

Final
General Management Plan
and
Comprehensive River Management Plan /
Environmental Impact Statement

National Park Service
U.S. Department of the Interior



Sequoia and Kings Canyon
National Parks
Middle and South Forks of the
Kings River
and North Fork of the Kern River

Tulare and Fresno Counties
California



Volume 1:
Purpose of and Need for Action /
The Alternatives /
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SEQUOIA AND KINGS CANYON NATIONAL PARKS and MIDDLE AND SOUTH FORKS OF THE KINGS RIVER AND NORTH FORK OF THE KERN RIVER

Tulare and Fresno Counties • California

FINAL GENERAL MANAGEMENT PLAN AND COMPREHENSIVE RIVER MANAGEMENT PLAN / ENVIRONMENTAL IMPACT STATEMENT

Volume 1: Purpose of and Need for Action / The Alternatives / Index

This document presents five alternatives that are being considered for the management and use of Sequoia and Kings Canyon National Parks over the next 15–20 years. The purpose of the *Final General Management Plan* is to establish a vision for what these national parks should be, including desired future conditions for natural and cultural resources, as well as for visitor experiences. The no-action alternative would continue current management direction, and it is the baseline for comparing the other alternatives (it was originally alternative B when the alternatives were first presented to the public in the winter of 2000). The preferred alternative is the National Park Service's proposed action, and it would accommodate sustainable growth and visitor enjoyment, protect ecosystem diversity, and preserve basic character while adapting to changing user groups. Alternative A would emphasize natural ecosystems and biodiversity, with reduced use and development; alternative C would preserve the parks' traditional character and retain the feel of yesteryear, with guided growth; and alternative D would preserve the basic character and adapt to changing user groups. The preferred alternative was developed by combining elements of other alternatives through a process known as Choosing by Advantages. This alternative would bring additional benefits to the parks, and it would be the most cost-effective.

This document also includes a comprehensive river management plan for the portions of the Middle and South Forks of the Kings River and the North Fork of the Kern River, which have been designated by Congress as components of the national wild and scenic rivers system. The purpose of the river management plan is to provide direction and overall guidance on the management of lands and uses within the river corridors.

The environmental impact statement, which has been prepared in accordance with the National Environmental Policy Act, relates to both the general management plan and the comprehensive river management plan. The impacts of the alternatives on natural and cultural resources, wild and scenic rivers, backcountry / wilderness, transportation, visitor experiences, private land and special use permits within the parks, park management and operations, and the socioeconomic environment are assessed. The environmentally preferred alternative is also identified.

This *Final General Management Plan and Comprehensive River Management Plan / Environmental Impact Statement* is presented in three volumes. The first volume includes the purpose of and need for action, plus the alternatives being considered and comparative tables of the alternatives and the impacts. The second volume includes the description of the affected environment, the environmental consequences, consultation and coordination, and the appendixes. The third volume contains summaries of substantive comments on the *Draft Environmental Impact Statement*, responses to those comments, and copies of letters received.

The *Draft Environmental Impact Statement* was on review from May 7 to October 6, 2004, and approximately 400 comments were received by mail, e-mail, fax, and on the parks' website. In August 2004 a series of meetings were held throughout California to discuss the plan, answer questions, and encourage substantive public comments. Substantive comments are addressed in this *Final Environmental Impact Statement*, and the text has been changed, clarified, or expanded where necessary. The alternatives have been revised with regard to special use permit cabins in the Mineral King area and hydroelectric facilities in accordance with Public Law 108-447, which was signed into law on December 8, 2004. This *Final Environmental Impact Statement* will be available for a 30-day no-action period before a record of decision is signed to document the selection of a preferred alternative and the approval of the final general management plan.

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Summary

PURPOSE OF AND NEED FOR THE PLANS

The purpose of a general management plan is to provide management direction to establish and achieve a vision for what Sequoia and Kings Canyon National Parks should be, including desired future conditions for natural and cultural resources, as well as for visitor experiences. This document presents five alternatives that are being considered for the management and use of these national parks over the next 15–20 years.

This document also includes a comprehensive river management plan for the portions of the Middle and South Forks of the Kings River and the North Fork of the Kern River, which have been designated by Congress as components of the national wild and scenic rivers system. The purpose of the river management plan is to provide direction and overall guidance on the management of lands and uses within the river corridors. In accordance with the legislation, no development or use of park lands that is inconsistent with wild and scenic river designation may be undertaken.

The environmental impact statement, which has been prepared in accordance with the National Environmental Policy Act (NEPA), relates to both the general management plan and the comprehensive river management plan. The impacts of the alternatives on natural and cultural resources, wild and scenic rivers, wilderness, transportation, visitor experiences, private inholdings and special use permits within the parks, park management and operations, and the socioeconomic environment are assessed. The environmentally preferred alternative is also identified.

Legislative Changes Since the Release of the Draft Environmental Impact Statement

Public Law 108-447 authorized the continuation of the Kaweah no. 3 hydroelectric facilities and special use permit cabins in the Mineral King

area, so the original proposals for these two matters were abandoned. Therefore, no management options are considered for hydroelectric facilities or the Mineral King permit cabins in this final document, and actions are the same under all alternatives.

Issues, Concerns, and Problems

The need for the plans is to address issues, concerns, and problems related to the management of the national parks. The following are among the reasons why the plans are needed:

- *Lack of a Comprehensive River Management Plan* — Boundaries must be established for the river corridors, and appropriate classifications must be identified for each segment. For rivers that are eligible for the wild and scenic rivers system, no actions may be taken that could adversely affect the values that qualify them for inclusion in the system.
- *An Outdated Master Plan* — The 1971 *Master Plan* for Sequoia and Kings Canyon National Parks does not meet the requirements of a general management plan, and it was developed without public involvement. Some actions are no longer appropriate.
- *Management of Cultural Resources* — Since the 1971 *Master Plan* was completed, a number of historic structures, districts, and landscapes have been identified and inventoried. The general management plan must decide what should be done to properly care for a cultural resource, and how cultural resources fit into the overall scheme of park management. While the National Park Service strives to preserve and protect cultural resources whenever possible, funding and staffing are insufficient to preserve and protect all cultural resources in the parks.
- *Unresolved Issues for Specific Developed Areas* — Previous proposals may no longer be desirable. For example, a 1980 proposal

to develop a 1,700-car parking garage at Wolverton to accommodate visitors to Giant Forest needs to be reexamined.

- *The Changing Context of the Parks in the Regional Ecosystem* — Sequoia and Kings Canyon National Parks were originally set aside to protect the sequoia groves. Adjacent lands possessing national park character have been added to the parks over the years. Yet nearby land uses continue to affect park ecosystems.

The Context for the Plans

The alternatives being considered present a management vision and direction for Sequoia and Kings Canyon National Parks, but some considered actions could require legislative action by Congress. For example, the designation of additional wild and scenic rivers would require legislation.

The context is also affected by activities occurring outside the parks. For example, Giant Sequoia National Monument was established in 2000, thus increasing the protection of giant sequoia groves. Also, adjacent areas have been designated as wilderness. While the monument and adjacent wilderness areas are administered by the U.S. Forest Service, the decisions made for this general management plan will affect resources throughout the region, just as decisions made by other governmental agencies will affect the management of Sequoia and Kings Canyon National Parks.

On a broader scale, the Sierra Nevada Ecosystem Project (SNEP) has identified five factors that are affecting the long-term health of the ecosystem and that could drastically alter it (SNEP 1996).

- loss of pre-Euro-American fire regimes
- introduced species
- air pollution
- habitat fragmentation
- rapid anthropogenic climatic change

While these ecosystem stressors are beyond the ability of any single governmental agency to control, they should be considered as decisions are made that will not only protect park resources and values but also contribute to the protection and health of the ecosystem.

THE ALTERNATIVES

Management Prescriptions

Management prescriptions are the heart of the general management plan. They are guidelines for achieving desired future conditions for both resources and visitor experiences, and they are based on public ideas presented in the scoping phases of this planning effort.

Management prescriptions are applied to geographic areas, which are referred to as zones. The size of each zone varies by alternative. Management prescriptions generally illustrate carrying capacity at a level appropriate for a conceptual general management plan. Some decisions about how management prescriptions will be implemented, however, are left to the alternatives (for example, how much stock use would be allowed throughout the parks or the amount of backcountry).

General management plans are required to identify and implement visitor carrying capacities for all areas of a park. The National Park Service defines visitor carrying capacity as the type and level of visitor use that can be accommodated while sustaining desired park resource conditions and achieving desired visitor experiences consistent with the purposes of the park. The overall strategy of implementing a carrying capacity process is a tiered approach to monitoring indicators and managing to standards and conditions. At the general management plan level of decision-making, desired resource conditions are maintained, and desired visitor experiences are achieved through the use of prescriptions. Visitor capacity includes managing all components of visitor use (levels, types, behavior, timing, and distribution). Each prescription discusses carrying capacity, including an identification

Elements Common to All Management Prescriptions

Certain elements are common to all the management prescriptions, as listed below:

- *Giant Sequoia Groves* — The giant sequoia groves — particularly Giant Forest — and the ecosystems they occupy are restored, maintained, and protected.
- *River Protection Measures* — Wild and scenic river resources and outstandingly remarkable values are protected through a number of measures and management tools. Rivers in front-country areas (classified as “recreational”) are protected by seasonal closures; zoning; limiting areas of development; managing overnight use by limiting the number of developed campsites, parking spaces, and lodging rooms; establishing development setbacks; removing facilities within floodplains; managing river-based recreation; defining river access points; prohibiting motorized watercraft; and regular inspection of the condition of resources, including the river’s outstandingly remarkable values. The capacity of roads providing access to recreational rivers is not expected to increase. Rivers in backcountry or wilderness areas (classified as “wild”) are protected by zone prescriptions, permits, overnight wilderness quotas, limits on stock party sizes, restrictions on use areas, and area closures. For both wild and recreational rivers, riverbanks would be restored as needed.
- *Light Pollution* — The night sky or natural dark is protected from light pollution to the extent possible.
- *Protection of Natural Sounds* — Opportunities are preserved in the parks for visitors to enjoy natural sounds, including quiet, to the extent possible.
- *Cultural Resources* — Archeological resources, historic structures, and cultural landscapes are inventoried, evaluated, protected, and preserved unless it is determined through environmental analysis and consultations with the California state historic preservation officer, Native American tribes, and other parties that either disturbance is unavoidable or natural deterioration is appropriate. If resources must be disturbed, techniques to adequately mitigate impacts are taken beforehand. The parks continue to consult with affiliated American Indian tribes to identify ethnographic resources in order to develop and accomplish programs in a way that respects the beliefs, traditions, and other cultural values of the Indians who have ancestral ties to park lands. Museum collections are inventoried, accessioned, and protected according to NPS standards.
- *Architectural and Site Character* — Public facilities in all zones comply with the parks’ guidelines for architectural design, lighting, and road character. The intent of the guidelines is to maintain rustic park architecture and character.
- *Accessibility for All Visitors* — New and remodeled federal and concession buildings and outdoor developed areas (e.g., campgrounds, trails, park attractions) are made accessible to all visitors, including those with disabilities, to the extent required by federal standards.
- *Sustainability* — New and remodeled buildings and facilities, as well as adaptively reused historic facilities, reflect the National Park Service’s commitment to energy and resource conservation by their energy efficiency and durability.
- *Commercial Services* — Authorized commercial services are offered in parks to make available high-quality and safe visitor experiences while protecting and maintaining the desired resource conditions in each zone. Commercial services could include various types of lodging, camping, food service or restaurants, stores, public showers, laundry facilities, transportation, gas stations, stock rides (horses or mules), and pack stations.

Concession permits or incidental business permits also provide visitor services; they need only be “appropriate” in order to be authorized. Typically these permits are for guided backcountry activities, such as pack stock, cross-country skiing, or fishing trips.
- *Utilities* — Utilities are limited to those determined to be necessary and appropriate for each site.

of the types of indicators that may be monitored and a range of actions that may be taken when indicators are not showing progress towards meeting desired condition.

For the frontcountry there are four prescriptions:

- *Low-use frontcountry* — Natural areas that provide resource-based experiences that are self-directed and include personal discovery and interaction. Examples: the Redwood Saddle and Mineral King back roads; primitive campgrounds (the Atwell Mill and South Fork campgrounds); low-use frontcountry areas (Mineral King).
- *High-use frontcountry* — Natural areas with trails, roads, or recreational and educational opportunities that draw many day visitors because of the quality of the resources and easy access. Examples: Tokopah Falls trail (nonwilderness part), Big Stump, General Grant Tree, Moro Rock, Crystal Cave.
- *Park development* (development types should not overlap)
 - *Villages* — Areas that provide concentrated visitor services (e.g., visitor centers, lodging, restaurants / informal food service, stores, and equipment rentals). Examples: Wuksachi, Grant Grove, and Cedar Grove villages.
 - *Campgrounds with amenities* — Large frontcountry campgrounds, often near villages. Diverse camping opportunities are offered, including car or RV camping and various amenities. Examples: Campgrounds at Cedar Grove, Grant Grove, Dorst, and Lodgepole.
 - *Park operation areas* — Areas with concentrated facilities for administration, maintenance, and utilities, and occasionally for visitor use. Examples: the Ash Mountain headquarters area, the Grant Grove maintenance area, the Wolverton water treatment plant.
 - *Residential areas* — Seasonal or year-round housing areas for government, contractor, and concession staff, as well as privately owned or permitted recrea-

tional housing or inholdings. Examples: Inholdings with private recreation dwellings (Wilsonia, Silver City, Oriole Lake); permit cabins (Cabin Cove near Mineral King); employee housing at Grant Grove or upper Ash Mountain.

- *High-use scenic driving* — Highways that provide sightseeing opportunities in areas of natural beauty, offer scenic views, and connect heavily visited park features and visitor service areas. Example: Generals Highway.

There are three backcountry prescriptions:

- *Major trails* — High-standard, regularly maintained, long-distance trails that access remote natural areas. They accommodate day use, are generally accessed from frontcountry trailheads, and are suitable for sustained heavy use. Examples: Pacific Crest Trail, John Muir Trail, High Sierra Trail, Rae Lakes Loop (Mist Falls/Paradise Valley), Mineral King lake basins.
- *Secondary trails* — Trails that access even more remote natural areas than major trails and that generally cannot sustain heavy use because of construction or inherent fragility of the resource through which they pass. Examples: Colby Pass–Kern Kaweah, Tehipite to the Pacific Crest Trail, Martha Lake north to the Pacific Crest Trail.
- *Cross-country areas* — Mostly remote, low-use areas where self-sustaining natural systems function largely untouched by humans. Examples: Rock Creek–Miter Basin, Dumbbell Basin.

Visions for the Management Alternatives

The alternatives are structured around a series of visions — an overall vision for the parks as a whole, and then specific visions for individual areas within the parks. The visions focus on what the parks and individual areas should be like at some time in the future. Management prescriptions are applied under each alternative consistent with the vision for a particular area.

The no-action alternative, a continuation of existing conditions and activities, is the baseline

for comparing the other alternatives (it was originally alternative B when the alternatives were first presented to the public in the winter of 2000). The preferred alternative is the National Park Service's preferred approach for managing the parks in the future. Alternative A would emphasize natural ecosystems and biodiversity, with reduced use and development; alternative C would preserve the parks' traditional character and retain the feel of yesteryear, with guided growth; and alternative D would preserve the basic character of the parks and adapt to changing user groups.

The preferred alternative was developed following an initial assessment of the impacts of the preliminary alternatives. A decision-making process known as "Choosing by Advantages" was used to bring maximum value to the process while making cost-effective decisions that would benefit national parks and the nation. The preferred alternative was selected for two major reasons: (1) it would bring additional benefits to the parks, and (2) it would be the most cost-effective. Benefits related to resource protection from other alternatives were added to the preferred alternative.

The visions for the preferred alternative are presented below. A parkwide vision is given, followed by visions for wild and scenic rivers, backcountry and wilderness management, and specific developed areas within the parks. The visions for the no-action alternative and the other three alternatives are then described, with an emphasis on the differences between the alternatives. The visions are worded in the present tense, indicating what the conditions are when the vision is achieved.

Preferred Alternative: Accommodate Sustainable Growth and Visitor Enjoyment, Protect Ecosystem Diversity, and Preserve Basic Character While Adapting to Changing User Groups

Parkwide. The parks' appeal is broadened to be more relevant to diverse user groups. Increased day use is accommodated, and overnight visitation is retained. The integrity of park resources is paramount. Stronger educational and outreach

Management Prescriptions and the Alternatives

How much of the park area is managed under each prescription depends on the vision of a particular alternative. The following are the relative amounts of management zones under each alternative as compared to the no-action alternative.

- ***No-Action Alternative*** — Backcountry predominates with a mix of low- and high-use frontcountry along Generals Highway, with several areas of park development.
- ***Preferred Alternative*** — Backcountry predominates with slightly less low-use frontcountry and slightly more high-use frontcountry along Generals Highway, with several areas of park development.
- ***Alternative A*** — More backcountry and less low- and high-use frontcountry and park development.
- ***Alternative C*** — More low- and high-use frontcountry, slightly more park development, and slightly less backcountry.
- ***Alternative D*** — More low- and high-use frontcountry, slightly more park development, and less backcountry.

programs provide enjoyment and instill park conservation values. The basic character of park activities and the rustic architecture of facilities is retained so that the parks remain strikingly different from surrounding areas. Park administrative facilities are redesigned and may be relocated outside the parks. Park facilities accommodate sustainable growth. Stock use continues with appropriate management and monitoring.

Wild and Scenic Rivers. National wild and scenic rivers, as well as rivers that are being studied for designation, are preserved in free-flowing condition, and they and their immediate environments are protected for the benefit and enjoyment of present and future generations. In managing these rivers, the National Park Service must protect and enhance the "outstandingly remarkable values" of each river segment, and it

may provide for other uses of the river area so long as such use is not inconsistent with the protection and enhancement of outstandingly remarkable values and the public's use and enjoyment of the area. The protection of natural river processes is a high priority.

For rivers that are being considered for designation as wild and scenic rivers, no actions may be taken that could adversely affect the values that qualify a river for the national wild and scenic rivers system.

Management plans for the designated river segments need not specify detailed actions. River plans may instead prescribe management zoning, desired conditions, typical visitor activities and experiences, park facilities, and management activities allowed in the river corridors. Through these prescriptions the outstandingly remarkable values and the free-flowing condition of the river corridors are protected and enhanced. Appropriate levels of public use and enjoyment are also prescribed.

Backcountry. Up to approximately 96.10% of the parks are compatible with wilderness designation or management as wilderness (no wilderness proposals are included in this plan). Natural resource conditions in the parks' backcountry and wilderness areas are improved. Facilities are evaluated for usefulness and compatibility with wilderness, and additional facilities are considered only in the nonwilderness backcountry. Most stressors to the backcountry are region-wide, such as air pollution and climate change, rather than from activities within the parks.

Kings Canyon National Park. *Cedar Grove and the Floor of the Kings Canyon* — The Kings Canyon is a glacially carved, deep canyon with waterfalls, lush meadows, campgrounds, and commercial facilities, as well as popular backcountry access. The identity of the canyon is strengthened and enhanced, but the area remains less visited and quieter than Grant Grove or Giant Forest. Visitors come to see the canyon's special features. The basic character of camping and backcountry access remain. Cedar Grove village is made more efficient and offers a mod-

estly greater variety of overnight accommodations. The area's season includes more spring and fall time.

Grant Grove — Grant Grove is a pristine sequoia grove with the world's third largest tree (the General Grant Tree) and the previously logged Big Stump Grove. The area continues as a very popular destination, with a highly visited sequoia grove. Grant Grove village offers day and overnight activities. Incompatible visitor and operational functions are separated. Facility development and use are limited to be consistent with sustainable water and sewer capacity. Circulation is redesigned and improved to reduce congestion.

Sequoia National Park. *Dorst / Halstead Meadow / Cabin Creek* — Dorst, Halstead Meadow, and Cabin Creek are within a forested area of open evergreen stands, meadows, and small sequoia groves. The Dorst area provides diverse camping opportunities and some facilities along Generals Highway. It serves as the trailhead to Muir Grove.

Wuksachi — Wuksachi is a new developed area set amid rocky outcrops and surrounded by evergreen forest. Wuksachi village provides year-round facilities for lodging and food service, plus residential and park operations areas in accordance with the concession contract.

Lodgepole — Lodgepole lies within the beautiful Tokopah Canyon of the Marble Fork of the Kaweah River. The Tokopah Falls trail is a popular day hike. Lodgepole remains a very popular campground with amenities, the dominant day-use commercial site, a river recreation site, a wilderness trailhead, and a principal employee residential area. Lodgepole offers expanded day activities and services, while continuing to provide overnight camping. Incompatible park and visitor functions are separated.

Wolverton — Wolverton, a large, open meadow in a forested valley, provides the main day use staging area for Giant Forest shuttles, plus backcountry access; winter uses are expanded.

Giant Forest — The giant sequoia grove at Giant Forest remains Sequoia National Park's primary day use feature. The grove, site of a major restoration effort, illustrates the premiere, naturally functioning giant sequoia ecosystem, with 6 of the 10 largest trees in the world, meadows, and abundant wildlife. The desired visitor experience is a walk in the woods to see the Big Trees. Visitors focus on the Giant Forest museum / Big Trees Trail area, the General Sherman Tree, Moro Rock, and Crescent Meadow. The extensive trail system is retained. Private vehicular access to the grove is retained but is limited by parking capacities; during peak-use periods some roads and/or parking areas are closed and replaced by shuttle system access.

Crystal Cave — Crystal Cave provides the primary public opportunity to experience the parks' significant cave resources.

Ash Mountain / Foothills — The foothills of Sequoia National Park represent some of the best protected foothill wildlands in the Sierra Nevada, featuring blue oak woodlands, chaparral, riparian corridors, and abundant wildlife. Increased levels of recreational use are accommodated primarily along the Middle and North Forks of the Kaweah River. The Ash Mountain area is the parks' primary administrative and operations center, and the area continues to have some seasonal as well as permanent residences for essential personnel. A partnership is developed with the gateway community to meet park needs and to retain the character of a small, rural community.

Mineral King — Mineral King Valley represents an extraordinary and spectacular experience in the Sierra Nevada because of its unusual metamorphic geology and appearance. Mineral King Road continues to provide access to the alpine backcountry, public recreation, campgrounds, and the Silver City private cabins and resort. Qualities that made the road corridor eligible for listing on the National Register of Historic Places are maintained and preserved, while the road provides increased public recreational access to the alpine backcountry and historic

resources. Slightly higher levels of public use are accommodated.

Dillonwood — Dillonwood, the previously logged sequoia grove that was added to Sequoia National Park in 2000, is protected, and modest use levels are accommodated. Dillonwood provides backcountry access through a sequoia grove. Day use is allowed. There are experiments with a variety of sequoia forest management techniques that are compatible with the NPS mission. (This is an interim vision pending site-specific planning.)

The Other Alternatives Considered

Parkwide Visions. Under the no-action alternative the parks are managed as they are now in accordance with approved plans (such as development concept plans, and the 1996 *Giant Forest Interim Management Plan*); negative resource impacts and visitor demands are responded to by relocating development, reducing some uses, or confining new developed areas. Visitor uses are reassessed and revised as new information emerges about natural and cultural resource impacts and visitor needs. Current facilities are inadequate for park needs and visitor use levels, and crowding is common in some areas. Stock use continues with some differences in appropriate management and monitoring under the no-action alternative and alternatives C and D; no stock use is allowed under alternative A.

Under alternative A the parks are natural resource preserves; they are primarily valued because they contain publicly owned resources that will be conserved for the future. Levels of use are lower than at present, and visitor experiences are more directly connected to natural resources and provide more solitude with less development. The parks contrast strongly with surrounding lands that are under increasing pressure for use and development. Park managers aggressively cooperate with the managers of surrounding lands to enhance range-wide biodiversity.

Alternative C preserves traditional park character and retains the feel of yesteryear, where

experiences are more reminiscent of how visitors used the parks in the past. This is conveyed through rustic architecture, but not living history programs. The lower impact recreational activities popular from the 1920s to the 1960s are emphasized, providing a strikingly different experience from that in an urban setting. Redesigned developed areas accommodate limited growth; overnight stays are encouraged. Negative impacts on natural resources are controlled, so as to maintain or improve resource conditions.

Under alternative D the parks preserve some of their traditional character and rustic architecture, but diverse new user groups and uses are encouraged. Day use is more common. Facilities are expanded to meet users' needs, while frequent interpretive programs are offered to educate, entertain, and instill a sense of park conservation values. Negative impacts on natural resources are controlled or mitigated, so as to maintain or improve resource conditions.

Wild and Scenic Rivers. The vision for wild and scenic rivers is the same under all alternatives. Wild and scenic rivers, as well as rivers that are being studied for designation, are preserved in free-flowing condition, and they and their immediate environments are protected for the benefit and enjoyment of present and future generations. In managing these rivers, primary emphasis is given to protecting the outstandingly remarkable values of each river segment, including their aesthetic, scenic, historic, archeological, and scientific features. The protection of natural river processes is a high priority.

Backcountry. Under the no-action alternative over 83% of the parks are designated wilderness; these and additional areas are managed as wilderness. Under alternative A up to 96.11% of the parks are compatible with wilderness designation and/or management as wilderness. Slightly less area under alternative C (96.09%) is compatible with wilderness designation and management, while under alternative D the area would decrease to 89.37% of the parks. No wilderness proposals are included in this plan. Under all alternatives natural resource condi-

tions in the parks' backcountry and wilderness areas are improved, but under alternatives C and D improvements only happen in some areas.

Under the no-action alternative the parks' backcountry and wilderness areas continue to have a variety of permitted activities and commercial operations. Existing facilities remain. Under alternative A visitor use is reduced from the present level; social conflicts are reduced while there are more opportunities for solitude; high-impact activities are eliminated (e.g., no campfires); and facilities are removed where feasible. Under alternative C party sizes and use levels are limited and dispersed, reducing the need for onsite regulation. Most commercial and park facilities remain. Under alternative D party sizes and use levels are higher than under alternative C, with higher levels of onsite regulation. Uses are separated and may be concentrated in high-use areas. Additional facilities may be added in the nonwilderness backcountry if needed.

Kings Canyon National Park. *Cedar Grove and the Floor of the Kings Canyon* — Under the no-action alternative and alternative A, the Kings Canyon is visited mostly by campers and hikers who come to enjoy the area's quiet or by persons passing through to access the backcountry. Under alternative C the identity of the Kings Canyon is strengthened and enhanced, but the area remains less visited and quieter than Grant Grove or Giant Forest. Under alternative D the Kings Canyon becomes a major park feature equal to Grant Grove or Giant Forest, with visitors drawn by the area's strong identity as the "quiet Yosemite." In all alternatives backcountry access remains an important function. The area's season is lengthened into the spring and fall. Visitors come to see the canyon's special features. The traditional character of camping and backcountry access remain.

Cedar Grove village is a low-use area with an extended season under the no-action alternative. Under alternative A there is a focus on resource preservation, facilities at Cedar Grove village are reduced in number, and visitation is less than at present. Under alternative C the village is enlarged slightly and offers a greater variety of

overnight accommodations. The area's season is lengthened to include more spring and fall time. Under alternative D the village is expanded to provide improved opportunities for more camping and lodging.

Grant Grove — Grant Grove continues as a very popular destination under the no-action alternative, with a highly visited sequoia grove. Grant Grove village offers day and overnight activities, mixed with other park development and uses. Circulation and congestion problems remain. Under alternatives A, C, and D Grant Grove continues as a popular destination, with visitation to the sequoia grove possibly increasing under alternatives C and D. Under alternative A more of the area is returned to natural conditions, with fewer commercial facilities. Under alternative C, however, Grant Grove village becomes a large destination village, with facilities redesigned for more day and overnight use and improved circulation. Under alternative D Grant Grove village is expanded, with more facilities for day and overnight use. Under alternatives C and D overlapping and incompatible uses are separated. Circulation and congestion problems are addressed under both alternatives, with new facilities provided under alternative D.

Sequoia National Park. *Dorst / Halstead Meadow / Cabin Creek* — The Dorst area provides camping and some facilities along the Generals Highway under the no-action alternative and alternatives C and D, and it serves as the trailhead to Muir Grove. Under alternative A the Dorst area provides less frontcountry camping; resource conditions and visitor experiences are improved. Under alternative D more opportunities are provided for visitors.

Wuksachi — Wuksachi village provides year-round facilities for lodging and food service, plus residential and park operations areas in accordance with the concession contract. Under alternative D Wuksachi village is expanded to provide diverse day and overnight uses, including picnic areas, trails, a traditional mix of overnight facilities (lodges and cabins), and food service, as well as areas for residential purposes and park operations.

Lodgepole — Lodgepole is a very popular campground with amenities, the dominant day-use commercial site, a river recreation site, a wilderness trailhead, and a principal employee residential area, all near one another. Under alternative A Lodgepole provides reduced levels of day use and campgrounds that are separated from operations. Under alternative C Lodgepole is redesigned and expanded, with an emphasis on overnight use; day uses are relocated to other areas. Under alternative D expanded day activities and services are offered at Lodgepole, while overnight camping is still provided. Under alternatives C and D incompatible uses are separated.

Wolverton — Under all alternatives Wolverton provides summer picnicking, winter activities, day-hiking trails, and a backcountry trailhead. It is the main day use staging area for Giant Forest shuttles. It also functions as a summer and winter trailhead. Under alternatives C and D backcountry access and winter uses are expanded.

Giant Forest — The vision for the Giant Forest area is the same under all the alternatives. It remains Sequoia National Park's primary day use feature. The desired visitor experience is a walk in the woods to see the Big Trees. Visitors focus on the Giant Forest museum / Big Trees Trail area, the General Sherman Tree, Moro Rock, and Crescent Meadow. The extensive trail system is retained. Private vehicular access to the grove is retained but is limited by parking capacities; during peak-use periods some roads and/or parking areas are closed and replaced by shuttle system access.

Crystal Cave — Crystal Cave provides the primary public opportunity to experience the parks' significant cave resources. Under alternative D additional types of tours are offered to provide for diverse visitor experiences.

Ash Mountain / Foothills — Under the no-action alternative the foothills accommodate low levels of year-round visitor use. Under alternative A the foothills area has improved resource conditions, and limited levels of recreational use are accommodated primarily along the Middle Fork of the Kaweah River. Under alternatives C and

D increased levels of recreational use are accommodated along the Middle and North Forks of the Kaweah River. The Ash Mountain area remains the parks' primary administrative and operations center under the no-action alternative and alternatives C and D, and the area continues to have some seasonal as well as permanent residences. Under alternative A park operations and residential areas are relocated outside the park.

Mineral King — Mineral King Road continues to provide access to recreational cabins, a small resort, campgrounds, and the alpine backcountry under the no-action alternative. Low levels of visitor services and activities are accommodated along the corridor. Under alternative A lower levels of visitor services and activities are accommodated along the corridor.

Under alternatives C and D Mineral King Road continues to provide access to recreational cabins, a small resort, and the alpine backcountry. Under both alternatives the qualities that made the road corridor eligible for listing on the national register are maintained and preserved. But under alternative D slightly higher levels of public use are accommodated.

Dillonwood — The vision for Dillonwood under all alternatives is an interim vision pending site-specific planning. Under the no-action alternative Dillonwood is open to pedestrian use. Under alternative A the sequoia grove at Dillonwood is protected, and low use levels are accommodated. Under alternatives C and D Dillonwood provides primitive camping facilities and backcountry access within a sequoia grove. In addition under alternative D, a group education primitive area is provided, and day use exploration is allowed. Under all alternatives there are experiments with a variety of sequoia forest management techniques.

Environmental Consequences

The potential effects of the five alternatives are analyzed for natural resources, wild and scenic rivers, backcountry (including wilderness), cultural resources, transportation, visitor experiences, land uses (private land and special use

permits), park operations, and the socioeconomic environment (see the text box on the next page for specific topics). The analysis is the basis for comparing the advantages and disadvantages of the alternatives. Impacts are described in terms of whether they are negligible, minor, moderate, or major, and how long they would last.

Cumulative Impacts

Cumulative impacts on the environment result from the incremental (i.e., additive) impact of an action when added to other past, present, and reasonably foreseeable future actions, regardless of who undertakes such actions. Cumulative impacts can result from individually minor but collectively major actions over a period of time.

For this planning effort, actions within the parks or by others that have occurred within the region or would occur in the foreseeable future were identified. For natural resources, findings from the Sierra Nevada Ecosystem Project were used to provide the overall regional context for cumulative effects. Specific actions that could affect natural resources within the parks and in their vicinity were also considered. For example, air quality impacts affecting the parks result primarily from actions throughout the entire airshed, so the cumulative impact area for this topic is the airshed including the San Joaquin Valley.

Impairment of Park Resources or Values

The National Park Service is prohibited from impairing park resources and values by the National Park Service Organic Act. An impairment is an impact to a natural or cultural resource in the parks that “would harm the integrity of park resources or values, including the opportunities that otherwise would be present for the enjoyment of those resources or values” (NPS *Management Policies* 2001, sec. 1.4.5).

The determination of impairment is closely tied to the outcome of the natural and cultural resource impact analysis. This determination is also made with a parallel consideration of the park's legislative mandates (purpose and significance), and resource management objectives as

<i>Impact Topics Considered in this Environmental Impact Statement</i>		
The environmental impact statement analyzes the following impact topics, based on the major values or issues identified in the planning process, as well as applicable laws and executive orders. Natural Resource Topics* • Cave resources • Water resources, including hydrology, water quality, and floodplains • Vegetation and soils, including general vegetation, sequoia groves, and meadow, riparian, and aquatic communities • Wildlife and wildlife habitat • Threatened, endangered, and sensitive species • Air quality Wild and Scenic Rivers • Effects of the alternatives on wild and scenic rivers Backcountry / Wilderness • Effects of the alternatives on backcountry or wilderness management	Cultural Resource Topics* • Historic structures, districts, and cultural landscapes • Archeological resources • Ethnographic resources and landscapes • Museum collections and archives Transportation • Effects of transportation-related actions on visitor experiences Visitor Experience • Park character • Visitation • Educational opportunities (including educational facilities, programs, and outreach) • Recreational opportunities (including opportunities to experience a full range of park resources, opportunities for traditional recreational experiences, opportunities for nontraditional or new recreational experiences, and opportunities for stock use) • Visitor services (including overnight lodging, camping opportunities, and other facilities and services)	tunities, and other facilities and services) Land Use: Private Land and Special Use Permits • Privately owned lands within the parks (inholdings) • Special use permits • Boundary adjustments Park Management, Operations, and Facilities • Staffing, infrastructure, visitor facilities, and services • Operations of non-NPS entities, including the Sequoia Natural History Association, concessioners, commercial permittees, partners, and volunteers • Other federal agencies Socioeconomic Environment • Local and regional economies • Special use permits and inholdings • Park concessioners • Park staffing and budget

* Topics requiring a finding related to impairment.

defined in relevant park plans. Impairment would be a major adverse impact from actions taken inside the parks.

The impact analysis for this document shows that no park values or resources would be impaired by actions considered under any alternative.

Summary of Impacts and the Environmentally Preferred Alternative

The following discussion summarizes impacts of all alternatives considered, in accordance with the National Environmental Policy Act. After the environmental consequences of the alternatives were analyzed, each alternative was evaluated as to how well it met the goals of the National Environmental Policy Act. The preferred alternative, which was developed by using the Choosing by Advantages process as a way to ensure the consideration of environmental goals,

was determined to be the environmentally preferred alternative.

Impacts Common to All Alternatives

The following discussion applies to all alternatives as a result of Public Law 108-447 authorizing the continuation of the Kaweah no. 3 hydroelectric facilities and special use permit cabins in the Mineral King area.

Natural Resource Impacts. There would be no additional effects on water resources from the operation of small-scale hydroelectric facilities. Requiring Mineral King permit cabin owners to meet state and local wastewater regulations would eliminate possible localized sources of pollution, with a minor, beneficial, long-term effect.

Wild and Scenic Rivers. The operation of hydroelectric facilities would have minor, adverse impacts on river flows but would not preclude the inclusion of these river segments in the wild and scenic rivers system. Impacts on scenic values would be moderate, adverse, and long term. Impacts of recreational activities would be moderate and beneficial.

Cultural Resources. The impacts of preserving facilities associated with the Kaweah no. 3 hydroelectric generation system would be minor, beneficial, and long term. A cultural resource preservation plan for private cabins in the Mineral King Valley, as well as a decision process for determining whether to replace cabins damaged by natural disaster, would result in minor to moderate, long-term, beneficial impacts.

Visitor Experience. Impacts from the continued operation of the Mineral King dams for use in hydroelectric power generation are expected to be negligible, while impacts related to continued recreational activities are expected to be moderate, beneficial, and long term.

Private Land and Special Use Permits on Park Land. Impacts of hydroelectric utilities on public land would be negligible to minor, beneficial, and long term. Impacts of special use permits for private cabins in the Mineral King

area would be major, adverse, and long term, despite the minor to moderate, beneficial impacts from the preservation of the cabin community because the general public would still not have access to public land.

Park Management, Operations, and Facilities. There would be no additional impacts on park operations from continued private operation of hydroelectric facilities or from requiring permit cabin owners to meet state and local standards for utility systems. Continuing the present partnership with the Mineral King special use permit community to develop maintenance standards and to establish and maintain a water system in West Mineral King for cabins and the NPS ranger station would result in moderate, beneficial, long-term impacts.

Socioeconomic Environment. Impacts from the continued operation of hydroelectric facilities are expected to be minor, beneficial, and long term as a result of compensation to the park. Special use permits for private cabins in the Mineral King Valley would result in ongoing annual fee income to the park, plus property taxes to Tulare County, resulting in negligible to minor, beneficial, and long-term impacts.

Impacts of the Preferred Alternative

Natural Resource Impacts. Natural resource conditions would improve under the preferred alternative as a result of more sustainable development and removing development from sequoia groves, resulting in minor to major, beneficial, long-term impacts both parkwide and in specific areas. Over time air quality under this alternative would improve as a result of lower vehicle emissions and use of transit; however, the cumulative impacts of poor regional air quality would continue to be major, adverse, and long term despite improved air quality as a result of this alternative.

Impacts on Wild and Scenic Rivers. The wild and scenic river plan would generally result in minor to moderate, beneficial, long-term impacts on designated and suitable river segments. Outstandingly remarkable values would be protected.

Impacts on Backcountry and Wilderness.

While 83.5% of the parks have been designated by Congress as wilderness, up to 96.10% would be compatible with management as wilderness, resulting over the long term in negligible to minor, beneficial impacts on wilderness recreational opportunities and values. Potentially establishing an additional high Sierra camp in the Hockett Plateau backcountry would have a negligible, adverse, long-term impact on wilderness recreational opportunities and values.

Cultural Resource Impacts. Identifying, inventorying, evaluating, preserving, and interpreting cultural resources would result in minor, beneficial, long-term impacts.

Transportation Impacts. Transit, road, and parking improvements would facilitate carrying capacity of the parks and reduce seasonal congestion, resulting in major, long-term, beneficial impacts in several areas.

Visitor Experience Impacts. Improving popular visitor areas and trails, as well as educational and recreational opportunities, and updating facilities would result in major, beneficial visitor experience impacts over the long term.

Impacts on Private Land and Special Use Permits. The preferred alternative would result in minor, beneficial, long-term impacts because public use of public land would be increased by acquiring a small amount of private land in and around the parks for public access. Private use of private land would generally be allowed to continue.

Impacts on Park Management and Socio-economic Impacts. Park operations would be improved as facilities and infrastructure were updated to be more sustainable and some facilities were relocated outside the parks, resulting in minor to moderate, beneficial impacts over the long term. Additional staffing and more housing in the surrounding community would have minor to moderate beneficial impacts on the local economy. Approved concession and other projects would be implemented in phases, resulting in moderate to major, short-term impacts for

individual businesses. Impacts on the regional economy would be negligible.

Impacts of the Other Alternatives Considered

Natural Resource Impacts. Under the no-action alternative there would continue to be localized, minor to moderate, adverse, long-term impacts on some natural resources. Under alternative A natural resource conditions would improve as the result of less visitation, use limits, reduced development, and no development in sequoia groves, resulting in minor to major, beneficial impacts over the long term, both parkwide and in specific areas.

Development under alternatives C and D would have minor to moderate, adverse impacts on natural resources during construction. Under both alternatives some natural resources would continue to sustain localized minor to moderate, adverse impacts over the long term.

Under all the alternatives air quality would improve because of lower vehicle emissions; however, regional air quality would continue to be subject to major, adverse, long-term impacts.

Impacts on Wild and Scenic Rivers. Under the no-action alternative and alternatives A, C, and D, impacts on wild and scenic river segments would generally be negligible to minor and beneficial over the long term.

Impacts on Backcountry and Wilderness. While 83.5% of the parks have been formally designated as wilderness, 96.10% under the no-action alternative would continue to be compatible with wilderness management and would be managed to preserve wilderness characteristics, resulting in negligible, beneficial, long-term impacts on wilderness recreational opportunities and values. Impacts would be similar under the other alternatives, except up to 96.11% of the parks would be compatible with management as wilderness under alternative A, 96.09% under alternative C, and 89.37% under alternative D.

Under alternative D additional areas would be managed as nonwilderness backcountry, allow-

ing the consideration of an additional high Sierra camp in the Hockett Plateau backcountry (similar to the preferred alternative), resulting in a minor, adverse impact on wilderness recreational opportunities and values.

Cultural Resource Impacts. Identifying, inventorying, evaluating, preserving, and interpreting cultural resources under the no-action alternative and alternatives C and D would result in minor, long-term, beneficial impacts. Under alternative A the loss of cultural resources would result in moderate to major, adverse, permanent impacts.

Transportation Impacts. While severe seasonal congestion would continue as a major, adverse, long-term impact in several park areas under the no-action alternative, the use of a transportation system at Giant Forest under all alternatives would somewhat increase the visitor carrying capacity in this area. Use limits under alternative A would result in a reduced carrying capacity, with major, adverse, long-term impacts on visitation.

Under alternative C the parks' carrying capacity would be somewhat increased, and seasonal congestion would be addressed with transit, as well as some road and parking revisions, resulting in moderate, beneficial impacts in several park areas. The use of transportation systems would be explored throughout the parks.

Under alternative D the parks' carrying capacity would be further increased, and seasonal congestion would be addressed by means of transit throughout the parks, a major road bypass, a multistory parking garage at Wolverton, and road and parking improvements, resulting in major, beneficial, long-term impacts in several park areas.

Visitor Experience Impacts. Under the no-action alternative popular visitor areas and trails would remain crowded, and educational opportunities would be limited. The gradual improvement of facilities would result in minor to moderate, beneficial impacts on visitor experiences over the long term.

Under alternative A reducing the amount of visitor facilities and trails would improve local conditions, resulting in minor to moderate, long-term, beneficial impacts on visitor experiences for those visitors able to enter the parks. Educational outreach would be increased, resulting in some minor, beneficial impacts locally.

Under alternative C popular visitor areas and trails would be improved or expanded, as would traditional ranger naturalist educational programs. Also, traditional recreational opportunities would be provided, and facilities would be updated, resulting in moderate, beneficial, long-term impacts on visitors.

Under alternative D popular visitor areas and trails would be improved, educational and recreational opportunities enhanced, and facilities updated, resulting in major, beneficial, long-term visitor experience impacts.

Impacts on Private Land and Special Use Permits. Under the no-action alternative and alternatives C and D, private land within the parks would continue subject to updated land protection plans; impacts would generally be minor, beneficial, and long term for private landowners, with negligible, adverse impacts on public use. The Boy Scout camp would continue under the no-action alternative, with negligible, long-term, adverse impacts on public use of public land.

Under alternative A acquiring private lands within the parks would result in moderate, beneficial impacts in terms of public use, but adverse impacts on private landowners.

Impacts on Park Management and Socio-economic Impacts. Under all the alternatives park operations would be gradually improved as facilities and infrastructure were updated and made more sustainable. Also, impacts on park operations from the assistance of other groups (the natural history association, volunteers, concessioners, commercial permit or incidental business permit holders, and partners) would be minor to major and beneficial.

Under the no-action alternative impacts on park operations due to an aging infrastructure, inadequate housing, and insufficient staffing would be minor to moderate and adverse over the long term.

Under alternative A eliminating the use of stock, helicopters, and snowmobiles would have major, adverse impacts on park operations even as facilities were updated to be more sustainable and some facilities were relocated outside the parks. Fewer facilities in the parks could result in moderate beneficial impacts on the local

economy to the extent that facilities were provided outside the parks by private entrepreneurs.

Under alternatives C and D additional staffing and more housing in adjacent communities would have minor impacts on the local economy, with the largest staffing increase under alternative D.

Under all the alternatives approved concession and other projects would be implemented in phases, resulting in moderate to major, short-term impacts to individual businesses, but negligible impacts regionwide.

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Abbreviations

The following abbreviations are used in the text or in bibliographic citations.

BLM	Bureau of Land Management
Caltrans	California Department of Transportation
CBA	Choosing by Advantages
CCC	Civilian Conservation Corps
CFR	<i>Code of Federal Regulations</i>
FERC	Federal Energy Regulatory Commission
HABS	Historic American Buildings Survey
HAER	Historic American Engineering Record
HALS	Historic American Landscapes Survey
NPS	National Park Service
PL	Public Law
NEPA	National Environmental Policy Act
USC	<i>United States Code</i>
USFS	U.S. Forest Service

An Overview of this Document

This *Final General Management Plan and Comprehensive River Management Plan / Environmental Impact Statement* is presented in three volumes.

Volume 1 includes the following elements:

- **The Purpose of and the Need for the Plans** — This part explains why the plans are being done; guidance for planning in terms of (1) the purpose and significance of the parks; (2) legislation, executive orders, and policies that affect the management of Sequoia and Kings Canyon National Parks, and (3) public input on the planning process that has been received through meetings and comments on planning newsletters and a workbook. The values and tradeoffs that are being considered in this planning process, and the decisions that need to be made, are also discussed. Finally, how this document relates to other planning efforts and documents is delineated.
- **The Alternatives, Including the Preferred Alternative** — This part describes management prescriptions for the parks, the alternatives being considered (including the preferred alternative, which is the National Park Service’s proposed action), mitigating measures included in the alternatives, and a summary of the environmental impacts. The alternatives are programmatic in terms of providing visions for the long-term management of the parks, as well as specific areas within the parks, but they also propose actions related to achieving a particular vision or management prescription.

Together, these two parts provide the information that is needed to compare the alternatives and their impacts, to decide how well each alternative would meet the mission of the parks, which is “to protect forever the greater Sierran ecosystem — including the sequoia groves and high Sierra regions of the parks — and its natural evolution, and to provide appropriate opportunities to present and future generations to

experience and understand park resources and values.” The sections of the *Comprehensive River Management Plan* are incorporated throughout the first two parts and are clearly identified by headings.

Volume 2 is the analytical part of the environmental impact statement and consists of the following elements:

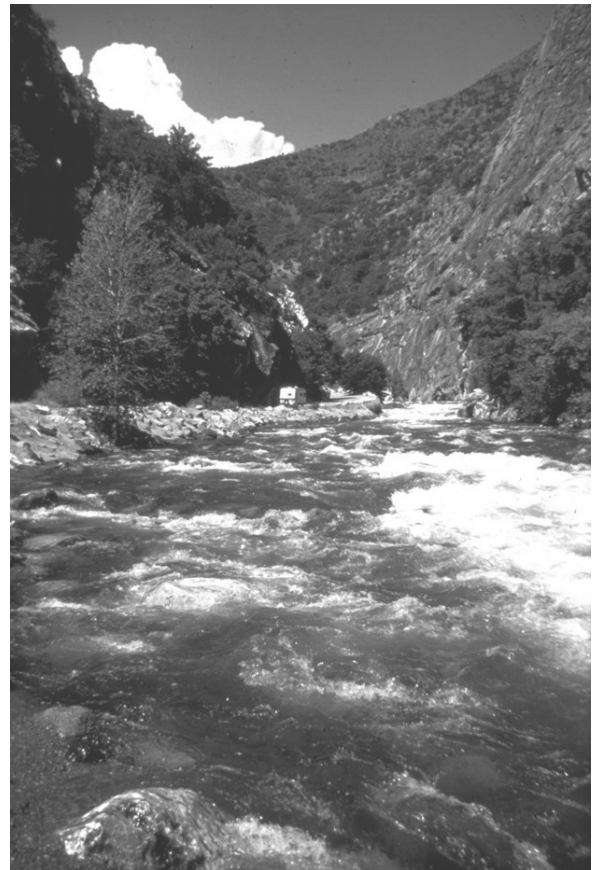
- **The Affected Environment** — The environment of the parks is described, emphasizing those aspects that would be affected by implementing any of the alternatives being considered. Natural resources, wild and scenic rivers, backcountry and wilderness, cultural resources, visitor use, land use, park operations, and the socioeconomic environment are described.
- **Environmental Consequences** — The impacts or effects of implementing the proposed actions on the affected environment are described. For each impact topic, the context, duration, and intensity of the impacts are analyzed. As a result of this analysis, a decision is made as to whether a specific action would leave a natural and cultural resource “unimpaired for the enjoyment of future generations.”

The rest of volume 2 includes “Consultation and Coordination,” a description of the process that was used to develop the preferred alternative, appendixes that include backup material for the planning process and the analysis of environmental impacts, a glossary, a selected bibliography, and an index of general terms.

Volume 3 consists of a summary of substantive comments on the *Draft General Management Plan and Comprehensive River Management Plan / Environmental Impact Statement*, NPS responses to those comments, and copies of letter from federal, state, and local governmental agencies; organizations; and selected individuals who made substantive comments.

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Purpose of and Need for the Plans



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Overview

This document presents the alternatives that are being considered for a general management plan for Sequoia and Kings Canyon National Parks. This document also includes a comprehensive management plan for the portions of the Middle and South Forks of the Kings River and the North Fork of the Kern River, which have been designated by Congress as components of the national wild and scenic rivers system.

This document has been prepared in accordance with the National Environmental Policy Act (NEPA), including an analysis of the impacts of the alternatives. Impacts are analyzed for natural and cultural resources, wild and scenic rivers, backcountry and wilderness, transportation, visitor experiences, private land and special use permits within the parks, park management and operations, and the socioeconomic environment. The environmentally preferred alternative is also identified.

PURPOSE OF THE PLANS

General Management Plan

The purpose of the *General Management Plan* is to establish a vision for what Sequoia and Kings Canyon National Parks should be, including desired future conditions for natural and cultural resources, as well as for visitor experiences. Four alternatives, plus the preferred alternative (the National Park Service's proposed action), are presented for management and use over the next 15–20 years. The alternatives have been developed based on input from interested and affected publics. The document also identifies other action plans that will be needed to implement approved actions in order to achieve the visions and goals established in this document.

Wild and Scenic Rivers Comprehensive Management Plan

In 1987 Congress designated portions of the Kings River and the North Fork of the Kern River as wild and scenic rivers to protect their

free-flowing condition and to protect and enhance the outstandingly remarkable values of the river corridors. The extent of river corridors within the parks include 61.2 miles of the Middle and South Forks of the Kings River and 28.9 miles of the North Fork of the Kern River.

The Wild and Scenic Rivers Act requires the preparation of a comprehensive management plan for each river segment to provide for the protection of river values. The plan must address resource protection, development of lands and facilities, user capacities, and other necessary or desirable management practices to meet the purposes of the act.

The purpose of the *Comprehensive River Management Plan* for the Middle and South Forks of the Kings River and the North Fork of the Kern River is to provide direction and overall guidance on the management of lands and uses within the river corridors. As stated in the 1987 legislation that added these rivers to the wild and scenic rivers system, the management plan “shall assure that no development or use of park lands shall be undertaken that is inconsistent with the designation” (16 USC 1274(a)(63) and (64)).

NEED FOR THE PLANS

The need for the plans is to address issues, concerns, and problems related to the management of the national parks. The following are among the reasons why updated plans are needed; general management plan issues are more fully discussed in “Decision Points,” beginning on page 21.

Lack of a Comprehensive River Management Plan. In adding the segments of the Middle and South Forks of the Kings River within Kings Canyon National Park and the North Fork of the Kern River in Sequoia National Park to the wild and scenic rivers system, Congress directed the National Park Service to revise the general management plan for these parks to recognize these designations, to establish boundaries, and to identify the appropriate classifications for each

segment. The Wild and Scenic Rivers Act also requires agencies to prepare comprehensive management plans for all rivers in the wild and scenic rivers system.

An Outdated Master Plan. The 1971 *Master Plan* for Sequoia and Kings Canyon National Parks is outdated and was prepared without public involvement. The 1971 plan also predated the 1978 addition of the Mineral King Game Refuge (a portion of Sequoia National Forest). The National Park Service now uses general management plans to set goals for desired resource conditions and visitor experiences in parks. The plan is needed to make major decisions related to the kinds and levels of visitor uses and support facilities, park carrying capacity and appropriate access, private uses and public access, and the appropriate level of focus on cultural resources. These decision points involve numerous park, visitor, and community values.

Portions of the 1971 *Master Plan* were controversial. For example, one of the goals of that plan was to phase out stock use, but that action was never implemented. This goal was replaced by a 1986 *Stock Use and Meadow Management Plan* that regulated stock use to protect park resources. Ongoing stock use and related impacts to high alpine area have occasionally generated differences of opinion, mainly between stock users and backpackers. The impacts of stock use are continuing to be assessed, and this general management plan makes a decision on the appropriateness of stock use. Sustainable levels of stock use would be determined in a separate wilderness stewardship and stock use plan, which would detail stock carrying capacity in wilderness and backcountry areas.

Some proposals in the 1971 *Master Plan* cannot be implemented because development was proposed in areas that have since been designated as wilderness. The aerial tramway proposed to Alta Peak, for example, would not be permitted in wilderness and is no longer seen as appropriate by either the public or the National Park Service.

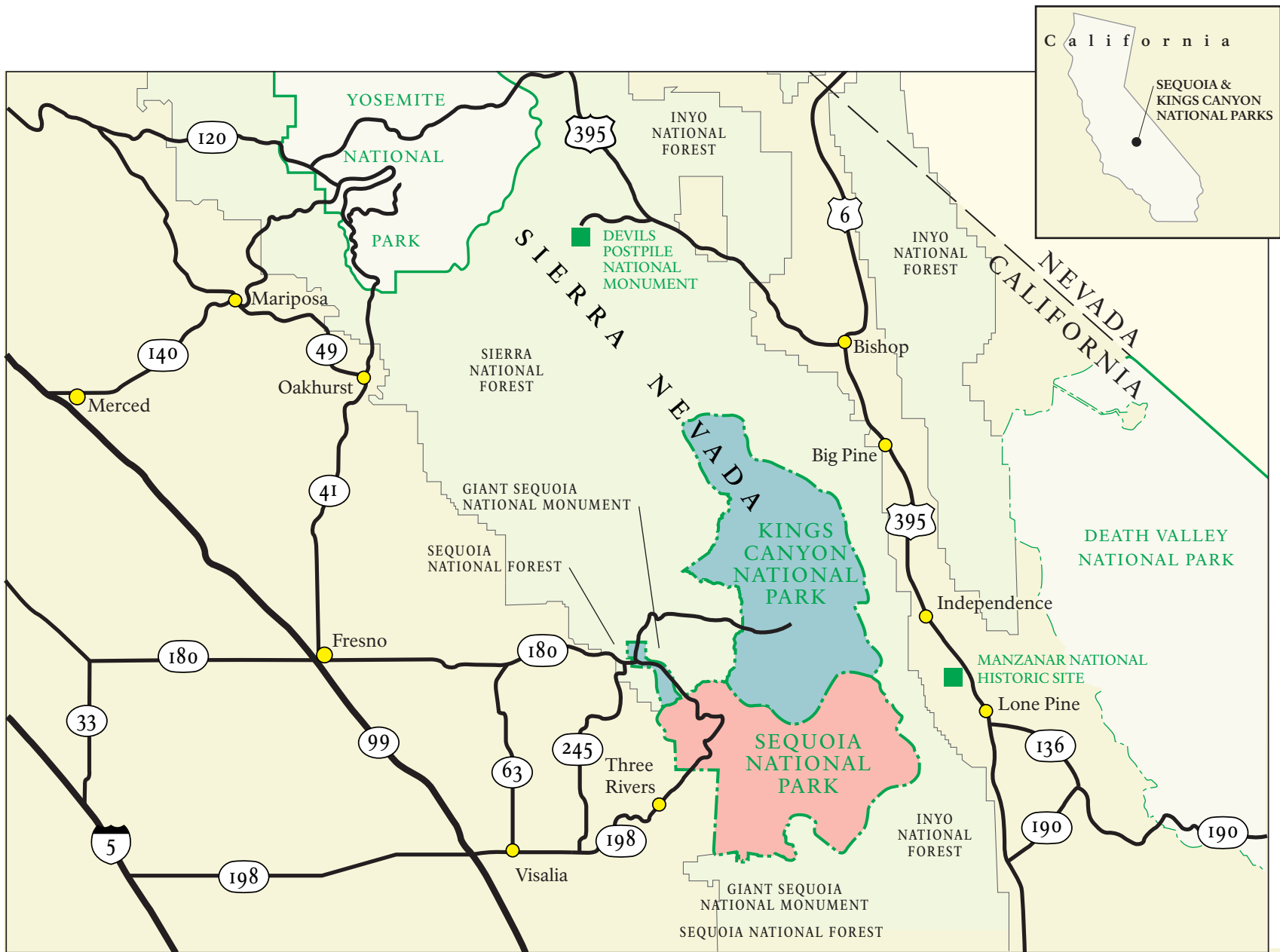
Management of Cultural Resources. Since the 1971 *Master Plan* was completed, a number of

historic structures, districts, and landscapes have been identified and inventoried and are being managed according to the “Secretary of the Interior’s Standards and Guidelines for Archeology and Historic Preservation” (NPS 1983) and the *Secretary of the Interior’s Standards for the Treatment of Historic Properties, with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings* (NPS 1995d), as well as *NPS Management Policies 2001* (NPS 2000c) and *Director’s Order #28: Cultural Resource Management* (NPS 1998b). Identifying and inventorying cultural resources is an ongoing activity.

Once cultural resources are identified and evaluated for significance, effective cultural resource management must address the following questions: What should be done to properly care for cultural resources, and how do cultural resources fit into the overall scheme of park management? While the National Park Service strives to preserve and protect cultural resources whenever possible, funding and staffing are insufficient to preserve and protect all such resources in the parks. In addition, cultural resources are only one of many park resources requiring attention.

Planning for this general management plan must strike a balance between equally important but conflicting resources or values by weighing the tradeoffs, for example, between the preservation and protection of cultural resources and the preservation of natural resources, the enhancement of visitor experience and safety, and the park’s operational concerns. Any action affecting cultural resources, however, will only be undertaken after appropriate consultations with the California state historic preservation office, any associated Indian tribes, other interested agencies or organizations, and the general public in compliance with section 106 of the National Historic Preservation Act.

Unresolved Issues for Specific Developed Areas. The parks have implemented significant portions of plans for specific developed areas, but there are unresolved issues for some developed areas. For example, the majority of development has been removed from the ecologically



0 20 Kilometers
0 20 Miles

LOCATION

Sequoia & Kings Canyon National Parks

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sensitive Giant Forest sequoia grove (a park goal for more than 70 years) and the area is being converted to day use. Overnight facilities operated by a concessioner have been replaced at a new developed area, Wuksachi. But the 1980 *Development Concept Plan* for Giant Forest / Lodgepole, which guided these changes, also recommended a 1,700-car parking garage at Wolverton, an issue that a 1996 interim plan did not resolve and now needs to be reexamined.

The Changing Context of the Parks in the Regional Ecosystem. Originally Sequoia and Kings Canyon National Parks were set aside to protect the sequoia groves. However, it soon became apparent that these areas were not large enough to protect the groves, and surrounding areas were recognized as possessing national park character, so the parks were expanded. Today, scientific research has shown that biological communities do not function independently. As a result, in the 1990s Congress

mandated the Sierra Nevada Ecosystem Project (SNEP), which pulled together scientists, managers, and local governmental representatives to develop a better understanding of how the various physical, biological, and social components of the entire mountain range interact; to establish a resource information base; and to identify means by which the entire ecosystem can be sustainably managed. The environmental impact analysis is based on information collected through the ecosystem project, as well as other efforts. Additionally, the Giant Sequoia Ecology Cooperative, an informal consortium of representatives from all agencies and entities that manage sequoia groves (National Park Service, U.S. Forest Service, Bureau of Land Management, the Tule Tribe, California State Parks, California Department of Forestry and Fire Protection, and University of California), meets periodically to exchange ideas and information, and to coordinate the management of sequoia groves.

Guidance for the Plans

ENABLING LEGISLATION

Sequoia National Park was established as the nation's second national park on September 25, 1890. The primary purpose for establishing the park is described in the act's preamble:

Whereas, the rapid destruction of timber and ornamental trees in various parts of the United States, some of which trees are the wonders of the world on account of their size and limited number growing, makes it a matter of importance that at least some of said forests should be preserved.

The legislation also stipulated that Sequoia National Park is to be a place "dedicated and set apart as a public park, or pleasuring ground, for the benefit and enjoyment of the people," and it is to be managed "for the preservation from injury of all timber, mineral deposits, natural curiosities or wonders . . . [and for] their retention in their natural condition."

One week later, on October 1, 1890, legislation was enacted that nearly tripled the size of Sequoia National Park and established General Grant National Park. This legislation extended the same protection to the new areas.

An act of July 3, 1926, again enlarged Sequoia National Park and instructed the secretary of the interior to establish regulations aimed at

the freest use of said park for recreational purposes by the public and for the preservation from injury or spoliation of all timber, natural curiosities, or wonders within said park and their retention in their natural condition . . . and for the preservation of said park in a state of nature so far as is consistent with the purposes of this Act.

Kings Canyon National Park was established by an act of March 4, 1940. This act abolished General Grant National Park, added its lands to

Kings Canyon National Park, and provided that the new park be "dedicated and set apart as a public park . . . for the benefit and enjoyment of the people."

An act of August 6, 1965, added Cedar Grove and Tehipite Valley to Kings Canyon National Park and instructed that these lands be managed "subject to all the laws and regulations applicable to such park."

The National Parks and Recreation Act of November 10, 1978 (Public Law [PL] 95-625), added U.S. Forest Service (USFS) lands in the Sequoia National Game Refuge to Sequoia National Park to "assure the preservation . . . of the outstanding natural and scenic features of the area commonly known as the Mineral King Valley . . . and enhance the ecological values and public enjoyment of the area."

In 2000 Public Law 106-574 authorized the addition of the Dillonwood sequoia grove to Sequoia National Park. This area was officially added on December 4, 2001, as a result of fundraising efforts by Save-the-Redwoods League (which raised \$5.4 million) and a major contribution from the Wildlife Conservation Board, an agency affiliated with the California Department of Fish and Game. The 1,518-acre tract has 1,180 acres of sequoia groves and is contiguous with the Garfield Grove on what was the southern boundary of Sequoia National Park. This addition protects a major sequoia grove and enhances opportunities for public enjoyment related to the parks' purposes.

Legislation and orders relating to Sequoia and Kings Canyon National Parks are listed in appendix A in volume 2.

PARK PURPOSES

The purposes of the parks are the reasons why Congress established these areas as part of the national park system. The purpose statements are basic to all other assumptions about the

parks and the ways in which the parks should be used and managed. As defined by park managers, the following are the purposes of Sequoia and Kings Canyon National Parks, which incorporate the mission statement:

- Protect forever the greater Sierran ecosystem — including the sequoia groves and high Sierra regions of the park — and its natural evolution.
- Provide appropriate opportunities to present and future generations to experience and understand park resources and values.
- Protect and preserve significant cultural resources.
- Champion the values of national parks and wilderness.

PARK SIGNIFICANCE

Sequoia and Kings Canyon National Parks are special and unique places because they have

- the largest giant sequoia trees and groves in the world, including the world's largest tree — the General Sherman Tree
- an extraordinary continuum of ecosystems arrayed along the greatest vertical relief (1,370 to 14,495 feet elevation) of any protected area in the lower 48 states
- the highest, most rugged portion of the high Sierra, which is part of the largest contiguous alpine environment in the lower 48 states
- magnificent, deep, glacially carved canyons, including Kings Canyon, Tehipite Valley, and Kern Canyon
- the core of the largest area of contiguous designated wilderness in California, the second largest in the lower 48 states
- the largest preserved southern Sierran foothills ecosystem
- almost 200 known marble caverns, many inhabited by cave wildlife that is found nowhere else

- a wide spectrum of prehistoric and historic sites documenting human adaptations in their historic settings throughout the Sierran environments*

During scoping for the general management plan, most comments indicate agreement with these statements, although some people questioned the use of “appropriate” and “significant” in the purpose statement. What these terms mean is further defined in this document.

Sequoia and Kings Canyon National Parks have been designated as an international biosphere reserve, a program under the United Nations Educational, Scientific, and Cultural Organization that recognizes resources with worldwide importance. While this designation does not grant any form of control or ownership to the international body, it underscores the exceptional and singular qualities of the parks.

THE PARKS' MISSION

The mission of Sequoia and Kings Canyon National Parks is based on the mission of the National Park Service, as defined by Congress in the 1916 Organic Act:

to conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations.

This mission was further defined in a 1978 amendment (PL 95-250),

The authorization of activities shall be construed and the protection, management, and administration of these areas shall be conducted in light of the high public value and integrity of the Na-

* Prehistoric and historic sites are listed, or determined eligible for listing, on the National Register of Historic Places. Primary cultural resources that are considered to be exceptionally significant for the national parks predate 1940 because the parks' development patterns, which include buildings and structures associated with early NPS development, rustic park architecture, and 1930s Civilian Conservation Corps construction, were established by that date.

tional Park System and shall not be exercised in derogation of the values and purposes for which these various areas have been established.

The Organic Act also authorizes the Park Service to “regulate the use” of national parks, allowing the development of rules, regulations, and more detailed policies to implement the overarching policies set by Congress. Rules and regulations for the national park system are contained in title 36 of the *Code of Federal Regulations* (36 CFR). The Park Service has articulated additional detailed policies in the *NPS Management Policies 2001* (NPS 2000c), which govern the way park managers are to make decisions on a wide range of issues.

The following mission statement for Sequoia and Kings Canyon National Parks articulates the broad ideals and vision that the National Park Service is striving to achieve:

The mission of Sequoia and Kings Canyon National Parks is to protect forever the greater Sierran ecosystem—including the sequoia groves and high Sierra regions of the parks—and its natural evolution, and to provide appropriate opportunities to present and future generations to experience and understand park resources and values.

All these legal mandates and policies provide the foundation for resource conditions that are to be achieved in the parks, as well as some aspects of visitor experiences.

Many resource requirements are mandated by federal law, as well as NPS policies, which stipulate that certain conditions must be achieved. These requirements, along with the mandate, are listed in Table 1, beginning on page 13.

MISSION GOALS

The parks’ mission goals articulate the broad ideals and vision the National Park Service is striving to achieve at Sequoia and Kings Canyon National Parks. The goals for the parks are

directly linked to the mission goals contained in the National Park Service’s 1998 *Strategic Plan*. Park-specific resource requirements tier off each mission goal.

Specific mission goals are included in appendix B in volume 2. Strategies and actions to meet legal and policy requirements associated with the mission goals is contained in the parks’ 1999 *Natural and Cultural Resources Management Plan*.

- *Mission Goal Ia:* Natural and cultural resources and associated values are protected, restored, and maintained in good condition and managed within their broader ecosystem and cultural context.
- *Mission Goal Ib:* Legally designated and protected wilderness is managed to meet the standards and ideals of the Wilderness Act and as a component of a larger regional wilderness area.
- *Mission Goal Ic:* Sequoia and Kings Canyon National Parks contribute to knowledge about natural and cultural resources and associated values; management decisions about resources and visitors are based on the best available scholarly and scientific information.
- *Mission Goal IIa:* Visitors safely enjoy and are satisfied with the availability, accessibility, diversity, and quality of park facilities, services, and appropriate recreational opportunities.
- *Mission Goal IIb:* Park visitors and the general public understand and appreciate the preservation of the parks and their resources for this and future generations.
- *Mission Goal IVa:* Sequoia and Kings Canyon National Parks use current management practices, systems, and technologies to better preserve park resources and to better provide for public enjoyment.
- *Mission Goal IVb:* Sequoia and Kings Canyon National Parks increase managerial resources through initiatives and support from other agencies, organizations, and individuals.

LAWS, REGULATIONS, AND SERVICE-WIDE MANDATES AND POLICIES

As with all units of the national park system, the management of Sequoia and Kings Canyon National Parks is guided by the 1916 Organic Act that created the National Park Service, the General Authorities Act of 1970, the act of March 27, 1978, relating to the management of the national park system (referred to as the Redwood amendment), and other applicable federal laws and regulations, such as the Endangered Species Act, the National Historic Preservation Act, the Wilderness Act, and the Wild and Scenic Rivers Act. The National Park Service has also established management policies for all units under its stewardship, as stated in *NPS Management Policies 2001* (NPS 2000c).

The key management provision of the Organic Act is:

The National Park Service shall promote and regulate the use of the Federal areas known as national parks, monuments, and reservations hereinafter specified . . . by such means and measures as conform to the fundamental purpose of the said parks, monuments, and reservations, which purpose is to conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations (16 USC 1).

The Organic Act also authorizes the National Park Service to “regulate the use” of national parks, which means the Park Service may develop more detailed policies to implement the overarching policies set by Congress. The National Park Service has articulated those detailed policies in its *Management Policies*, which govern the way park managers are to

make decisions on a wide range of issues that come before them.

The various legal mandates and policies prescribe many resource conditions and some aspects of visitor experience, as defined in Table 1. While the attainment of some of these conditions has been deferred in the parks due to funding or staffing limitations, the National Park Service will continue to strive to implement these policies at the parks with or without a new general management plan. The general management plan is not needed to decide, for instance, whether or not it is appropriate to protect endangered species, control exotic species, provide for handicapped access, or conserve artifacts.

NPS policies and other applicable federal laws require that resource management goals and desired conditions, including strategies and actions to meet legal and policy requirements, be achieved, as stated in the 1999 *Natural and Cultural Resources Management Plan* for Sequoia and Kings Canyon National Parks. This plan describes existing resource conditions and how they differ from the desired future conditions, major issues and stressors that are causing divergence from the desired future conditions, and a long-term strategy for addressing each major issue. The parks’ *Strategic Plan* identifies which actions outlined in the *Resources Management Plan* will be implemented during the next five years.

Legal mandates for cultural resources also include the American Indian Religious Freedom Act and Executive Order 13007, “Indian Sacred Sites.” Appendix D in volume 2 describes Native American consultations with traditionally associated tribes conducted during the general management planning process. Continuing consultations will seek information on the tribes’ desires for access to sacred sites they may wish to identify.

**TABLE 1: FEDERAL LAWS AND NPS POLICIES APPLICABLE TO THE MANAGEMENT
OF SEQUOIA AND KINGS CANYON NATIONAL PARKS**

Desired Condition	Source
<i>Natural Resources</i>	
<i>Vegetation (including Sequoia Groves)</i>	
The preservation from injury of all timber . . . in their natural condition.	Sequoia National Park enabling legislation
The giant sequoia groves — particularly Giant Forest — and the ecosystems they occupy are restored, maintained, and protected	
NPS-managed natural systems, and the human influences upon them, will be monitored to detect any significant changes. Action will be taken in the case of such changes, based on the type and extent of change.	NPS <i>Management Policies 2001</i>
Maintain all the components and processes of naturally evolving park ecosystems.	
Fire management activities conducted in wilderness areas will conform to the basic purposes of wilderness.	
Intervention in natural biological or physical processes will be allowed only (1) when directed by Congress, (2) in some emergencies when human life and property are at stake, or (3) to restore native ecosystem functioning that has been disrupted by past or ongoing human activities.	
The National Park Service will re-establish natural functions and processes in human-disturbed natural systems in the parks unless otherwise directed by Congress.	
The National Park Service will, within park boundaries, identify, conserve, and attempt to recover all federally listed threatened, endangered, or special-concern species and their essential habitats. As necessary, the service will control visitor access to and use of essential habitats, and may close such areas to entry for other than official purposes. Active management programs (such as monitoring, surveying populations, restorations, exotic species control) will be conducted as necessary to perpetuate, to the extent possible, the natural distribution and abundance of threatened or endangered species, and the ecosystems upon which they depend. Ongoing consultation related to threatened or endangered species will occur with the U.S. Fish and Wildlife Service should any actions take place in the habitat of such species.	Endangered Species Act (16 USC 1531, et seq.); NPS <i>Management Policies 2001</i>
The National Park Service will identify all state and locally listed threatened, endangered, rare, declining, sensitive, or special concern species and their essential habitats that are native to and present in the parks. These species and their essential habitats will be considered in Park Service planning and management activities.	NPS <i>Management Policies 2001</i>
Plant and animal species considered to be rare or unique to a park will be identified, and their distributions within the park will be mapped.	
The management of populations of exotic plant and animal species, up to and including eradication, will be undertaken whenever such species threaten park resources or public health and wherever control is prudent and feasible.	
Exotic species will not be introduced into the parks (except under special circumstances).	

Desired Condition	Source
<i>Natural Resources (cont.)</i>	
The National Park Service will re-establish natural functions and processes in human-disturbed natural systems in the parks unless otherwise directed by Congress. . . . The Park Service will restore the biological and physical components of these systems as necessary, accelerating both their recovery and the recovery of landscape and community structure and function. . . . The Park Service will seek to return (human-disturbed) areas to conditions and processes representing the ecological zone in which the damaged resources are situated.	NPS <i>Management Policies 2001</i> (cont.)
Terrain and plants may be manipulated where necessary to restore natural conditions on lands altered by human activity. Management activities may include . . . rehabilitating areas disturbed by visitor use or by the removal of hazard trees.	
Revegetation efforts will use seeds, cuttings, or transplants representing species and gene pools native to the ecological portion of the park in which the restoration project is occurring.	
The National Park Service will actively seek to understand and preserve the soil resources of parks, and to prevent, to the extent possible, the unnatural erosion, physical removal, or contamination of the soil, or its contamination of other resources.	
All approved livestock use must ensure the preservation of wilderness resources and character. Superintendents will be responsible for monitoring livestock use in wilderness to the same degree as human use, and may use the same management tools and techniques, to manage livestock use that are available for managing other wilderness uses.	
Grazing will be managed and conducted in accordance with management objectives and procedures designed to ensure that grazing does not result in the degradation of park resources. . . . Grazing will be restricted whenever necessary to protect natural and cultural resources and values, or whenever there are conflicts with other recreational users.	
Forage and other habitat requirements of native wildlife populations will be given first priority when determining livestock management priorities.	
Harvesting of plants may be allowed only when it is determined that such harvesting will not jeopardize rare, threatened, or endangered plant or animal species	
The National Park Service will . . . avoid, whenever possible, the pollution of park waters by human activities occurring within and outside parks.	Executive Order 11990, "Protection of Wetlands" (42 USC 4321), <i>Director's Order #77-1: Wetland Protection</i> , Clean Water Act (33 USC 1344)
NPS and NPS-permitted programs and facilities are maintained and operated to avoid pollution of surface and ground waters; natural and beneficial values of wetlands are preserved and enhanced.	
Protection of stream features will primarily be accomplished by avoiding impacts to watershed and riparian vegetation, and by allowing natural fluvial processes to proceed unimpeded.	
When practicable and not detrimental to NPS mandates to preserve park resources, known hazards will be reduced or removed. When providing for persons' safety and health is inconsistent with congressionally designated purposes and mandates, or impracticable, efforts will be made to provide for such safety and health through other controls, including closures, guarding, signing, or other forms of education.	NPS <i>Management Policies 2001</i>

Desired Condition	Source
Natural Resources (cont.)	
The National Park Service will strive to protect the full range of genetic types (genotypes) of native plant and animal populations in the parks by perpetuating natural evolutionary processes and minimizing human interference with evolving genetic diversity.	NPS Management Policies 2001 (cont.)
The National Park Service will control pests . . . under special circumstances (including) . . . to conserve and protect plants and animals needed and appropriate for developed areas	
Water Resources and Aquatic Ecosystems	
Surface and ground waters are restored or enhanced; water quality meets as a minimum the standard for contact recreation.	Clean Water Act; Executive Order 11514, "Protection and Enhancement of Environmental Quality"; NPS Management Policies 2001
NPS and NPS-permitted programs and facilities are maintained and operated to avoid pollution of surface and ground waters.	Clean Water Act; Executive Order 12088, "Federal Compliance with Pollution Control Standards"; NPS Management Policies 2001
Natural floodplain values are preserved or restored.	Executive Order 11988, "Floodplain Management"; Rivers and Harbors Act; Clean Water Act; NPS Management Policies 2001
The natural and beneficial values of wetlands are preserved and enhanced.	Executive Order 11990, "Protection of Wetlands"; Rivers and Harbors Act; Clean Water Act; NPS Management Policies 2001
Federal- and state-listed threatened and endangered species and their habitat are sustained.	Endangered Species Act; NPS Management Policies 2001
Fishing is permitted in accordance with regulations.	Act creating Sequoia National Park
Protection of stream features will primarily be accomplished by avoiding impacts to watershed and riparian vegetation, and by allowing natural fluvial processes to proceed unimpeded.	NPS Management Policies 2001
Populations of native plant and animal species function in as natural a condition as possible except where special management considerations are warranted.	
Native species populations that have been severely reduced or extirpated from the park are restored where feasible and sustainable.	
Management of populations of exotic plant and animal species, up to and including eradication, will be undertaken whenever such species threaten park resources or public health and when control is prudent and feasible.	
Wildlife	
Populations of native plant and animal species function in as natural a condition as possible except where special management considerations are warranted.	NPS Management Policies 2001
Native species populations that have been severely reduced or extirpated from the park are restored where feasible and sustainable.	
Management of populations of exotic plant and animal species, up to and including eradication, will be undertaken whenever such species threaten park resources or public health and when control is prudent and feasible.	NPS Management Policies 2001
Air Resources, Soundscapes, and Lightscaapes	
Air quality in the parks meets national ambient air quality standards (NAAQS) for specified pollutants. Park activities do not contribute to deterioration in air quality.	Clean Air Act; NPS Management Policies 2001
The National Park Service will preserve the natural ambient soundscapes of parks, which exist in the absence of human-caused sound.	NPS Management Policies 2001

Desired Condition	Source
Natural Resources (cont.)	
The National Park Service will protect natural darkness and other components of the natural lightscape in the parks.	NPS Management Policies 2001; Sequoia and Kings Canyon National Park Clover Creek Development Exterior Lighting Design Concepts.
Geological, Soils, and Paleontological Resources	
Significant caves will be secured, protected, and preserved for the perpetual use, enjoyment, and benefit of all people.	1988 Federal Cave Resources Protection Act
All units of the national park system are closed to new mining claims	1976 Mining in the Parks Act
Caves will be managed to perpetuate karst processes, airflow, mineral deposition, plant and animal communities, and wilderness and cultural values.	NPS Management Policies 2001
Natural geologic processes proceed unimpeded.	
Karst terrains will be managed to ensure that water quality, spring flow, drainage patterns, and caves are not significantly altered.	
Paleontological resources, including both organic and mineralized remains in body or trace form, will be protected, preserved, and managed for public education, interpretation, and scientific research	
Natural soil resources and processes function in as natural a condition as possible, except where special management considerations are allowable under policy.	
The National Park Service will actively seek to understand and preserve the soil resources of parks, and to prevent, to the extent possible, the unnatural erosion, physical removal, or contamination of the soil, or its contamination of other resources.	
Each park should inventory abandoned mineral land sites to identify safety hazards and resource impacts.	
The National Park Service must, to the extent possible, mitigate or eliminate safety and environmental hazards associated with abandoned mineral lands.	
Wilderness	
The administration of wilderness meets the standards within the Wilderness Act: • protection of these areas in an unimpaired state for future use and enjoyment as wilderness; and • preservation of the wilderness character of these areas.	Wilderness Act of 1964; California Wilderness Act of 1984; Director's Order #41: Wilderness Preservation and Management
Wilderness is protected and managed so as to preserve its natural conditions and which: • generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable. • has outstanding opportunities for solitude or a primitive and unconfined type of recreation.	
Cultural resources located within wilderness areas are evaluated, protected, and managed to preserve their integrity.	NPS Management Policies 2001 Director's Order #28: Cultural Resource Management "Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation"
Fire management activities conducted in wilderness areas will conform to the basic purposes of wilderness.	NPS Management Policies 2001

Desired Condition	Source
Natural Resources (cont.)	
Fire Management	
Each park is required to have a fire management plan / environmental assessment that addresses wildland and prescribed fires. Wildland fires are naturally ignited and part of natural systems that are being sustained by parks. Prescribed fires are human ignited to achieve resource management or fuel treatment objectives.	NPS Management Policies 2001
Until a plan is approved, parks must immediately suppress all wildland fires, taking into consideration park resources and values to be protected, firefighter and public safety, and costs.	
Fire suppression within wilderness will be consistent with the "minimum requirement" concept. (Minimum tool or administrative practice to successfully and safely accomplish the objective with the least adverse impact on wilderness character or values.)	
Wild and Scenic River Resources	
Protect and enhance the values for which the river was designated, or found eligible and suitable for designation, while providing for public recreation and resource uses which do not adversely impact or degrade those values.	Wild and Scenic Rivers Act "National Wild and Scenic Rivers System; Final Revised Guidelines for Eligibility, Classification and Management of River Areas"
Protect the free-flowing character of the river area.	"National Wild and Scenic Rivers System; Final Revised Guidelines for Eligibility, Classification and Management of River Areas"
Water quality is maintained or improved to levels which meet standards for aesthetics, and fish and wildlife propagation.	Clean Water Act "National Wild and Scenic Rivers System; Final Revised Guidelines for Eligibility, Classification and Management of River Areas"
Cultural Resources	
Prehistoric and Historic Archeological Sites	
Archeological sites are identified and inventoried, and their significance is determined and documented.	Antiquities Act of 1906 National Historic Preservation Act Executive Order 11593, "Protection and Enhancement of the Cultural Environment" "Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation" NPS Management Policies 2001 Director's Order #28: Cultural Resource Management
Archeological sites are protected in an undisturbed condition unless it is determined through formal processes that disturbance or natural deterioration is unavoidable.	Antiquities Act of 1906 Archeological and Historic Preservation Act Archeological Resources Protection Act "Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation" NPS Management Policies 2001 Director's Order #28: Cultural Resource Management
In cases where disturbance or deterioration is unavoidable, the site is professionally documented and salvaged.	Antiquities Act of 1906 "Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation" NPS Management Policies 2001 "Programmatic Agreement among the National Park Service, Advisory Council on Historic Preservation, and National Conference of State Historic Preservation Officers" Director's Order #28: Cultural Resource Management

Desired Condition	Source
<i>Cultural Resources (cont.)</i>	
Historic structures and cultural landscapes are inventoried and their significance and integrity are evaluated under criteria for the National Register of Historic Places.	National Historic Preservation Act Archeological and Historic Preservation Act Executive Order 11593, "Protection and Enhancement of the Cultural Environment" "Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation" NPS <i>Management Policies 2001</i> <i>Director's Order #28: Cultural Resource Management</i>
The qualities of historic structures and cultural landscapes that contribute to their actual listing or their eligibility for listing on the National Register of Historic Places are protected in accordance with the "Secretary's Standards," unless it is determined through a formal process that disturbance or natural deterioration is unavoidable.	Antiquities Act of 1906 National Historic Preservation Act, section 106 <i>Secretary of the Interior's Standards for the Treatment of Historic Properties, The Secretary of the Interior's Standards for Rehabilitation</i> "Programmatic Agreement among the National Park Service, Advisory Council on Historic Preservation, and National Conference of State Historic Preservation Officers" "Protection of Historic Properties" (36 CFR 800) NPS <i>Management Policies 2001</i> <i>Director's Order #28: Cultural Resource Management</i>
<i>Objects and Archival Manuscripts Collections</i>	
Manage parks to provide for the protection of historic, prehistoric, and scientific features.	Antiquities Act of 1906 "Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation" NPS <i>Management Policies 2001</i> <i>Director's Order #28: Cultural Resource Management</i>
Manage parks to "maintain historic or prehistoric sites, buildings, objects, and properties of national historical or archaeological significance and ... establish and maintain museums in connection therewith."	Antiquities Act of 1906 Historic Sites Act of 1935 "Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation" NPS <i>Management Policies 2001</i> <i>Director's Order #28: Cultural Resource Management</i>
All museum objects and manuscripts are identified and inventoried, and their significance is determined and documented. The qualities that contribute to the significance of collections are protected in accordance with established standards.	Antiquities Act of 1906 National Historic Preservation Act American Indian Religious Freedom Act Archeological Resources Protection Act Native American Graves Protection and Repatriation Act "Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation" NPS <i>Management Policies 2001</i> <i>Director's Order #28: Cultural Resource Management</i>
<i>Ethnographic Resources</i>	
Manage parks to provide for the protection of historic, prehistoric, and scientific features.	Antiquities Act of 1906 Executive Order 13007, "Indian Sacred Sites"
Protect and preserve access for American Indians to sites to allow for the exercise of traditional religions.	American Indian Religious Freedom Act of 1978 Executive Order 13007, "Indian Sacred Sites"
Regulations do not authorize the taking, use, or possession of fish, wildlife, or plants for ceremonial or religious purposes, except where specifically authorized by federal statute or treaty rights, or where hunting, trapping, or fishing are otherwise allowed.	NPS <i>Management Policies 2001</i>

Desired Condition	Source
Visitor Management Requirements	
Visitor Experience and Park Use Requirements	
Visitor and employee safety and health are protected.	NPS <i>Management Policies 2001</i>
Visitors understand and appreciate park values and resources and have the information necessary to adapt to the park environments. Visitors have opportunities to enjoy the park in ways that leave park resources unimpaired for future generations.	NPS Organic Act Sequoia and Kings Canyon National Parks enabling legislation NPS <i>Management Policies 2001</i>
Park recreational uses are promoted and regulated. Basic visitor needs are met in keeping with park purposes.	NPS Organic Act Sequoia and Kings Canyon National Parks enabling legislation <i>Code of Federal Regulations</i> , Title 36 NPS <i>Management Policies 2001</i>
New and remodeled buildings, outdoor developed areas, and features are accessible to all visitors, including those with disabilities, in compliance with federal standards. However, it may not be possible to make all sites or historic buildings accessible because the required changes would affect the integrity of the feature or the historic structure. In these cases interpretive brochures or programs could help convey an experience to visitors.	Americans with Disabilities Act Architectural Barriers Act Rehabilitation Act NPS <i>Management Policies 2001</i>
The parks solicit input from local communities and the general public to ensure that future actions and programs are responsive to diverse public viewpoints, values, and concerns.	National Environmental Policy Act of 1969 NPS <i>Management Policies 2001</i> <i>Director's Order #75, Civic Engagement and Public Involvement</i>
Commercial sightseeing flights over national parks (those occurring within 5,000 feet of ground level) are subject to an air tour management plan prepared jointly by the Federal Aviation Administration and the National Park Service.	National Parks Air Tour Management Act of 2000
Transportation	
Transportation systems are a cost-effective alternative to the development of new facilities; reduce congestion, noise, air pollution, and adverse effects on park resources and values; enhance the visitor experience, simplify travel, make it safer and easier to see park features; and conserve energy and use alternative-fueled vehicles when practicable.	NPS <i>Management Policies 2001</i>
Special Park Uses	
Hydroelectric Facilities • Permits may be extended until September 8, 2026. • Hydroelectric permit fees are retained in the park. • Permits require updated dam hazard studies and a mitigation plan to protect health and safety. • Bonds, insurance, and indemnification are required to protect public and employee health and safety. • The park superintendent will establish permit conditions that protect NPS and public interests, including park resources and values. • The park superintendent will ensure that measures to protect U.S. interests are incorporated into permits for special park uses. Because no new hydroelectric infrastructure would be permitted in the national parks, the secretary of the interior may consider termination of the special use permit if catastrophic damage requiring reconstruction occurred to existing facilities.	Consolidated Appropriations Act of 2005 (PL 108-447, Division E, Title 1, Section 139(c)) NPS <i>Management Policies 2001</i> <i>Director's Order #53: Special Park Uses</i>
Permit Cabins • Any renewals or extensions of leases or permits shall be granted only to those persons who were lessees or permittees of record on November 10, 1978, and to their heirs, successors, and assigns.	Consolidated Appropriations Act of 2005 (PL 108-447, Division E, Title 1, Section 139(b))

Desired Conditions	Source
<i>Special Park Uses (cont.)</i>	
• The park superintendent will establish permit conditions that protect NPS and public interests, including park resources and values. • The park superintendent will ensure that measures to protect the United States' interests are incorporated into permits for special park uses.	NPS <i>Management Policies 2001</i> <i>Director's Order #53: Special Park Uses</i>
Boy Scout Camp • The park superintendent will establish permit conditions that protect NPS and public interests, including park resources and values. • The park superintendent will ensure that measures to protect the United States' interests are incorporated into permits for special park uses.	NPS <i>Management Policies 2001</i> <i>Director's Order #53: Special Park Uses</i>
<i>Development and Sustainability</i>	
New and remodeled buildings and facilities reflect the NPS commitment to energy and resource conservation, as well as durability.	Executive Order 12873, "Federal Acquisition, Recycling, and Waste Prevention" Executive Order 12902, "Energy Efficiency and Water Conservation at Federal Facilities" <i>Guiding Principles of Sustainable Design</i> (NPS 1993)
<i>Commercial Services</i>	
Commercial services are used to provide goods and services to visitors. All commercial services must be authorized; must be deemed necessary and/or appropriate; cannot be provided outside the park; and must be economically feasible. Commercial service use levels and types are managed to provide high-quality visitor experiences while protecting natural, cultural, and scenic resources. Commercial services include concession contracts, commercial use authorizations, leases, cooperative agreements, rights-of-way, and special use permits.	NPS <i>Management Policies 2001</i> General Authorities Act NPS Concessions Management Improvement Act of 1998

The Context for the Plan

The laws, policies, and special designations that affect park management are described in this section. While each alternative being considered presents a management vision and direction for Sequoia and Kings Canyon National Parks, some proposed actions could require legislative action by Congress in order to be implemented. For example, proposals dealing with new designations of wild and scenic rivers would require legislation.

The context for the plan is also affected by activities occurring outside the parks. For example, Giant Sequoia National Monument was established by presidential proclamation in 2000, thus increasing the protection of giant sequoia groves. Also, adjacent areas have been designated as wilderness. While the monument and adjacent wilderness areas are administered by the U.S. Forest Service, the decisions made for this general management plan will affect resources throughout the region, just as decisions made by other governmental agencies will affect the management of Sequoia and Kings Canyon National Parks.

On a broader scale, the Sierra Nevada Ecosystem Project has identified five factors that are affecting the ecosystem over the long term and that could drastically alter it. While these ecosystem stressors are beyond the ability of any single governmental agency to control, they should be considered in making decisions that will not only protect park resources and values but also contribute to the protection and health of the ecosystem.

SPECIAL CONGRESSIONAL DESIGNATIONS AND AUTHORIZATIONS

Wild and Scenic Rivers

The Wild and Scenic Rivers Act establishes the national wild and scenic rivers systems to preserve and protect selected rivers, or segments of

rivers, in their free-flowing condition. Section 1(b) of the act states:

It is hereby declared to be the policy of the United States that certain selected rivers of the Nation which, with their immediate environments, possess outstandingly remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural, or other similar values, shall be preserved in free-flowing condition, and that they and their immediate environments shall be protected for the benefit and enjoyment of present and future generations.

Section 10(a) of the act states:

Each component of the National Wild and Scenic Rivers System shall be administered in such manner as to protect and enhance the values that caused it to be included . . . without . . . limiting other uses that do not substantially interfere with public use and enjoyment of these values. In such administration primary emphasis shall be given to protecting its aesthetic, scenic, historic, archeological, and scientific features. Management plans for any such component may establish varying degrees of intensity for its protection and development, based on the special attributes of the area.

Each river or segment in the rivers system must be classified as “wild,” “scenic,” or “recreational,” depending on the degree of development within the river area. The river area is the land included within the wild and scenic river corridor boundaries. These terms are defined in the act (sec. 2(b)) as follows:

Wild river areas — Those rivers or sections of rivers that are free of impoundments and generally inaccessible except by trail, with watersheds or shorelines essentially primitive and waters unpolluted. These represent vestiges of primitive America.

Scenic river areas — Those rivers or sections of rivers that are free of impoundments with shorelines and watersheds still largely primitive and shorelines largely undeveloped, but accessible in places by roads [i.e., roads may cross but generally not parallel the river]. These rivers are usually more developed than wild and less developed than recreational.

Recreational river areas — Those rivers or sections of rivers that are readily accessible by road or railroad, that may have some development along their shorelines, and that may have undergone some impoundment or diversion in the past.

Each river segment must also have established boundaries. Boundaries are limited to no more than an average of 320 acres per river mile, measured from the ordinary high water mark on both sides of the river. If drawn evenly along the ordinary high water mark (as defined in 33 CFR 328.3 (e)) on both sides of the river, this would result in a boundary 0.25 mile wide on each side of a river.

Outstandingly Remarkable Values

Outstandingly remarkable values are the river-related and dependent values that make the river segment unique and worthy of special protection, and they form the basis for the river's designation as part of the wild and scenic rivers system. The values include scenic, recreational, geologic, fish and wildlife, historic, cultural, or other similar values or features. A feature must be judged to be unique, rare, or exemplary to the extent that it stands out as among the best on a regional or national basis. River and affiliated land management practices are to concentrate on protecting these values.

Designated River Segments in Sequoia and Kings Canyon National Parks

The following river segments in Sequoia and Kings Canyon National Park have been designated as wild or recreational:

- *Middle Fork of the Kings River (29.5 miles within Kings Canyon National Park) — Wild.* This free-flowing river segment is wholly in designated wilderness. It is accessible only by trail and is primitive in nature, qualifying it for wild classification.
- *South Fork of the Kings River (the upper 24.1 miles within Kings Canyon National Park) — Wild.* This free-flowing river segment is wholly in designated wilderness. It is accessible only by trail and is primitive in nature, qualifying it for wild classification.
- *South Fork of the Kings River (the lower 7.6 miles within Kings Canyon National Park) — Recreational.* Lodging, campgrounds, and other amenities for park visitors are located in or near the river corridor. The river corridor also contains a road that runs parallel to the river, and three road bridges cross the river, thus qualifying it for recreational classification.
- *North Fork of the Kern River (the entire 28.9 miles within Sequoia National Park) — Wild.* This free-flowing river segment is wholly in designated wilderness. It is accessible only by trail and is primitive in nature, qualifying it for wild classification.

Pursuant to the NPS *Management Policies 2001*, general management plans and other plans potentially affecting river resources “will propose no actions that could adversely affect the values that qualify a river for the national wild and scenic rivers system” (sec. 2.3.1.10). Also, no management actions may be taken that could adversely affect the values that qualify a river for inclusion in the national wild and scenic rivers system (sec. 4.3.4).

Comprehensive River Management Plan

Section 3(d) of the Wild and Scenic Rivers Act requires the preparation of a comprehensive management plan for each river segment to provide for the protection of the river values. The plan must address

- resource protection
- development of lands and facilities

- user capacities
- other necessary or desirable management practices

The plan may be incorporated into resource management planning for affected adjacent federal lands

Proposed Additions to the Wild and Scenic Rivers System

Section 4(a) of the Wild and Scenic Rivers Act authorizes studies to determine the eligibility and suitability of rivers for addition to the national wild and scenic rivers system. To be eligible, a river must be free flowing and must exhibit at least one outstandingly remarkable value. Reports of proposed rivers are to identify the

characteristics which make the area a worthy addition to the system; the current status of land ownership and use in the area; [and] the reasonably foreseeable potential uses of the land and water which would be enhanced, foreclosed, or curtailed if the area were included in the national wild and scenic rivers system.

Section 5(d)(1) of the Wild and Scenic Rivers Act states that “in all planning for the use and development of water and related land resources, consideration shall be given by all Federal agencies involved to potential national wild, scenic, and recreational river areas.”

Park plans may not propose any actions, nor may any management actions be taken, that could adversely affect the values that qualify a river for the national wild and scenic rivers system (*Management Policies 2001*, sec. 2.3.1.10, sec. 4.3.4).

The South Fork of the San Joaquin River and the five forks of the Kaweah River (North, Marble, Middle, East, and South) have been evaluated as to their eligibility and suitability for inclusion in the national wild and scenic rivers system. All of the rivers except the North Fork of the Kaweah were determined to be eligible. Hydroelectric facilities are present on the Marble and Middle Forks of the Kaweah River, and on tributaries of

the East Fork of the Kaweah, within Sequoia National Park. However, it has been determined that these facilities would not preclude the inclusion of these rivers in the national system because “the waterway remains generally natural and riverine in appearance” (*Federal Register* 47 (no. 173): 39458).

Water Resources Projects

Section 7 of the Wild and Scenic Rivers Act severely restricts water resources projects on or near designated rivers. It states that “the Federal Energy Regulatory Commission [FERC] shall not license the construction of any dam, water conduit, reservoir, powerhouse, transmission line, or other project works under the Federal Power Act” on or directly affecting any river designated as wild and scenic. This part of section 7 is not relevant to the already designated river segments because there are no FERC licensed projects on them. However, as stated above, hydroelectric impoundments and diversions are located on the Marble and Middle Forks of the Kaweah River and on tributaries to the East Fork of the Kaweah River.

No federal agency may recommend authorization of a water resources project (i.e., any construction within the bed or banks of a river that would affect the free-flowing condition of the river) without first receiving a determination from the river managing agency that the project would not affect the river’s free-flowing condition or its outstandingly remarkable values and without seeking approval from Congress. Therefore, water resources projects are permissible only if they are judged by the managing agency not to directly and adversely affect the outstandingly remarkable values or free-flowing condition of the river and if Congress specifically authorizes the project.

Section 7 also prohibits all federal agencies, including the Federal Energy Regulatory Commission, from licensing or assisting with developments above, below, or on a tributary of a wild and scenic river if it will “invade the area or unreasonably diminish the scenic, recreational, or fish and wildlife values present in the area.”

Wilderness

The 1964 Wilderness Act (PL 88-577) establishes the national wilderness preservation systems in order to

secure for the American people of present and future generations the benefits of an enduring resource of wilderness. . . . '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.

Wilderness is defined as:

an area of undeveloped Federal land retaining its primeval character and influence, without permanent improvements or human habitation, which is protected and managed so as to preserve its natural conditions and which (1) generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable; (2) has outstanding opportunities for solitude or a primitive and unconfined type of recreation; (3) has at least five thousand acres of land or is of sufficient size as to make practicable its preservation and use in an unimpaired condition; and (4) may also contain ecological, geological, or other features of scientific, educational, scenic, or historical value.

Certain uses are prohibited,

subject to existing private rights, there shall be no commercial enterprise and no permanent road within any wilderness area designated by this Act and, except as necessary to meet minimum requirements for the administration of the area for the purpose of this Act (including measures required in emergencies involving the health and safety of persons within the area), there shall be no temporary road, no use of motor vehicles, motorized equipment or motorboats, no landing of aircraft, no other form of mechanical transport, and no structure or installation within any such area.

Approximately 723,000 acres, or about 83.5% of the parks, have been federally designated as the Sequoia-Kings Canyon Wilderness, requiring this area to be protected and managed in perpetuity to preserve its natural conditions.

Potential Wilderness and Other Areas

Four areas are designated as potential wilderness — Pear Lake (a ski hut and ranger station on 5 acres), Bearpaw Meadow (a high Sierra camp on 32 acres), and two utility corridors for powerlines (12 acres and 22 acres). These areas would become wilderness when and if the facilities were removed. These areas could be affected by alternatives being considered in the general management plan.

Oriole Lake and adjacent park lands are in wilderness, including a primitive road that provides access to 12 acres of private inholdings. If these inholdings were acquired from willing sellers by the National Park Service and the facilities removed, this area would become wilderness.

Backcountry Areas Managed to Preserve Wilderness Characteristics

Additional backcountry areas are managed to preserve wilderness characteristics, resulting in the preservation of wilderness characteristics on 832,756 acres, or 96.24% of the parks. At the same time that the Sequoia-Kings Canyon Wilderness was established, three other areas of the parks included in the wilderness recommendation were not formally designated as wilderness, and Congress stated that this was done "without prejudice." Each of the following areas has been managed to preserve its wilderness characteristics (in accordance with regulation and policy).

- *Redwood Canyon* — Together with the North Fork of the Kaweah, Redwood Canyon includes approximately 35,321 acres in Kings Canyon National Park. It contains the largest sequoia grove in the park and extensive karst features.
- *North Fork of the Kaweah* — The North Fork of the Kaweah contains rugged terrain

and ranges from low foothill country to coniferous forests, including several giant sequoia groves.

- *Hockett Plateau* — Hockett Plateau (the East Fork of the Kaweah River watershed) is approximately 56,200 acres in the southwestern corner of Sequoia National Park. The area is dominated by the 8,500-foot-high Hockett Plateau and contains a variety of natural resources, including extensive tracts of giant sequoia forest.

Wilderness Eligibility

At the direction of Congress or in accordance with *NPS Management Policies 2001*, wilderness eligibility assessments have been conducted for the following areas:

- *Chimney Rock* — This area in Kings Canyon National Park is also known as the Jennie Lakes addition. It includes 1,756 acres. The area has been determined to have characteristics making it eligible for further wilderness study.
- *Mineral King* — The Mineral King area in Sequoia National Park includes 15,600 acres. It is accessible by road. Popular trails leading out of the valley go to high-altitude alpine areas. Mineral King has been determined to have characteristics making it eligible for further wilderness study (except for the road corridor, Silver City, Kaweah Han, cabin communities, and other present development).

These areas would undergo a public process of wilderness studies by the parks that could lead to wilderness recommendations for Congress to act on.

As a new addition to the park, the Dillonwood area (approximately 1,518 acres, 1,180 of which contain the sequoia grove) was assessed and found not eligible for wilderness consideration.

Hydroelectric Facilities

Over 100 years ago the secretary of the interior authorized the construction of hydroelectric generating facilities in the parks on the Marble

and Middle Forks of the Kaweah River. In 1899 four storage dams were constructed above Mineral King on tributaries to the East Fork to facilitate more even river flow as well as to generate power at a facility outside Sequoia National Park. Another hydroelectric facility began operating outside the park in 1907, with dams and diversions on the Middle and Marble Forks of the Kaweah and related flumes, four gaging stations, a siphon crossing the Middle Fork, and a cable river crossing within the parks. In response to a determination of eligibility submitted by Southern Consolidated Edison, the California state historic preservation officer has determined that the facilities are eligible for listing on the National Register of Historic Places.

In 1974 Congress authorized the secretary of the interior to permit the continued operation of impoundments and diversions on the Marble and Middle Forks of the Kaweah River for a period not to exceed 10 years (PL 93-522). By 1984 the Park Service was to conduct a study and report to Congress on the impacts of the hydroelectric facilities on the national park.

In 1978, pursuant to Public Law 95-625, the Mineral King area (including four Southern California Edison dams on tributaries of the East Fork of the Kaweah River) was transferred from the U.S. Forest Service to the National Park Service. Public Law 95-625 amended Public Law 93-522 to incorporate hydroelectric facilities contained within the Mineral King addition.

In 1984 the report on the impacts of hydroelectric facilities on park resources (Jordan/Avent 1984) did not find impacts to be significant. Both the permit and license were subsequently renewed. In 1986 Congress authorized the Park Service to permit the Southern California Edison Company to operate the Kaweah hydroelectric facilities for 10 years and to issue an additional 10-year permit (PL 99-338) or through September 8, 2006.

The Consolidated Appropriations Act of 2005 (PL 108-447, Division E, Title 1, Sec. 139(c)(1)) authorized two additional renewals of the

Kaweah hydroelectric facilities, which would extend operations through September 8, 2026. Among other provisions, the act (1) prohibits the expansion of hydroelectric facilities in Sequoia National Park; (2) requires that an independent safety assessment of the Kaweah project be conducted, and that any deficiencies identified be corrected; and (3) requires that the secretary of the interior prepare and submit to Congress an update of the July 1983 report on the impact of the operations of the Kaweah no. 3 facility on Sequoia National Park. Therefore, the preferred alternative proposed in the *Draft Environmental Impact Statement* that would have removed hydroelectric facilities upon the expiration of the current permit is no longer being considered and has been removed from this *Final Environmental Impact Statement*. Because no new hydroelectric infrastructure would be permitted in the national parks, the secretary of the interior may consider termination of the special use permit if catastrophic damage requiring reconstruction occurred to existing facilities.

In 1992 the Federal Energy Regulatory Commission renewed Southern California Edison's license for the Kaweah complex facilities outside Sequoia National Park (Project 298-000-California). The commission specifically excluded from the license those portions of the complex on NPS managed land. The current FERC license runs through December 31, 2021.

Mineral King Special Use Permits

Special congressional mandates or designations may also affect how specific resources or areas in the national parks are managed. For example, the act adding the Mineral King area to Sequoia National Park permitted the owners of cabins to continue to occupy their cabins on federal park land (PL 95-625). (Recreation cabin use began under a now-discontinued Forest Service program.) However, Congress did set expiration limits for the cabins by prohibiting the transfer of permits from the permittees of record in 1978, and it allowed the permits to be renewed in five-year increments until the death of that permittee, at which time the cabins were to be removed.

The same legislation also prohibited the development of downhill skiing.

On December 8, 2004, Congress approved changes to Public Law 95-625 relating to privately owned cabins on federal land in the Mineral King Valley. There are approximately 60 privately owned cabins, and these cabins are subject to special use permits issued by the National Park Service. The legislative changes enacted by Congress in 2004 provided that those persons named as permittees of record for cabins as of December 8, 2004, could transfer their permits to their heirs, successors, or assigns, which was not allowed under the previous legislation. Under the new law the National Park Service may continue to renew cabin permits, and any permits that are issued may be revoked if the continued use of the cabin is incompatible with park administration or if the land is needed for park purposes.

As a result of these legislative changes, alternatives that were considered in the *Draft Environmental Impact Statement* that envisioned the expiration of permits upon the death of the last living permittee of record in 1978 are no longer being considered. Instead all alternatives now include the same program elements with regard to the continued use of special use permit cabins by permittees or their assigns. These elements are described in greater detail on page 164.

ADJACENT LAND USES

Giant Sequoia National Monument

On April 15, 2000, Presidential Proclamation 7295 designated approximately 355,000 acres of U.S. Forest Service land to the north and south of Sequoia and Kings Canyon National Parks as Giant Sequoia National Monument, under the management of the U.S. Forest Service. The purpose of the national monument is to protect the remaining sequoia groves and their ecosystem. The north unit, which includes much of the Hume Lake District, has 130,000 acres and the southern unit, 225,000 acres. Based on the proclamation, recreational uses will continue much as they do now, but vehicles will be restricted to roads. The proclamation does not alter private

lands (inholdings) or existing leases and permits related to USFS land, and existing water rights are not affected. Roads are to be limited to no more than those in existence at the time of designation, and a transportation plan is to be developed. Mineral rights are withdrawn, and commercial logging is terminated. (See “Relationship to Other Planning” for a description of the national monument’s approved management plan.)

Designated Wilderness Adjacent to the Parks

Designated wilderness adjacent to the parks contributes to the extensive nature of the Sequoia-Kings Canyon Wilderness, making it part of the core of the largest area of contiguous designated wilderness in California and the second largest in the lower 48 states. Contiguous designated wilderness includes:

- Golden Trout Wilderness on USFS land south of Sequoia National Park
- John Muir Wilderness on USFS land east of Sequoia National Park and east, north and west of Kings Canyon National Park
- Monarch Wilderness west of Kings Canyon National Park
- Jennie Lakes Wilderness west of Kings Canyon National Park and north of Sequoia National Park

ECOSYSTEM STRESSORS

The Sierra Nevada Ecosystem Project (SNEP 1996) and decades of research in Sequoia and Kings Canyon National Parks have identified five important systemic stressors to park ecosystems, as described below. (A more detailed description of stressors is included at the beginning of “The Affected Environment” in volume 2.)

Loss of Pre-Euro-American Fire Regimes

Between 1891 and 1967 all fires in Sequoia, General Grant, and Kings Canyon national parks

were suppressed, which resulted in important ecosystem changes. For example,

- A buildup of dense vegetation along foothill streams and in their upper catchments reduced annual streamflow in the foothills.
- Both stream chemistry and streamflow in the mixed-conifer zone were altered, with unknown consequences for aquatic ecosystems.
- Giant sequoia reproduction, which in the past depended on frequent fires to expose mineral soil and open gaps in the forest canopy, effectively ceased, and the reproduction of other shade-intolerant species was greatly reduced.
- The accumulation of dead material created an increased hazard of severe wildfires sweeping through the mixed-conifer forests.
- The lack of fire also reduced habitat critical for certain wildlife species.

The parks began an aggressive program in 1968 to reestablish fire in the parks’ ecosystems. This program of prescribed fire has made great progress in the giant sequoia groves and has substantially restored a considerable area of mixed-conifer forest. Much, however, remains to be done.

Introduced Species

Hundreds of nonnative species have become established within the parks, severely altering some park ecosystems, and invasions are ongoing. More than 120 exotic vascular plant species are known within park boundaries, and new ones are discovered yearly.

- Introduced species make up about 99% of herbaceous biomass in foothills grasslands, potentially affecting soil water dynamics, stressing native species, and perhaps increasing the probability of invasion by particularly noxious species.
- Blister rust is reducing the number of sugar pines in the parks, which are one of the most important food sources for seed-eating animals in the mixed-conifer zone.

- Even before the parks were created, waters that were originally barren of fish had been stocked, and new species introduced. As a result, most aquatic communities above 7,000 feet have been altered, sometimes severely, resulting in a decline in both native invertebrate and vertebrate species. Additional damage has been caused by hybridization. For example, the Little Kern golden trout was almost lost due to hybridization with exotic rainbow trout.
- Domestic species (especially cats) and other exotic wildlife periodically establish themselves at lower elevations and compete with native wildlife for resources.
- Portions of Sequoia National Park have been severely grazed in the recent past by trespass cattle and now harbor numerous nonnative plants.

An aggressive program to remove or control many species of invasive plants is now underway.

Air Pollution

Sequoia and Kings Canyon National Parks periodically experience some of the worst air quality in the United States.

- Ozone-sensitive individuals of ponderosa and Jeffrey pines show extensive foliar injury at present ozone levels. While mature giant sequoias seem to be relatively resistant to present ozone levels, sequoia seedlings are more vulnerable to injury.
- Chronic ozone pollution could lead to shifts in forest structure and composition.
- High-elevation lakes and streams are very dilute and potentially sensitive to human-induced acid deposition. While not now a problem, future increases in acid deposition would likely alter aquatic communities.
- The deposition of atmospheric nitrogen in park watersheds has been slowly increasing, and there has been a decrease in dissolved nitrogen leaving watersheds. The consequences for aquatic and terrestrial

plant communities are unknown, but scientific studies are underway.

- Sequoia and Kings Canyon National Parks are downwind of the agriculturally rich San Joaquin Valley, where tons of pesticides are used every year. These pesticides can drift into the parks on prevailing winds. While cause-and-effect links between synthetic chemical drift into the parks and effects on park ecosystems have not yet been established, research in the parks and elsewhere suggests that effects may partly explain the decline of amphibians.

Habitat Fragmentation

Intensifying land use and population growth on lands adjacent to the national parks are turning the parks into biological islands, which will make the ecosystems significantly more difficult to preserve with their biodiversity intact.

- Several species have either already disappeared from this part of the Sierra Nevada or survive in very small numbers, most likely as a result of habitat loss on adjacent lands, leaving insufficient park habitat to support viable populations.
- Coniferous forested lands to the north and south of the parks have been altered by timber harvest, grazing, water diversions, nonnative species, and loss of natural fire regime, potentially contributing to a decline of forest wildlife populations in the region.
- Past domestic sheep grazing on public lands east of the Sierra Nevada crest, along with other factors, previously threatened the re-establishment of healthy populations of Sierra Nevada bighorn sheep in and adjacent to the parks, leading to their endangerment. Bighorn sheep now are recovering slowly.
- Animals that are protected inside the parks (e.g., deer, bear, and band-tailed pigeons) become legal game species outside the parks. How these animals are managed outside the parks affects the age structure and abundance of species within the parks.

Rapid Anthropogenic Climatic Change

Average global temperatures have been rising in this century, and global temperatures are projected to rise by another 1.0 to 3.5°C (2 to 6°F) over the next century. It is unknown how global climatic change will manifest itself locally in the Sierra Nevada.

- Based on paleoecological records, global summertime temperatures 10,000 to 4,500 years ago were perhaps up to 2°C higher than now, with prolonged summer drought in California. The species composition and fire regimes of Sierran forests were quite different from those of today.
- Increasing average temperatures will probably result in higher snow lines, earlier snowmelt, and prolonged summer droughts, affecting the viability of certain species.

Giant sequoia seedlings are highly vulnerable to drought, and drought stress would make mature trees more vulnerable to insects, pathogens, and air pollution.

- Some Sierran habitats will likely shift to higher elevations. Organisms with limited mobility may become extinct locally, and some habitats, such as high alpine, are likely to disappear entirely, leading to the irreversible loss of some species.

Rapid anthropogenic climatic change has the potential to become the greatest stressor on the ecosystems of Sequoia and Kings Canyon National Parks. While there is little that park managers can do to prevent global warming, they can take some steps to mitigate impacts on park ecosystems. For example, the resilience of forests to climatic change and consequent extreme wildfire behavior can be increased by restoring a more open structure to the forests.



The Sequoia–Kings Canyon Wilderness

The Scope of the Plan

OVERVIEW

As a major policy document for Sequoia and Kings Canyon National Parks, this general management plan is the proper forum to address societal and community values related to the parks. Major values that will be affected by decisions for this plan, as well as tradeoffs, are discussed below for natural resources, cultural resources, and visitor / community values. Some values are supported by law and policy, while others reflect changes in our society.

Major decisions that must be made in the plan relate to determining what activities and uses are appropriate in the parks. In some cases these decisions will affect the amount of visitor use and the types of visitor experiences, park operations, and land uses within the parks. In other cases the exact amount and the conditions for particular uses will be determined in future implementation plans. This general management plan is a programmatic document that provides conceptual guidance to park managers. Subsequent implementation plans will focus on “how to implement an activity or project” (NPS 1998a). Implementation plans will include more extensive details and analysis than this general management plan.

The National Park Service requires that general management plans determine whether park boundaries are adequate for protecting resources or whether they need to be adjusted. Many recommendations have been made about boundary adjustments during public scoping. However, adjacent areas are generally protected by other public agencies, so this document specifies which areas should be the focus of a detailed boundary adjustment study to be undertaken after the general management plan has been approved.

The scope of the plan also determines the scope of the environmental impact analysis. The final sections of this chapter discuss which impact

topics will be analyzed and which have been dismissed because there will be no impacts.

VALUES AND ISSUES IDENTIFIED DURING SCOPING

Natural Resource Values and Issues

Giant Sequoia Groves

Giant sequoia groves used to be much more extensive; now the groves are found only in a limited range along the west side of the Sierra Nevada. Sequoia and Kings Canyon National Parks contain the biggest examples of the world’s largest trees. The General Sherman, General Grant, Lincoln, and other large sequoias are estimated to be 1,800 to 2,700 years old. The largest sequoias are as tall as an average 26-story building, and their diameters at the base exceed the width of some city streets. As they continue to grow, they produce about 40 cubic feet of wood each year, approximately equal to the volume of a 50-foot-tall tree one-foot in diameter. The scale of the trees still astounds visitors. The designation of the parks as an international biosphere reserve underscores the world-class nature of these resources.

The following public values related to natural resources are supported by law and policy:

- maintaining and preserving natural ecosystems, and protecting native vegetative communities
- protecting and improving conditions for threatened and endangered species
- protecting and improving the quality of water resources (water quality, hydrology, and floodplains)
- protecting and improving air quality
- protecting outstanding resource values of wild and scenic rivers
- protecting caves

The Night Sky

Sequoia and Kings Canyon National Parks offer opportunities to experience the night sky free from artificial light, one of a dwindling number of places in the country where this is possible. Efforts should be undertaken to ensure that light pollution from inside the parks does not erode this value.

Natural Sounds and Quiet

The parks offer opportunities to enjoy natural sounds and quiet, which the public has affirmed that they value. Park regulations help preserve natural soundscapes, and in campgrounds quiet times are enforced. Nevertheless, noise from motor vehicles, RV generators, communication devices, and even some levels of conversation can intrude on natural sounds and quiet. These unnatural sounds can sometimes be heard miles from their source, potentially spoiling the experiences of other park users.

Sounds from aircraft can also be disturbing to the park experience. NPS managers work closely with local military bases to minimize overflights and low-flyers. Because airspace over the parks is primarily assigned to military use, scheduled commercial flights are less frequent. Commercial air tours are a potential use in the future, which could affect natural quiet.

Cultural Resource Values and Issues

Cultural resources are valued for their history and the perspective they bring to more recent changes. Specific stories that are echoed by buildings, facilities, and other park resources include the following:

- Native American uses of the parks are seen in trails, grinding holes, pictographs, and other artifacts.
- Early explorers like Hale Tharp, who lived in a fallen sequoia log that can still be visited, had contact with Native Americans. Tharp also knew John Muir, who explored the park area.
- Logging interests and the Kaweah Colony (a socialist communal group), who were

drawn by tales of fabulous trees and left huge stumps in decimated sequoia groves, propelled the establishment of national parks to protect the trees.

- Ranchers and sheep herders long sought summer pasture in the parks.
- The lack of precious metals disappointed early miners in Mineral King.
- The parks were established as a result of pressure from preservationists and other interests, including local Visalia newspaperman George Stewart.
- The U.S. Army was the first to manage the parks and to construct park roads. The many Civil War veterans named the largest trees to commemorate war heroes.
- Early recreation community development occurred in Wilsonia, Silver City, and on U.S. Forest Service land in Mineral King so that people could escape the summer heat in the valley.
- Early promotion of the parks by the National Park Service led to the development of concession facilities to accommodate increased visitation. The perils of growth were recognized early on by long-time superintendents Colonel White and Walter Frye.
- The legacy of rustic character continued in construction projects done by the Civilian Conservation Corps from the 1930s through the 1940s.
- Conservation groups influenced the parks' history by donating land (such as Zumwalt Meadow) and facilities, by leading back-country trips, and by supporting public preservation in the Mineral King area.
- The 1970s controversy over the Mineral King area stopped the development of a ski resort and led to the eventual transfer of this area from the Forest Service to the National Park Service.
- The 1984 establishment of wilderness areas limited park development and promoted stewardship of wilderness values.

- Scientific research has expanded essential knowledge about sequoias, Sierra Nevada ecosystems, bears, caves, and fire. The Mount Whitney–Smithsonian Institution shelter supports scientific research.
- The removal of historic facilities to support the longtime goal of restoring the Giant Forest illustrates growing awareness of the detrimental impact of development patterns on sequoia groves and the National Park Service’s resolve to protect the internationally significant groves.
- The continuing interest in resource conservation is underscored by the establishment of Giant Sequoia National Monument in the surrounding national forest.
- Native American uses of the parks continue, with an increased understanding, protection, and accommodation of traditional uses.
- Current cultural resource studies are examining Mission ‘66 resources in the parks to determine if they might be eligible for listing on the National Register of Historic Places.

Visitor and Community Values and Issues

Park Character and Atmosphere

The parks are valued for their scenery; their natural and cultural resources; their comfortable, low-key, and relaxed character or atmosphere; and the appearance of the built environment. Both Sequoia and Kings Canyon National Parks are valued as early examples of the national park idea. Citizens stated in public planning meetings and in written comments that they appreciate the protected wilderness, ensuring that little change will occur, as well as the opportunity to participate in recreational activities in relatively uncrowded locations. Aspects of the visual character that are appreciated by visitors include structures and development that echo early cattle grazing, pioneer settlement, and the Great Depression era CCC work. Typical historic buildings constructed of rock, logs, and even sequoia pieces look underscaled within the commanding

landscape. Character-defining structures or elements include ranger stations, lodging, housing, restrooms, signs, walls, roads, curbs, benches, and detailing. To identify and protect these values, historic structures have been studied, resulting in an *Inventory of Significant Structures* and a series of guidelines, including the *Architectural Character Guidelines*, *Road Character Guidelines*, and *Exterior Lighting Concepts*. Nominations to the National Register of Historic Places for the Wilsonia Historic District and the Mineral King Road Cultural Landscape District considered the value of early 20th century recreation communities. These recreation communities are particularly valued by both private landowners and special use permit holders who use them seasonally or year-round; however, others see these communities as privileged enclaves not appropriate in national parks.

Public Ownership

National parks are one of the most popular government programs ever developed — setting aside outstanding natural and cultural resources for public enjoyment, identity, and pride. Unique and special natural and cultural resources are to be protected, conserved, and preserved so that they can provide enjoyment for citizens today and for generations to come.

Public Access

The public expects parks to protect the resources for which they were established, and also to provide enjoyment by allowing access to those resources in a manner that preserves them for future generations. The public does not see these parks as special ecological or cultural museums that are not to be used by the public, instead the parks are seen as interactive ecosystems that include human use, lively learning places, spectacular settings for recreation, important scientific research areas and laboratories, and natural areas of great intrinsic value. The public wants access to what the parks offer, whether it is recreational, educational, emotional, or spiritual. Access affords opportunities for visitors to learn about park values and the ethics of protecting places like this for the benefit of all people. These values — stewardship, leave-no-trace

practices, sustainable park practices — can be taken home and applied in local settings.

An Uncrowded Atmosphere and Diverse Levels of Social Interaction

There is public support for retaining the relatively uncrowded atmosphere that offers diversified experiences with different levels of crowding. The public desires that the parks remain far less crowded than parks like Grand Canyon and Yosemite. Public scoping comments generally recognized that the Grant Grove and Giant Forest areas should remain the most visited areas. But even within those areas, visitors should be able to find more secluded and less crowded places at different times and seasons. The parks have five primary front-country developments (Cedar Grove and Grant Grove in Kings Canyon National Park; Giant Forest, Ash Mountain, and Mineral King in Sequoia National Park). The unique setting of each area provides a different kind of park experience, with varying levels of visitor use. The public values these differences. Even within the backcountry there are more heavily used areas. Unroaded areas can only be reached by trail, and permits are required so that visitation can be monitored, resource damage limited, use dispersed, and various levels of solitude offered.

A Range of Visitor Experience Opportunities

Visitors like to choose among opportunities to experience park resources. The experiences offered should accommodate different user skills, abilities, and age levels. There should be activities for children, seniors, and people with disabilities, as well as for automobile tourists, backpackers, and bus tour groups. Park settings — from developed features and villages to remote backcountry locations — should allow users to choose their experiences.

Wilderness Values

Generally, public comments indicate that as population expands, there is increasing support for retaining untouched, primeval areas that can provide solitude. For many people, just knowing that wilderness exists is important. Wilderness is

also valued for the different recreational opportunities it provides — primarily hiking, backpacking, stock use, and rock climbing.

The Restorative Nature of the Parks

Many people have mentioned the importance of the restorative and regenerative power of these parks. The parks are a place apart, a vast wilderness area where natural forces are supreme, where four seasons contrast sharply with the climate of the adjacent lowlands, and where the rustic character of development blends rather than competes with native surroundings. These factors help define what is special about Sequoia and Kings Canyon and what is worthy of passing on to future generations in an unimpaired state.

MAJOR DECISIONS TO BE MADE

Appropriate Amounts of Visitation and Access to the National Parks

The general management plan must provide implementation commitments for determining the appropriate amounts of visitation to the parks that can be maintained without causing irreparable resource damage or altering the desired experience. This is the parks' carrying capacity, and it is affected by the following considerations:

- *When the amount of visitation does not cause a primary resource impact, how should carrying capacity be dealt with?*

The general management plan needs to provide implementation commitments for determining if more visitor use is desirable, what constitutes too much use, and what makes a good park experience. Currently the frontcountry areas of the park are open to everyone — the experience is affected only by how much visitation occurs. What level of crowding and social contact are acceptable? Summer weekends and holidays are crowded, and some visitors have said that crowding during some peak use times adversely affects their visits. Traffic congestion and

the lack of parking are worst at visitor centers, the Sherman Tree, Grant Tree, Crescent Meadow, and Moro Rock, as well as in the Grant Grove and Lodgepole areas. Public comments made throughout the general management planning process clearly indicate that the Park Service needs to deal with crowding proactively in order to maintain a quiet, low-key, and uncrowded experience. For this reason, the public has supported transit systems in Giant Forest (NPS 1996a).

The Wild and Scenic Rivers Act requires managing agencies to address the issue of user carrying capacity for designated river segments. The act does not mandate that carrying capacity be interpreted as an absolute number of people.

- *What other factors besides road capacity affect the volume of visitation?*

Vehicles are about the only practical way for people to get to the parks. The mountainous roads can only accommodate so much traffic before gridlock occurs, particularly at popular features and in developed areas. Also, parking lots can be developed only at certain places because of topography and other resource constraints. However, other factors affect capacity, such as the number of people per vehicle; how traffic is dealt with in crowded areas; current road conditions, circulation patterns, and parking areas; and options for using transit. For example, currently each automobile entering the parks carries an average of a little over two people; however, more people per car would increase the number of people who could come by automobile, given that the road system can only accommodate so many vehicles. Capacity could also be increased by having visitors park in outlying locations and riding transit to popular features; this would help improve resource conditions near highly popular features and make parking easier to find, but popular features would

continue to be crowded during peak times. The determination of capacity must correlate closely with the purpose and significance of the parks, and the related values and desired conditions. One decision relates to what extent can alternate means of transportation improve the parks' carrying capacity without altering desired visitor experiences?

- *To what extent can the parks balance increased day use visitation while retaining their park character? A number of factors affect the answer to this question:*

What elements make up park character?

Responses to questions in the Planning Workbook (Newsletter 4) provide some guidance about public thinking. Public response has been that park character means continuing to provide the same mix of experiences, but limiting growth. Approximately a quarter of respondents felt that it was important to meet the needs of day users and changing user groups; but 42% felt that change to accommodate new use patterns should be resisted. At the same time 69% of respondents felt that facilities for both day and overnight users needed to be retained, and 23% wanted more day use facilities. Of the respondents, 39% wanted to identify additional park features. In defining appropriate facilities, 33% wanted to reduce, limit, or relocate them outside the parks; 28% wanted to retain the current mix of commercial and visitor services; and 35% wanted to replace or redesign and allow for some expansion, but no new developed areas. In dealing with congestion, 32% wanted congestion to regulate use; 22% wanted to reduce congestion by use limits; 17% wanted to increase parking capacity; and 29% wanted mandatory transit. When discussing transit, 53% wanted to expand voluntary shuttles, 28% wanted to limit shuttles to Giant Forest, and 19% wanted mandatory shuttles.

How have historic access methods changed? When the parks were first established, visitors sometimes arrived by various means of public transit — wagons, stagecoaches, trains, and buses. Within Sequoia and Kings Canyon, glass-topped buses were used during the 1920s. When automobiles became a predominant form of transportation, Congress mandated that automobile access be provided. That decision brought with it increased freedom of visitation, automobile service stations, increased fumes and engine noise, as well as automobiles parking on sensitive resources. Parking spaces became scarce during peak times, and motorists spent frustrating amounts of time looking for parking spaces instead of experiencing what the parks had to offer. However, some visitors may now believe that the freedom to drive to park destinations is a tradition to be maintained.

How have use patterns changed? While early development in the parks was geared toward overnight visitation for relatively long periods, changing use patterns have forced a change in this type of use. With a burgeoning regional population, the result has been more use during the day. The changing workplace and pace of life also affect visitation, with shorter vacations becoming more common. Even backcountry overnight use is for shorter periods of time. The largest impact of these trends will be seen on the parks' frontcountry areas and developments. Alternate transportation can help respond to this pressure but will result in a different experience for day users since they would have less freedom of choice in how to reach their destinations at certain times.

- *To what extent can education and limits on visitation support fair access and visitor freedom?*

Methods could include gate limits / restrictions, permits for use, user fees, reg-

ulation, education, or alternate transportation. The desired combination would depend on what park vision is adopted.

Should day use reservations be combined with a certain number of spaces set aside for visitors on a first-come / first-served basis?

Should there be more regulations on vehicle access, such as vehicle length limits to facilitate better traffic flow?

Can education help provide information about seasonal, peak season, and daily visitation patterns so visitors can plan for the type of experiences they want?

Can a transit system, similar to that envisioned for Giant Forest (outlying parking areas and shuttles to the grove), be effectively used elsewhere?

Appropriate Visitor Experiences

- *What range and ability level of recreational activities are appropriate to accommodate visitors without changing the traditional park atmosphere?*

The traditional range of park activities includes hiking, backpacking, caving, rock-climbing, late summer water play, fishing, and winter season activities such as snow play, sledding, cross-country skiing, and snowshoeing. For most of these activities, there are options for beginners as well as experts. While ice skating and downhill skiing were once provided and are seen by some long-term users as traditional and desirable, these activities are not economically viable in the parks.

While most comments indicated that visitors were satisfied with the existing traditional range of activities, broader recreational trends are also evident in the parks. For example, snowshoeing has regained popularity in recent years and is something that most people can easily do. Kayaking has also become popular during certain seasons, but it involves risk and requires a great deal of expertise, and

there are no beginner kayaking rivers in the parks.

Should the range of activities be expanded if new activities potentially could alter the experiences of other visitors or increase demands on park staff? Not knowing what types of recreation will emerge in the future, the National Park Service has criteria to assess the appropriateness of new activities. Should the criteria only allow activities that cannot take place elsewhere? According to responses to the Planning Workbook, 39% of the respondents said all new activities should be discouraged, and 36% said any new activities allowed must be those that cannot take place elsewhere.

How should Kings Canyon and Sequoia manage requests for commercial air tours? In many parks air tours are popular, and while these tours offer a unique sight-seeing opportunity, the resultant noise negatively affects many other users, especially in parks where visitors value solitude and natural soundscapes. The National Parks Air Tour Management Act now applies to all commercial, sightseeing flights over national parks (those occurring within 5,000 feet above ground level).

- *Can the following specific activities be accommodated while protecting resources?*

Stock use. The general management plan must decide whether stock use (horses, mules, and llamas) is appropriate. Back-country hikers often are disturbed by the impacts of stock use — the presence and smell of urine or feces, the potential introduction of alien weeds, heavily grazed and trampled meadows, dust, erosion, and some widened trails. As a result, some groups want stock use eliminated. While the 1971 *Master Plan* called for phasing out stock use (specifically horses and mules), the action was never implemented. Instead programs were established to monitor resource conditions, set party size limits, and restrict or close

certain areas to stock so that resource conditions could be improved.

The general management plan will look at whether resource condition monitoring and research indicate that stock use can be continued without irreparable resource degradation. If, through the general management planning process, it was determined that continued stock use was appropriate, the National Park Service would then prepare an implementation plan to address specific stock-related issues. This implementation plan, which would focus on wilderness stewardship as well as stock use, would be subject to environmental compliance and public involvement. The plan would address the social, physical, and biotic impacts of varying degrees and kinds of such use, along with methods to regulate use in order to protect park values.

Bicycling Opportunities. To what extent can more bicycling be encouraged while providing visitor safety and meeting the requirements of law and policy? Bicycles are allowed only on park roads since NPS policy does not allow biking on trails. While mountain biking has become a popular recreational activity, both law and NPS policy forbid off-road biking in the parks. At the same time, bicycling is a very sustainable means of providing alternate transportation in developed areas, as well as a form of recreation. However, recreational bicycling may be less satisfying and less safe on a road shared with motor vehicles. For the Cedar Grove area in Kings Canyon National Park, 45% of the respondents to the Planning Workbook said they do not mind both bicycles and vehicles on roads, 30% felt bicycling should be encouraged by establishing bike lanes or closing roads, and 25% wanted dedicated lanes or separate bike routes. The Cedar Grove area has a relatively flat terrain, where bicycling could be a viable means of transportation. Also, the river road is a narrow, rough, one-way road that offers potential for increased recreational

use. Connections to destinations and from campgrounds may be needed. Bicycle lanes could be striped on the Kings Canyon Highway, or dedicated bike routes could be developed.

In Sequoia National Park the use of Colony Mill Road (a historic right-of-way) has been suggested as a more challenging recreational bicycling route. However, this area is managed as wilderness, meaning that bicycling is an inappropriate use.

Increased Access to Caves. To what extent can more “adventure tours” provide an intermediate level of caving experience to the general public without degrading cave resources? While the parks contain hundreds of caves, general public access is limited to Crystal Cave. Several types of tours are offered, including a historical tour. Researchers and experts have access to more caves. Would additional public tours require facilities such as hardened entries and gates to protect these caves? Public comments on the Planning Workbook suggest that present opportunities are sufficient for most visitors — 39% wanted to continue current management, and 30% wanted additional wilderness designation to offer further protection of cave resources. In contrast, 15% felt that more guided cave tours would be beneficial, and 16% felt wilderness designation should be added along with more tours.

- *To what extent can visitor-related impacts be reduced by educational programs?*

The public feels education, regulation, and limitations should all be used to maintain the parks. Public comments support functioning ecosystems — not just places that look natural. Increasing scientific knowledge is helping define the line between appropriate and inappropriate activities and locations. For example, meadows are now known to be sensitive, and baseball, camping, and parking are no longer allowed in them. Wildfire is an

important element in the ecological balance, and NPS *Management Policies 2001* endorse allowing many wildfires to burn rather than suppressing them. What is evolving is a philosophy of stewardship and wise use, and visitors are generally supportive of activity restrictions in order to protect natural resources. Visitors learn about the park ecology and the impacts of their actions on the natural, self-supporting system. Safety precautions related to bears and other animals, such as cougars, are common visitor knowledge due to educational programs and information in the park newspaper. Managing the parks’ black bear population involves public safety and habitat protection. While serious bear/human conflicts are rare, and no human deaths have occurred, the parks have had to destroy 20 bears over the last 20 years. At the same time, education and changes to park facilities have reduced the potential for conflict, and the number of bears destroyed has been declining. Picnic and other facilities have been closed or relocated so that bear/human conflicts do not occur. Bear-proof food storage lockers, refuse containers, food canisters, and even backcountry food storage lockers are now common facilities

Appropriate Park Facilities and Their Relationship to Park Operations

- *In order to protect resources, improve visitor services, and provide operational efficiency, to what extent should new visitor facilities be provided, older facilities updated, or historic development patterns retained?* Park facilities have an effect on park operations and efficiency. Because these parks are over 100 years old, some buildings and utilities have outlived their design life. In other cases historical development patterns affect both resource protection and park operations.

Roads and transportation-related facilities. Due to terrain, all access roads, including the Generals Highway and the

Kings Canyon Highway, will remain primarily one- or two-lane park roads with slower speeds than typical highways. However, what changes to roads, entrance stations, intersections, and parking areas can improve visitor experiences by facilitating improved traffic flow? What kinds of alternate transit systems and support facilities are feasible and can improve park resource protection, as well as visitor experiences? Would paving public back roads increase maintenance efficiency without altering the adventurous experience many park visitors value?

Historic development patterns. In the past structures were built in or near what are now known to be very sensitive resources — sequoia groves, meadows, and streams. Sequoia National Park has been in the forefront of resource restoration in the national park system with the removal of the Giant Forest village area in order to protect and restore impacted areas of the grove. So far, 282 buildings and over 1 million square feet of asphalt have been removed, and 231 acres of the sequoia grove have been restored. A picnic ground at Hazelwood was closed in 1969 when a falling sequoia killed a visitor. The park superintendent's house was damaged by a toppling sequoia in 1941 and was not replaced. Campgrounds at Sunset Rock, Round Meadow, Paradise, and Sugar Pine were closed in 1971. All these actions removed traditional locations for visitor activities in order to improve protection for sequoia groves and to ensure visitor safety. Giant Forest village is not the only area where historic development patterns have resulted in conflicts with resource preservation. Decisions to be made relate to historic facilities in or near sensitive areas, the wisdom of retaining historic development patterns, or replacing / restoring historic facilities that have been damaged or destroyed. Meanwhile, visitor use has been substantially improved through more efficient use of parking space.

Utilities. To what extent should utility systems be relocated or upgraded to improve resource conditions and meet expanding visitor needs?

Housing. To what extent can and should staff housing needs be met within the parks? Department of the Interior policy seeks to reduce housing in parks. Can some housing needs be met outside the parks? How can housing needs of volunteers be met? While staff may buy or rent housing locally, some permanent park and concession staff need housing close to their jobs to provide critical visitor services, 24-hour emergency services, or on-site resource protection. Factors to be considered in providing on-site housing include job requirements, public safety, availability of affordable local rental housing, and excessive commute time or distance. Seasonal staff housing has generally been dormitory style cabins or tent tops with centrally located communal baths and kitchens.

- *To what extent should the parks provide educational programs and activities for day use?*

The answer will depend on the vision that is adopted for the parks. Visitors enjoy contact with interpretive ranger staff and the education that is provided as a result. In fact, over 54% of the Planning Workbook respondents said that naturalist activities and media should be expanded. But in recent years educational programs in the parks have been reduced due to a smaller staff as parks strive to balance budgets in times of increasingly complicated resource management staffing mandates, continual park maintenance activities, and more law enforcement ranger needs. While some free ranger programs continue, especially during the peak season, education has focused on providing campfire programs, which tend to benefit overnight visitors.

Appropriateness of Various Land Uses within Park Boundaries

- *To what extent do private inholdings at Wilsonia, Oriole Lake, Silver City, and Mineral King further the parks' purposes, as well as the NPS mission?*

These inholdings predate the establishment of the parks. While the Land and Water Conservation Fund was set aside to purchase private land within park boundaries, congressional dispersal of funds for land acquisition has lagged since 1980. NPS policy is to acquire inholdings from willing sellers.

Wilsonia in Grant Grove Village. Wilsonia is an inholding with several hundred vacation residences on the west side of Grant Grove village. The general management plan needs to decide a future for the area. What are appropriate uses and adaptive reuses of NPS-owned buildings within a private historic district? Is it appropriate to adaptively reuse housing structures for office space? How does water and wastewater usage by Wilsonia residents impact the park or the nearby sequoia grove? Should privately owned buildings be used for commercial purposes, for example, as bed-and-breakfast establishments, thus giving visitors additional lodging choices?

Oriole Lake in Sequoia National Park. Located in a remote area at the end of a rough road are four inholdings with five private cabins that are surrounded by designated wilderness. Some day hiking occurs in this area, mostly by local park visitors. The decision to be made is whether public ownership should be pursued in order to provide public access to the uncommon, foothill lake environment or to expand wilderness protection.

Silver City and Kaweah Han in Sequoia National Park. Silver City was developed in the 1930s when the Mineral King Road was built. Conservation easements to protect park resources and maintain

visual compatibility are in place for the Silver City Resort. The vision that is decided for this area must relate to the vision for the Mineral King area.

Kaweah Han is a 60-acre private inholding of forested property adjacent to Silver City within the Mineral King area. It was purchased in 2002 and is expected to remain in residential use. The plan needs to look at possible management options in case ownership or use changes in the future. The property contains numerous structures and related improvements, including a rustic lodge.

Mineral King Valley Inholdings. A few very small inholdings in the valley are remnants of old mining property or property acquired for skiing development in the 1960s.

The park has been working with other property owners to acquire inholdings, some of which are used for public trail-head parking.

- *What long-term uses of the Boy Scout permit camp at Wolverton would be consistent with the purposes of Sequoia National Park?*

The Boy Scouts of America have had a special use permit for a seasonal campground near Wolverton. The plan must decide if continuing this camp is the highest and best use of that area or whether public use would be more appropriate.

Relationship to Park Purpose and Significance and to Park Visions

- *To what extent would additional wilderness be compatible with alternative park visions?*

The general management plan should determine what amount of wilderness is compatible with the park vision. However, wilderness studies and subsequent recommendations to Congress are not part of the general management plan.

Sequoia and Kings Canyon National Parks contain vast areas of inaccessible backcountry that offer opportunities for

solitude and primitive and unconfined recreation. With population increases, support for retaining untouched primeval areas is increasing. Numerous public comments during the planning process suggested that additional wilderness should be designated within the parks: more than 59% of comments on the Planning Workbook supported additional wilderness as a contributing factor to the essential character of the parks; this increased to 77% for some areas. Other commenters were confused about what wilderness designation means or felt that the 1984 designation of wilderness (which now comprises over 83% of the parks) was sufficient.

Congress requires the National Park Service to look at the wilderness eligibility of areas that have been added to the parks — land above the 8,000-foot elevation at Mineral King, which was added in 1978, and the Chimney Rock area, which was added in 1984 as part of the Jennie Lakes addition. Also, NPS policy directs that new acquisitions, such as the 2001 Dillon-wood expansion, be assessed for wilderness eligibility. There are four small areas of potential wilderness — Bearpaw Meadow (a high Sierra camp), Pear Lake (ski hut), and two utility corridors for powerlines — that will become wilderness if non-conforming facilities are removed. Oriole Lake and a road that provides access to 12 acres of private inholdings are in wilderness; the private inholdings are outside wilderness. If these inholdings were acquired by the National Park Service from willing sellers and facilities were removed, the area would become wilderness.

Three areas were recommended to Congress in 1984 as suitable and eligible for wilderness designation, but they were not designated. Pursuant to NPS policy, these areas, which include Redwood Canyon, the North Fork of the Kaweah, and the Hockett Plateau, have been managed as wilderness. Substantial

public support was shown by people responding to the Planning Workbook for wilderness designation of these areas — 77% for Redwood Canyon, 65% for the North Fork of the Kaweah, and 75% for the Hockett Plateau. At the same time, there has been some discussion about excluding portions of these areas from wilderness to accommodate certain activities and facilities. For example 59% of the workbook respondents said the Colony Mill Road should be excluded to accommodate bicycle use. A few people proposed excluding about 40 acres from the Hockett Plateau to accommodate another high Sierra camp.

Compatibility of these types of actions with a vision for the parks needs to be explored.

- *How should the parks preserve and protect both cultural and natural resources while enhancing visitor enjoyment and safety?*

According to NPS 28: Cultural Resource Management Guideline,

The goal of cultural resource planning in the national park system is to identify and preserve park cultural resources and provide for their appreciation by the public. It strives to integrate cultural resource concerns into broader NPS planning processes, to avoid or minimize harm to cultural resources, to identify the most appropriate uses for cultural resources, and to determine the ultimate treatment (preservation, rehabilitation, restoration, reconstruction/reproduction) or deliberate neglect or destruction for cultural resources.

Once cultural resources are identified and evaluated for significance, effective cultural resource management must address what should be done to properly care for a cultural resource and how do cultural resources fit into the overall scheme of park management? While the National Park Service strives to preserve and protect cultural resources whenever possible,

funding and staffing are insufficient to preserve and protect all such resources in the parks. In addition, cultural resources are only one of many resources requiring attention in the parks. Planning for this general management plan must strike a balance between equally important but conflicting resources or values by weighing the tradeoffs, for example, between the preservation and protection of cultural resources and the preservation of natural resources, the enhancement of visitor experience and safety, and the park's operational concerns. Any action affecting cultural resources listed on or eligible for listing on the National Register of Historic Places, however, will only be undertaken after appropriate consultations with the California state historic preservation office, any associated Indian tribes, other interested agencies or organizations, and the general public.

Park policy encourages adaptive reuse of historic structures where feasible, but resulting renovation costs typically exceed costs of new construction, and historic building patterns may have imperiled natural resources. Decisions may also have to consider the value and signifi-

cance of cultural resources to local or national constituencies, and the decision can be compounded by additional factors such as private ownership of structures.

When asked about what should be the emphasis for cultural resource preservation / protection in the Planning Workbook, 56% of the respondents wanted to emphasize the preservation of examples of all park historic and cultural themes, 25% wanted to preserve a large number of resources related to specific themes, and 19% wanted to emphasize interpretation rather than preservation.

BOUNDARY ADJUSTMENTS

Expansions to Sequoia and Kings Canyon National Parks were authorized in 1890, 1926, 1940, 1965, 1978, 1984, and 2000. During public scoping meetings for this planning effort, various citizens proposed park expansions in addition to others that have been previously proposed. NPS policy has defined specific criteria that must be met for land to be considered appropriate for inclusion in a national park (see text box). The secretary of the interior has some authority to make minor boundary adjustments in existing park units, while occasionally smaller

NPS Boundary Adjustment Criteria

Section 3.5 of the NPS *Management Policies 2001* state that boundary adjustments may be recommended to:

- protect significant resources and values, or to enhance opportunities for public enjoyment related to park purposes;
- address operational and management issues, such as the need for access or the need for boundaries to correspond to logical boundary delineations such as topographic or other natural features or roads; or
- otherwise protect park resources that are critical to fulfilling park purposes.

All recommendations for boundary changes must meet the following two criteria:

- the added lands will be feasible to administer, considering their size, configuration, ownership, hazardous substances, costs, the views of and impacts on local communities and surrounding jurisdictions, and other factors such as the presence of exotic species; and
- other alternatives for management and resource protection are not adequate.

boundary adjustments can be accomplished administratively through land protection plans or special studies.

Sequoia National Park is negotiating with Save the Redwoods League to purchase an 11-acre parcel adjacent to the western boundary of Sequoia National Park at the end of North Fork Drive (the Alley property). This property would facilitate visitor access to the park. This addition would meet the second criteria for boundary adjustments: to address operational and management issues, such as the need for access or the need for boundaries to correspond to logical boundary delineations such as topographic or other natural features or roads.

As required by NPS policy, other suggested additions must be considered during the general management planning process. The following boundary expansion proposals were mentioned by the public and are grouped according to related goals:

Goal: Increase Resource Protection

Portions of the John Muir Wilderness in Inyo National Forest. These additions were suggested because they would better meet the park mission to protect the habitat of California bighorn sheep (recently listed as a federal endangered species).

Goal: Expand Opportunities for Cultural Resource Enjoyment

Portions of the Sequoia National Forest South of California Highway 180. These additions were suggested because they would enhance but not duplicate opportunities for public enjoyment of significant historic resources, including key sites related to giant sequoia logging history (Converse Basin and logging flumes / railroad development). These areas are now within the Giant Sequoia National Monument, and they are currently accessible by road and trail. Other reasons that have been mentioned are to include all sequoia groves, to unify management, to simplify access, and to establish boundaries that correspond to readily identifiable natural or man-made features. The area includes the Jennie Lakes

wilderness and private inholdings, some of which provide visitor services (such as the Hume Lake Christian Camp, the Kings Canyon Lodge, the Montecito-Sequoia Lodge, and Stony Creek village). Different agency missions and regulations have allowed grazing, logging, hunting, and snowmobiling.

Goal: Increase Resource Protection, Administrative Efficiency, and Recreational Opportunities

BLM Land near the North Fork and Case Mountain. This area was suggested to increase administrative efficiency, to provide additional foothills recreation areas, and to include sequoia groves within the park.

Portions of the Golden Trout Wilderness in Sequoia National Forest. This area was suggested to even out the park boundary because this area is a peninsula jutting into the park. However, it is in a different watershed, with trail access only, and it is not recommended for further study.

Many of these resources are now managed by federal agencies (for example, the U.S. Forest Service manages Giant Sequoia National Monument) or have been added to Sequoia National Park as a result of the Dillonwood addition. Therefore, these boundary expansion proposals are not considered necessary. The National Park Service will continue to coordinate management with other land management agencies to ensure the protection of resources.

SCOPE OF THE IMPACT ANALYSIS

Impact Topics Considered in this Environmental Impact Statement

Impact topics were selected for analysis based on the major values or issues identified during the planning process, as well as applicable laws and executive orders (e.g., Endangered Species Act of 1973, as amended; Executive Order 11988 "Floodplain Management," section 106 of the National Historic Preservation Act). In addition, the NPS *Management Policies 2001* and resource management guidelines call for natural and cultural resources to be considered.

Natural Resource Topics

- Cave resources
- Water resources, including hydrology, water quality, and floodplains
- Vegetation and soils, including general vegetation, sequoia groves, and meadow, riparian, and aquatic communities
- Wildlife and wildlife habitat
- Threatened, endangered, or sensitive species
- Air quality

Wild and Scenic Rivers

- Effects of the alternatives on wild and scenic rivers

Backcountry / Wilderness

- Effects of the alternatives on wilderness or backcountry management

Cultural Resource Topics

- Historic structures, districts, and cultural landscapes
- Archeological resources
- Ethnographic resources and landscapes
- Museum collections and archives

Transportation

- Effects of transportation-related proposals on carrying capacity

Visitor Experience

- Park character
- Visitation
- Educational opportunities (including educational facilities, programs, and outreach)
- Recreational opportunities (including opportunities to experience a full range of park resources, traditional recreational experiences, nontraditional or new recreational experiences, and stock use)
- Visitor services (including overnight lodging, camping opportunities, and other facilities and services)

Private Land and Special Use Permits on Park Land

- Privately owned lands within the parks (inholdings)
- Special use permits
- Boundary adjustments

Park Management, Operations, and Facilities

- Staffing, infrastructure, visitor facilities, and services
- Operations of non-NPS entities, including the Sequoia Natural History Association, concessioners, commercial or incidental business permit holders, partners, and volunteers
- Other federal agencies

Socioeconomic Environment

- Local and regional economies
- Special use permits and inholdings
- Park concessioners
- Park staffing and budget

Impact Topics Dismissed from Further Analysis

The following topics were dismissed from further analysis because the resource does not occur in the parks or there would be no discernible effect.

Geology and Geologic Processes — Although some localized earthwork for facility or road construction could occur under some alternatives, overall geology or geologic processes within the parks would not be altered. Impacts to cave resources and soils are addressed.

Prime and Unique Farmlands — This plan would not involve or affect any agricultural lands.

Environmental Justice — No socially or economically disadvantaged population would be adversely affected to a disproportionate degree by any of the alternatives.

Soundscape / Night Sky — Nothing in the range of alternatives would affect the natural soundscape or the night sky.

Relationship to Other Planning

NPS PLANS

Plans for Giant Forest

The 1980 *Development Concept Plan for Giant Forest / Lodgepole* set the direction for removing facilities from the Giant Forest. A 1,700-car parking garage at a staging area (the Wolverton corrals) was proposed to support transit and day use, but it was never built. The 1996 *Giant Forest Interim Management Plan* finalized the planning to remove facilities from Giant Forest and convert it to day use. The major elements of that plan are essentially incorporated into this general management plan. The parking garage is no longer seen as consistent with the park mission.

Management Plans

The *Natural and Cultural Resources Management Plan* serves as the foundation for the parks' resource stewardship programs, and its management recommendations are incorporated into the general management plan through broad park mission goals related to resource stewardship. The *Resources Management Plan* further defines these goals, describes existing resource conditions and how they differ from the desired future conditions envisioned in the goals, identifies major issues and stressors that are causing divergence from the desired future conditions, and outlines a long-term, comprehensive strategy for addressing each major issue. The parks' *Strategic Plan* then identifies which actions outlined in the *Resources Management Plan* are to be implemented over the next five years. The plan also proposes a coordinated program to identify, protect, preserve, and enhance the natural and cultural resources of these two parks. It draws upon appropriate legislation and NPS policy, as well as on knowledge of the resources of the parks and their special needs.

The 1999 *Air Resources Management Action Plan* contains actions to reach the goal of the achieving and maintaining the natural range of air quality in the parks and to protect park natu-

ral and cultural resources, employees, and visitors from human-caused air pollution related threats. Although the San Joaquin Valley Unified Air Pollution Control District has primary regulatory authority for air pollution control in the San Joaquin Valley, Sequoia and Kings Canyon National Parks have a crucial role to play in protecting park air quality. Park management decisions and actions need to comply with mandates while striving to achieve park and NPS goals. Recommended actions fall into several categories — research, inventory and monitoring, park planning and regulatory compliance, education, external relations, information management, and funding. All categories are of equal importance, but actions within categories are prioritized as high, medium, or low priority. Each year park managers determine the recommended actions to be taken that year, which are identified in annual work plans.

The parks' current *Backcountry Management Plan* was approved in 1986 and provides direction for managing wilderness and backcountry areas. It is expected that upon completion of the general management plan a comprehensive wilderness stewardship and stock use plan will be completed. Some important issues that are addressed in this *Final General Management Plan / Environmental Impact Statement*, such as the continuation of stock use, the extent of wilderness compatible with each alternative, and the general level of commercial services, will directly affect the content of a new wilderness stewardship and stock use plan.

A new *Fire and Fuels Management Plan* has been developed to replace the *Fire Management Plan* approved in 1989. Park staff have been mapping fire history, and the new plan is based on recent science and research, as well as updated national policies. In the unlikely event of conflicts or implementation gaps, the approved general management plan will supersede the *Fire and Fuels Management Plan*. A natural-like fire regime will play an integral role in preserving park landscapes.

The *Aquatic / Water Resources Management Plan* for Sequoia and Kings Canyon National Parks describes the parks' water resources information base and problems, along with park-specific objectives for the management of aquatic and water resources (NPS 1989a). Data collection efforts include developing water quality monitoring programs, identifying impacts in both front- and backcountry areas, and monitoring species. Management actions include managing visitor use, managing wet meadows, mitigating acidic deposition, and fostering public education, as well as conducting research. Additionally the plan establishes minimum standards for stream management, visitor use, and long-term monitoring of natural systems. The plan is scheduled to be updated based on the issues and concerns identified in the 2005 *Water Resources Information and Issues Overview Report*, which was prepared by the NPS Water Resources Division.

Transportation studies and shuttle implementation plans are being developed for the transit recommendations in the *Giant Forest Interim Management Plan*. These include a shuttle plan with routes and stops, a parking management plan, and facility planning for shuttle maintenance and storage.

A gateway community transit connection concept plan is being prepared to develop a transit vision and conceptual action plan for Sequoia and Kings Canyon National Parks, other federal land agencies, and gateway communities in the San Joaquin Valley of central California. The planning team is looking at the value of transit connections, economic benefits to valley communities, air quality benefits, effect on public land resource protection, potential visitor experience enhancements, and partnerships between the National Park Service and local, state, and federal agencies, as well as the private sector.

The *Museum Collections Management Plan* covers the scope of collections (that is, the types of natural and cultural specimens and artifacts appropriate for the parks to collect, related to the parks' purpose and significance); the maintenance of records of the collections and archives

for resource management and research; the protection of and security for the collections and archives regarding fire detection and suppression and possible theft and vandalism; storage conditions; and planning for staffing, storage, and research needs for the anticipated growth of the collections and archives.

Design Guidelines

The *Sequoia and Kings Canyon National Parks Design Guidelines* define appropriate materials, approaches, and quality, as well as the approach to historic resources.

The *Architectural Character Guidelines* (NPS 1989b) establish an approach to retain the character of past architectural styles in the parks, particularly those related to early national park architecture and the CCC era.

The *Road Character Guidelines* (NPS 1990) document elements of the road system that are important to its character. These include stone culverts and retaining walls, signs, and historic bridges.

The *Exterior Lighting Design Concepts* (NPS 1992a) complement the *Architectural Character Guidelines* by establishing standards for low levels of lighting that will minimize light pollution and be compatible with architectural styles.

Long-Range Interpretive Plan

A "Long-Range Interpretive Plan" for Sequoia and Kings Canyon National Parks was completed in 1997. A revised comprehensive interpretive plan will be completed following the approval of the general management plan. The primary interpretive themes identified in the "Long-Range Interpretive Plan" are common to all alternatives:

- The natural resources of the southern Sierra Nevada have undergone a series of human uses and impacts as values for those resources have evolved.
- Giant sequoia, which grow only on the western slope of the Sierra Nevada, have a fascinating ecology which allows them to

become the largest, and some of the oldest, trees in the world.

- Because of the enormous topographic relief of the southern Sierra Nevada, the range creates a wide range of climates, shaping a diversity of interconnected habitats, each of which is occupied by carefully adapted, interdependent organisms.
- The Sierra Nevada was created by and continues to be acted upon by a variety of geologic forces.
- The Sierra Nevada environment, which plays a critical role in defining the region's climate, geography, and economy, is greatly affected by human activities within the region.
- Sequoia and Kings Canyon National Parks protect a large wilderness area, where natural forces prevail and which provides significant scientific and social values to the world.

Visitor experience goals are to (1) make available a variety of experiences to visitors, including the ability to access orientation and activity planning; (2) interact safely with natural and cultural resources; (3) experience park environments by exploring trails; (4) learn about resources through a variety of media; (5) understand the ecosystem; (6) learn about and appreciate less readily available resources; (7) be introduced to vulnerabilities of resources to human activities; (8) be provided opportunities to learn skills needed to enjoy the parks; and (9) encourage visitors to appreciate the national park system and its mission and to recognize naturalness and wildness as values that are preserved in parks.

PLANS FOR ADJACENT FEDERAL LANDS

Bureau of Land Management, Resource Management Plan. The 1996 *Caliente Resource Management Plan* finds that the Middle, East, and North Forks of the Kaweah River, which are adjacent to Sequoia National Park, are eligible for inclusion in the wild and scenic rivers system. Case Mountain would continue to

be open to the leasing of oil and gas resources subject to raptor stipulations but would be closed to the leasing of geothermal resources. Additionally, travel within sequoia groves would be limited to pedestrians. Currently allotted livestock grazing would continue to be authorized, but grazing within sequoia groves would be terminated if any negative effects were shown by studies.

U.S. Forest Service Wilderness Management Plans.

The Golden Trout Wilderness is being managed under a 1982 *Wilderness Management Plan* that was reaffirmed in the 1989 *Sequoia National Forest Plan*. In 2001 a *Wilderness Management Plan* was approved for the John Muir, Ansel Adams, and Dinkey Lakes Wildernesses. Management plans have not been prepared for either the Monarch Wilderness or the Jennie Lakes Wilderness.

Giant Sequoia National Monument. As directed in the presidential proclamation establishing the national monument, a combined *Management Plan and Final Environmental Impact Statement* was completed in December 2003 (USFS 2003a). A scientific advisory board, selected in consultation with the National Academy of Sciences, provided guidance for the plan.

The stated objects of interest in the plan are

- the naturally occurring groves of giant sequoia, which are described in the proclamation as “magnificent groves of towering giant sequoias, the world’s largest trees”
- the ecosystems within the monument that surround the groves and provide enriching recreational and social experiences, outstanding landscapes, and an array of rare and endemic species, such as the fisher, the great gray owl, the American marten, the northern goshawk, the peregrine falcon, the spotted owl, and the condor
- the historical landscape in and around the Hume Lake basin associated with the Euro-American use of the giant sequoias since the late 1800s

- the limestone caverns and prehistoric archaeological sites that provide a paleontological record of the ecological changes that giant sequoias have undergone, as well as a prehistoric record of the relationship of the area to the native tribes

As stated in the “Record of Decision” (USFS 2003b), the plan

establishes management direction in four areas: the protection of communities and other valuable resources from catastrophic fire, ecological restoration, recreation and human use, and transportation. In the first two decades [of plan implementation], the protection strategy will be emphasized to reduce the risk of stand-replacing wildfires. The highest priority will be to protect communities and the second priority will be to protect sequoia groves and other important resources such as wildlife and aquatic habitat. The highest priority for ecological restoration (restoration strategy) will be the restoration of plantations created by past logging and wildfires. Opportunities will be taken where they exist to address ecological restoration needs during protection activities. A wide range of recreational opportunities will continue to be provided. Management direction provides a sound foundation for changes and additions to recreational facilities and services in response to public demand. The current road system will generally remain intact, providing access for the protection of communities and resources from wildfires, as well as providing good access to a broad spectrum of existing recreational opportunities. The road system will provide access for the Tule River Indian Reservation for the protection of their resources and culturally important sites and resources. The overall ecological condition of riparian areas will gradually improve as portions of roads or recreational sites that are inconsistent with the aquatic management strategy are restored.

Sierra Nevada Forest Plan Amendment. In January 2004 the Forest Service issued the *Si-*

erra Nevada Forest Plan Amendment to improve the protection of old forests, wildlife habitats, watersheds, and communities in the Sierra Nevada and the Modoc Plateau (USFS 2004). The new plan will reduce the number of acres burned by severe wildfires by more than 30% over the next 50 years. It will double the acres of large old-growth trees and California spotted owl nesting habitat over the next 50 years. Around communities, fuels will be reduced on about 700,000 acres over the next 20 years, helping to protect them from severe wildfires.

STATE AND REGIONAL PLANS

Sierra Nevada Ecosystem Plan. The *Sierra Nevada Ecosystem Plan* represents a major public effort using science to assess ecosystem conditions. It identifies five major natural resource threats — air pollution, increased insularity and habitat fragmentation, invasion by nonnative species, loss of a natural fire regime, and climate change. The general management plan alternatives do not affect or alter these threats.

The federal sequoia managers plan focuses on the consistent management of giant sequoia groves.

State Route 65 Transportation Concept Report. The *State Route 65 Transportation Concept Report*, by the California Department of Transportation’s District Office 6, is a 20-year plan for a 302-mile north-south highway from near Bakersfield to near Yuba City; 181 miles are yet to be constructed. The route serves recreational traffic to Sequoia and Kings Canyon National Parks. Between 2010 and 2020, California 65 north of California 198 is projected to be constructed with funds from the Kern and Tulare Regional Improvement Program, the Caltrans Interregional Improvement Program, and the Governor’s Traffic Congestion Relief Program.

Comprehensive Statewide Historic Preservation Plan for California, 2000–2005. The *Comprehensive Statewide Historic Preservation Plan* for California describes the vision for his-

toric preservation in California and outlines future direction for the Office of Historic Preservation. The plan identifies the critical preservation issues, needs, challenges, and opportunities for historic preservation in California. The plan expresses the shared vision and active contribution of a wide range of public and private organizations and individuals with vested interests in historic preservation programs, issues, and concerns.

Section 106 of the National Historic Preservation Act of 1966 requires that federal agencies consult with the state historic preservation officer and, as appropriate, associated Indian tribes and the general public prior to taking any action that affects cultural resources listed on or eligible to be listed on the National Register of Historic Places. Sequoia and Kings Canyon National Parks will fulfill all their obligations under section 106.

LOCAL PLANS

Three Rivers Policy Framework. The gateway community of Three Rivers updated its *Policy Framework* in June 2002. The framework addresses goals in five categories to retain the

community's small rural character: land use and community character, natural environment, community facilities and services, transportation (mobility and access), and public safety. Future implementation mechanisms include surveys, guidelines, standards, plans and maps, natural resource mapping, floodway designation, scenic corridor designation, and regulations in addition to coordination and development plans. Many proposed policies (use of native plants, viewshed protection, controls on exterior lighting) are consistent with those of the National Park Service, and the general approach is compatible with the draft general management plan alternatives. The Three Rivers *Policy Framework* is intended to coordinate with the *Tulare County Foothill Growth Management Plan*.

Natural environment objective 5.2 relates to protecting and preserving the natural features and quality of the Kaweah River and all of its tributaries, both perennial and intermittent. Several proposed policies related to this objective are similar to protection measures for wild and scenic rivers that are discussed in this document.

Alternatives, Including the Preferred Alternative



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Introduction

PUBLIC SCOPING AND MANAGEMENT ALTERNATIVES

Before any alternatives were developed, information was gathered on park resources, applicable mandates and laws, visitor use, and preferences. Some of this information was shared with the public in project newsletters. The purpose of public involvement is to help shape the range of alternatives, which was done through public scoping meetings, a Planning Workbook (Newsletter 4), and alternatives workshops. The resultant ideas defined the extent of differences in alternatives and helped to set up a range of three distinct alternatives — an alternative that would emphasize natural ecosystems and biodiversity, an alternative that would preserve traditional character and retain the feel of yesterday, and an alternative that would adapt to changing user groups. Each of these alternatives, as well as the alternative to continue current management (the no-action alternative), would support the parks' purpose and significance, address issues of concern, avoid unacceptable resource impacts, meet the parks' long-term goals, and respond to differing public wishes or concerns.

PREFERRED ALTERNATIVE DEVELOPMENT

The preferred alternative was developed following an initial assessment of the impacts of the preliminary alternatives. A decision-making process known as "Choosing by Advantages" (CBA) was used to bring maximum value to the process while making cost-effective decisions that would benefit national parks and the nation. Nineteen factors were assessed, and the results of the CBA process are included in appendix F in volume 2. The preferred alternative was selected for two major reasons: (1) it would bring additional benefits to the parks, and (2) it would

be more cost-effective than the alternative that was initially ranked highest in the CBA process. Benefits related to resource protection from other alternatives were added to the preferred alternative.

MANAGEMENT PRESCRIPTIONS

Management prescriptions are the heart of the general management plan. The prescriptions guide the achievement of desired future conditions for both resources and visitor experiences, and they are applied to specific areas or zones, which would differ by alternative. Alternatives and management prescriptions were first presented in Newsletter 5 (winter 2000). As the planning process evolved, changes were made to both the prescriptions and the alternative actions.

AN ALTERNATIVE CONSIDERED BUT REJECTED

The only alternative that was considered but rejected was a public suggestion to remove all development from the parks (including roads) and to ask people to hike into the parks. While the intent of the suggestion may have been to protect resources, this alternative would not meet the NPS mandate to both preserve resources and provide for public enjoyment. Only visitors physically capable of a strenuous hiking experience could enjoy the parks. Cultural resources, particularly those highly valued facilities related to early NPS rustic architecture and the CCC (the Generals Highway and related facilities) would be removed, as would all park and concession facilities. This would be a loss of public and private funds that have been spent to provide enjoyment for park visitors. This alternative would not meet NPS *Management Policies* or any of the six goals of the National Environmental Policy Act. Consequently, it was rejected.

Management Prescriptions

BACKGROUND INFORMATION

Desired resource conditions, visitor experiences, appropriate activities, and appropriate facilities are described for each management prescription. Numerous elements are common to all prescriptions. The management prescriptions presented below have been simplified and consolidated compared to those presented in Newsletter 5.

For the frontcountry there are four prescriptions — *low-use frontcountry*, *high-use frontcountry*, *park development* (including villages, campgrounds with amenities, park operations, and residential), and *high-use scenic driving*.

For the backcountry there are three prescriptions — *major trails*, *secondary trails*, and *cross-country areas*.

Carrying Capacity

General management plans are required to identify and implement commitments for visitor carrying capacities for all areas of a park. The National Park Service defines visitor carrying capacity as the type and level of visitor use that can be accommodated while sustaining desired park resource conditions and achieving desired visitor experiences consistent with the purposes of the park. The overall strategy of implementing a carrying capacity process is a tiered approach that incorporates monitoring indicators and management actions to achieve certain standards and conditions.

At the general management plan level of decision-making, desired resource conditions are maintained and desired visitor experiences are achieved through prescriptions. Visitor capacity includes managing all components of visitor use (levels, types, behavior, timing, and distribution). A section under each prescription discusses carrying capacity, including the types of **indicators** that may be **monitored** and a range of actions that may be taken when indicators are

not showing progress towards meeting the desired condition.

Frontcountry Carrying Capacity

Frontcountry visitation levels that are being considered under the alternatives analyzed in this document can generally be accommodated without adverse resource impacts, as described in the section entitled “Major Decisions to be Made” (beginning on page 33). Carrying capacity can be dealt with primarily as a seasonal visitor management issue based on available parking at each site and on the prescribed standards for resource conditions, visitor experience, and the physical capacity of visitor facilities. The overall approach to carrying capacity in frontcountry areas is (1) to concentrate visitor use at designated facilities in order to contain visitor impacts, (2) to monitor general trends for change, and (3) to conduct site-specific monitoring and management if general trends begin to indicate increasing impacts. This approach is described in the carrying capacity discussion for each frontcountry prescription.

Backcountry Carrying Capacity

The parks have long regulated backcountry use, and permits are issued based on regular monitoring of resource condition indicators intended to maintain desired resource conditions and ensure carrying capacities are not exceeded. Implementation plans, like the *Backcountry Management Plan* and the *Stock Use and Meadow Management Plan*, detail measures to monitor resource condition indicators throughout the backcountry. See the backcountry prescriptions for more detail.

Applying Management Prescriptions

Management prescriptions are applied to geographic areas, which are referred to as zones. Zone sizes vary by alternative, depending on the vision for each alternative. Management prescriptions generally illustrate carrying capacity at a level appropriate for a conceptual general

management plan. Some decisions about the way in which management prescriptions would be implemented, however, are left to the alternatives. These include stock use, the amount of additional wilderness, and backcountry commercial use. For example, alternative A has no stock use, alternative C broadens stock use but imposes limits on group size, and alternative D concentrates use but allows larger groups. The vision for alternative A states that more wilderness would be compatible under this alternative than under either alternative C or D. Also, the appropriateness of new activities is discussed in the alternatives.

Zone Boundaries

A natural boundary, such as a stream, a road, a natural feature, or a wilderness boundary, is often used to delineate zones. The zones shown on maps of the alternatives are representative and are not drawn to scale. Future implementation plans will select specific sites, provide designs, and meet any additional requirements for compliance with environmental and historic preservation laws and regulations.

Land Suitable for Development

Sequoia and Kings Canyon National Parks contain a great deal of steep terrain, and most of the buildable terrain near roads has already been developed. A Geographic Information System (GIS) was used to define future potential development areas. Slopes of 15% or less are considered suitable for development, even if in the past structures were built on slopes up to 30% or more. Not all areas within the development zone can or will be built on because of the need to protect resources.

ELEMENTS COMMON TO ALL PRESCRIPTIONS

The prescriptions are phrased in the present tense in order to convey what conditions are once the desired conditions have been achieved.

Sequoia Groves

The giant sequoia groves — particularly Giant Forest — and the ecosystems they occupy are restored, maintained, and protected. This includes reintroducing and managing natural processes such as frequent low to moderate intensity surface fires and native forest insect outbreaks to preserve the groves' ecological integrity. Ground and surface water conditions are also significant to the reproduction and maintenance of the sequoia resource and are managed to protect grove hydrology.

River Protection Measures

Wild and scenic river resources and outstandingly remarkable values for designated and eligible rivers are protected in the parks through a number of measures and management tools.

- Rivers in frontcountry areas are classified as “recreational” and are protected by seasonal closures; zoning; limiting areas of development; managing overnight use by limiting the number of developed campsites, parking spaces, and lodging rooms; establishing development setbacks; removing facilities within floodplains; managing river-based recreation; defining river access points; prohibiting motorized watercraft; and regularly inspecting the condition of resources, including the river's outstandingly remarkable values. As a mitigating measure, riverbanks are restored as needed. The capacity of roads providing access to recreational rivers is not expected to increase.
- Rivers in less accessible backcountry or wilderness areas are classified as “wild” and are protected by zone prescriptions, permits, overnight wilderness quotas, restrictions on stock party sizes, restrictions on use areas, riverbank restoration, and area closures. As a mitigating measure, riverbanks are restored as needed.

For rivers that are being considered for designation as wild and scenic rivers, no actions may be taken that could adversely affect the values

that qualify a river for the national wild and scenic rivers system.

Hydroelectric impoundments and diversions on the Marble and Middle Forks of the Kaweah River, and on the tributaries of the East Fork, are on sections being studied for inclusion in the wild and scenic rivers system. It has been determined that the magnitude of impacts resulting from these relatively small-scale facilities does not preclude the inclusion of these river segments in the wild and scenic rivers system, since even with these facilities the waterways remain “generally natural and riverine in appearance” (*Federal Register* 47, no. 173: 39458).

The management plans for the designated river segments prescribe desired conditions, typical visitor activities and experiences, and park facilities and management activities allowed in the river corridors based on management zoning. Through management zoning the outstandingly remarkable values of the river corridor are protected and enhanced.

Light Pollution

The night sky or natural dark is protected from light pollution, which obscures the visibility of stars and other celestial bodies. The parks’ *Exterior Lighting Design Concepts* recommend techniques to provide safety while reducing light pollution. These include keeping illumination to the minimum necessary, using lights that provide accurate color rendition, directing light down, and screening fixtures to reduce glare. Emergency lighting is to be kept to a minimum and placed on switches or motion detectors. This is in accordance with NPS policy.

Protection of Natural Sounds

Opportunities in the parks are preserved for visitors to enjoy natural sounds, including quiet. Visitors to the parks often seek escape from the sights and sounds of urban life. As visitors move away from developed areas and park features, they are more able to enjoy the natural sounds of water, wind, and wildlife. The parks continue to limit low-flying aircraft to avoid disturbing the natural setting. Additionally, all visitors are re-

minded that their actions can disturb others. Sounds caused by visitors can destroy the tranquillity that other visitors often seek.

Cultural Resources

Archeological resources, historic structures, and cultural landscapes are identified, evaluated, protected, and preserved unless it is determined through environmental analysis and consultations with the California state historic preservation officer, Native American tribes, and other parties that either disturbance is unavoidable or natural deterioration is appropriate. If resources must be disturbed, techniques to adequately mitigate impacts are taken beforehand. The parks continue to consult with affiliated American Indian tribes to identify ethnographic resources in order to develop and accomplish programs in a way that respects the beliefs, traditions, and other cultural values of the Indians who have ancestral ties to park lands. No structure listed on or eligible for listing on the National Register of Historic Places is removed or allowed to decay naturally (molder) without prior review by park and NPS regional cultural resource specialists, including approval by the regional director and consultation with the California state historic preservation officer. Before such a structure is removed or allowed to molder, appropriate documentation to record the structure is prepared in accordance with section 110(b) of the National Historic Preservation Act and submitted to the Historic American Buildings Survey (HABS), the Historic American Engineering Record (HAER), or the Historic American Landscapes Survey (HALS) program.

Museum collections are acquired, accessioned and catalogued, preserved, protected, and made available for access and use according to NPS standards and guidelines.

Architectural and Site Character

Public facilities in all zones comply with the parks’ guidelines for architectural design, lighting, and road character. The intent of the guidelines is to maintain rustic park architecture and character. Generally, operational areas are sited and screened by using natural features to mini-

mize views by the public. Construction materials are colored to merge with the natural landscape.

Accessibility for All Visitors

New and remodeled federal and concessioner buildings and outdoor developed areas (e.g., campgrounds, trails, and park attractions) are made accessible to all visitors, including those with disabilities, at least to the extent required by federal standards. While NPS policy is to maximize accessibility, it may not be possible to make a site like Moro Rock with its steep, winding staircase or a historic building with a narrow post and beam door opening accessible because the required changes would affect the integrity of the feature. When an important park experience cannot be readily made physically accessible, interpretive brochures, wayside exhibits, or programs may be provided to help convey the experience to visitors.

Sustainability

New, remodeled, and adaptively reused buildings and facilities, as well as adaptively reused historic facilities, reflect the National Park Service's commitment to energy and resource conservation by their energy efficiency and durability.

Commercial Services

In any zone where management prescriptions provide for visitor activities or facilities, such activities and facilities may be provided by authorized commercial services. Commercial services are offered in the parks to make available high-quality and safe visitor experiences, while protecting and maintaining the desired resource conditions in each zone. Commercial activities need to adhere to management prescriptions to provide the desired visitor experiences. Commercial services could include various types of lodging, camping, food service or restaurants, stores, public showers, laundry facilities, transportation, gas stations, stock rides (horses or mules), and pack stations. Before commercial services can be proposed or reauthorized within a park, they must be deemed "necessary and appropriate"; they must be finan-

cially feasible (that is, an operator has an opportunity to make a profit); and they cannot be services provided outside the parks. "Necessary" commercial services afford convenience to visitors and are generally a considerable distance from similar facilities outside the parks. Commercial service plans are prepared to describe in detail the facilities and actions required to provide commercial services, and to achieve related visitor experience and resource protection goals.

Concession permits or incidental business permits also provide visitor services; they need only be "appropriate" in order to be authorized. Typically these permits are for guided backcountry activities, such as pack stock, cross-country skiing, or fishing trips. As such, concession permits are often regulated by backcountry permits; and no more than a certain percentage of backcountry permits should be set aside for commercial operators on weekends in order to give the general public access to park resources. Activities listed as appropriate in any zone are generally suitable for concession permits. However, commercial raft or nonmotorized watercraft use is not considered safe in rivers within the parks, so this type of business permit would not be authorized.

Utilities

Utilities are limited to those determined to be necessary and appropriate for each site. While most utility systems are in developed areas, utility systems and related corridors (sewer and water lines, radio repeaters, telephone lines, aerial or underground electrical lines, manholes, etc.) may be present in any management zone as a result of past management practices. The intent of park managers is to limit the number of such facilities and to minimize their impact. Services are to be provided in the most efficient and sustainable way possible, and future utility replacements, repairs, or new systems are to be located so as to minimize resource damage and to be inconspicuous. Related aboveground elements and access points are screened from visitors whenever possible. Electric powerlines and other utilities are placed underground whenever feasible.

FRONTCOUNTRY PRESCRIPTIONS

Low-Use Frontcountry Zone

Description. Low-use frontcountry areas are natural areas that provide resource-based experiences that are self-directed and include personal discovery and interaction. This zone may include Sierra Nevada foothills, montane forests, and subalpine areas. This zone is accessed by a system of trails and roads, and limited recreation facilities are provided. Visitors are likely to encounter fewer people and more natural quiet than they would in the high-use frontcountry. Primitive campgrounds may be provided, as well as back roads valued because they closely follow natural terrain and provide rough and challenging driving experiences. **Examples:** Back roads — Redwood Saddle and Mineral King; primitive campgrounds — Atwell Mill and South Fork campgrounds; low-use frontcountry areas — Mineral King.

Desired Natural Resource Condition. Natural resources may be minimally manipulated to accommodate facilities; however, the overall scale and extent of development and impacts are limited and less than what one would find in the high-use frontcountry. Resource impacts are confined to the immediate facility area. Damaged areas and unplanned impacts (such as trails created by visitors) are restored or left to regenerate naturally. Illegal marijuana plants and farming facilities are removed, and areas are restored to natural conditions.

Desired Cultural Resource Condition. Cultural resources are managed as discussed on page 54.

Desired Visitor Experience. *Roads* — Motorists, bicyclists, or others can traverse low-speed, low-use, narrow back roads that follow the natural terrain. Constant alertness is required since roads may have many curves, steep grades, rough or rutted surfaces, and steep dropoffs. Some routes may be designated for nonmotorized use.

Trails — By taking trails that lead away from roads and visitor use areas, visitors can experience

greater solitude and take more responsibility for what they do. They are encouraged to stay on designated trails, which may be steep or rocky. Written information may be provided about trail character, conditions, and educational opportunities. Maps may be necessary.

Primitive Campgrounds — Campgrounds with minimal facilities provide a rustic experience; recreational vehicles or generators are not allowed.

Appropriate Activities. Activities include driving, sightseeing, hiking, camping, caving, rock climbing, water play, fishing, nonmotorized watercraft use, cross-country skiing, snowshoeing, bicycling, and stock use in designated areas. Snowmobiles are prohibited, except by permit along roads to access private residences.

Appropriate Facilities. Roads are often narrow (generally less than two lanes), one- or two-way, with paved and unpaved sections; often there are no shoulders or guard rails/walls and few passing pullouts. Back roads may be minimally altered for road safety. Parking areas may be paved, with edges defined by rocks and logs to confine impacts. Bicycle routes may be designated.

Ranger stations, visitor contact stations, entrance stations, corrals or pack stations, and historic roadside structures may be present, as well as park operational facilities (such as fire lookouts and utility systems). These facilities are generally small; operational facilities should be located out of sight from public roads, trails, and facilities.

Facilities for hiking may include narrow unpaved trails, trailheads, footbridges, and small directional signs at trail intersections. River access may be provided by way of marked and hardened trails, and signs to direct visitors to areas that can withstand use.

Primitive campgrounds provide less than 50 sites and do not offer full services (for example, no potable water, electricity, or RV dump stations). Restrooms may not be lighted. Trailhead campsites for backpackers, walk-in campsites,

and relatively remote bike-in, hike-in, or pack-in campsites may be provided. Stock campgrounds have hitching posts and turnaround space for horse trailers.

Carrying Capacity. Low-use frontcountry areas, primarily trails and campgrounds, generally have the physical capacity to absorb more visitor use than exists today and still maintain less crowded experiences for visitors while meeting desired resource conditions. The frontcountry trail system is extensive. Facilities such as parking areas and campsites adequately control levels and distribution of visitor use since no parking or camping is allowed in undesignated areas.

To accommodate projected day use growth and still maintain desired resource conditions, some facilities such as those listed in the “Appropriate Facilities” section may be built, renovated, or expanded (trails and trailheads, picnic areas, river access parking, primitive campgrounds), with facility expansion proportional to future projected visitation levels. The road system is not expanded. Actions are consistent with law and policy mandates, and they are suitable for site-specific conditions. If facilities are at capacity, visitors are directed to another area.

Enforcement rangers are not likely to regularly patrol low-use frontcountry areas unless there is a resource concern such as illegal marijuana farms, a substantial visitation increase, or the monitoring of general trends indicates potential problems.

Data Collection — General information, such as campground use, continues to be collected and analyzed by park staff to identify trends. Some monitoring of specific resources and visitor experiences is undertaken.

Indicators — Indicators in this zone may include the condition of fundamental resources (riparian communities, indicator species, soils, vegetation cover, rock faces, archeological sites, water quality, and natural soundscape) and visible impacts (presence of visitor-created trails and facilities, trash, invasive or illegal plants).

Indicators are monitored to ensure that desired resource prescription standards are met. Resource management plans contain details for monitoring.

Management Actions — Types of management actions that may be undertaken in low-use frontcountry areas to address changes in resource conditions, and possibly affecting visitor distribution and behavior, include

- defining road and parking facility edges so that parking is limited to desired locations
- defining trails and river access points
- restoring disturbed sites
- improving trail delineation or hardening trails and trailheads
- removing invasive plants
- removing illegal plants and demolishing related construction
- expanding educational programs (especially those emphasizing leave-no-trace ethics)

High-Use Frontcountry Zone

Description. High-use frontcountry areas are natural areas with trails, roads, or recreational and educational opportunities that draw many day visitors because of the quality of the resources and easy access. This zone may include Sierra Nevada foothills, montane forests, and subalpine areas. These areas are usually associated with road corridors. Park information systems encourage the use of various areas in this zone to disperse visitor use and to provide more focused experiences. Examples: Tokopah Falls trail (nonwilderness part), Big Stump, General Grant Tree, Moro Rock, Crystal Cave.

Desired Natural Resource Condition. Natural resources may be moderately to highly manipulated to accommodate facilities but generally appear natural. Development is larger and associated impacts more noticeable than in the low-use frontcountry. Resource impacts are confined to the immediate facility area; resources in and near high-use areas are likely to be protected by methods such as fencing or paved walks.

Damaged areas and unplanned impacts (such as trails created by visitors) are restored or left to regenerate naturally.

Desired Cultural Resource Condition. Cultural resources are managed as discussed on page 54.

Desired Visitor Experience. At park attractions visitors can expect to encounter many people, but in a natural setting; traffic congestion may be common during the summer season. Interpretive information is available through waysides and brochures; scheduled naturalist activities are offered. During low-use times (e.g., early morning or evening) natural sounds may predominate.

Once people are about a half-mile away from trailheads on well-defined trails they have opportunities to experience more natural sounds and quiet, with decreasing sights and sounds of roads and other visitors. Visitors can easily follow trails and readily find information and written materials about trail conditions, experiences, and educational opportunities at trailheads and wayside exhibits.

Vistas may be marked to both guide visitors and prevent resource damage from trampling.

Appropriate Activities. Activities may include onsite programs, hiking, water play, fishing, caving, rock climbing, nonmotorized watercraft use, cross-country skiing, snowshoeing, and picnicking. