

APPENDIX B:

**EXTENT NECESSARY DETERMINATION: AN ANALYSIS TO
DETERMINE THE PROPER TYPES AND LEVELS OF
COMMERCIAL SERVICES IN THE WILDERNESS OF
SEQUOIA AND KINGS CANYON NATIONAL PARKS**

This page intentionally left blank.

**EXTENT NECESSARY DETERMINATION:
AN ANALYSIS TO DETERMINE THE PROPER TYPES AND
LEVELS OF COMMERCIAL SERVICES IN THE WILDERNESS
OF SEQUOIA AND KINGS CANYON NATIONAL PARKS
A SPECIALIZED WILDERNESS ACT FINDING**

INTRODUCTION

The Wilderness Act (16 USC 1131-1136; PL 88-577) secured for our nation an enduring resource of wilderness. Wilderness areas included in the National Wilderness Preservation System are to be administered for the use and enjoyment of the American people in such manner as will leave them unimpaired for future use and enjoyment as wilderness, and to ensure that the wilderness character of these areas is preserved.

In order to achieve these goals, the Wilderness Act (the Act) in its Prohibition of Certain Uses section (§ 4(c)) lists some specific prohibited uses, or practices. There are absolute prohibitions on commercial enterprise and permanent roads, and also general prohibitions, with qualified exceptions, on: temporary roads; use of motor vehicles; motorized equipment and motorboats; landing of aircraft; mechanical transport; and structures and installations. Under the Special Provisions section of the Act, in §4(d)(5), it states that “Commercial services may be performed within the wilderness areas designated by this Act to the extent necessary for activities which are proper for realizing the recreational or other wilderness purposes of the areas.” The “purposes” referred to in §4(d)(5) are those enumerated in §4(b), which states that “...wilderness areas shall be devoted to the public purposes of recreational, scenic, scientific, educational, conservation, and historical use.” It is worthwhile to note that these purposes are rarely, if ever, discrete; that is, a recreational activity would commonly involve scenic or educational pursuits, or even both.

DEFINITIONS

The Wilderness Act does not define the terms “activities,” “commercial services,” or “necessary.” When Congress does not include definitions of important terms in a statute, agencies may rely on commonly accepted definitions. The word “activities” is commonly defined as, “a pursuit in which a person is active”¹, “a recreational pursuit or pastime,” or “actions taken by a group in order to achieve their aims.”² In the wilderness context, it is understood as referring to the recreational or other active pursuits engaged in by wilderness visitors. The word “commercial” is commonly defined as (1) “[o]f or relating to commerce,” i.e., “[t]he buying and selling of goods, esp. on a large scale: business,” (2) “[e]ngaged in commerce,” (3) “[i]nvolved in work designed or planned for the mass market,” or (4) [h]aving profit as a

¹ Merriam-Webster’s (online)

² Oxford Dictionary (online)

primary aim.”³ The word “service” is commonly defined as “the organized system of apparatus, appliances, employees, etc., for supplying some accommodation required by the public” or “the performance of any duties or work for another.” For the purposes of this document, a commercial service is one that relates to or is connected with commerce wherein work is performed for another person or entity, and where the primary purpose is the experience of wilderness through support provided for a fee or charge and where the primary effect is that the wilderness experience is guided and shaped through the use of support services provided for a fee or charge.

The word “necessary” is defined in some dictionaries as meaning “absolutely needed.”⁴ Other dictionaries define it to mean “important in order to achieve a specific result, or desired by authority or convention.”⁵ The word necessary appears in many federal statutes. Courts that have been called upon to interpret the word necessary in a statutory context have frequently rejected an absolutist definition and instead adopted a more flexible definition of necessary. In particular, the U.S. Court of Appeals for the Ninth Circuit specifically declined to interpret the word necessary in Section 4(c) of the Wilderness Act as “requiring a finding of absolute necessity” by the wilderness managing agency before a structure could be authorized in wilderness.⁶

Consistent with this judicial interpretation, this Extent Necessary Determination (END) does not use the word necessary in an absolutist sense. Rather, the word necessary in relation to commercial services is defined to mean a service that is important to achieve objectives for visitor use and enjoyment of wilderness in such a manner that the Desired Conditions for wilderness character are achieved, and wilderness character is thereby preserved.

The language of the Act also suggests two distinct but interrelated standards related to the terms “activities” and “commercial services.” First, the “activities” that may be supported by commercial services must be “proper for realizing the recreational or other wilderness purposes.” Second, “commercial services” can only be authorized “to the extent” that they are necessary for activities deemed proper. The U.S. Court of Appeals for the Ninth Circuit has concluded that this language requires agencies to determine the amount of use that can be allowed. Thus, both the type (i.e., “proper”) and amount (i.e., “extent”) of commercial support must be addressed in this Extent Necessary Determination.

GUIDANCE FOR EVALUATING COMMERCIAL SERVICES

The NPS *Management Policies* (2006) states that wilderness-oriented commercial services that contribute to public education and visitor enjoyment of wilderness values or that provide opportunities for primitive and unconfined recreation may be authorized if the activities conform to NPS concessions management policies and the Wilderness Act, and if they are consistent with the park’s wilderness management objectives. Commercial services must be consistent with the application of the minimum requirement concept and with the objectives of the park’s management plans.

³ Webster’s II New College Dictionary 225 (1995); accord Merriam-Webster’s Collegiate Dictionary 230 (2000). See *wilderness Society v. U.S. Fish and Wildlife Service*, 353 F.3d 1051, 1061 (9th Cir. 2003).

⁴ Merriam-Webster’s (online)

⁵ Encarta Dictionary (online)

⁶ *Wilderness Watch v. U.S. Fish and Wildlife Service*, 629 F.3d 1024 (9th Cir. 2010), interpreting Section 4(c) of the Wilderness Act, which prohibits structures and installations in wilderness “except as necessary to meet minimum requirements for the administration of the area for the purpose of [the Act].”

The NPS's Director's Order #41: *Wilderness Stewardship* requires the NPS to prepare a documented determination setting forth the types and amount of commercial services that are necessary to realize wilderness purposes. This Extent Necessary Determination (END) satisfies that requirement.

The U.S. District Court for Northern California referred to the determination as a “comparative and qualitative analysis where the variables are considered in relation to one another and the interests at stake are weighed (High Sierra Hikers Assn. v. U.S. DOI, 848 F. Supp. 2d 1036 (N. D. Cal. 2012)). In this END, qualitative aspects of visitor use and enjoyment and wilderness character are considered, including the role of particular wilderness-appropriate visitor activities in achieving desired conditions for wilderness character and objectives for visitor use and enjoyment; the particular attributes of these activities that necessitate commercial support; the regulatory framework for those activities that ensures that wilderness character can be preserved while promoting opportunities for visitor use and enjoyment; and the manner in which commercially-supported visitor use is accommodated within the wilderness-protective standards that have been established for overall visitor use. By considering these variables in relation to one another and in relation to the objectives of the particular alternatives for future management of Sequoia and Kings Canyon National Parks' wilderness, a conclusion is reached about the level of commercial support that may be provided under each alternative such that wilderness character is preserved.

RELATIONSHIP TO THE WSP/FEIS

The END, together with the Final Environmental Impact Statement (FEIS) for the Wilderness Stewardship Plan, was prepared using an interdisciplinary approach that included wilderness management experts, commercial services staff, and other resource specialists. Through the process of preparing this END and the FEIS, the NPS considered both the potential short-term and long-term effects of commercial service activities.

The END is an integral part of the WSP/FEIS. The extent to which commercial services in the parks' wilderness were deemed necessary is an outcome of the overall wilderness planning process. This process identified key elements of wilderness character, defined desired conditions and management objectives for these elements, analyzed impacts in determining the overall amount of use appropriate in wilderness, and finally determined the proportion of this use that may be supported by commercial services while ensuring the preservation of wilderness character.

The determination of the extent necessary for commercial services is closely related to the identification of visitor capacity, or the amounts of use appropriate in the wilderness. “Appendix A: Visitor Capacity” provides an explanation of visitor capacity and the amounts of visitor use that are considered in the WSP/FEIS. This appendix provides further explanation of the process and outcomes of determining extent necessary for commercial services in wilderness.

The framework for determining visitor capacity and the extent of commercial services necessary in the SEKI wilderness included the establishment of measures and standards to identify and monitor visitor use and its effects on the condition of wilderness character. These measures and standards are described in chapter 2 of the WSP/FEIS and in “Appendix A: Visitor Capacity.”

Each alternative includes a proposed specific visitor capacity and extent of commercial services and each is protective of wilderness character.

In this framework, the assessment of necessary commercial service types and amounts is an extension of the WSP/EIS's visitor use planning, and builds on the visitor capacity decision-making process that is elaborated for each alternative. Indeed, the requirement to identify the activities that are proper for

wilderness purposes is an integral part of visitor use planning, which considers the overall type and amounts of visitor use that can be accommodated while sustaining acceptable resource and social conditions that complement the purpose of a park or area, in this case, a designated wilderness area. Effective visitor use management ensures that wilderness character is preserved by limiting change to important indicators of wilderness character.

As with other aspects of visitor use planning, an assessment of necessity for commercial services within each alternative is the outcome of a decision-making process and part of a larger management program. It requires judgment about the desired environmental and experiential conditions in, and effects on, wilderness. Each of the action alternatives in the WSP/FEIS preserves wilderness character by emphasizing wilderness character qualities in different ways. Resource conditions, management intensity, and visitor capacities, including the extent of support by commercial services, are foundational elements of the alternatives. Changing one has implications for the others. Visitor capacities in the different alternatives show how higher and lower amounts of use fit with management actions to produce different resource conditions and experiences. These represent choices for the kind of place the parks' wilderness will be and the experiences it will offer wilderness visitors in the future. All alternatives preserve wilderness character, as required by the Act, while offering a reasonable range of choices about the future of the wilderness as required by the National Environmental Policy Act (NEPA).

STRUCTURE AND CONTENT OF THE EXTENT NECESSARY DETERMINATION / COMMERCIAL SERVICES EVALUATION

The sections that follow identify the types of “activities which are proper for realizing recreational and other wilderness purposes” and then determine the numeric amount of commercial support, expressed in terms of commercial service days, ensuring that the amount allowed is consistent with the preservation of wilderness character. The appropriate sequence is to first determine which activities are proper for realizing the recreational or other purposes of wilderness, determine if commercial services are beneficial for the activity, and then determine the extent to which commercial services are necessary to support those activities. To be proper, an activity must be both lawful in wilderness and subject to sufficient management control so as to preserve wilderness character. To address the amount of each activity that would be allowed, this assessment examines specific aspects of proper activities and the ability to manage the activities to preserve the wilderness character objectives of each alternative presented in the WSP/FEIS. It should also be noted that the Act does not state that an activity must be *necessary*, but rather that an activity must be proper for realizing wilderness purposes. Nor does it state that commercial services must be necessary for *access* to wilderness, but rather that commercial services may be performed only to the “extent necessary” for activities proper for realizing wilderness purposes, and can be conducted in a manner that does not degrade wilderness character, as determined by the agency.

The extent of commercial support to visitors in wilderness is expressed in terms of service days, which is defined as all or part of a day spent by a client of a commercial service provider on NPS-managed lands. For each plan alternative, a conclusion is reached about the annual overall wilderness-wide service days that may be performed. These commercial service days are divided into two categories, those that use stock and those that do not, with a secondary conclusion separating out the high-use Mount Whitney Management Area, where a reduced portion of overall service days are allocated. There is also a description of other regulatory mechanisms that control commercially supported trips.

Table B-1: Structure and Content of the Extent Necessary Determination / Commercial Services Evaluation

Section	Title	Purpose
I	Activities Which Are Proper for Realizing the Recreational or Other Purposes of Wilderness	Examines various visitor activities and the reasons why each activity is considered proper for the use and enjoyment and recreational or other public purposes of wilderness
II	Aspects of Wilderness Activities that May Necessitate Commercial Support	Looks at several potential characteristics of an activity that may provide insight into why commercial services may be necessary for that activity
III	Type of Commercial Services that are Necessary for Each Proper Activity	Uses the categories provided in Section II to analyze the aspects of specific activities that may necessitate commercial support. A conclusion regarding the necessity for commercial support is made for each activity
IV	Extent (Amount) of Commercial Support that is Necessary for Each Proper Activity	Reviews each activity against the desired conditions and visitor capacities of each alternative in order to allocate an amount of commercial support that is necessary for the proper activities
V	Summary	Alternatives Summaries and Table for Visitor Capacities, Commercial Services Allocations, and Preservation of Wilderness Character
VI	Maps	Maps show spatial distribution of Non-stock, Stock, and Combined commercial support

SECTION I: ACTIVITIES WHICH ARE PROPER FOR REALIZING THE RECREATIONAL OR OTHER PURPOSES OF WILDERNESS

For a commercial service to be considered as a necessary form of support for an activity, that activity must be proper for realizing wilderness purposes. Any activity that occurs in designated wilderness must first be of a type that does not violate the prohibitions of §4(c) on the use of motor vehicles, motorized equipment or motorboats, the landing of aircraft, or other forms of mechanical transport. NPS Management Policies 6.4.3 states that recreational uses in wilderness will be of a nature that:

- Enables the areas to retain their primeval character and influence;
- Protects and preserves natural conditions;
- Leaves the imprint of man’s work substantially unnoticeable;
- Provides outstanding opportunities for solitude or primitive and unconfined types of recreation; and
- Preserves wilderness in an unimpaired condition.

Also, for an activity to be proper, it must be subject to sufficient management control so as to preserve wilderness character, which is the fundamental purpose of managing visitor use in a wilderness area. These management controls are outlined and discussed in the activity descriptions below and are in chapter 2 of the WSP.

In addition, the WSP has established goals, desired conditions, and objectives for the future management of wilderness in Sequoia and Kings Canyon National Parks (chapter 1, pages 5, 11-13). One critical objective of the WSP is *provide opportunities for and encourage public use and enjoyment of*

wilderness in accordance with the Wilderness Act and other laws and policies. The goals, objectives, and desired conditions that are relevant for this END are:

Goals:

- 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 the applicable planning guidance from the GMP (2007).
- Promote safety and outdoor ethics within the context of wilderness where users are expected to be self-reliant.
- 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.

Desired Conditions for Wilderness Character:

- The untrammelled quality of wilderness character would be preserved by limiting deliberate manipulation of ecological systems except as necessary to promote another quality of wilderness character.
- The natural quality of wilderness character would be preserved by mitigating the impacts of modern civilization on ecosystem structure, function, and processes. The NPS aspires to minimize or localize adverse impacts caused by visitor use and administrative activities. In the wilderness, natural processes would dominate:
 - ecosystem structure and function
 - native biodiversity
 - water quality and quantity
 - decomposition, nutrient cycling and soil forming processes
 - meadow and wetland productivity
 - fire regimes
 - soundscapes, dark skies and viewsheds

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

- The undeveloped quality of wilderness character would be preserved through the removal of installations that are unnecessary for the protection of other wilderness character qualities.
- Outstanding opportunities for solitude or primitive and unconfined recreation would be provided to support visitor use and enjoyment of the parks' wilderness areas in balance with the protection of other wilderness character qualities.
 - Visitors with diverse backgrounds and capabilities would have opportunities to use and enjoy wilderness.

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

Objectives for Specific Planning Elements:

- Visitor use and enjoyment of wilderness would be promoted while ensuring the preservation of wilderness character.
- Visitors would have the opportunity to choose camping locations, except in areas where camping would result in unacceptable impacts.
- Visitors would have opportunities to travel with stock, from day rides to multi-day trips, in a manner that is compatible with the protection of wilderness character.
- Commercial services may be performed to the extent necessary for activities that are proper for realizing the recreational or other wilderness purposes of the areas in a manner that ensures the preservation of wilderness character. Commercial services would support visitor use and enjoyment of wilderness in a variety of appropriate ways.

