level which can occur in the Mount Whitney Management Area between late-May and late-September: 930
Stock-based Activities Stock trips – riding, packing, day rides and overnight camping with stock. Overnight Camping – gear support, including stock spot and dunnage	Wilderness-wide: activities that are supported by stock-based commercial services. Mount Whitney Management Area: activities that are supported by stock-based commercial services.	For all, day and overnight stock-based: 3,360 (40% of all commercial services) Of the above total allocation, the level which can occur in the Mount Whitney Management Area between late-May and late-September: 500

The Bearpaw Meadow High Sierra Camp and the Pear Lake Ski Hut are allowable non-conforming commercial enterprises that may continue operation within potential wilderness as authorized by Congress. The Bearpaw Meadow High Sierra Camp will continue to be operated at near its current level of 1,700 use days by a park concessioner.

The Pear Lake Ski Hut will continue to be operated at near its current level of 1,500 use days during the winter months as a ski hut (lodging facility) by a cooperating association under a cooperative agreement.

OTHER ALTERNATIVES CONSIDERED

ALTERNATIVE 1 – NO-ACTION/STATUS QUO

The overarching idea behind alternative 1 is that existing approved plans and policies (excepting the rescinded portions of the GMP) used by the parks to oversee wilderness would remain in place. Under alternative 1, the management of all wilderness areas would continue to be guided by the BMP and SUMMP, each approved in 1986.

The BMP allows for recreational use in such a manner that the parks' 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). Alternative 1 includes the continuation of management objectives established under the BMP.

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, 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 0.5 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, PCT, and HST), 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 maintain current low use levels by preventing displacement of visitors who cannot get a permit when quotas for the most popular trailheads fill.

Commercial services would be notably reduced in both quantity and areas where they would be available. Types of commercial services would be 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 the 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.

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 have their quotas filled.

Visitation by stock users would be lower; therefore, fewer controls on stock travel and grazing would be needed in those areas open to stock use. 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.

ENVIRONMENTALLY PREFERABLE ALTERNATIVE

The Council on Environmental Quality (CEQ) defines the environmentally preferable alternative as — the alternative that would promote the national environmental policy as expressed in NEPA § 101. Section 101 states that it is the continuing responsibility of the federal government to:

1. Fulfill the responsibilities of each generation as trustee of the environment for succeeding generations;
2. Assure for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings;
3. Attain the widest range of beneficial uses of the environment without degradation, risk to health or safety, or other undesirable and unintended consequences;
4. Preserve important historic, cultural, and natural aspects of our national heritage, and maintain, wherever possible, an environment which supports diversity and variety of individual choice;
5. Achieve a balance between population and resource use which would permit high standards of living and a wide sharing of life's amenities; and
6. Enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.

The identification of the environmentally preferable alternative was based on analyses that balance factors such as physical impacts on the environment, mitigation measures to minimize impacts, and achievement of short- and long-term goals for protecting and improving wilderness character.

All of the alternatives would fulfill all of the above CEQ requirements to some degree. The action alternatives would fulfill these requirements somewhat equally, through continuation of existing wilderness and resource management policies, ecological restoration of 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. Alternative 5 is similar to alternatives 2, 3 and 4 in preserving and protecting natural resources. Beneficial effects on soils, water quality, vegetation (wetlands, meadows, and alpine), invertebrates, and special-status species would occur due to decreases in administrative and commercial stock use, reduced stock-party size, reduced trailhead quotas, and closure of some meadows to grazing. Overall, alternative 5 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 protects wilderness character, in particular, solitude, more than any other alternative. However, alternative 5 would not support diversity and a variety of individual choice as well as other alternatives, and would reduce opportunities for primitive recreation because the quotas for entry into the wilderness would be reduced. By reducing overall use levels, alternative 5 does not attain the widest range of beneficial uses of the environment nor achieve a balance between population and resource use. In addition, this alternative along with the other action alternatives removes portions of the historic

resource at the Bearpaw Meadow High Sierra Camp, resulting in an adverse effect on a cultural landscape.

Alternative 5, while it meets the criteria for the environmentally preferable alternative, is not the selected alternative because it would exclude a substantial number of visitors from the wilderness in order to enhance opportunities for solitude. Resource conditions in wilderness do not indicate a compelling basis to reduce use levels wilderness-wide, therefore the targeted approach under the selected action, alternative 2, provides a more balanced approach to preserving wilderness character. Thus alternative 2 is the selected action.

PUBLIC ENGAGEMENT AND AGENCY COORDINATION

PUBLIC SCOPING

Scoping was first initiated with the April 26, 2011, publication of the Notice of Intent to prepare an EIS (Federal Register 23335). Five public scoping meetings were held in California in 2011: Fresno (April 25), Oakland (April 26), Bishop (April 27), Los Angeles (April 28), and Visalia (April 29). A total of 108 individuals attended the public scoping meetings. The public was invited to submit comments on the scope of the project and potential issues and concerns related to wilderness management through July 25, 2011. On July 14, 2011 the deadline for comments was extended to August 31, 2011. Information about the project scoping process was published in the Kaweah Commonwealth (April 15, July 22, August 19, 2011) and Inyo Register (May 10, 2011), and included on several public websites: National Parks Traveler website (April 4, 2011); High Sierra Topix (April 20, 2011); and Sierrawild.gov (July 25, 2011). During the entire scoping process, 912 pieces of correspondence were received.

On October 25, 2012, the parks released the preliminary draft alternatives for the WSP/DEIS for public review. The review period ended November 19, 2012. During the 2012 comment period, NPS held five public meetings in California: in Bishop (October 25), Los Angeles (October 26), Oakland (October 29), Visalia (October 30), and Three Rivers (November 5), California. A total of 93 individuals attended the public alternatives scoping meetings. Information on the comment period and public meetings was published in the Kaweah Commonwealth on July 20 and November 16, 2012, and also included on several websites: National Park Traveler (July 27, 2012); Clovis Independent (July 19, 2012); Mineral King District Association website (July 16, 2012); Yosemite News website (July 19, 2012); and the George Wright Society website (July 27, 2012). A total of 201 pieces of correspondence providing feedback on the preliminary draft alternatives were received. Information from the public review of the preliminary draft alternatives was used to update and clarify the final draft alternatives included in the WSP/DEIS.

PUBLIC REVIEW OF THE PLAN/DEIS

A Notice of Availability was published in the *Federal Register* on June 27, 2014 initiating the 60-day public review period. Printed or electronic copies of the WSP/DEIS were provided to 236 interested parties on the parks' mailing list and to those who requested copies. A printed copy was provided to 18 area public libraries. In addition, a notice of availability of the WSP/DEIS was sent by email or regular U.S. mail to 1,870 people on the parks' mailing list, and to 53 commercial use authorization holders. A news release was distributed to 151 media outlets, and was placed on the parks' website.

Seven public meetings, including three informational meetings (in Oakland, Bishop, and Visalia), three meetings with focused discussions on the commercial service portion of the WSP/DEIS (Bishop and Visalia) and a webinar on the management preferred alternative were held during the public review period. Total attendance at the public meetings was 79; 25 people viewed the webinar. The parks' staff

also conducted meetings with Inyo and Sequoia national forest staff, and presented information at area tribal forum meetings.

During the 60-day public review period, the parks received 255 public comment letters: 212 from individuals; 4 from federal, state, county, or local governments; 1 from a non-governmental organization; 1 from a non-governmental organization; 23 from recreational or conservation-related interest groups; and 14 from businesses. The changes to the WSP/DEIS resulting from public comment are summarized in chapter 1 of the WSP/FEIS.

PLAN/FEIS

The Notice of Availability of the final WSP/FEIS was published in the Federal Register on April 3, 2015 (Volume 80, No. 64), initiating the 30-day no action period which ended on May 3, 2015. The NPS posted electronic copies of the WSP/FEIS to the NPS PEPC website. Printed or electronic copies of the WSP/FEIS were provided to 235 interested parties on the parks' mailing list and to those who requested copies. Printed copies were provided to 18 area public libraries. In addition, a notice of availability of the WSP/FEIS was sent by email or regular U.S. mail to 1,870 people on the parks' mailing list, and to 53 commercial use authorization holders. A news release was distributed to 151 media outlets, and was placed on the parks' website.

AGENCY AND TRIBAL GOVERNMENT CONSULTATION

U.S. Forest Service

National Park Service) staff met with staff from Sequoia National Forest and Sierra National Forest staff on April 26, 2011, and with Inyo National Forest staff on April 28, 2011 to discuss wilderness issues. The NPS invited the Inyo, Sierra, and Sequoia national forests to serve as cooperating agencies in the preparation and review of the WSP/DEIS (May 16, 2011 letter). The Inyo and Sierra national forests agreed to become cooperating agencies. Agency meetings were held on the WSP/DEIS preliminary draft alternative concepts on October 22 and 26, 2012, with representatives from Sierra and Inyo National Forest (respectively), and on November 13, 2012, with representatives from Sequoia National Forest. On February 27, 2014, the NPS met again with the Inyo National Forest to discuss specific issues, including access and trails, permitting and quotas, and commercial services. All three national forests were provided with the WSP/DEIS for review and comment.

Area Tribes

The NPS has consulted with American Indian tribes and groups having a cultural association with the wilderness and the parks, as well as those in the immediate vicinity, throughout the development of the WSP/DEIS. Consultation was initiated by Superintendent Karen Taylor-Goodrich in a March 17, 2011, letter to area tribes and tribal groups, inviting participation in the planning process and formal government-to-government consultation.

Information on the WSP/DEIS was provided to the attendees at the Sierra and Sequoia Tribal Forum Meetings on May 12, 2011, and June 8, 2011, respectively, and an update on the WSP/DEIS planning process was provided to the Sierra Nevada Native American Coalition on February 12, 2012. A presentation was provided at that time, along with an invitation to schedule meetings with individual tribes if they had issues to discuss related to wilderness management.

On October 3, 2012, the superintendent sent a letter to area tribes asking for their review on the preliminary draft alternatives, and inviting the tribes to participate in government-to-government consultations. During all of the review stages, NPS provided information to area tribes through mailings and presented the materials at area tribal meetings, including the Sequoia and Sierra National Forest tribal forum meetings (May 12, 2011, April 14, 2011, June 8, 2011, February 2, 2012, September 12, 2012, November 13, 2012, February 26, 2013, August 13, 2013, February 25, 2014 and August 19, 2014) as well as a tribal meeting of the Sierra Nevada Native American Coalition (Dunlap) on February 12, 2012. The NPS also invited area tribes to attend special agency and tribal meetings in Bishop, Fresno, and Visalia. Additional information was provided to the area tribes during the public review of the WSP/DEIS.

U.S. Fish and Wildlife Service

The Endangered Species Act of 1973, as amended (16 U.S. Code (USC) 1531 et seq.), requires all federal agencies to consult with the USFWS to ensure that any action authorized, funded, or carried out by the agency does not jeopardize the continued existence of listed species or critical habitat. The NPS notified the USFWS on March 30, 2011 that the planning process was going to be initiated and provided them with information on the preliminary draft alternatives on October 25, 2012. The updated species lists were obtained from the USFWS website on August 9, 2011, and on February 28, 2014. The NPS submitted a biological assessment to the USFWS on June 15, 2014. The biological assessment is included at: <http://parkplanning.nps.gov/sekiwild> under "Supporting Documents." The USFWS responded to the NPS on March 11, 2015 with concurrence that the WSP as proposed is not likely to jeopardize the continued existence of the northern distinct population segment of the mountain yellow-legged frog, the Sierra Nevada yellow-legged frog, and the Yosemite toad.

State Historic Preservation Office

Section 106 of National Historic Preservation Act (NHPA) requires that federal agencies take into account the effect of any proposed undertakings on properties that are listed, or eligible for listing, in the National Register. The NPS notified the California State Historic Preservation Office (CA SHPO) on March 30, 2011, of the intent to prepare an EIS. The preliminary draft alternatives were provided to the CA SHPO on October 25, 2012. Consultation with the CA SHPO was formally initiated with the public release of the WSP/DEIS. A proposed area of potential effect (APE) and a determination of effect for the WSP were submitted to the CA SHPO on December 5, 2014. On March 6, 2015, the CA SHPO responded to NPS and concurred that the WSP is an undertaking and that the APE is sufficient to address both direct and indirect effects. Because identification efforts of cultural resources are currently incomplete, the NPS and SHPO agreed to develop a Programmatic Agreement to take effects of the undertaking into account and complete the Section 106 process. Consultation with the SHPO will continue for the duration of the WSP planning and implementation period.

CONCLUSION

Overall, of the five alternatives considered, the selected action best meets the purpose, need, and objectives of the WSP/EIS and is expected to preserve the wilderness character and support the long-term protection, preservation, and restoration of natural and cultural resources of the Sequoia-Kings Canyon and John Krebs wildernesses, and other lands managed as wilderness, at Sequoia and Kings Canyon National Parks. The selected action incorporates practical means to avoid or minimize environmental harm and will not result in the impairment of wilderness park resources and values or violate the NPS Organic Act.

The required 30-day no-action period before approval of the ROD was initiated on April 3, 2015 with the USEPA's Federal Register notification of the filing of the WSP/FEIS (Volume 80, No. 67). The no-action period ended on May 3, 2015.

The official responsible for implementing the selected action is the Superintendent of Sequoia and Kings Canyon National Parks.

SIGNATORY

Approved:

Patricia L. Neubacher

Patricia L. Neubacher
Acting Regional Director, Pacific West Region

5/27/15

Date

ATTACHMENT A: MEASURES TO MINIMIZE ENVIRONMENTAL HARM

The National Park Service (NPS) places a strong emphasis on measures to avoid, minimize, or mitigate potential environmental impacts. The Wilderness Stewardship Plan / Final Environmental Impact Statement (WSP/FEIS) for Sequoia and Kings Canyon National Parks (SEKI or the parks) incorporates mitigations to protect wilderness character and natural and cultural resources. Mitigations are considered part of plan implementation, and must occur prior to, during, or after project implementation. In addition to the following measures, there are wilderness-specific mandates, policies, restrictions, and regulations (as summarized in appendix F of the WSP/FEIS) that are required to preserve wilderness character. Those requirements are not listed here.

Action	Responsibility
MEASURES TO PROTECT WILDERNESS CHARACTER AND NATURAL RESOURCES	

Measures to Protect Vegetation, Soils, Water Quality, and the Visitor Experience

Manure will be removed from within 100 feet of core camping and tie-up areas and scattered on dry terrain. The core camp is defined as that area within 100 feet of the fire ring or cooking area.	SEKI, Concessioners, CUA holders, Partners
Manure will be scattered whenever encountered, particularly in or near water. Manure piles will be removed from water whenever possible. Manure that accumulates at riding break areas will be scattered.	SEKI, Concessioners, CUA holders, Partners
After stock have grazed or have been held in an area, the area will be inspected and all manure piles will be scattered.	SEKI, Concessioners, CUA holders, Partners
Measures that give stock an opportunity to urinate and defecate away from water (e.g., stop to let them urinate before leading them to water to drink) will be taken.	SEKI, Concessioners, CUA holders, Partners
At park parking areas and trailheads, all manure will be removed.	SEKI, Concessioners, CUA holders, Partners
California or Nevada certified weed-free forage (baled or loose hay, hay cubes, or straw bedding) is required when hay products are used as supplemental forage or bedding in the frontcountry. This requirement will be included in pack station concession contracts and commercial use authorizations.	SEKI, Concessioners, CUA holders, Partners
Feed carried into wilderness will be commercially processed pellets, rolled grains, or fermented hay. These products have a high level of mechanical milling, heat treatment, and/or anaerobic fermentation that destroys seeds. Baled or loose hay and compressed hay cubes, which have little to no processing, will not be allowed in wilderness. This applies to all users: administrative, commercial, and private.	SEKI, Concessioners, CUA holders, Partners

Action	Responsibility
Stock users will be encouraged to purge their animals for three days on pellets, rolled grains, fermented hay, or certified weed-free forage prior to entering the parks.	SEKI, Concessioners, CUA holders, Partners
As a desired practice, stock will be inspected and cleaned by handlers prior to entering the parks, or prior to moving from frontcountry to wilderness within the parks, to remove any plant parts, seeds, or soil that may have adhered to animals, tack, or equipment.	SEKI, Concessioners, CUA holders, Partners
Packers will handle loads and tack in such a way as to avoid picking up plant parts, soil, or mud. This desired practice will be included in pack station concession contracts and commercial use authorizations. Private stock users will be informed of this practice through outreach and education.	SEKI, Concessioners, CUA holders, Partners
Manure that accumulates in corrals will be removed from the parks and not stockpiled or burned within the parks. This requirement will be included in pack station concession contracts.	SEKI, Concessioners, CUA holders, Partners
As a desired practice, NPS administrative corrals and concessioner pack stations will be kept free of invasive plants within a 50-foot buffer of the facility.	SEKI, Concessioners, CUA holders, Partners

Measures to Protect Vegetation, Soils, and Water Quality

The Ash Mountain helibase and frontcountry helispots will be kept free of invasive plants within a 50-foot buffer of the facility to reduce the risk of contaminating clothing, shoes, gear, and external loads. Cargo nets will be inspected and cleaned after use, particularly after use outside the parks or in low elevations.	SEKI, Partners
Helicopter users will be responsible for inspecting and cleaning their gear, clothing, boots, and external load items for plant seeds, plant parts, and caked dirt and mud before loading. Helitack staff will inspect and clean helicopter skids.	SEKI, Partners
Heliport staff will track helicopter landing sites and cargo net drops and provide locations to a designated contact annually. Invasive plant, heliport, and wilderness ranger staff will work together to survey for new introductions and control invasive plants in wilderness helispots.	SEKI, Partners
Trailheads will be inspected for invasive plants and kept weed-free. Invasive plant staff will work with trailhead rangers and trail crews to inspect for and remove invasive plants.	SEKI
When travelling from frontcountry to wilderness; from lower to higher elevations; from areas of known weed infestations (communicated in training); or to or from meadows, riparian areas, or other wetlands; wilderness users will be instructed to inspect, remove, and properly dispose of plant seeds, plant parts, and caked dirt and mud found on clothing, boots, tools, and camping equipment.	SEKI, Concessioners, CUA holders, Partners

Action	Responsibility
Invasive plant staff will strive to train all parks personnel in invasive plant identification, early detection, and reporting.	SEKI
A monitoring system is employed to track use, document conditions, and provide information for preventing and mitigating impacts from stock grazing. The monitoring program takes into account variation in annual climate, the characteristics of specific forage areas, and the inherent abilities of different species to withstand grazing and trampling pressure. The strategy for managing stock use is designed to prevent significant impacts to meadows through implementation of multiple complementary monitoring protocols and a suite of adaptive management tools.	SEKI
Where possible, crews will use established stock camps, trail crew camps, and backpacker camps. When a project requires that a new site be established for crew camping, appropriate Resource Management and Visitor Protection subject matter experts will be consulted regarding camp selection. Paramount in selecting a new site will be the ability to restore the site once the work project is completed and the camp is no longer needed.	SEKI
Park staff will use scrim, a coarsely woven fabric, or other protective coverings to protect vegetation where concentrated activities (such as administrative camps) will otherwise be likely to have long-term adverse impacts on ground cover.	SEKI
Projects will avoid in-stream work when possible. If in-stream work is required, activities will be coordinated with NPS hydrologists and compliance specialists.	SEKI
When new raised causeways are required to prevent increasing trail associated resource impacts or to provide adequate trail footing, these causeways will be constructed so as to minimize the effects on natural hydrologic processes, in consultation with a NPS hydrologist.	SEKI
Management actions will be taken to return campsites in out-of-standard areas to within standard including: increased education to the public in specific areas; increased ranger patrols to achieve compliance; rehabilitation of impacted areas, site-specific actions such as modifying sites to render them uninviting to camping or implementation of site specific short- or long-term closures to camping; changing group size, night limit, or campfire restrictions; reduction of commercial visitor services in out-of-standard areas; and changing trailhead quotas.	SEKI

Measures to Protect Wildlife (Including Special Status Wildlife)

Park staff, concessioners, CUA holders, and partners will comply with food storage, garbage disposal requirements, and the proper treatment of human waste at all times.	SEKI, Concessioners, CUA holders, Partners
Camping by humans, and grazing and pasturing by stock will be carefully managed, and in some areas prohibited, in meadows and other aquatic areas where the Northern Distinct Population Segment of the mountain yellow-legged frog, Sierra Nevada yellow-legged frog, and the Yosemite toad are breeding or using the area in large numbers.	SEKI

Action	Responsibility
Park staff, concessioners, CUA holders, partners, and visitors will be educated about how to avoid impacting the mountain yellow-legged frog, and encouraged to exercise caution when they encounter the animal.	SEKI, Concessioners, CUA holders, Partners
The parks will provide the USFWS with a copy of the annual Stock Use and Meadow Monitoring field reports within ten (10) working days of completion.	SEKI
The parks will provide the USFWS with a copy of any scientific or management report completed on the three listed amphibians and activities included in the WSP within ten (10) working days of issuance.	SEKI
Proposed trail realignments in proposed or designated critical habitats will require review by NPS biologists or ecologists.	SEKI
Existing trails that go through or near meadows used by the Yosemite toad may be rerouted away from those meadows.	SEKI
Park staff, concessioners, CUA holders, partners, and visitors will be educated about how to avoid impacting the Yosemite toad and encouraged to exercise caution when they encounter these animals.	SEKI, Concessioners, CUA holders, Partners
Monitoring will be used to determine if effects of visitor use on the Yosemite toad or its habitat are approaching unacceptable levels; visitor use will be adjusted in Yosemite toad habitat to prevent or mitigate degradation.	SEKI
Existing trails that run immediately adjacent to waters used by the mountain yellow-legged frog may be rerouted away from these areas.	SEKI
New Class 1 trails may be designed to avoid running immediately adjacent to waters used by the mountain yellow-legged frog.	SEKI
If monitoring detects habitats used by the mountain yellow-legged frog as being degraded due to overuse from stock grazing and/or hiker and stock traffic, visitor use restrictions will be changed to prevent or mitigate degradation.	SEKI
Off-trail travel may be limited near certain mountain yellow-legged frog populations to reduce the potential of trampling.	SEKI
New Class 1 trails will be constructed in a manner that minimizes opportunities for people to approach bighorn sheep from above or constructed completely outside of bighorn sheep habitat.	SEKI
Educational efforts cautioning park staff, concessioners, CUA holders, partners, and visitors not to directly approach bighorn sheep will be increased.	SEKI, Concessioners, CUA holders, Partners
Helicopter use in bighorn sheep habitat will be scheduled to avoid sensitive periods (e.g., lambing season) and will avoid flying low or landing within one mile of bighorn sheep.	SEKI, Partners

Action	Responsibility
Measures to Protect Soundscape	
Standard noise abatement measures (e.g., using the quietest available equipment/tools) and educational actions (e.g., informing the public about project work) will be implemented, as appropriate, during park operations and construction activities to reduce impacts on visitor opportunities for solitude and primitive and unconfined types of recreation.	SEKI
MEASURES TO PROTECT CULTURAL RESOURCES	
Cultural resources, including archeological sites, historic structures, and ethnographic resources, will be managed in accordance with the National Historic Preservation Act (NHPA), and other applicable laws.	SEKI
In accordance with section 106 of the NHPA, archeological surveys and investigations will precede new construction- or project-related ground disturbance as a result of implementing the WSP (e.g., the development of new trails in wilderness, the relocation of ranger stations, and for paleontological or other research excavations) to ensure that significant archeological resources are avoided to the greatest extent possible.	SEKI
The locations of administrative camps, trail reroutes, ground disturbance, and similar areas of potential impact will be assessed on a case-by-case basis.	SEKI
Work in areas where known cultural resources exist will be avoided to the extent possible.	SEKI
Archeological resources will be left undisturbed and preserved in a stable condition to prevent degradation and loss of research values unless intervention could be justified based on compelling research or site protection needs. Recovered archeological materials and associated records will be treated in accordance with NPS <i>Management Policies</i> 2006, NPS Museum Handbook, and 36 Code of Federal Regulations (CFR) Part 79.	SEKI
Should previously unknown historic or prehistoric resources be discovered during any project implementation, work will be halted in the discovery area, the site secured, and parks' cultural resource specialist notified. A qualified cultural resource management specialist will examine the area as soon as possible and will follow the procedures of 36 CFR Part 800.13[c].	SEKI
The parks will continue to provide federally recognized tribes with appropriate access to sacred sites and ethnographic resources in wilderness. Information received during tribal consultations will assist cultural resources management.	SEKI
If adverse effects are determined through the implementation of the WSP, pursuant to 36 CFR 800.5 the NPS in consultation with the State Historic Preservation Officer/Tribal Historic Preservation Officer (SHPO/THPO) and any Indian tribe that attaches religious and cultural significance to an identified historic property, the NPS shall apply the criteria of adverse	SEKI

Action	Responsibility
effect to historic properties within the area of potential effects. The agency official shall consider any views concerning such effects which have been provided by consulting parties and the public.	
Designs that are sensitive to and compatible with historic resources and cultural landscapes will be used for new construction subject to continuing consultations with the SHPO. If adverse impacts could not be avoided, these impacts would be mitigated by strategies determined through a consultation process with all interested/consulting parties.	SEKI

ATTACHMENT B: DETERMINATION OF NON-IMPAIRMENT

Sequoia and Kings Canyon National Parks Wilderness Stewardship Plan / Environmental Impact Statement May 2015

This document evaluates and determines whether the selected action in the Sequoia and Kings Canyon National Parks' Wilderness Stewardship Plan/Environmental Impact Statement Record of Decision (WSP/EIS) will result in impairment to park resources and values. This evaluation is directed by the NPS Organic Act of 1916 (16 USC, Section 1) and the NPS General Authorities Act of 1970 (16 USC Section 1A-1, as amended). Per NPS *Management Policies 2006*, section 1.4.5, an action constitutes an impairment when its impact "will harm the integrity of park resources or values, including the opportunities that otherwise will be present for the enjoyment of those resources or values." Whether an impact meets this definition depends on the particular resources that will be affected; the severity, duration, and timing of the impact; the direct and indirect effects of the impact; and the cumulative effects of the impact in question and other past or planned future impacts. An impact on any park resource or value may, but does not necessarily, constitute impairment. An impact will be more likely to constitute an impairment to the extent that it affects a resource or value whose conservation is:

- necessary to fulfill specific purposes identified in the establishing legislation or proclamation of the park, or
- key to the natural or cultural integrity of the park or to opportunities for enjoyment of the park, or
- identified in the park's general management plan or other relevant NPS planning documents as being of significance.

The park resources and values that are subject to the non-impairment standard include:

- The parks scenery, natural and historic objects, wildlife, and the processes and conditions that sustain them, including, to the extent present in the park: the ecological, biological, and physical processes that created the park and continue to act upon it; scenic features; natural visibility, both in daytime and at night; natural landscapes; natural soundscapes and smells; water and air resources; soils; geological resources; paleontological resources; archeological resources;
- Cultural landscapes; ethnographic resources; historic and prehistoric sites, structures, and objects; museum collections; and native plants and animals;
- Appropriate opportunities to experience enjoyment of the above resources, to the extent that can be done without impairing them;
- The park's role in contributing to the national dignity, the high public value and integrity, and the superlative environmental quality of the national park system, and the benefit and inspiration provided to the American people by the national park system; and
- Any additional attributes encompassed by the specific values and purposes for which the park was established.

The description of the park purpose and significance as it specifically relates to the wilderness of Sequoia and Kings Canyon National Parks is found in Chapter 1 of the WSP/FEIS.

Pursuant to the NPS Guidance for Non-Impairment Determinations (October 31, 2011), non-impairment determinations must include a specific discussion for each park resource and value subject to the non-impairment standard. The discussion must include an explanation as to why the selected action's impacts will not result in impairment. Impairment findings pertain only to park resources and values, and are not

necessary for visitor experience, socioeconomics, public health, park operations, or similar topics or concerns. The impact topics that are evaluated for purposes of this impairment determination include soils, water quality, vegetation, wildlife, special-status species, and cultural resources.

SOILS

Visitor use and wilderness management activities can have adverse effects on soils. Impacts on soils tend to be concentrated along trail corridors, campsites, and other attractions, such as vistas, ranger stations, and near food-storage boxes. The intensity of impacts can vary widely depending on the local setting, the environment, and the timing of visitor use. The types of impacts that occur as a result of visitor use and wilderness management activities include erosion, soil compaction, contamination, and direct removal.

The selected action does not materially affect the soils of Sequoia and Kings Canyon National Parks. Visitor use and administrative actions under the selected action will be similar to current conditions. The effects of current visitor use and administrative activities are not creating recognizable threats to soils. Site-specific trail maintenance and construction activities could result in localized adverse or beneficial effects from soil disturbance and from trail stabilization.

The selected action provides for similar levels of stock use throughout wilderness. As a result, some impacts on soils, especially compaction, devegetation, incision, and widening of trails will occur. Wilderness wide, impacts will be small, with the potential for more substantial adverse impacts at a few specific sites. These sites will generally be limited to especially steep or wet sections of the most used trails in wilderness, and in wet areas such as stream crossings in meadows.

Effective monitoring of meadows in accordance with the Stock Use and Meadow Monitoring and Management Strategy protocols (appendix D of the WSP/FEIS), ranger patrols, and visitor reports will provide necessary information to minimize the impacts by restricting access and use. By closing selected sites to grazing, trampling impacts in the closed meadows will be reduced. Due to the limited adverse impacts on soils and implementing monitoring and management actions, the selected action will not result in impairment to soils.

WATER QUALITY

There is little evidence that visitor use and administrative activities, including human and animal waste, has affected water quality in the parks. Water quality in the parks' wilderness is good. Because visitor and stock use levels under the selected action will be similar to current conditions, few changes on water quality are expected. Studies show detectable effects on water quality in the parks' wilderness where visitors recreate, but these effects are very small (Suk et al. 1987; Clow et al. 2011). Some measurable impacts have occurred, especially near the most heavily used mixed-use sites; however, the impacts remain below accepted thresholds for health or ecological concerns. Under the selected action, off-trail stock-party sizes will be reduced, resulting in beneficial impacts on water quality in localized areas adjacent to and just downstream of the most heavily visited sites; however, the improvements are anticipated to be too small to quantify. Beneficial effects on water quality will also occur in off-trail areas that will be closed to stock grazing (many of which will be meadows), as well as riparian areas associated with the closed areas. Removal of existing, failing privies and installation of new privies will create additional beneficial effects on water quality, although these improvements will also be small. The selected action will result in little change to water quality; therefore, the selected action will not result in impairment to the surface water and groundwater resources.

VEGETATION

Wetlands and Meadows

Wetlands and meadows can be affected by human and stock trampling and grazing. Hiking access to wetland and meadow areas under the selected action will be similar to current conditions; however, the percentage of meadow area open to stock travel will be reduced from 64% to 54%. While visitor use and stock will still have the potential to cause trampling impacts in localized areas, resulting in locally detectable vegetation loss, these small scale impacts are insignificant on a landscape scale, and are not expected to result in long-term changes in function or composition of wetlands and meadows. In the case of trampling by stock, impacts on meadows are expected to be reduced when compared with the no action alternative, since some additional meadows would be closed to stock access.

Grazing also has the potential to impact wetland and meadow vegetation, but these impacts are anticipated to be reduced under the selected alternative when compared with the no action alternative. The percentage of the parks' meadow area open to grazing will be reduced from 51% to 48%. Stock grazing under the selected action will remain similar to current levels, but the intensity of grazing will be controlled with site-specific grazing capacities developed in the *Stock Use and Meadow Monitoring and Management Strategy* (appendix D of the WSP/FEIS). These capacities will reduce grazing and trampling impacts in the most popular destinations as compared with the no action alternative. The capacities will also protect areas from increased grazing pressure that might result from displacement of grazing use from nearby meadows that have reached capacity or are otherwise closed.

While there will be potential for ongoing impacts associated with trampling and grazing, these impacts are expected to be of limited scale, duration, and intensity, and impacts are expected to be equal to or less than those occurring under the no action alternative. Therefore, the selected alternative will not result in impairment to wetlands and meadows.

High-elevation Long-lived Tree Species

Four long-lived tree species with special resource or research value grow in the high elevations of the parks' wilderness: whitebark pine (*Pinus albicaulis*, a candidate for federal listing); foxtail pine (*Pinus balfouriana* subsp. *austrina*), Sierra juniper (*Juniperus grandis*), and limber pine (*Pinus flexilis*). Three of the species are relatively common (whitebark pine, foxtail pine, and Sierra juniper) and one is quite limited in the parks (limber pine). These species have the potential to be impacted by firewood collectors, who may burn ancient downed wood, damage living trees when downed wood is scarce, and trample seedlings and other vegetation while searching for firewood.

The selected alternative would impose additional campfire closures in high elevation areas where long-lived tree species are present. Campfires will be permitted in 35,857 acres of high-elevation conifer habitat that supports the four subalpine or upper montane long-lived tree species (10.3% of the habitat area) as opposed to 44,212 acres of high-elevation conifer habitat under current conditions.

These closures will protect downed wood resources and old living trees, and reduce trampling impacts on high-elevation vegetation. In these areas, downed trees and wood will remain in place as paleo resources, which provide insight into the region's climate history. Downed wood will also be available as nutrients and habitat for seedlings. Mutilation of old living trees, which can occur when downed wood is depleted through campfire use, will cease in newly closed areas. Trampling of long-lived tree seedlings and non-target vegetation types, such as lodgepole pine, mountain hemlock, western white pine, and red-fir, will be reduced by eliminating the need for off-trail firewood collection.

Compared to current conditions, the selected alternative will better protect high-elevation, long-lived tree species from impacts associated with campfire use, such as the depletion of downed wood, mutilation of live trees, and trampling during firewood collection. The selected alternative will therefore not result in impairment of high-elevation, long-lived tree species.

Alpine Vegetation

The wilderness of the parks protects most of the subalpine and alpine environment of the southern Sierra Nevada of California. With nearly half the area of the parks (48%) above 10,000 feet, the parks' wilderness is dominated by high-elevation habitats. Most of the alpine vegetation in the parks, found in some of the most remote and inaccessible areas, is undisturbed. Where visitor use is concentrated, however, the slow-growing alpine vegetation can show signs of impact. Due to the short growing season and harsh conditions in the high-elevation environment, recovery can take a long time.

Under the selected alternative, visitor and administrative use levels will remain comparable to current conditions, but 70% of the mapped alpine vegetation in the parks, including alpine meadows, will be closed to stock, decreasing potential trampling and grazing impacts. The protection of alpine meadows is also enhanced due to the closure of several meadows to grazing and the continuance of opening/closing dates.

As a result, impacts to alpine vegetation under the selected alternative will remain similar to current conditions. Vegetation in cross country areas will remain undisturbed except in the few locations where visitors have established informal trails, such as Mt. Langley. Trail corridors and high-elevation camp areas will continue to be the primary areas in which impacts are observed. While these impacts can be locally severe, they are insignificant at the landscape or ecosystem scale. Thus, the selected action will not result in impairment of alpine vegetation.

Plants of Conservation Concern (Park Sensitive Plant Species)

The parks support a rich and diverse vascular flora composed of more than 1,560 taxa. Of these, only one plant species is listed under the California Endangered Species Act, and one is under review for federal endangered listing. The parks are home to an additional 77 vascular plant and non-vascular species and subspecies that have been ranked as rare by the California Native Plant Society and the California State Natural Diversity Database (Huber et al. 2013). Of these 77 park sensitive species, 29 were analyzed in the WSP/FEIS, as they exist in meadows used by stock, uplands open to cross-country travel by stock, or destinations popular with rock climbers and cross-country hikers, and are therefore more likely to be impacted by visitor or administrative use.

However, because these species are by definition rare, trampling by visitors is infrequent under current conditions, and there is no evidence of population level impacts. Visitor use levels and patterns are not expected to change under the selected alternative, although some additional meadows would be closed to stock, and grazing intensity in meadows will be managed through the implementation of site-specific grazing capacities and other management actions such as opening dates and temporary closures.

Therefore, impacts on plants of conservation concern are predicted to be infrequent and localized under the selected alternative, and impacts are not expected to be observable at the population level. Impacts are also not expected to lead to the listing of these species. Therefore, the selected action will not result in impairment of sensitive plant species.

Nonnative Plant Species

Surveys have detected 219 nonnative plant taxa present within the parks (Tu et al. 2013) that were either deliberately (cultivated), or accidentally introduced by humans. Of these, 78 are considered invasive (Gerlach et al. 2003; Tu et al. 2013). The probability of invasion is highest when propagules are introduced to disturbed areas with ample light, nutrients, and water, such as trail crossings of meadows, streams, or seeps; or sites with recent fires. Most of the mapped invasive plant populations in the parks' wilderness are found along trails, which are recognized as important vectors for the dispersal of invasive plants into un-trailed areas (Mutch et al. 2008b). Potential vectors in the wilderness include hikers, helicopters, and stock.

Under the selected alternative, most aspects of visitor use will remain similar to current conditions; activities such as trail construction and maintenance that cause soil disturbance will also be similar to current conditions. However, the selected action will allow less off-trail stock travel and off-trail grazing than current conditions. Total stock use will likely remain similar to current levels, but could be reduced slightly in the Mount Whitney Management Area. Stock feed restrictions and improved prevention and detection strategies will also be implemented. As a result, the selected alternative will slightly lower the potential for introducing nonnative plants, benefitting native vegetation. These benefits would be most pronounced in certain high-value habitats, like wetlands and meadows that will be closed to stock. Therefore, the selected action will not result in impairment to the parks' vegetation from introduction of nonnative plant species.

WILDLIFE

Black Bear (*Ursus americanus*)

Black bear behavior can be negatively affected when bears obtain human food, and can lead to food habituation and potentially dangerous encounters with visitors. Bears are most likely to obtain human food in areas of high visitor use coupled with poor food storage practices. Under the selected alternative, visitor use levels are expected to remain similar to current conditions, but there is some risk that food acquisition could increase, because about 40% of the fixed food-storage boxes in the parks' wilderness would be removed. However, evidence from visitor surveys within the parks' wilderness and other wilderness areas suggests that visitor compliance with food storage requirements is high. With proper food-storage practices (e.g., use of portable containers or counter-balancing), little increase in food acquisition by bears is expected. In addition, the selected alternative retains food storage boxes in some areas of high visitor use and a history of food acquisition by bears. Therefore, the selected action will not result in impairment of black bears.

Birds

The brown-headed cowbird (*Molothrus ater*) is a nonnative species associated with cattle and stock operations that has affected dozens of Sierra Nevada bird species by parasitizing nests. Brown-headed cowbirds have been observed in many areas of the parks, albeit rarely, and most often at lower elevations and near roads and developed areas. Available data indicate that brown-headed cowbird parasitism is not currently contributing to native bird population dynamics in wilderness. Under the selected alternative, the closure of additional meadows to grazing could further reduce habitat quality for brown-headed cowbirds. Since there is little evidence of cowbird presence in the parks currently, observations are generally associated with developed areas, and the selected alternative does not improve habitat conditions for brown headed cowbirds, no significant increases in brown-headed cowbird parasitism are expected. Therefore, the selected action will not result in impairment of the parks' native bird species by brown-headed cowbirds.

Invertebrates

Invertebrates may be impacted by human and stock trampling and stock grazing. Under the selected alternative visitor-use levels will be similar to current conditions, so the likelihood of trampling impacts by people and stock will not change. Meadow closures may benefit invertebrates by reducing or eliminating stock use from the closed meadows, but available data indicate that the beneficial effects will be minimal. The selected action will have little effect, either adverse or beneficial, on invertebrates of the parks; therefore, the selected action will not result in impairment of invertebrates.

SPECIAL-STATUS SPECIES

Section 7 of the Endangered Species Act (ESA) requires all federal agencies to ensure that their actions do not compromise the existence or critical habitat of a listed species. Although habitats in the parks support many species with special status, only those species potentially affected by the actions of the WSP were considered.

Yosemite toad (*Anaxyrus canorus*)

The Yosemite toad is listed as a federally threatened species (USFWS 2014). Under the selected action, Yosemite toads could be impacted by visitor disturbance and by trampling. The selected action will reduce impacts on Yosemite toads by converting several informal or abandoned trails to maintained trails, which would be routed further away from toad breeding habitat; implementing smaller party-sizes for stock groups and off-trail hikers; limiting stock-parties to day-use only in toad habitat; and prohibiting grazing or stock travel in some toad habitat. Overall, the selected action resulted in a USFWS determination of *may affect, but not likely to adversely affect* for the Yosemite toad. Therefore, the selected action will not result in impairment of this species.

Mountain Yellow-legged Frogs – Northern distinct population segment (DPS) of mountain yellow-legged frog (*Rana muscosa*) and Sierra Nevada yellow-legged frog (*Rana sierrae*)

Mountain yellow-legged frog habitat overlaps with relatively popular areas of wilderness located near the Pacific Crest Trail (PCT)/John Muir Trail (JMT), Bishop Pass, Rae Lakes Loop, Mount Whitney area, the High Sierra Trail (HST), and the Lakes Trail. Under the selected action, the potential for hikers and stock to encounter mountain yellow-legged frogs will remain similar to current conditions. Mountain yellow-legged frog populations could be disturbed by hikers or stock, and individual frogs could be trampled by hikers or stock, but trampling is unlikely to result in adverse effects at the population level. Habitat degradation from trails or stock use could adversely affect mountain yellow-legged frogs, but given the few locations where frog populations coincide with trails, the potential for habitat degradation will be small.

Slight beneficial effects on mountain yellow-legged frogs and/or frog habitat could result from changes to ten areas where stock travel will be eliminated or restricted to within 100 yards of the trail, and from eliminating grazing in four other areas. In areas open to grazing, new controls on grazing could provide slight benefits. The potential for injury or mortality to mountain yellow-legged frogs from trampling remains under the selected action, but the probability is very low and would be highly unlikely to result in population-level impacts. Overall, the selected action resulted in a USFWS determination of *may affect, but not likely to adversely affect* for mountain yellow-legged frogs. The selected action will not result in impairment of the Sierra Nevada yellow-legged frog or the northern DPS of the mountain yellow-legged frog.

Sierra Nevada bighorn sheep (*Ovis canadensis sierrae*)

Sierra Nevada bighorn sheep have been listed as federally endangered since 2000 when only 122 animals were known to exist. With federal recovery efforts, this population grew to about 500 by 2012. Under the selected alternative, reduced visitor use levels in popular areas (e.g., Mount Whitney Management Area), reduced stock-party sizes (on and off-trail), and a prohibition on stock in certain areas and meadows could reduce disturbance to bighorn sheep. However, these beneficial effects are minimal. Overall, the selected action resulted in a USFWS determination of *may affect, but not likely to adversely affect* for the Sierra Nevada bighorn sheep and could result in a slight modification of the critical habitat. Because the impacts of the selected action will not be significantly adverse or beneficial, and will not result in population-level impacts, the selected action will not result in impairment of Sierra Nevada bighorn sheep.

CULTURAL RESOURCES

Archeological and ethnographic resources have the potential to be impacted by construction or project-related ground disturbance. Under the selected action, trails could be built or upgraded; new campsites, including stock sites, could be established; and privies could be constructed at popular areas. Much of the work conducted in wilderness will be accomplished under the Nationwide Programmatic Agreement between the NPS, the Advisory Council on Historic Preservation, and the National Conference of State Historic Preservation Officers (2008).

In accordance with section 106 of the National Historic Preservation Act (NHPA), assessments for projects will occur on a site-specific and case-by-case basis prior to implementation. Archeological resources, historic structures, cultural landscapes, and known ethnographic resources would be managed in accordance with the NHPA and other laws, regulations, and directives that direct the NPS to protect cultural resources. If National Register-eligible resources are identified, the construction would be sited to avoid the resources.

Of the seven cultural landscapes in the wilderness, six would continue to be protected under the selected alternative as the parks would continue to preserve and maintain these cultural landscapes in accordance with the NHPA, Department of the Interior, and NPS policies: the Kern Canyon Ranger Station / Lewis Camp Area, the Barton Lackey Complex, Colony Mill Road, the John Muir Trail, the High Sierra Trail and the "Early Trail System" of Sequoia and Kings Canyon National Parks. These six cultural landscapes would continue to be protected and would not be affected by the undertaking. The potentially eligible cultural landscape, the Bearpaw Meadow High Sierra Camp, could be altered by the removal of the 1964 constructed Bearpaw Meadow Ranger Station. Depending on the outcome of the formal determination of eligibility, this action may be considered beneficial or adverse.

Because potential adverse effects will be avoided or mitigated through the National Historic Preservation Act Section 106 process, the selected action will not result in impairment to cultural resources.

CONCLUSION

The WSP/FEIS provides direction to the NPS for the next 15 to 20 years regarding the use and protection of wilderness in the parks. The NPS will use the management framework established by the WSP to preserve wilderness character and provide opportunities for public use and enjoyment of wilderness.

In the professional judgment of the superintendent, the implementation of the selected action will not result in impairment of the parks' resources or values whose conservation is necessary to fulfill specific purposes identified in the establishing legislation or proclamation of the parks; that are key to the natural

or cultural integrity of the parks or to opportunities for enjoyment of the parks; or that are identified as significant in the parks' 2007 General Management Plan or other relevant NPS planning documents.

This conclusion is based on the analyses presented in the WSP/FEIS, which incorporates consideration of the parks' purpose and need, the desired conditions, the goals and objectives of a wilderness stewardship plan, input from subject matter experts, consultation required under Section 7 of the ESA and Section 106 of the NHPA, and comments provided by the public and other entities.