In addition, these objectives were further elaborated for each action alternative. These elaborations are included in “Table B2: Discussion of Alternative Concepts”, current visitor and commercial service use levels and desired conditions.

BACKPACKING AND HIKING TRIPS (OVERNIGHT CAMPING AND DAY HIKES)

Hiking and backpacking are traditional wilderness activities and are currently the most popular ways in which the public experiences the benefits of wilderness.

Day hiking: Hiking from a frontcountry location into and out of wilderness without spending the night is a popular activity that has occurred in the parks since their establishment. Day-use hiking in wilderness is a proper activity because it allows visitors to realize and experience the recreational and other values of wilderness.

Backpacking: Backpacking, which is defined as multi-day hiking while carrying overnight camping gear, fulfills the recreational, scenic, educational, conservation and other wilderness purposes.

Types of commercial services that may directly support day-hiking and backpacking are guide services that help visitors find appropriate locations for these activities and provide local knowledge or education about wilderness resources. Guide services may provide a range of support from all-inclusive (with meals/cooking and gear provided) to minimal guiding (with only a guide). These activities may be exclusively hiking-based or may use stock support to re-supply longer trips.

There are a wide variety of limitations on hiking and backpacking to ensure wilderness preservation. These limitations ensure that these activities remain compatible with wilderness character, i.e., do not lead to unacceptable impacts on resources or social conditions (see alternatives in chapter 2). Backpacking and hiking are permitted in all areas of the wilderness of Sequoia and Kings Canyon National Parks (the

parcs), with the exception of a limited number of areas that might be closed to access due to resource impacts, or safety issues (e.g., wildfires). Backpacking and hiking are subject to limitations that include: party size; the requirement to properly store all food; and where campfires are allowed (although these are rare for day hikers). In addition, backpacking and hiking are limited by the general wilderness prohibition on motor vehicles and mechanical transport, by applicable federal regulations (36 CFR Parts 1 and 2) and by the capacity limitations described in chapter 2 and “Appendix A: Visitor Capacity.”

This combination of controls effectively limits backpacking and hiking in the wilderness of the parks to a style which is compatible with a wilderness setting and which contrasts with frontcountry environments. Subject to the requirements and limitations discussed above, backpacking and hiking are considered activities that are proper for realizing the recreational and other purposes of wilderness.

STOCK TRIPS (RIDING, PACKING, DAY RIDES AND OVERNIGHT CAMPING WITH STOCK)

The use of stock in wilderness is a long-standing primitive type of recreation consistent with wilderness purposes. Riding and packing with stock is a documented traditional activity that was championed by the founders of the wilderness ideal and has occurred in the parks since their establishment in the late 19th and early 20th Century (Jackson 2004, McKee 2013, Tweed and Dilsaver 1990, Leave No Trace 2002). Through time, many members of the public have been able to experience the benefits of wilderness through stock- supported travel.

Stock in the parks is defined as horses, mules, burros, or llamas. Other animals (e.g., goats, used for packing elsewhere) are not allowed in the parks due to resource impacts. Wilderness trips that use stock for support are varied, but generally consist of two types:

- Traveling trips – these consist of visitors riding or walking and remaining with the stock throughout the duration of the trip. Stock is used for riding and/or for carrying supplies and equipment. Meal service provided by the commercial service operator may be included.
- Day trips – these consist of visitors riding stock from a frontcountry location into wilderness and then returning to the frontcountry without stock or people spending the night in wilderness.

Stock trips are permitted in many areas of the wilderness of the parks, with the exception of areas that are currently closed to stock access or that would be closed to stock access under the WSP due to safety concerns or impacts to natural or social conditions. Stock use is subject to limitations that include: the types of allowed animals; the types of stock feed allowed; party size; off-trail travel restrictions; the requirement to properly store all food; grazing restrictions; locations where campfires are allowed (rare for day users); the type of substrate allowed for camping (bare ground); distance from lakes and streams (25 feet minimum, 100 feet recommended); camp cleanup; and modifying campsites with rock walls, new fire rings, or other structures (all of which are prohibited). In addition, stock use is limited by the general wilderness prohibition on motor vehicles and mechanical transport, by applicable federal regulations (36 CFR Parts 1 and 2) and by the capacity limitations described in chapter 2 and “Appendix A: Visitor Capacity.”

This combination of existing limitations and proposed stock use prescriptions effectively restrict stock use in the wilderness of the parks to a style which is compatible with a wilderness setting and which contrasts with stock use in frontcountry environments. Subject to the requirements and limitations discussed above, stock use is considered an activity that is proper for realizing the recreational and other purposes of wilderness.

Types of commercial services that may directly support stock trips are guide and outfitting services based on providing visitors with stock and proper equipment and assisting visitors in finding appropriate locations for these activities and providing localized knowledge or education and information about proper wilderness use and resources. These may consist of day-use trips or overnight camping (also see below under Overnight Camping).

OVERNIGHT CAMPING

Overnight camping is a traditional wilderness activity that is integral to multi-day trips involving hiking, packing, mountaineering, or oversnow travel (i.e., skiing and snowshoeing). The ability, and sometimes the necessity, to spend multiple days traveling and camping without encountering roads or permanent human habitation is a defining feature of wilderness and is an expression of the area's size and undeveloped character. Overnight camping allows visitors to immerse themselves in the wilderness resource.

Overnight camping is now permitted in most areas of the wilderness of Sequoia and Kings Canyon National Parks, with the exception of a limited number of areas that are closed to camping due to the proximity to a trailhead or due to resource impacts. Under all of the action alternatives considered in the WSP/FEIS, overnight camping would continue to be permitted in most areas of the wilderness. Overnight camping is subject to limitations that include: stay length; party size; the requirement to properly store all food; where campfires are allowed; type of substrate allowed for camping (bare ground); distance from lakes and streams (25 feet minimum, 100 feet recommended); and modifying campsites with rock walls, new fire rings, or other structures (all of which are prohibited). In addition, overnight camping is limited by the general wilderness prohibition on motor vehicles and mechanical transport, by applicable federal regulations (36 CFR) and by the capacity limitations described in chapter 2 and "Appendix A: Visitor Capacity."

This combination of limitations effectively restricts overnight camping in the wilderness of the parks to a style which is consistent with a wilderness setting and which contrasts with camping in frontcountry environments. The style of overnight camping may range from minimalist backpacking camps to camps that contain items of comfort (e.g., chairs and cooking tables) that may be associated with stock-supported groups. Subject to the requirements and limitations discussed above, overnight camping is considered an activity that is proper for realizing the recreational or other purposes of wilderness.

Other than the particular uses and practices prohibited under §4(c), the type of equipment which is permitted in wilderness is generally not addressed by regulation. While the NPS does not regulate visitor choices about equipment, it has the authority to regulate visitor behavior to prevent damage to natural and cultural resources, to protect wilderness experiences, and to ensure that wilderness character is preserved. There is disagreement among some users about what equipment may or may not be appropriate in wilderness (e.g., ice chests, phones). The NPS enforces regulations to ensure wilderness resource preservation and protection (e.g., prohibitions on loud audio devices and motorized equipment, see appendix F).

Subject to the requirements and limitations discussed above, certain types of commercial services may then be necessary to directly support overnight camping activities through the transportation of equipment or supplies. These services allow people to have enough supplies to reach inner portions of wilderness and or extend their stays to more thoroughly immerse themselves in the wilderness experience. These services also allow a diverse public who cannot all physically carry the equipment to be able to recreate in and experience the benefits of wilderness.

Examples of these types of commercial services include gear and food hauling services by stock (i.e., spot or dunnage service) or porters (dunnage service).

- Spot trips – these consist of some or all members of a party riding to a place where they separate from the animals with their gear and food and continue their trip without the stock. The stock then returns to the frontcountry. On occasion, stock may return after a period of time to pick up and assist the visitors with exiting wilderness via riding and/or carrying out gear. These trips could involve the stock going in just for the day or involve the stock staying overnight in wilderness.
- Dunnage – this consists of stock or people carrying in gear and food and meeting with wilderness users at a place where gear is delivered and visitors continue their trip without the stock. The stock drops off gear and food and returns to the frontcountry. These trips could involve stock going in just for the day or staying overnight in wilderness. This same service could be provided by porters who carry in gear and/or food for people, either initially at the start of a trip, or to provide mid-trip resupply for wilderness travelers. The human porter(s) could go in just for the day or stay overnight in wilderness.

OVER-SNOW TRAVEL (SKI AND SNOWSHOE TOURING AND WINTER OVERNIGHT CAMPING)

Skiing and snowshoeing are traditional wilderness activities. Though they require specialized skills, they have remained popular as a way to experience the recreational or other purposes of wilderness. There are a variety of limitations on skiing and snowshoeing (with backpacks or sleds) to ensure wilderness preservation. These limitations ensure the activity remains compatible with wilderness character (i.e., does not lead to unacceptable impacts on resources or social aspects). See alternatives in chapter 2.

Skiing and snowshoeing from a frontcountry location into and out of wilderness without spending the night is a popular activity that has occurred in the parks since their establishment. Day-use skiing and snowshoeing in wilderness is a proper activity. Day- skiing and snowshoeing may be supported by commercial service providers solely for skiing and snowshoeing, or to access climbing and mountaineering experiences.

Skiing and snowshoeing is now permitted in all areas of the wilderness of Sequoia and Kings Canyon National Parks, with the exception of a limited number of areas that might be closed to access due to resource impacts or safety issues (e.g., avalanches). Under all of the action alternatives considered in the WSP/FEIS, skiing and snowshoeing would continue to be permitted in most areas of the wilderness. Skiing and snowshoeing are also subject to limitations on: party size; the requirement to properly store all food; and where campfires are allowed (although these are rare for day-users). In addition, skiing or snowshoeing are limited by the general wilderness prohibition on motor vehicles and mechanical transport, by applicable federal regulations (36 CFR Parts 1 and 2) and by the capacity limitations described in chapter 2 and “Appendix A: Visitor Capacity.”

Types of commercial services that may directly support skiing and snowshoeing are guide services based on assisting visitors in finding appropriate locations for these activities and providing specialized equipment and/or technical skill development.

CLIMBING AND MOUNTAINEERING (SUMMER AND WINTER)

The rugged rock and snow-covered areas of the parks provide excellent opportunities for mountaineering (year-round, including ski mountaineering and ice climbing) and technical rock climbing. This activity has been occurring in the Sierra Nevada for more than 150 years. Both mountaineering and technical rock

climbing are proper activities in wilderness provided they are done in a manner compliant with existing regulations. There are some specialized considerations that rock and ice climbers must take into account (i.e., the proper use of fixed anchors) in order to ensure they do not degrade wilderness character. Travel for this activity could involve oversnow travel, hiking, or a mix of hiking and use of stock.

Mountaineering and technical rock climbing is now permitted in all areas of the wilderness of Sequoia and Kings Canyon National Parks, with the exception of a limited number of areas that might be closed to access due to resource impacts. Under all of the action alternatives considered in the WSP/FEIS, climbing and mountaineering would continue to be permitted in most areas of the wilderness. Mountaineering and technical rock climbing are subject to limitations that include: party size; the requirement to properly store all food; specific climbing restrictions (see “Appendix J: Climbing Management Strategy”); where campfires are allowed; type of substrate allowed for camping (bare ground); distance from lakes and streams (25 feet minimum, 100 feet recommended); and modifying campsites with rock walls, new fire rings, or other structures (all of which are prohibited). In addition, overnight camping is limited by the general wilderness prohibition on motor vehicles and mechanical transport, by applicable federal regulations (36 CFR) and by the capacity limitations described in chapter 2 and “Appendix A: Visitor Capacity.”

Types of commercial services that may directly support mountaineering and technical rock climbing are guide services based on assisting visitors in finding appropriate locations for these activities and providing specialized equipment and/or technical skill development. This activity could be supported by way of hiking-based, skiing-based, or stock-based support.

FISHING

Though most fish in the parks have been introduced, recreational fishing has been a popular activity for more than a century. This activity can consist of fishing rivers, streams or lakes, whether by the use of flies or other lures or bait. Fishing as an activity is proper in wilderness provided it is done in a manner compliant with existing regulations. Travel for this activity could involve hiking or a mix of hiking and use of stock.

Fishing is now permitted in most areas of the wilderness of Sequoia and Kings Canyon National Parks, with the exception of a limited number of areas that are closed due to resource impacts, and subject to specific fishing regulations. Under all of the action alternatives considered in the WSP/EIS, fishing would continue to be permitted in most areas of the wilderness. People who fish are subject to limitations that include: stay length; party size; the requirement to properly store all food; where campfires are allowed; type of substrate allowed for camping (bare ground); distance from lakes and streams (25 feet minimum, 100 feet recommended); and modifying campsites with rock walls, new fire rings, or other structures (all of which are prohibited). In addition, people who fish are limited by the general wilderness prohibition on motor vehicles and mechanical transport, by applicable federal regulations (36 CFR) and by the capacity limitations described in chapter 2 and “Appendix A: Visitor Capacity.”

Types of commercial services that may directly support fishing are guide services based on assisting visitors in finding appropriate locations for angling and providing specialized equipment and/or technical skill development. This activity could be supported by way of hiking-based, or stock-based support.

RIVER-RUNNING

River-running (kayaking and canoeing) is a fundamental and appropriate wilderness activity, provided it is non-motorized/human-powered. This activity is limited in the wilderness of the parks due to short-lived adequate seasonal water flows, the challenging whitewater conditions, and difficulty of accessing remote

ivers. Limitations on river running would include those on hiking, backpacking, and overnight camping. These limitations ensure the activity remains compatible with wilderness character (i.e., does not lead to unacceptable impacts on resources or social aspects). Travel for this activity could involve hiking or a mix of hiking and the use of stock.

River-running is now permitted on almost all rivers in the wilderness of Sequoia and Kings Canyon National Parks, with the exception of a segment of the Middle Fork Kings that is closed due to resource and experiential impacts. Under all of the action alternatives considered in the WSP/FEIS, river-running would continue to be permitted on most rivers, with the existing prohibition on the lowest segment of the Middle Fork Kings being retained. People who river-run are subject to limitations that include: stay length; party size; the requirement to properly store all food; where campfires are allowed; type of substrate allowed for camping (bare ground); distance from lakes and streams (25 feet minimum, 100 feet recommended); and modifying campsites with rock walls, new fire rings, or other structures (all of which are prohibited). In addition, people who river-run are limited by the general wilderness prohibition on motor vehicles and mechanical transport, by applicable federal regulations (36 CFR) and by the capacity limitations described in chapter 2 and “Appendix A: Visitor Capacity.”

Types of commercial services that may directly support river running are dunnage/gear transport via stock or porters, and river guide services that would assist visitors in safely conducting the activity in appropriate locations, including providing localized knowledge.

PHOTOGRAPHY

Taking photographs is a popular way for the public to realize the scenic purpose of wilderness and as such is a proper activity. Travel for this activity could involve hiking or a mix of hiking and use of stock.

Photography is now permitted in all areas of the wilderness of Sequoia and Kings Canyon National Parks, with the exception of a limited number of areas that may be closed due to resource impacts. Under all of the action alternatives considered in the WSP/FEIS, photography would continue to be permitted in most areas of the wilderness. People who conduct photography are subject to limitations that include: stay length; party size; the requirement to properly store all food; where campfires are allowed; type of substrate allowed for camping (bare ground); distance from lakes and streams (25 feet minimum, 100 feet recommended); and modifying campsites with rock walls, new fire rings, or other structures (all of which are prohibited). In addition, people who conduct photography are limited by the general wilderness prohibition on motor vehicles and mechanical transport, by applicable federal regulations (36 CFR) and by the capacity limitations described in chapter 2 and “Appendix A: Visitor Capacity.”

Types of commercial services that may directly support photography are guide services based on assisting visitors in finding appropriate locations for these activities and providing technical skill development.

NOTE: Filming in wilderness for commercial purposes is prohibited, unless it can be shown that a wilderness purpose is realized. The use of models, sets or props, or other approaches that promote a product or service for commercial still photography is also prohibited (NPS Director’s Order 41).

OTHER ACTIVITIES THAT SUPPORT THE PURPOSES OF WILDERNESS AND THAT ARE NOT SUBJECT TO COMMERCIAL SERVICES RESTRICTIONS

Educational Trips: Education is one of the enumerated purposes of the Wilderness Act. Educational trips that have environmental education as their primary purpose occur regularly in wilderness and may also incorporate other activities, such as backpacking and hiking, or stock use. Trips such as these often allow visitors to realize many of the other purposes of the Wilderness Act such as the recreational,

conservation and historic purposes. In general, education will be considered the primary purpose of a trip when academic credit is provided, even if accompanied by staff from environmental education organizations. When academic goals are the primary purpose, having support services provided by other entities does not change the essential character of the trip, which is academic, not commercial.

Scientific Research: Scientific research conducted by educational institutions, governmental entities, and the like is considered a proper use of wilderness because these activities further the scientific, educational, historic, and/or conservation purposes of wilderness. Scientific research is encouraged under NPS policies (NPS *Management Policies* 6.3.6.1). Scientific research conducted by these types of entities is not subject to this Extent Necessary Determination even if commercial services are used to provide ancillary assistance in the transport of research supplies and equipment, either via stock or porters. Researchers of this type operate under the authority of the NPS and their activities are categorized as an administrative use of wilderness.

PUBLIC ACTIVITIES THAT ARE PROHIBITED OR NOT PROPER IN WILDERNESS

Although many activities are proper in wilderness, there are also numerous recreational and other activities which are not. Activities that are proper in wilderness are limited to those that are both legal and appropriate. Improper activities are those that:

- may have impacts that are inconsistent with the preservation of wilderness character,
- are not relevant to the public purposes of wilderness (which are “recreational, scenic, scientific, educational, conservation, and historical use,” as defined in §4(b) of the Wilderness Act), and/or,
- are not of a “primitive type.”

Some of these activities are prohibited specifically by law. Activities that are not proper and are prohibited in wilderness include (but are not limited to) bicycle riding or other mechanical transportation; launching into the air or landing from the air either people or objects (including but not limited to BASE jumping, hang gliding, or use of drones); use of motorized vehicles or equipment (e.g., motorcycles, generators, drills, saws); competitive events for people or animals; survival exercises or similar activities; the erection of structures; and, for many national parks specifically, hunting. Note that the parks may conduct some of the activities/uses above if they are properly analyzed and approved in a MRA. (Wilderness Act Section 4(c) and NPS *Management Policies 2006*, Chapter 6).

SECTION II: ASPECTS OF WILDERNESS ACTIVITIES THAT MAY NECESSITATE COMMERCIAL SUPPORT

To be conducted safely and in a manner that preserves wilderness character, wilderness activities often require specialized skills, knowledge, or equipment. Climbing and mountaineering, for example, involve technical skills that are necessary for ascent and descent, safety practices associated with exposure (e.g., fall hazards) and environmental factors (e.g., mountain weather), and special equipment that is employed for locomotion and safety. Stock packing involves special equipment, such as the stock and tack and skill in loading packs, riding saddle horses, leading pack mules, providing care for the animals, and mitigating stock-related environmental impacts. Wilderness visitors vary in their ability to conduct these more specialized or technical wilderness activities. Therefore, when parks choose to provide opportunities for these types of visitor activities, some level of commercial support may be necessary.

The extent to which these forms of commercial service support are necessary depends on how the parks balance the competing interests inherent in the Wilderness Act, and in particular, the charge to maintain wilderness character while providing opportunities for wilderness recreation. Factors that are considered

in this analysis include the balance the parks seek in terms of self-reliant experiences as opposed to novice or introductory experiences, and the range of social and environmental conditions that can be provided while preserving wilderness character. In the context of wilderness stewardship planning, these objectives for visitor use have been explored through the development of alternatives. Based on the analysis in this END, the alternatives included in the plan incorporate different proposals for the amount of commercial services that are necessary to achieve desired conditions for wilderness character. This END represents a comparative and qualitative analysis of the relevant wilderness factors and determines the amount of commercial services that are necessary under each alternative.

SPECIALIZED SKILLS OR KNOWLEDGE

For some wilderness visitors the need for, or lack of, specialized skills or knowledge can be a barrier to engaging in that activity. A commercial service may support a visitor activity by providing or teaching the skills or knowledge that are needed to engage in a proper wilderness activity. This may take the form of guiding, in which the outfitter/guide provides the necessary skills or knowledge to the individual or group that is participating in the activity. It may also take an instructional form, in which the outfitter/guide teaches an individual or group the necessary skills or knowledge so that they may independently participate in the activity in the future. In the latter case, the level of instruction may range from basic or introductory wilderness skills and knowledge to advanced technical skills and knowledge. Guides and instructors are also able to provide local knowledge that can make a wilderness trip safer and more rewarding for visitors who are unfamiliar with a particular wilderness area.

SPECIALIZED EQUIPMENT OR SERVICES

Wilderness activities may require specialized equipment or services that cannot be provided by all wilderness visitors who wish to engage in a particular activity. Regarding specialized equipment, the expense, care, or space required for that equipment may be too great for some wilderness visitors to provide without support from a commercial service provider. Visitors may wish to try out an activity before making the financial commitment to purchase equipment. Some visitor trips may require services, such as the transporting of equipment or supplies that cannot be provided without commercial support. For each activity that has been determined to be proper for the recreational or other purposes of wilderness, the specialized equipment or services that may necessitate commercial support are discussed.

SPECIAL SAFETY CONCERNS

Wilderness activities may involve special safety concerns that cannot be managed by all wilderness visitors without commercial support. The NPS does not attempt to eliminate the risks inherent in wilderness travel or in participation in particular wilderness activities. However, for some visitors, a commercial provider may be a necessary means of managing those inherent risks or may be a means to acquire the requisite knowledge to manage those risks independently in the future. For each activity that has been determined to be proper for the recreational or other purposes of wilderness, the special safety concerns that may necessitate commercial support are discussed.

SPECIAL RESOURCE CONCERNS

Wilderness activities may involve the potential for impacts to wilderness resources. A commercial service provider may be a means to ensure that activities are conducted in appropriate locations and in a manner that mitigates or minimizes resource impacts. For each activity that has been determined to be proper for the recreational or other purposes of wilderness, the special resource concerns that may necessitate commercial support are discussed.

OTHER CONTRIBUTIONS THAT SUPPORT WILDERNESS PURPOSES

Commercial services most often support wilderness visitors in their recreational activities, but they may also independently or cooperatively support scenic, scientific, educational, historic, or conservation objectives.

INTRODUCTORY EXPERIENCES

Commercial service providers can provide assistance to visitors who lack the experience or confidence to attempt a wilderness adventure on their own. These types of trips can introduce a diverse public to a variety of ways to experience their public wildlands. These types of support can build confidence in visitors that can lead to future more self-reliant wilderness trips. This can relate to a range of activities, such as hiking and backpacking, stock use, or oversnow travel. Introducing novice visitors to their publicly-owned wilderness can provide rewarding experiences and build support for long-term wilderness preservation.

The NPS considers the provision of such introductory experiences as critical to its mission, and recognizes that commercial services aid in this aspect of mission accomplishment. This is one of the few ways to ensure that diverse people have access to these opportunities to connect with their national parks and wilderness. Chapter 8 of *NPS Management Policies 2006* states:

National Parks belong to all Americans, and the National Park Service will welcome all Americans to experience their parks. The Service will focus special attention on visitor enjoyment of the parks while recognizing that the NPS mission is to conserve unimpaired each park's natural and cultural resources and values for the enjoyment, education, and inspiration of present and future generations. The Service will also welcome international visitors, in keeping with its commitment to extend the benefits of natural and cultural resource conservation and outdoor recreation throughout the world.

In addition, parks will have “an atmosphere that is open, inviting, and accessible to every segment of American society” (Chapter 8, Sec. 8.2). It has been recognized that some segments of the American population are hesitant to take advantage of their public lands due to de facto barriers: “lack of knowledge, experience, awareness (what to do, where to go, how to get there, equipment needed, etc.)” (Pease 2011). Commercial services can assist people in overcoming some of these barriers, thereby offering an opportunity to more diverse segments of society to experience national parks and wilderness.

SECTION III: TYPE OF COMMERCIAL SERVICES THAT ARE NECESSARY FOR EACH PROPER ACTIVITY

This section uses the categories provided in Section II to analyze the aspects of specific activities from Section I that may necessitate commercial support to achieve wilderness purposes. A conclusion regarding the necessity for commercial services is made for each activity. The amount of commercial services that would be allowed is addressed in Section IV.

Table B-2: Analysis of Types of Activities That May be Supported by Commercial Services

Proper Activity Supported by a Commercial Service	
Backpacking and Hiking Trips (with overnight camping and day hiking)	
Reasons that Commercial Support is Necessary for Activity	
Specialized Skills and Knowledge	Way-finding, orienteering, the use of overnight equipment, campsite selection, food preparation and appropriate food storage in wilderness, wilderness first aid, map reading, sanitation and waste disposal, leadership, and Leave No Trace [®] practices.
Specialized Equipment or Services	Proper use of backpack, cooking equipment, tent, food storage devices, water purification equipment
Special Safety Concerns	High elevation environment, challenging cross-country areas, orienteering/way-finding, first aid, creek crossings, mountain weather
Special Resource Concerns	N/A
Other Contributions that Support Wilderness Purposes	Introductory experiences and guided trips can lead to a better understanding of wilderness character, purposes, and values, and assists the public in being confident to appropriately experience their public lands.
Introductory Experience	Provides people with the necessary skills to engage in self-reliant recreation.
Conclusion	<p>Backpacking and hiking are activities that are proper for realizing the public purposes of wilderness. The skills, equipment, and safety issues identified above are barriers that impede the ability of some visitors to realize the values inherent in a wilderness experience. These factors necessitate some level of commercial support for backpacking and hiking. The availability of commercial support may also offer opportunities for introductory wilderness experiences.</p> <p>Allowing commercial support for this activity is consistent with the desired conditions of the WSP. In terms of desired conditions, backpacking and hiking allow visitors to use and enjoy wilderness in a manner that is consistent with the preservation of wilderness, to experience a natural, undeveloped, and untrammled environment, and to avail themselves of opportunities for solitude or an unconfined recreation experience. The use of commercial support services also helps to achieve the Desired Condition of ensuring that the parks' wilderness resources will be accessible to visitors of diverse backgrounds and capabilities.</p>

Table B-2: Analysis of Types of Activities That May be Supported by Commercial Services (continued)

Proper Activity Supported by a Commercial Service	
Stock trips - Riding, packing, day rides and overnight camping with stock	
Reasons that Commercial Support is Necessary for Activity	
Specialized Skills and Knowledge	Safely packing, riding, and leading of stock in a remote wilderness environment are highly specialized skills. In addition, care for stock is a skill that requires specialized skills and knowledge. Use of the parks' wilderness by private (i.e., not commercially-supported) stock users accounts for less than 20% of total stock use by visitors, and this proportion has decreased over the past three decades. This illustrates that the difficulties and costs of owning and using private stock is a substantial obstacle to experiencing wilderness through the traditional activity of stock use. In addition, local knowledge is important to understand which trails are best-suited to the skill level of the stock user. Way-finding, orienteering, the use of overnight equipment, campsite selection, appropriate food storage in wilderness, wilderness first aid, map reading, sanitation and waste disposal, leadership, competency, communication, and Leave No Trace [®] practices are also skills and knowledge that are relevant to the use of pack stock in wilderness.
Specialized Equipment or Services	Stock trips require highly specialized and expensive equipment, including the animals, saddles, panniers, saddle trees, bear-proof food storage, hobbles and pickets, nose bags, tree-saver straps, ropes, veterinary first aid, and processed weed-free feed. The cost of stock and stock related equipment is prohibitive for most visitors. Horses and mules cost in excess of \$3,000, and the equipment for each animal may exceed \$1,500. In addition to the cost of the stock and stock equipment, stock owners must have access to facilities necessary to care for stock. Stock users must have a trailer to bring stock to the trailheads and a vehicle capable of towing a stock trailer. Caring for stock may cost as much as \$10,000 per animal each year. Transport of animals is also prohibitively expensive.
Special Safety Concerns	Stock use in wilderness presents special safety concerns that may necessitate commercial support for some visitors that choose to participate in a traditional wilderness stock trip. Stock travel in mountainous terrain on steep, narrow trails is inherently dangerous. Accidents involving stock can result in the injury or death of riders or stock animals. A skilled packer, particularly one with local knowledge about trail and environmental conditions, can mitigate these risks. While some visitors may choose and have the ability to manage these risks independently, many will require the services of a commercial provider.
Special Resource Concerns	Improper use of stock can impact water quality, vegetation, etc. Complex grazing regulations which are critical to protect the parks' resources may be difficult to understand for the casual stock user. These resource concerns can be mitigated or eliminated by skilled commercial providers with local knowledge of trails and camping areas appropriate for stock and specific restrictions and practices to protect resources.
Other Contributions that Support Wilderness Purposes	The use of stock in wilderness is a long-standing primitive type of recreation consistent with wilderness purposes. This is a documented traditional use of wilderness that was championed by the founders of the wilderness ideal. Stock can provide access to wilderness that would otherwise be inaccessible to many members of the public (including those who travel notable distances to reach the parks), and can also provide the support to ensure a positive experience in a wilderness environment.

Table B-2: Analysis of Types of Activities That May be Supported by Commercial Services (continued)

Proper Activity Supported by a Commercial Service	
Stock trips - Riding, packing, day rides and overnight camping with stock	
Reasons that Commercial Support is Necessary for Activity	
Introductory Experience	This activity can provide an introductory experience for wilderness visitors.
Conclusion	<p>Stock riding, packing, and camping are activities that are proper for realizing the public purposes of wilderness. The amount of knowledge and equipment required to successfully undertake a stock trip in wilderness is extremely high. Without access to commercial services, visitors who do not own their own stock are effectively barred from engaging in this type of wilderness activity and realizing the recreational, scenic, and other values that can be experienced during a stock trip. As a result, some level of commercial support is necessary. Commercial support services may also offer opportunities for introductory wilderness experiences.</p> <p>Allowing commercial support for this activity in accordance with the stock use prescriptions in the WSP is consistent with and supports the desired conditions of the WSP. In terms of desired conditions, commercial support for stock riding, packing, and camping allows visitors to use and enjoy wilderness in a manner that is consistent with the preservation of wilderness, to experience a natural, undeveloped, and untrammeled environment, to avail themselves of opportunities for solitude or an unconfined recreation experience, and to experience a traditional activity that may range from single day to multi-day trips. The availability of commercial stock trips also helps to ensure varied opportunities for wilderness-compatible recreation.</p>

Proper Activity Supported by a Commercial Service	
Overnight Camping - Gear and food support including stock “spot” and stock and porter “dunnage”	
Reasons that Commercial Support is Necessary for Activity	
Specialized Skills and Knowledge	Ability to carry items to support wilderness travel and overnight camping, and to ensure that visitors have opportunities to select campsites in areas that might otherwise not be accessible to them.
Specialized Equipment or Services	N/A
Special Safety Concerns	N/A
Special Resource Concerns	Allows for appropriate wilderness equipment to be utilized (e.g., food storage containers, camp stoves, tents, etc.).
Other Contributions that Support Wilderness Purposes	Allows people to have enough supplies to reach inner portions of wilderness and or extend their stays to more thoroughly immerse themselves in the wilderness experience. Allows a diverse public who cannot all physically carry the equipment to be able to recreate in and experience the benefits of wilderness.
Introductory Experience	This activity supports an introductory experience in wilderness.

Table B-2: Analysis of Types of Activities That May be Supported by Commercial Services (continued)

Proper Activity Supported by a Commercial Service	
Overnight Camping - Gear and food support including stock “spot” and stock and porter “dunnage”	
Reasons that Commercial Support is Necessary for Activity	
Conclusion	<p>Commercial services to support gear and food transport is necessary in the parks wilderness to achieve public purposes.</p> <p>Overnight camping is an activity that is proper for realizing the public purposes of wilderness, and possesses attributes that necessitate commercial support at some level. Overnight camping requires specialized skills and knowledge, involves special natural resource concerns, and may also offer opportunities for introductory wilderness experiences. Commercial support for overnight camping primarily takes the form of transporting gear and supplies that are to be used in the course of a wilderness trip. Allowing commercial support for this activity also assists in achieving the desired conditions of the WSP. In terms of desired conditions, commercial support for overnight camping allows visitors to use and enjoy wilderness in a manner that is consistent with the preservation of wilderness, to experience a natural, undeveloped, and untrammled environment, to avail themselves of opportunities for solitude or an unconfined recreation experience, and to assist visitors of diverse abilities and experience levels in selecting their own camping locations.</p>

Proper Activity Supported by a Commercial Service	
Oversnow Travel (ski and snowshoe touring and winter overnight camping)	
Reasons that Commercial Support is Necessary for Activity	
Specialized Skills and Knowledge	Ski, or other oversnow travel skills, route finding, winter survival, avalanche awareness, leadership
Specialized Equipment or Services	Skis, snowshoes, winter camping and survival equipment (e.g., shovels, avalanche beacons)
Special Safety Concerns	Winter survival, winter route-finding, avalanche awareness, weather
Special Resource Concerns	Human waste disposal, winter fires
Other Contributions that Support Wilderness Purposes	These are primitive and traditional recreational activities. Intense solitude is possible as this activity allows visitors to experience wilderness in a different manner.
Introductory Experience	This provides an introductory experience to winter wilderness exploration and use.
Conclusion	<p>Over-snow travel is an activity that is proper for realizing the public purposes of wilderness, and possesses attributes that necessitate commercial support at some level. Over-snow travel requires specialized skills and knowledge, employs special equipment, involves special safety and natural resource concerns, and may also offer opportunities for introductory experiences in a winter wilderness environment. Allowing commercial support for this activity also assists in achieving the desired conditions of the WSP. In terms of desired conditions, over-snow travel allows visitors to use and enjoy wilderness in a manner that is consistent with the preservation of wilderness, to experience a natural, undeveloped, and untrammled environment, and to avail themselves of extraordinary opportunities for solitude or an unconfined recreation experience.</p>

Table B-2: Analysis of Types of Activities That May be Supported by Commercial Services (continued)

Proper Activity Supported by a Commercial Service	
Climbing and Mountaineering (summer and winter)	
Reasons that Commercial Support is Necessary for Activity	
Specialized Skills and Knowledge	Route finding, use of equipment for locomotion and protection, orienteering, knowledge of hazards, understanding rock and ice conditions. Certifications /training requirements.
Specialized Equipment or Services	Ropes, climbing equipment/aids, ice axes, crampons, skis, snowshoes
Special Safety Concerns	Minimize risk through education, training, and ensuring safe practices. Knowledge of safe routes and conditions.
Special Resource Concerns	Climber access and social trails, knowledge of what is allowed and what is prohibited, fixed anchors, proper disposal of human waste, knowledge of sensitive plant species, use of "clean" climbing techniques to minimize resource impacts
Other Contributions that Support Wilderness Purposes	Climbing and mountaineering has been occurring since the early exploration of the parks (mid-19 th century) and is a primitive form of recreation. Some consider it a traditional value of wilderness.
Introductory Experience	This service supports an introductory experience for a less common but proper wilderness activity.
Conclusion	Climbing and mountaineering is an activity that is proper for realizing the public purposes of wilderness, and possesses attributes that necessitate commercial support at some level. Climbing and mountaineering requires specialized skills and knowledge, employs special equipment, involves special safety and natural resource concerns, and may also offer opportunities for introductory experiences or technical skills development. Allowing commercial support for this activity also assists in achieving the desired conditions of the WSP. In terms of desired conditions, climbing and mountaineering allows visitors to use and enjoy wilderness in a manner that is consistent with the preservation of wilderness, to experience a natural, undeveloped, and untrammled environment, and to avail themselves of extraordinary opportunities for solitude or an unconfined recreation experience. Note: A future comprehensive climbing management plan would determine site specific requirements.

Proper Activity Supported by a Commercial Service	
Fishing	
Reasons that Commercial Support is Necessary for Activity	
Specialized Skills and Knowledge	Understanding regulations and proper locations for fishing activities. Knowledge of local fishing conditions and site-specific requirements. Proper use of specialized equipment.
Specialized Equipment or Services	Fishing equipment, camping equipment
Special Safety Concerns	Fast, cold rivers with dangerous conditions in many areas. High elevation conditions, cold lakes, hypothermia.

Table B-2: Analysis of Types of Activities That May be Supported by Commercial Services (continued)

Proper Activity Supported by a Commercial Service	
Fishing	
Reasons that Commercial Support is Necessary for Activity	
Special Resource Concerns	Understanding minimum impact requirements in wilderness. Understanding protocols for decontamination to prevent introduction of non-native aquatic organisms. Fishing is one of few extractive uses permissible in wilderness, so it is important for visitors to understand the fishing requirements and restrictions (catch and release, proper disposal of fish carcasses). Also fishing guides can help visitors ensure the protection of native and/or particularly sensitive fish species, such as those protected under the Endangered Species Act. Guides can promote practices that provide for bank and riparian area protection.
Other Contributions that Support Wilderness Purposes	Fishing is a primitive form of recreation that can lead to increased self-reliance. Also this provides education to users on the appropriate methods and regulations related to fishing in wilderness.
Introductory Experience	Instruction about fishing techniques in wilderness.
Conclusion	Fishing is an activity that is proper for realizing the public purposes of wilderness, and possesses attributes that necessitate commercial support at some level. Fishing is an activity that is proper for realizing the public purposes of wilderness, and possesses attributes that necessitate commercial support at some level. Fishing requires specialized skills and knowledge, employs special equipment, involves special safety and natural resource concerns, and may also offer opportunities for introductory experiences. Allowing commercial support for this activity also assists in achieving the desired conditions of the WSP. In terms of desired conditions, fishing allows visitors to use and enjoy wilderness in a manner that is consistent with the preservation of wilderness, to experience a natural, undeveloped, and untrammelled environment, and to avail themselves of opportunities for solitude or an unconfined recreation experience.

Proper Activity Supported by a Commercial Service	
River running	
Reasons that Commercial Support is Necessary for Activity	
Specialized Skills and Knowledge	Knowledge of local conditions, ability to survive in severe river conditions, navigation skills in hazardous waters
Specialized Equipment or Services	Kayaks, rafts, emergency gear, personal flotation devices, paddles, dry bags, helmets, food storage
Special Safety Concerns	Extreme river conditions, changing river conditions (fluctuating flows), wilderness travel with heavy equipment
Special Resource Concerns	Protection of Wild and Scenic River values, riparian protection, human waste disposal, litter (kayak pieces), abandoned gear and equipment

Table B-2: Analysis of Types of Activities That May be Supported by Commercial Services (continued)

Proper Activity Supported by a Commercial Service	
River running	
Reasons that Commercial Support is Necessary for Activity	
Other Contributions that Support Wilderness Purposes	River running is a primitive recreational pursuit. Areas not commonly explored would be accessed through this activity. The extremely difficult conditions of the parks' rivers present notable challenges to physical abilities and self-reliance for river runners, consistent with wilderness values.
Introductory Experience	Because of the extreme difficulty to safely run the parks wilderness rivers, novice river runners would not be able to access the parks. This activity does not support an introductory experience in wilderness.
Conclusion	River running is an activity that is proper for realizing the public purposes of wilderness, and possesses attributes that necessitate commercial support at some level. River running requires specialized skills and knowledge, employs special equipment, involves special safety and natural resource concerns, and may also offer opportunities for technical skills development. Allowing commercial support for this activity also assists in achieving the desired conditions of the WSP. In terms of desired conditions, river running allows visitors to use and enjoy wilderness in a manner that is consistent with the preservation of wilderness, to experience a natural, undeveloped, and untrammled environment, and to avail themselves of extraordinary opportunities for solitude or an unconfined recreation experience.

Proper Activity Supported by a Commercial Service	
Photography	
Reasons that Commercial Support is Necessary for Activity	
Specialized Skills and Knowledge	Knowledge of photography skills, local knowledge of wilderness conditions and use, knowledge of care of photographic equipment in wilderness setting.
Specialized Equipment or Services	Camera equipment, tripod
Special Safety Concerns	N/A
Special Resource Concerns	N/A
Other Contributions that Support Wilderness Purposes	Supports education and the scenic purposes of wilderness. Long-standing tradition of photography of wilderness that has been extensively used to support wilderness establishment and preservation.
Introductory Experience	This activity supports an introductory experience in wilderness.
Conclusion	Photography is an activity that is proper for realizing the public purposes of wilderness, and possesses attributes that necessitate commercial support at some level. Photography requires specialized skills and knowledge, employs special equipment, supports the educational and scenic purposes of wilderness, and may also offer opportunities for introductory experiences or technical skills development. Allowing commercial support for this activity also assists in achieving the desired conditions of the WSP. In terms of desired conditions, photography allows visitors to use and enjoy wilderness in a manner that is consistent with the preservation of wilderness, to experience a natural, undeveloped, and untrammled environment, and to avail themselves of extraordinary opportunities for solitude or an unconfined recreation experience.

SECTION IV: EXTENT OF COMMERCIAL SERVICES DETERMINED NECESSARY FOR EACH PROPER ACTIVITY IN WILDERNESS

Section IV: Extent or Quantity of Commercial Services that are Necessary for Each Proper Activity reviews each activity against the desired conditions and visitor capacities of each alternative. A conclusion is reached about the annual overall wilderness-wide service days (level of use) that may be commercially supported, divided into two categories, those that use stock and those that do not, with a secondary conclusion separating out the high-use Mount Whitney Management Area, where a reduced portion of overall service days are allocated. There is also a description of other regulatory mechanisms that control commercially supported trips.

Table B-3: Alternatives Concepts and Objectives

	Alt 1: No-action / Status Quo	Alt 2: Use Levels Near Current Levels (NPS Preferred Alternative)	Alt 3: Allow for Increased Use	Alt 4: Reduce Development and Commercial Services	Alt 5: Reduce Use
Alternatives Concepts	Continue to manage wilderness under the existing Backcountry Management Plan / Stock Use and Meadow Management Plans	<i>Preserve Wilderness Character with targeted site-specific actions to reduce the recreational impacts in the highest use areas of wilderness with increased restrictions, while allowing less-restricted primitive recreation in less-visited areas.</i> Moderate levels of commercial services would be allowed, similar to current levels overall, with some increased controls in specific areas. Types of commercial services allowed would be expanded. Commercial services in high-use areas would be reduced in level.	<i>Maximize opportunities for visitor use and enjoyment and emphasize the quality of wilderness as a place that provides opportunities for primitive recreation.</i> There would be increased opportunities for commercial services potentially in expanded areas for visitors who want to experience the wilderness but may need additional services, facilities, or direction, or who may lack the specialized equipment to travel independently.	<i>Increase the undeveloped and self-reliant qualities of wilderness while protecting the natural quality of wilderness through restrictions on visitor behavior in high use areas and by reducing the availability of commercial support.</i> Notably reduce commercial services overall (types, levels, and areas), from current conditions.	<i>Increase the opportunities for solitude and unconfined recreation, and protect the natural quality of wilderness by notably reducing visitor use.</i> Commercial services would be allowed, but less use would be expected overall commensurate with reduced trailhead quotas for all visitors (including those supported by commercial services).

Table B-3: Alternatives Concepts and Objectives (continued)

	Alt 1: No-action / Status Quo	Alt 2: Use Levels Near Current Levels (NPS Preferred Alternative)	Alt 3: Allow for Increased Use	Alt 4: Reduce Development and Commercial Services	Alt 5: Reduce Use
Objectives of the Alternatives that are Relevant to the Commercial Support Allocation	N/A	Visitor Use Levels - Visitor use and enjoyment of wilderness would be provided in a manner that ensures the preservation of wilderness character. In this alternative, visitor use levels would be reduced in some popular areas to preserve opportunities for solitude or other wilderness-character qualities.	Visitor Use Levels - Visitor use and enjoyment of wilderness would be provided in a manner that ensures the preservation of wilderness character. In this alternative, opportunities for visitor use and enjoyment of wilderness would be increased by permitting more visitor use.	Visitor Use Levels - Visitor use and enjoyment of wilderness would be provided in a manner that ensures the preservation of wilderness character. In this alternative, increased emphasis on self-reliance and reduced development would be accompanied by a slight decrease in visitor numbers.	Visitor Use Levels - Visitor use and enjoyment of wilderness would be provided in a manner that ensures the preservation of wilderness character. In this alternative, increased opportunities for solitude would be achieved through a decrease in visitor numbers.
	N/A	Camping and Campsites - Visitors would have the opportunity to choose camping locations, except in areas where camping would result in unacceptable impacts. In this alternative, camping restrictions would be adjusted in targeted areas.	Camping and Campsites - Visitors would have the opportunity to choose camping locations, except in areas where camping would result in unacceptable impacts. In this alternative, increased visitor use would require an increase in camping restrictions.	Camping and Campsites - Visitors would have the opportunity to choose camping locations, except in areas where camping would result in unacceptable impacts. In this alternative, an emphasis on visitor self-reliance would allow fewer camping restrictions.	Camping and Campsites - Visitors would have the opportunity to choose camping locations, except in areas where camping would result in unacceptable impacts. In this alternative, decreased visitor use would allow fewer camping restrictions.

Table B-3: Alternatives Concepts and Objectives (continued)

	Alt 1: No-action / Status Quo	Alt 2: Use Levels Near Current Levels (NPS Preferred Alternative)	Alt 3: Allow for Increased Use	Alt 4: Reduce Development and Commercial Services	Alt 5: Reduce Use
	N/A	<p>Stock Use - Visitors would have opportunities to travel with stock, from day rides to multi-day trips, in a manner that is compatible with the protection of wilderness character. Grazing and stock access would be managed to protect wilderness character and reduce conflict with other wilderness visitors. Under this alternative, the number of meadows available to grazing would be reduced.</p>	<p>Stock Use - Visitors would have opportunities to travel with stock, from day rides to multi-day trips, in a manner that is compatible with the protection of wilderness character. Grazing and stock access would be managed to protect wilderness character and reduce conflict with other wilderness visitors. Under this alternative, increased visitor use would result in a need for more stock structures and closure of selected off-trail grazing areas in order to protect resources.</p>	<p>Stock Use - Visitors would have opportunities to travel with stock, from day rides to multi-day trips, in a manner that is compatible with the protection of wilderness character. To support the self-reliant aspect of this alternative, off-trail access would be limited to private stock, drift fences and hitch rails would be removed, and no grazing would be permitted (carry all feed).</p>	<p>Stock Use - Visitors would have opportunities to travel with stock, from day rides to multi-day trips, in a manner that is compatible with the protection of wilderness character. Grazing and stock access would be managed to protect wilderness character and reduce conflict with other wilderness visitors. In areas where stock would be permitted, fewer restrictions would be needed to protect wilderness character given the lower levels of visitor use in this alternative. Off-trail areas would not be open to stock.</p>

Table B-3: Alternatives Concepts and Objectives (continued)

	Alt 1: No-action / Status Quo	Alt 2: Use Levels Near Current Levels (NPS Preferred Alternative)	Alt 3: Allow for Increased Use	Alt 4: Reduce Development and Commercial Services	Alt 5: Reduce Use
	N/A	<p>Commercial Services - Commercial services would be performed to the extent necessary for activities which are proper for realizing the recreational or other wilderness purposes of the areas. Commercial services would support visitor use and enjoyment of wilderness in a variety of appropriate ways. Visitors with diverse backgrounds and skill levels would 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 would be reduced in the very popular Mount Whitney Management Area.</p>	<p>Commercial Services - Commercial services would be allowed to the extent necessary for activities which are proper for realizing the recreational or other wilderness purposes of the areas. Commercial services would support visitor use and enjoyment of wilderness in a variety of appropriate ways. Visitors with diverse backgrounds and skill levels would 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. The availability of commercial support would be allowed to expand commensurate with potentially higher levels of visitor use.</p>	<p>Commercial Services - Commercial services would be allowed to the extent necessary for activities which are proper for realizing the recreational or other wilderness purposes of the areas. Commercial services would support visitors in limited ways and circumstances in order to emphasize the self-reliant aspect of wilderness character.</p>	<p>Commercial Services - Commercial services would be allowed to the extent necessary for activities which are proper for realizing the recreational or other wilderness purposes of the areas. Commercial services would support visitor use and enjoyment of wilderness in a variety of appropriate ways. Visitors with diverse backgrounds and skill levels would 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. The types of commercial support would be similar to current conditions, but the lower overall levels of visitor use would result in lower overall levels of commercial support.</p>

Table B-4: Visitor Capacities and Relationship to Commercial Services

	Alternative 1: No-action / Status Quo	Alternative 2: Use Levels Near Current Levels (NPS Preferred Alternative)	Alternative 3: Allow for Increased Use	Alternative 4: Reduce Development and Commercial Services	Alternative 5: Reduce Use
Visitor Capacity VUD = visitor use day(s) (Also, see "Appendix A: Visitor Capacity")	<p>Current Conditions show an average of ~23,000 visitors/Year and ~111,000 Visitor Use Days(VUD)/Year</p> <p>[This does not include PCT, JMT, and other park wilderness users who obtain wilderness permits from sources other than the parks and local US Forests (Inyo, Sequoia, and Sierra), such as Yosemite NP, and the Pacific Crest Trail Association.]</p>	<p>Alternative 2 would have overall visitor use levels similar to alternative1, but with some specific areas targeted for reductions and other areas allowed to increase if visitation patterns shift. However, overall use-levels would remain near alternative1 averages. Use data shows that visitation levels also fluctuate from year to year by as much as 20% above or below the annual averages, based on permit data and best professional judgment. Alternative 2 would have an estimate of a "maximum" of 134,000 VUDs (based on a 20% fluctuation over the current average annual VUD of 111,000) with annual average of approximately 108-114,000 VUD.</p>	<p>Alternative 3 would allow for an increase of around 30% from current visitor use levels to averages of:</p> <ul style="list-style-type: none"> - visitors = ~30,000, and - VUD = ~141-147,000 <p>(would allow fluctuations of about 15-20% above and below the "average")</p> <p>An estimate of a maximum of 175,000 VUDs with annual average of 141-147,000 VUD.</p>	<p>Alternative 4 would reduce visitor use levels from alternative1 levels by ~ 5%. Adjusted averages would be:</p> <ul style="list-style-type: none"> - visitors = ~22,000 - VUD = ~102,500-108,500 <p>(would allow fluctuations of about 15-20% above and below the "average")</p> <p>An estimate of a maximum of 127,000 VUDs with annual average of 102,500-108,500 VUD.</p>	<p>Alternative 5 would reduce current visitor use levels from alternative1 levels by ~ 30%. Adjusted averages would be:</p> <ul style="list-style-type: none"> - visitors = ~16,500 - VUDs = ~74,700-80,700 <p>(would allow fluctuations of about 15-20% above and below the "average")</p> <p>An estimate of a maximum of 93,300 VUDs with annual average of 74,700-80,700 VUD.</p>

Table B-4: Visitor Capacities and Relationship to Commercial Services (continued)

	Alternative 1: No-action / Status Quo	Alternative 2: Use Levels Near Current Levels (NPS Preferred Alternative	Alternative 3: Allow for Increased Use	Alternative 4: Reduce Development and Commercial Services	Alternative 5: Reduce Use
Activities supported by commercial services (either by Concessioner or CUA holder) [CUA = Commercial Use Authorization (e.g., permit)]	Backpacking and hiking Stock trips (day rides, overnight, traveling) Stock spot and dunnage Skiing and snowshoeing Mountaineering (summer and winter)	Backpacking and hiking Stock trips (day rides, overnight, traveling) Overnight camping – gear support (porters, stock spot and dunnage) Oversnow travel (skiing, snowshoeing, and winter camping) Climbing and mountaineering (summer and winter) Fishing River running Photography	Backpacking and Hiking Stock trips (day rides, overnight, traveling) Overnight camping – gear support (porters, stock spot and dunnage) Oversnow travel (skiing, snowshoeing, and winter camping) Climbing and mountaineering. (summer and winter) Fishing River running Photography	Backpacking and Hiking Stock trips (overnight, traveling) Overnight camping – gear support (porters, stock spot and dunnage) Oversnow travel (snowshoeing, skiing, and winter camping) Climbing and mountaineering. (summer and winter) The following would be discontinued: - stock day rides - day-trips into wilderness, that is, where visitor/client enters and leaves wilderness without spending the night (non-stock) for any purpose (e.g., fishing, hiking, climbing) No additional activities would be supported by commercial services based on the overall goals of this alternative. This alternative promotes self-reliance; therefore a reduction in the types of activities would be appropriate.	Backpacking and Hiking Stock trips (day rides, overnight, traveling) Overnight camping – gear support (porters, stock spot and dunnage) Oversnow travel (skiing, snowshoeing, and winter camping) Climbing and mountaineering. (summer and winter) Fishing River running Photography

Table B-4: Visitor Capacities and Relationship to Commercial Services (continued)

	Alternative 1: No-action / Status Quo	Alternative 2: Use Levels Near Current Levels (NPS Preferred Alternative	Alternative 3: Allow for Increased Use	Alternative 4: Reduce Development and Commercial Services	Alternative 5: Reduce Use
Use levels of activities that commercial services could support	<p>Current Visitor Use Days (VUD) average 111,000 per year. Current Commercial Service Days (CSD) are near 7,500 per year. Comparing this data provides an observed ratio of CSDs to VUDs of approximately 6.8% (though these numbers are comparative only and not directly linked).</p> <p>Of note is that the 4 years sampled for CSDs (with good quality data), were among the lowest for commercial stock use over the past 30 years.</p>	<p>Overall commercial service levels would be limited to near what has occurred in the recent past. The exception is the Mount Whitney Management Area, where commercial service levels would be reduced. These changes would be consistent with the desired conditions for this alternative. To summarize, under alternative 2:</p> <ul style="list-style-type: none"> • Visitors with diverse backgrounds and skill levels could experience wilderness and engage in activities such as hiking, backpacking, stock trips, fishing, over-snow travel, or mountaineering, or build skills in these activities • Visitors could choose their own camping locations • Visitors could travel with stock, from day rides to multi-day trips • Visitors could use and enjoy wilderness in a variety of appropriate ways. <p>Data available is best for the 4-year period of 2010-2013. During that time there were approximately 6,500 commercial service days on average, with a high near</p>	<p>Commercial service levels would be allowed to increase proportionally with the potential increase in overall use (VUDs). With this alternative allowing up to a 30% increase in overall VUDs, this could result in a proportional increase in CSDs. These changes would be consistent with the desired conditions for this alternative. To summarize, under Alternative 3:</p> <ul style="list-style-type: none"> • Visitors with diverse backgrounds and skill levels could experience wilderness and engage in activities such as hiking, backpacking, stock trips, fishing, over-snow travel, or mountaineering, or build skills in these activities • Visitors could choose their own camping locations • Visitors could travel with stock, from day rides to multi-day trips • Visitors could use and enjoy wilderness in a variety of appropriate ways. • Visitors would have more opportunities to obtain permits for overnight use 	<p>Commercial service levels would be notably reduced, percentage wise compared to VUDs, from current levels. CSD levels would be reduced by about 45% of current levels, and would also be subject to site-specific reductions / prohibitions in order to control impacts in high-use areas.</p> <p>This alternative would notably reduce CSDs, by approximately 45% from alternative 1 levels, whether or not demand was present. These changes would be consistent with the desired conditions for this alternative. To summarize, under alternative 4:</p> <ul style="list-style-type: none"> • Visitors would have access to limited amounts and types of commercial support • Visitors could choose camping locations they could reach self-reliantly • Few visitors could travel with stock • Visitors could use and enjoy wilderness in a variety of appropriate ways if they could provide the necessary skills, knowledge, and 	<p>Commercial service levels would be reduced, proportionally, to that of allowed VUDs. CSD levels would be allowed near current percentages of VUD and would also be subject to site-specific reductions / prohibitions in order to control impacts in high-use areas.</p> <p>This alternative would provide for a reduction of overall VUDs. CSDs would also be proportionally reduced, whether or not demand was present. These changes would be consistent with the desired conditions for this alternative. To summarize, under alternative 5:</p> <ul style="list-style-type: none"> • Visitors with diverse backgrounds and skill levels could experience wilderness and engage in activities such as hiking, backpacking, stock trips, fishing, over-snow travel, or mountaineering, or build skills in these activities • Visitors could choose their own camping locations • Visitors could travel with stock, from day rides to multi-day trips

Table B-4: Visitor Capacities and Relationship to Commercial Services (continued)

	Alternative 1: No-action / Status Quo	Alternative 2: Use Levels Near Current Levels (NPS Preferred Alternative	Alternative 3: Allow for Increased Use	Alternative 4: Reduce Development and Commercial Services	Alternative 5: Reduce Use
		7,500. CSDs in high-use areas would be subject to additional site-specific reductions / prohibitions in order to reduce or control impacts in these areas. This alternative would allow overall CSDs of near current to slightly increased versus current levels, and would limit (via location, percentage, and absolute numbers) any increase in CSDs in highest use areas, whether or not demand was present.	CSDs in high-use areas would be subject to additional site-specific reductions / prohibitions in order to reduce or control impacts in these areas. This alternative would allow a proportional increase in overall CSDs, but would limit (via location, percentage, and absolute numbers) any increase in CSDs in highest use areas, whether or not demand was present.	equipment without commercial support	<ul style="list-style-type: none"> • Visitors could use and enjoy wilderness in a variety of appropriate ways. • Visitors would have fewer opportunities to obtain permits for overnight use
Visitor capacity standards that ensure Wilderness Character is preserved (applies to all visitors, of which commercially supported visitors make up the stated percent)		<p>Maximum permitted Proportion of Commercial Support: ~7.6%</p> <p>Campsite Condition Standard (WVCM): High Use – 1000 Moderate Use – 500 Low Use – 250 Consequences for Wilderness Character: Research conducted in 2009 (Cole) indicates widespread improvement in campsite condition since the time of designation. These standards would maintain current, high-quality conditions throughout the wilderness. Improved conditions would result from management</p>	<p>Maximum permitted Proportion of Commercial Support: ~7.6%</p> <p>Campsite Condition Standard (WVCM): High Use – 1300 Moderate Use – 650 Low Use – 325 Consequences for Wilderness Character: These standards would potentially allow for greater campsite impacts than exist under current conditions, but given current trends in visitor use, high-quality conditions throughout the wilderness are expected to remain. Improved conditions would result from management action at</p>	<p>Maximum permitted Proportion of Commercial Support: ~4.2%</p> <p>Campsite Condition Standard (WVCM): High Use – 950 Moderate Use – 475 Low Use – 235 Consequences for Wilderness Character: Research conducted in 2009 (Cole) indicates widespread improvement in campsite condition since the time of designation. These standards would maintain current, high-quality conditions throughout the wilderness. Improved conditions would result from management</p>	<p>Maximum permitted Proportion of Commercial Support: ~7.6%</p> <p>Campsite Condition Standard (WVCM): High Use – 700 Moderate Use – 350 Low Use – 175 Consequences for Wilderness Character: Research conducted in 2009 (Cole) indicates widespread improvement in campsite condition since the time of designation. These standards would maintain current, high-quality conditions throughout the wilderness. Improved conditions would result from management</p>

Table B-4: Visitor Capacities and Relationship to Commercial Services (continued)

	Alternative 1: No-action / Status Quo	Alternative 2: Use Levels Near Current Levels (NPS Preferred Alternative	Alternative 3: Allow for Increased Use	Alternative 4: Reduce Development and Commercial Services	Alternative 5: Reduce Use
		action at Guitar Lake, Kern Hot Springs, and Shepherd Pass Lake. See WSP/FEIS chapters 2 and 4 and "Appendix A: Visitor Capacity."	Guitar Lake and Shepherd Pass Lake. See WSP/FEIS chapters 2 and 4 and "Appendix A: Visitor Capacity."	action at Guitar Lake, Kern Hot Springs, Hockett Meadow, and Shepherd Pass Lake. See WSP/FEIS chapters 2 and 4 and "Appendix A: Visitor Capacity."	action at LeConte Ranger Station, Middle Dusy Basin, Lower Dusy lakes, Lakes above Tyndall, Guitar Lake, Kern Hot Springs, Simpson Junction, 11,393 Lakes, South Dusy Lakes, Atwell-Hockett Trail, Hockett Meadow, and Shepherd Pass Lake. See WSP/FEIS chapters 2 and 4 and "Appendix A: Visitor Capacity."
		Trail Encounter Frequency Standard (# of encounters per hour on 90% of quota season days): Very High – 45 High – 25 Moderate – 15 Low – 6	Trail Encounter Frequency Standard (# of encounters per hour on 90% of quota season days): Very High – 59 High – 33 Moderate – 20 Low – 8	Trail Encounter Frequency Standard (# of encounters per hour on 90% of quota season days): Very High – 43 High – 24 Moderate – 14 Low – 5	Trail Encounter Frequency Standard (# of encounters per hour on 90% of quota season days): Very High – 25 High – 18 Moderate – 11 Low – 4
		Consequences for Wilderness Character: Recent social science research (Martin and Blackwell 2013) suggest that almost all visitors encounter other visitors during their wilderness trips, but a majority of visitors stated that these encounters neither added nor detracted from the quality of their visit. These standards would ensure that encounter frequencies in most wilderness areas	Consequences for Wilderness Character: These standards would potentially allow for encounter frequencies higher than under current conditions, but given current trends in visitor use, high-quality conditions in most parts of wilderness are expected to remain. Improved opportunities for solitude would result from management action at Roads End, Rae Lakes, and Evolution Basin &	Consequences for Wilderness Character: These standards would ensure that encounter frequencies in most wilderness areas would remain near current conditions. Improved opportunities for solitude would result from management action at Mount Whitney, Roads End, Rae Lakes/JMT, Evolution Basin & Valley, Rae Lakes/JMT, Mount Langley Approach, Rae Lakes Loop-	Consequences for Wilderness Character: These standards would ensure that encounter frequencies in most wilderness areas would remain near current conditions. Improved opportunities for solitude would result from management action at Mount Whitney, Roads End, Lakes Trail, Mineral King, Evolution Basin & Valley, Rae Lakes/JMT, Mount Langley Approach, Rae

Table B-4: Visitor Capacities and Relationship to Commercial Services (continued)

	Alternative 1: No-action / Status Quo	Alternative 2: Use Levels Near Current Levels (NPS Preferred Alternative	Alternative 3: Allow for Increased Use	Alternative 4: Reduce Development and Commercial Services	Alternative 5: Reduce Use
		would remain near current conditions. Improved opportunities for solitude would result from management action at Mount Whitney Roads End, Rae Lakes/JMT, Evolution Basin & Valley, Mount Langley Approach, and Crabtree Ranger Station to Trail Crest.	Valley.	Lower, and Crabtree Ranger Station to Trail Crest.	Lakes Loop-Lower, Dusy Basin, West Side Kearsarge, and Crabtree Ranger Station to Trail Crest.
		<p>Grazing Standards: See appendix D for specific grazing standards.</p> <p>Consequences for Wilderness Character: Meadow specific grazing capacities would limit impacts to the natural quality of wilderness throughout the parks. Stock would have access to 46% of meadows in wilderness, as compared to 51% under current conditions, thus improving the natural quality of wilderness.</p>	<p>Grazing Standards: See appendix D for specific grazing standards.</p> <p>Consequences for Wilderness Character: Meadow specific grazing capacities would limit impacts to the natural quality of wilderness throughout the parks. Stock would have access to 37% of meadows in wilderness, as compared to 51% under current conditions, thus improving the natural quality of wilderness.</p>	<p>Grazing Standards: See appendix D for specific grazing standards.</p> <p>Consequences for Wilderness Character: Grazing would not be permitted. Natural conditions would improve in meadows currently subject to grazing use.</p>	<p>Grazing Standards: See appendix D for specific grazing standards.</p> <p>Consequences for Wilderness Character: Meadow specific grazing capacities would limit impacts to the natural quality of wilderness throughout the parks. Stock would have access to 36% of meadows in wilderness, as compared to 51% under current conditions, thus improving the natural quality of wilderness</p>

NOTES:

The above VUD calculations did not include use of the parks by visitors who obtained their wilderness permits from sources other than the parks or local US Forests (Inyo, Sequoia, and Sierra). These visitors could have originated from multiple starting points, including points north and south on the Pacific Crest Trail, John Muir Trail, or others. They could have been issued wilderness permits from various other entities, including Yosemite NP and the Pacific Crest Trail Association. However, in the rare event that a visitor permitted by a park, forest, or other permitting agency used a commercial service provider authorized to operate in the parks' wilderness, that commercial support would be subject to the Commercial Service Day allocation. See additional information on wilderness visitor use in "Appendix A: Visitor Capacity".

Table B-5: Current Visitor Use levels, Current Commercial Service Levels and Proposed Commercial Service Allocations

		Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
		Current Visitor Use Levels data is for 4 years - 2010-2013	Proposed Visitor Capacity	Proposed Visitor Capacity	Proposed Visitor Capacity	Proposed Visitor Capacity
	Total Visitor Use Days – by overnight users, both private and supported by Commercial Services (this does not take into account use by PCT and JMT users that are not recorded by the parks wilderness permit system, or day-use visitors)	109,815 - high 108,167 - average	111,000 average 134,000 estimated maximum	144,000 average 175,000 estimated maximum	105,500 average 127,000 estimated maximum	77,700 average 93,300 estimated maximum
			PROPOSED ALLOCATIONS BY ACTION ALTERNATIVE IN COMMERCIAL SERVICE DAYS (CSDs)			
	Total Allocation for All Commercial Services Combined – for overnight and day use, Non-Stock and Stock based.	Commercial Service Days (CSDs): CSDs for All (w/day): 7,474 - high 6,550 – average	For All, day and overnight, Non-Stock and Stock based. 8,400 CSDs*	For All, day and overnight, Non-Stock and Stock based. 10,920 CSDs*	For All, day and overnight, Non-Stock and Stock based. 4,390 CSDs*	For All, day and overnight, Non-Stock and Stock based. 5,880 CSDs*
Wilderness-Wide: Activities that are supported by commercial services that are Non-Stock based. Allocated CSDs can be used anywhere/ anytime, except in the Mount Whitney Management Area during the wilderness permit quota period. (from the Friday of Memorial Day Weekend to September 30)	<ul style="list-style-type: none"> ▪ Backpacking and Hiking Trips ▪ Overnight Camping - gear support by porters– year round ▪ Climbing and Mountaineering (summer and winter)* ▪ Over-snow Travel (ski and snowshoe touring and winter camping – winter only fishing ▪ River Running ▪ Photography 	Commercial Service Days Supported by Non-stock providers: CSDs for all visitors (w/day): 4,675 - high 4,063 – average	For All, day and overnight, Non-Stock based services. 5,040 CSDs	For All, day and overnight, Non-Stock based services. 6,550 CSDs	For All, day and overnight, Non-Stock based services. 2,630 CSDs	For All, day and overnight, Non-Stock based services. 3,530 CSDs

Table B-5: Current Visitor Use levels, Current Commercial Service Levels and Proposed Commercial Service Allocations (continued)

		Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
<p>Mt. Whitney Management Area (see map below): Activities supported by commercial services that are <i>Non-Stock</i> based. (excludes Fishing, River- running, and Photography)</p> <p>NOTE: These are the only allocations that may be used for non-stock based services in the Mount Whitney Management Area as defined by the map below during the wilderness permit quota period. These allocations are a part of, not in addition to, the overall Non-Stock CSDs above.</p>		<p>Commercial Service Days Supported by <i>Non-Stock</i> providers:</p> <p>CSDs for All (w/day): 1,346 - high 1,062 – average</p>	<p>Of the above allocation for Non-Stock Services, the level which can occur in the Mt. Whitney Management Area</p> <p>930 CSDs</p>	<p>Of the above allocation for Non-Stock Services, the level which can occur in the Mt. Whitney Management Area</p> <p>1,210 CSDs</p>	<p>Of the above allocation for Non-Stock Services, the level which can occur in the Mt. Whitney Management Area</p> <p>490 CSDs</p>	<p>Of the above allocation for Non-Stock Services, the level which can occur in the Mt. Whitney Management Area</p> <p>650 CSDs</p>
<p>Wilderness-Wide: Activities supported by commercial services that are <i>Stock</i> based.</p> <p>Allocated CSDs can be used anywhere/anytime, except in the Mt. Whitney Management Area during the wilderness permit quota period.</p>	<ul style="list-style-type: none"> ▪ Stock trips - Riding, packing, day rides and overnight camping with stock ▪ Overnight Camping - gear support, including stock spot and dunnage 	<p>Commercial Service Days Supported by <i>Stock</i> providers:</p> <p>CSDs for All(w/day): 3,110 - high 2,487 – average</p>	<p>For all, day and overnight Stock based</p> <p>3,360 CSDs</p>	<p>For all, day and overnight Stock based</p> <p>4,370 CSDs</p>	<p>For all, day and overnight Stock based</p> <p>1,760 CSDs</p>	<p>For all, day and overnight Stock based</p> <p>2,350 CSDs</p>

Table B-5: Current Visitor Use levels, Current Commercial Service Levels and Proposed Commercial Service Allocations (continued)

	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
<p>Mt. Whitney Management Area: Activities supported by commercial services that are Stock based.</p> <p>NOTE: These are the only allocations that may be used for Stock-based services in the Mt. Whitney Management Area during the wilderness permit quota period. These allocations are a part of, not in addition to, the overall Stock CSDs above.</p>	<p>Commercial Service Days Supported by Stock providers:</p> <p>CSDs for All(w/day): 635 – high 521 – average</p>	<p>Of the above Stock allocation, the level which can occur in the Mt. Whitney Management Area</p> <p>500 CSDs</p>	<p>Of the above Stock allocation, the level which can occur in the Mt. Whitney Management Area</p> <p>650 CSDs</p>	<p>Of the above Stock allocation, the level which can occur in the Mt. Whitney Management Area</p> <p>260 CSDs</p>	<p>Of the above Stock allocation, the level which can occur in the Mt. Whitney Management Area</p> <p>350 CSDs</p>

* The overall allocations of all commercial services wilderness-wide for alternatives 2-5, have been established at 12% over the highest years' use of the 4-year period of 2010-2013. It is known that current data collection methods have not been capable of completely documenting all commercial services that were provided during those 4 years, and therefore underestimate actual commercial use levels. With the implementation of this WSP, additional data collection methods will be established that provide more accurate information and ensure that allocations are not exceeded. Also, the 4-year period of best data, 2010-2013, is known to have been a period of relatively low commercial services due to a very heavy snow year in 2010 (which delays wilderness entry, due to snow on passes, to later in the season), followed by 3 drought years (which allow for early entry, but low water then shortens the primary use season). These factors are confirmed by more accurate data from annual stock use, which shows that 2012 was the 2nd lowest, 2011 was the 3rd lowest, 2013 was the 4th lowest, and 2010 was the 8th lowest commercial stock use years of the last 3 decades (Frenzel, E. and S. Haultain 2014). An informed estimate to compensate for these factors which allows for a more accurate baseline of typical commercial service levels is to estimate typical use by adjusting the high use year by 12%. This factor has been applied to the overall allocations for all commercial services wilderness-wide. The factor of 12% was selected as a reasonable estimate of unreported/unrecorded commercially supported services and also relates to the anomaly of the low stock use in those years used for comparative data (e.g., annual stock use nights from 2006-2009 was 3,150, and from 2010-2013 was 2,497, a 21% reduction).

HOW ALLOCATION NUMBERS FOR CSDS ABOVE WERE CALCULATED

- Total Visitor Use Day capacities – as stated in “Appendix A: Visitor Capacity.”
- Total Allocation calculations of CSDs for all Commercial Services combined:
 - Baselines were calculated based on the observed total of all commercially-supported use during the highest year from 2010-2013 data, which equals 7,474, rounded to 7,500, and representing a baseline proportion of commercial support to visitor use days (111,000) of approximately 6.8%. This is then adjusted up by 12% to account for the known low sample data to establish a baseline commercial annual allocation maximum of 8,400 CSDs.
 - Under alternative 2, the parks would adopt a maximum allocation level equal to the baseline of 8,400 CSDs, and maintain a commercial support proportion of overall visitation of approximately 7.6%.
 - Under alternative 3, this baseline of 8,400 would be multiplied by 1.3 to allow for an increase in visitor use by up to 30% while maintaining a commercial support proportion of overall visitation of approximately 7.6%, resulting in 10,920 CSDs.
 - Under alternative 4, the baseline of 8,400 would be multiplied by 0.95 (to adjust for the limited decrease of 5% in visitor use) to 7,980, and then multiplied by .55 to provide for the notable reduction (45%), in commercial support in this alternative to 4,390 CSDs (rounded up from 4,389), and to reduce the proportion of commercially supported visitors to approximately 4.2% of overall visitation.
 - Under alternative 5, the baseline of 8,400 would be multiplied by 0.7 to allow for a decrease in visitor use of 30% while maintaining a commercial support proportion of overall visitation of approximately 7.6%, resulting in 5,880 CSDs.
- Allocation calculations for wilderness-wide Non-Stock CSDs:
 - The figures in each of the alternatives are equal to 60% of Total CSDs for that alternative (rounded):
 - Alternative 2 = 5,040 CSDs (60% of 8,400)
 - Alternative 3 = 6,550 CSDs (60% of 10,920)
 - Alternative 4 = 2,630 (60% of 4,390)
 - Alternative 5 = 3,530 (60% of 5,880)
 - The calculation of 60% of all CSDs allotted to Non-stock commercial services is based on current and past use levels, and has proven to be at a level that provides for visitor use and enjoyment of wilderness, supports activities that realize the recreational and other purposes of wilderness, and allows for the preservation of wilderness character (see WSP/EIS, chapter 4).
- Allocation calculations for wilderness-wide Stock CSDs:
 - The figures in each of the alternatives are equal to 40% of Total CSDs for that alternative (rounded):
 - Alternative 2 = 3,360 CSDs (40% of 8,400)
 - Alternative 3 = 4,370 CSDs (40% of 10,920)

- Alternative 4 = 1,760 (40% of 4,390)
- Alternative 5 = 2,350 (40% of 5,880)
- The calculation of 40% of all CSDs being allotted to Stock commercial services is based on current and past use levels, and has proven to be at a level that provides for visitor use and enjoyment of wilderness, supports activities that realize the recreational and other purposes of wilderness, and allows for the preservation of wilderness character (see WSP/EIS, chapter 4).
- Allocation calculations for Mount Whitney Management Area:
 - CSDs for the Mount Whitney Management Area are based on achieving a 10 % reduction of commercial service supported use of the area. The reduction is based on the combined averages of non-stock (1,062 CSDs/yr) and stock (521 CSDs/yr) use of 1,583 CSDs/yr from the four year period of 2010-2013. The baseline allowable level of CSDs for the Mount Whitney Management Area of 1,425 is determined by multiplying 1,583 by 0.9. The allowable baseline level of 1,425 CSDs/yr is allocated as described below.
 - Non-stock CSDs in the Mount Whitney Management Area will be allowed to consist of 65% of the baseline use level determined above. By multiplying the 1,425 overall CSD baseline by 0.65, a non-stock baseline of 930 CSD is derived (rounded up from 926). This non-stock baseline is then applied to each of the alternatives below:
 - Alternative 2, adopt baseline of 930 CSDs.
 - Alternative 3, multiply baseline of 930 by 1.3 to provide for an increase of 30% (adjust for the increase in visitor capacity) to 1,210 CSDs.
 - Alternative 4, multiply baseline of 930 by 0.95 (to adjust for the limited decrease, 5%, in visitor capacity) to 885, and then multiply by 0.55 (to provide for the specific notable reduction, 45%, to commercial services in this self-reliant emphasizing alternative) to 490 CSDs (rounded up from 487).
 - Alternative 5, multiply baseline of 930 by 0.7 to provide for a decrease of 30% (adjust for the decrease in visitor capacity) to 650 CSDs.
 - Stock CSDs in the Mount Whitney Management Area will be allowed to consist of 35% of the baseline use level determined above. By multiplying the 1,425 overall CSD baseline by 0.35, a stock baseline of 500 CSD is calculated (rounded up from 499). This stock baseline is then applied to each of the alternatives below:
 - Alternative 2, adopt baseline of 500 CSDs.
 - Alternative 3, multiply baseline of 500 by 1.3 to provide for an increase of 30% (to adjust for the increase in visitor capacity) to 650 CSDs.
 - Alternative 4, multiply baseline of 500 by 0.95 (to adjust for the limited decrease, 5%, in visitor capacity) to 475, and then multiply by .55 (to provide for the specific notable reduction, 45%, to commercial services in this self-reliant emphasizing alternative) to 260 CSDs (rounded down from 261).
 - Alternative 5, multiply baseline of 500 by 0.7 to provide for a decrease of 30% (to adjust for the decrease in visitor capacity) to 350 CSDs.

Monitoring and analysis of the established process of managing commercial services in wilderness will be conducted by the parks' staff in response to changes that occur during the life of the Wilderness Stewardship Plan. Depending on the nature of changes that occur, the National Park Service would take additional actions consistent with the management directions in the WSP in regards to the management of commercial services in wilderness. In all cases, appropriate environmental compliance and public involvement would occur, as necessary, when corrective actions are taken. Possible adjustments may include, but are not limited to:

- Group size limits, client-to guide ratios, number of trips, allocation of use and locations of use available to commercial services providers may be revised in response to new information, such as assessments of impacts to environmental and social conditions (especially as related to visitor capacity standards) and changes in the parks' programs.
- The number of commercial service providers may be limited.
- Approved activities, if found incompatible with resource protection, visitor enjoyment, and / or safety, may be suspended or terminated.
- The limits on commercial services imposed by this plan will be reassessed and/ or recalculated when significant changes in use patterns occur. Actions that may affect this process are:
 - Changes in visitor use travel patterns that would affect the results of an Extent Necessary Determination.
 - Extent Necessary methodology will be reevaluated using improved data that will be collected in the future.

Bearpaw Meadow High Sierra Camp and the Pear Lake Ski Hut offer overnight lodging in designated potential wilderness addition areas of these parks. When Congress designated the Sequoia-Kings Canyon Wilderness in 1984, it allowed the continuation of these facilities as non-conforming uses and designated the areas they occupy as potential wilderness additions. These seasonal facilities offer rustic lodging, and at Bearpaw Meadow High Sierra Camp, meal service (to guests and employees). Due to their special status as congressionally authorized non-conforming uses, this Extent Necessary Determination treats these facilities separately from the parks' concessioners and CUA holders who provide commercial services to visitors using designated wilderness.

The Congressionally authorized Bearpaw Meadow High Sierra Camp (lodging and meal service) is run through a long-term Concession Contract with DNC Parks and Resorts at Sequoia. This facility has a seven year (2006 -2012) avg. of 1,497 VUD/yr. This allowed seasonal commercial entity would continue to operate at its established capacity of approximately 1,700 Visitor Use Days per year (June through September) and to continue its current levels and types of resupply activities. Services at and resupply trips to the Bearpaw Meadow High Sierra Camp are not included in the calculations and limitations in table B-5 because these activities are not commercial services provided to visitors in designated wilderness and have been expressly allowed per Congressional direction.

The Congressionally allowed operation of the Pear Lake Ski Hut (lodging service) is conducted through an agreement between the NPS and Sequoia Natural History Association. This entity has a 5 year (2008/2009 – 2012/2013) avg. of 1,220 VUD/yr. This seasonal commercial operation would continue at its established capacity of approximately 1,500 Visitor Use Days per year (December through April). Services provided at Pear Lake Ski Hut are not included in the calculations or limitations in table B-5.

SECTION V: SUMMARY

SUMMARY OF ALTERNATIVE 2

Alternative 2 would seek to provide opportunities for visitors to enjoy a range of proper activities similar to existing conditions, except in areas of higher use and impact where site-specific actions would be taken to improve wilderness character. These site-specific actions would include reducing the availability of commercial support in the Mount Whitney Management Area, as well as many other site-specific restrictions that would apply to all visitors regardless of commercial support (see WSP chapter 2). Of special note are changes in the way that stock parties are regulated, since stock parties often involve commercial support. Collectively, the combination of proposed visitor capacity, regulation of visitor use, and commercial service allocation would result in conditions that preserve wilderness character, with some improvement of wilderness character in high use areas relative to current conditions. This determination is based on a variety of recent research that shows that past and current management has been successful in protecting wilderness character. This research includes studies of current visitor experiences, visitor effects on bighorn sheep, visitor effects on water quality, visitor effects on meadow condition, and visitor effects on campsite conditions. These studies show good to excellent resource conditions in most of the wilderness with very few limited site-specific exceptions. For some resources, such as meadow and campsite condition, the impacts of past use are measurable (primarily from many decades ago), but the current trend is towards improving conditions. Alternative 2 would focus management actions on site-specific resource impacts in order to improve the overall condition of wilderness character. A complete discussion of the environmental consequences of alternative 2 on Wilderness Character is included in the WSP/FEIS “Chapter 4: Environmental Consequences.”

The commercial service levels proposed in table B-5 have been determined to be appropriate to achieve the objectives of alternative 2, which include the preservation of wilderness character. Namely, these commercial service levels are necessary to ensure that visitors have sufficient freedom to choose camping locations and camping styles that allow them to use and enjoy wilderness and realize the recreational (or other) purpose of wilderness; ensure that visitors with diverse backgrounds and capabilities are able to access wilderness, develop or expand wilderness skills, and otherwise use and enjoy wilderness; and to ensure that visitors are able to engage in the traditional activity of traveling with stock. Because these opportunities are envisioned to be similar to existing conditions in most areas, commercial allocations are proposed at levels similar to current conditions. The exception is in the Mount Whitney Management Area, where improvements to wilderness character would be achieved in part by reducing the levels of use supported by commercial services.

SUMMARY OF ALTERNATIVE 3

Alternative 3 would seek to provide opportunities for visitors to enjoy a range of proper activities at use levels exceeding current conditions. Actions would be taken to accommodate higher levels of visitor use while protecting the natural quality of wilderness character. These actions would often involve impacts on the undeveloped quality of wilderness and increased regulations, which would impact the unconfined aspect of wilderness character; and higher use levels would directly affect opportunities for solitude. Despite these changes, wilderness character would not be impaired under alternative 3. The conditions that visitors would encounter in terms of development, density of other visitors, naturalness, and freedom from manipulation would be consistent with conditions associated with designated wilderness areas and the requirements of the Act, and would contrast sharply with conditions found in non-wilderness settings. A complete discussion of the environmental consequences of alternative 3 on Wilderness Character is included in the WSP/FEIS “Chapter 4: Environmental Consequences.”

The proposed commercial service levels have been determined to be appropriate to achieve the objectives of alternative 3, which include the preservation of wilderness character. Namely, these commercial service levels are necessary to ensure that a larger number of visitors have sufficient freedom to select camping locations and camping styles that allow them to use and enjoy wilderness and realize the recreational (or other) purpose of wilderness; ensure that visitors with diverse backgrounds and capabilities are able to access wilderness, develop or expand wilderness skills, and otherwise use and enjoy wilderness; and to ensure that visitors are able to engage in the traditional activity of traveling with stock. Because these opportunities are envisioned to occur at levels exceeding existing conditions in most areas, commercial allocations are proposed at levels that would exceed current levels of commercial support although the level of support would be proportional to current conditions.

SUMMARY OF ALTERNATIVE 4

Alternative 4 would seek to provide opportunities for visitors to enjoy primarily self-reliant activities; overall use levels would be slightly lower than current conditions, reflecting the decreased availability of commercial support. Actions would be taken to reduce most forms of visitor assistance, including removing developments and decreasing the availability of commercial support, and regulations would be relaxed to improve visitor freedom. Under alternative 4, wilderness character would be preserved in terms of opportunities for solitude and the natural wilderness qualities, and improved in terms of the undeveloped quality and unconfined aspect. This would occur, however, at the expense of the use and enjoyment for certain types of visitors, including those that desire to develop or expand wilderness skills, and those that wish to travel with stock. A complete discussion of the environmental consequences of alternative 4 on Wilderness Character is included in the WSP/FEIS “Chapter 4: Environmental Consequences.”

The proposed commercial service levels have been determined to be appropriate to achieve the objectives of alternative 4, which include the preservation of wilderness character. Namely, commercial service support would be available at levels significantly diminished from current conditions, and opportunities for self-selecting camping locations, developing or expanding wilderness skills, and traveling with stock would also be diminished. Commercial allocations are therefore proposed at levels below current conditions.

SUMMARY OF ALTERNATIVE 5

Alternative 5 would seek to provide opportunities for visitors to enjoy a range of proper activities at use levels below current conditions. Actions would be taken to improve opportunities for solitude. Due to lower levels of visitor use, the natural quality of wilderness character would be protected with less reliance on development and regulations; this would improve the undeveloped quality and unconfined aspect of wilderness. However, this would occur at the expense of the use and enjoyment of many visitors, who would face greater competition for permits at many popular trailheads. Wilderness character would be preserved under alternative 5. Visitors able to obtain permits would encounter excellent conditions in terms of all wilderness character qualities. A complete discussion of the environmental consequences of alternative 5 on Wilderness Character is included in the WSP/FEIS “Chapter 4: Environmental Consequences.”

The proposed commercial service levels have been determined to be appropriate to achieve the objectives of alternative 5, which include the preservation of wilderness character. Namely, these commercial service levels are necessary to ensure that a smaller number of visitors have freedom to select camping locations and camping styles that allow them to use and enjoy wilderness and realize the recreational (or other) purpose of wilderness; ensure that visitors with diverse backgrounds and capabilities are able to access wilderness, develop or expand wilderness skills, and otherwise use and enjoy wilderness; and to

ensure that visitors are able to engage in the traditional activity of traveling with stock. Because these opportunities are envisioned to occur at levels below existing conditions, commercial allocations are proposed at levels that would also be below current conditions, although the level of support would be proportional to current conditions.

CONCLUSION

The proposed allocation of CSDs in this END would support proper activities at levels (i.e., extent) that will provide for full preservation of wilderness character while ensuring that diverse high-quality wilderness opportunities are available for public enjoyment. The determined CSD levels, for each of alternatives 2, 3 and 5, would allow for commercial services to support no more than 7.6% of anticipated overall visitor capacity averages, and would support only 4.2% of averages for alternative 4. Under all action alternatives and under the agency Preferred Alternative, commercial support would remain relatively uncommon, self-supported visitation would remain the norm, and wilderness character would not be threatened by excessive commercial presence.

Nor would environmental consequences of the proposed level of commercial support threaten wilderness character. The activities that commercial services may support are the same activities that are enjoyed by the non-commercially supported public. Also, the impacts of commercially supported visitors in combination with other visitors have been properly and thoroughly analyzed in the WSP/FEIS “Chapter 4, Environmental Consequences.” This analysis shows there will be no meaningful threat to wilderness character as the result of the proposed CSDs in this WSP/FEIS.

The findings of this END are the result of the balancing of multiple relevant factors, including the potential environmental effects of commercially supported visitor use, which are found not to impede the preservation of wilderness character, and the opportunities for public enjoyment that this proposed level of commercial support can provide to wilderness visitors. These findings are consistent with the primary objectives of the Wilderness Act, as stated in Section 2(a): “wilderness areas. . . shall be administered *for the use and enjoyment of the American people* in such manner as will leave them unimpaired for future use and enjoyment as wilderness, and so as to provide for the protection of these areas, *the preservation of their wilderness character. . .*” (emphasis added).

Table B-6: Summary of Visitor Capacities, Commercial Service Allocations, and Preservation of Wilderness Character

	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
Alternative Description	Continue to manage wilderness under the existing Backcountry Management Plan /Stock Use and Meadow Management Plans.	Preserve Wilderness Character with targeted site-specific actions to reduce recreational impacts, particularly in high-use areas.	Maximize visitor use and enjoyment and emphasize the quality of wilderness as a place that provides opportunities for primitive recreation.	Increase the undeveloped and self-reliant qualities of wilderness while protecting the natural quality of wilderness with restrictions on visitor behavior and reduced availability of commercial support.	Increase the opportunities for solitude and unconfined recreation, and protect the natural quality of wilderness by notably reducing visitor use.
Wilderness Character Values					
Natural	No campsite condition standards. Grazing management per Stock Use and Meadow Management Plan.	Campsite Condition Standard (WVCM): High Use – 1000 Moderate Use – 500 Low Use – 250 Meadow-specific grazing capacities (See appendix D)	Campsite Condition Standard (WVCM): High Use – 1300 Moderate Use – 650 Low Use – 325 Meadow-specific grazing capacities (See appendix D)	Campsite Condition Standard (WVCM): High Use – 950 Moderate Use – 475 Low Use – 235 Meadow-specific grazing capacities (See appendix D)	Campsite Condition Standard (WVCM): High Use – 700 Moderate Use – 350 Low Use – 175 Meadow-specific grazing capacities (See appendix D)
Untrammelled	Limited impacts to untrammelled quality would continue from fire management, invasive species management, and various restoration activities.				
Undeveloped	Food-storage boxes retained: 86	Food-storage boxes retained/tested for removal/removed: 48/13/25	Food-storage boxes added: 35	Food-storage boxes removed: 86	Food-storage boxes removed: 86
	Privies and restrooms retained: 23 (21 privies and 2 restrooms)	Privies and restrooms retained/tested for removal/removed: 9/7/7 (and possibly one added)	Privies and restrooms retained: 23	Privies and restrooms removed: 23	Privies and restrooms removed: 23
	Ranger stations and patrol cabins retained: 18	Ranger stations and patrol cabins retained/removed: 17/1	Ranger stations and patrol cabins retained: 18	Ranger stations and patrol cabins retained/removed: 9/9	Ranger stations and patrol cabins retained/removed: 14/4
	Hitch rails and drift fences retained: 106	Hitch rails and drift fences retained/removed: 71/35	Hitch rails and drift fences retained/removed: 87/19	Hitch rails and drift fences removed: 106	Hitch rails and drift fences retained/removed: 60/46

Table B-6: Summary of Visitor Capacities, Commercial Service Allocations, and Preservation of Wilderness Character (continued)

	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
Opportunities for Solitude and Unconfined Recreation	No encounter standards	Trail Encounter Frequency (# of encounters per hour on 90% of quota season days, by encounter class): Very High – 45 High – 25 Moderate – 15 Low – 6	Trail Encounter Frequency (# of encounters per hour on 90% of quota season days, by encounter class): Very High – 59 High – 33 Moderate – 20 Low – 8	Trail Encounter Frequency (# of encounters per hour on 90% of quota season days, by encounter class): Very High – 43 High – 24 Moderate – 14 Low – 5	Trail Encounter Frequency (# of encounters per hour on 90% of quota season days, by encounter class): Very High – 25 High – 18 Moderate – 11 Low – 4
Other (Cultural Resources)	The Bearpaw Meadow High Sierra Camp would continue to be operated by a concessioner of the parks.	The Bearpaw Meadow High Sierra Camp would continue to be operated by a concessioner of the parks as in alternative 1.	The Bearpaw Meadow High Sierra Camp would be retained and would continue to be operated by a concessioner. Some expansion could occur within the existing footprint.	The Bearpaw Meadow High Sierra Camp, including any historic elements, would be removed and the area rehabilitated.	The Bearpaw Meadow High Sierra Camp would be reduced in size and its season of operation would be shortened.
Visitor Capacity					
Annual Visitor Use Days	111,000 (observed three year average 2010-12)	111,000 (estimated average, with annual variation +/- 20%)	144,000 (estimated average, with annual variation +/- 20%)	105,500 (estimated average, with annual variation +/- 20%)	77,700 (estimated average, with annual variation +/- 20%)
Commercial Use Allocation					
Total	NA	~7.6%	~7.6%	~4.2%	~7.6%
Non-stock	NA	~4.6%	~4.6%	~2.5%	~4.6%
Stock	NA	~3%	~3%	~1.7%	~3%

This page intentionally left blank.

**SECTION VI – MAPS OF MOUNT WHITNEY MANAGEMENT AREA
AND OF CURRENT COMMERCIAL SERVICE LEVELS BY TRAVEL
ZONE**

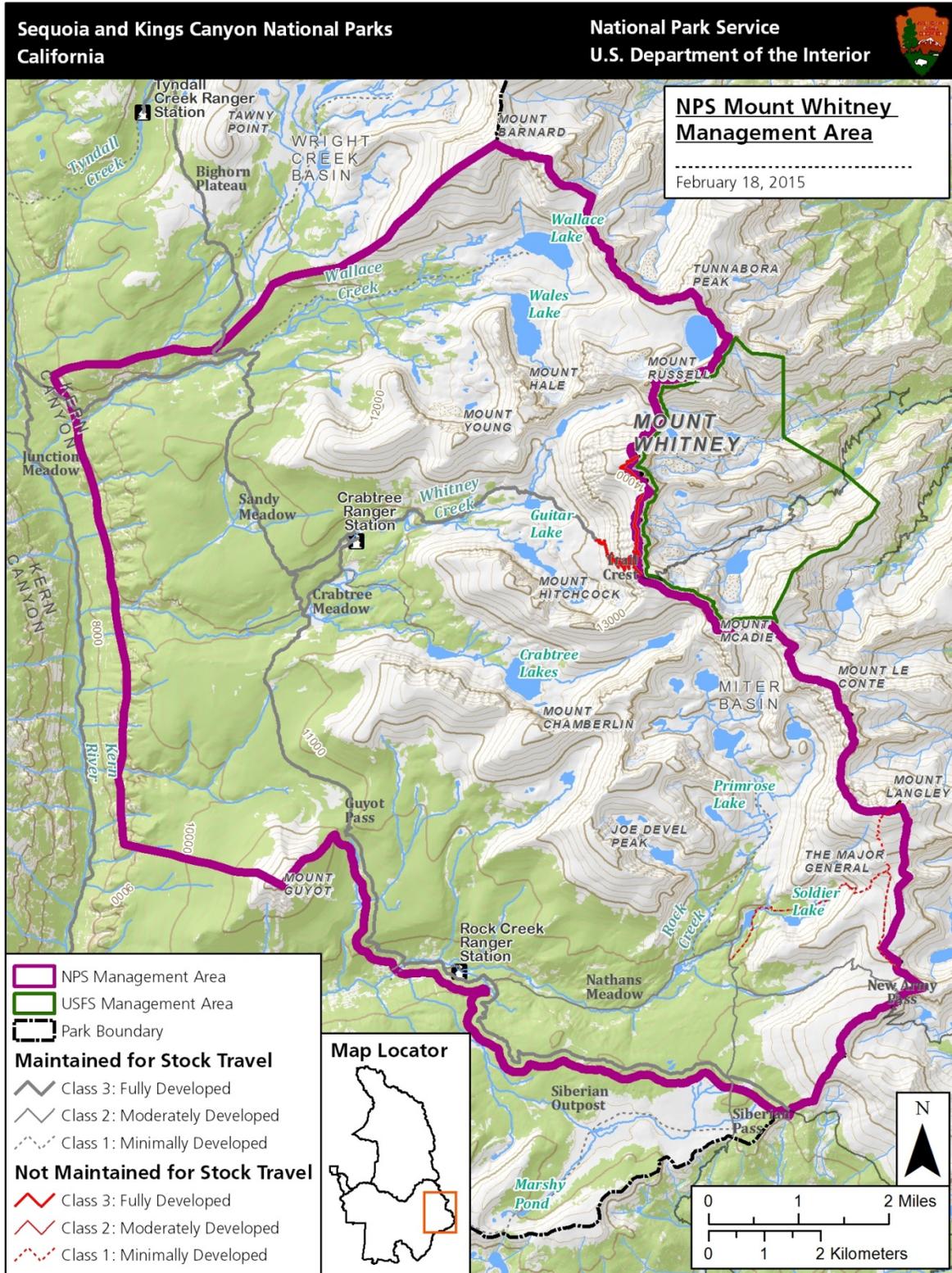


Figure B-1: Mount Whitney Management Area

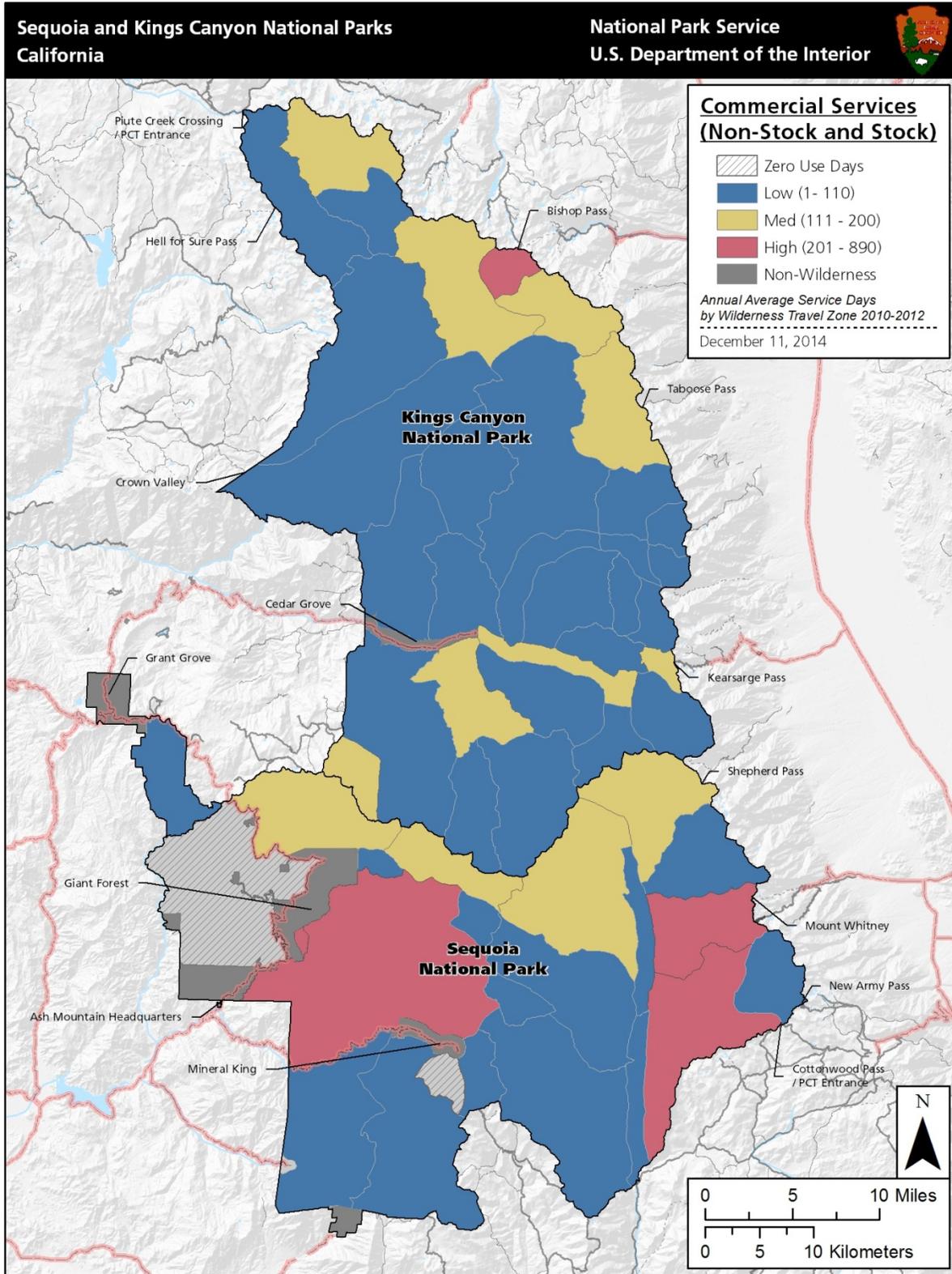


Figure B-2: Combined Non-stock and Stock Commercial Services by Wilderness Travel Zone

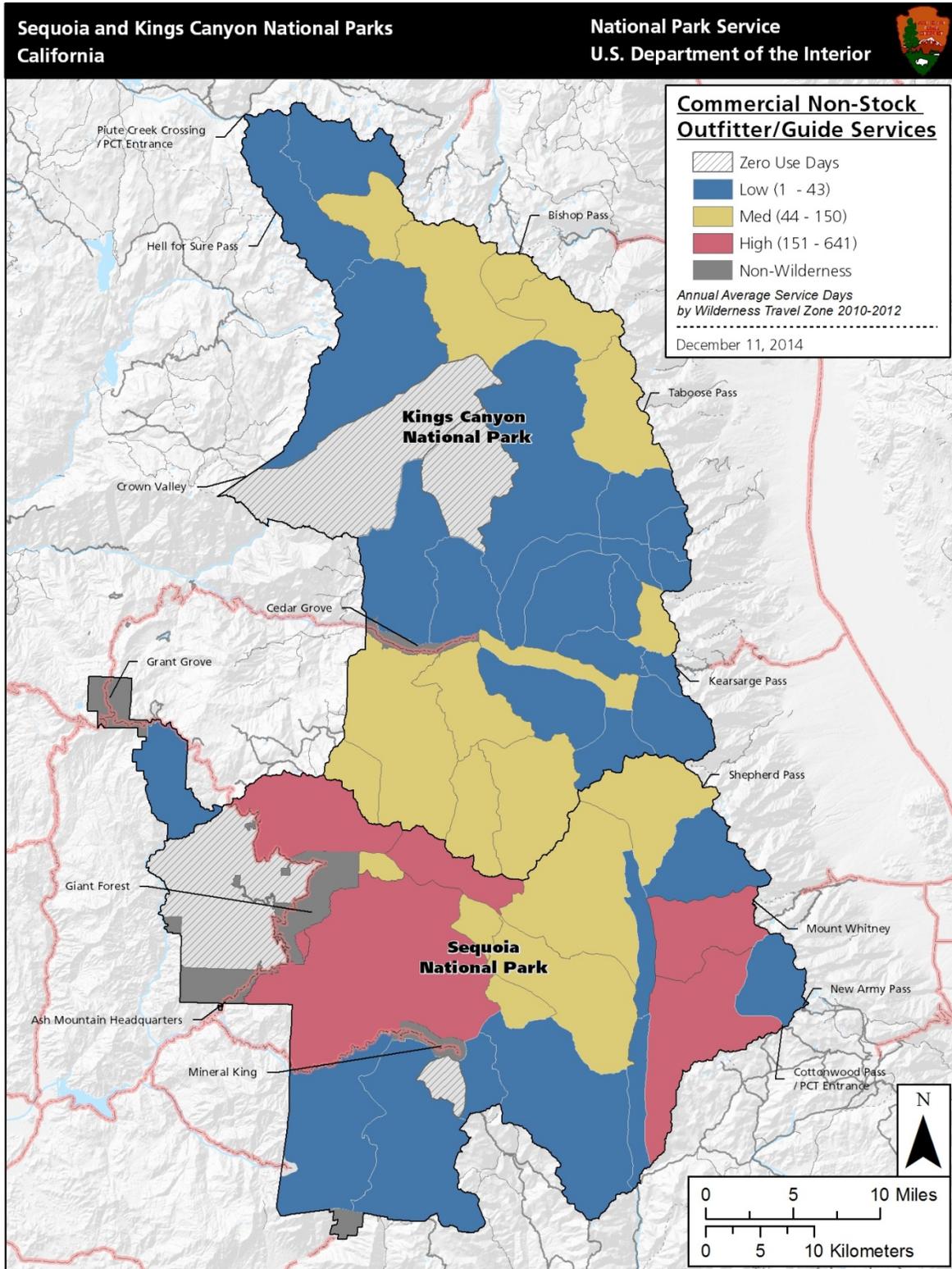


Figure B-3: Non-stock Commercial Services by Wilderness Travel Zone

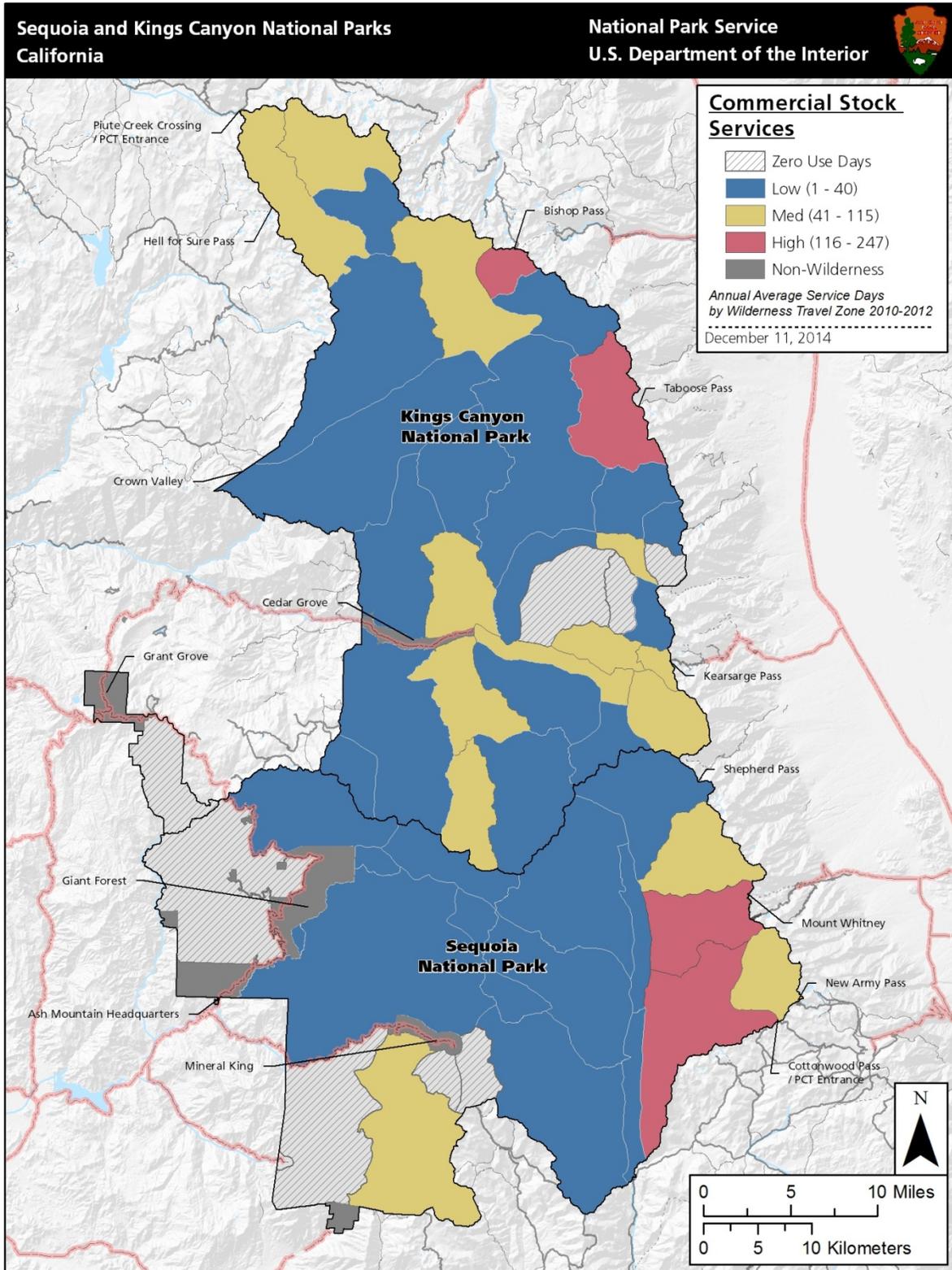


Figure B-4: Stock Commercial Services by Wilderness Travel Zone

REFERENCES

Frenzel, E. and S. Haultain

- 2014 *Summary report of stock use and grazing in wilderness meadows, Sequoia and Kings Canyon National Parks, 2013.* Sequoia and Kings Canyon National Parks, Three Rivers, CA, USA.

High Sierra Hikers Association v. U.S. Department of the Interior

- 2012 U.S. Dist. LEXIS, 74124 (N.D. Cal.)

Jackson, L.A.

- 2004 *The Mule Men: A history of stock packing in the Sierra Nevada.* Mountain Press, Missoula, Montana.

Leave No Trace

- 2002 *Leave No Trace skills and ethics: horse use.* Leave No Trace, Inc., Boulder, Colorado.

McKee, E.A., Jr.

- 2013 *Echoes of Blossom Peak: Cowboys, horsemen and history of Three Rivers.* Self-published.

National Park Service (NPS)

- 2006 *Management Policies 2006.* U.S. Government Printing Office, Washington, DC.
- 2007 *Final General Management Plan and Comprehensive River Management Plan/Environmental Impact Statement.* Sequoia and Kings Canyon National Parks, Three Rivers, CA. 657 pp.
- 2013 Director's Order 41: *Wilderness Stewardship.* Approved May 13, 2013.

Pease, James. L.

- 2011 *Parks and Under-served Audiences: An Annotated Literature Review.* Prepared for the National Park Service under contract by MPR Museum Consultants.

Tweed, W.C. and L.M. Dilsaver

- 1990 *Challenge of the Big Trees.* Sequoia Natural History Association.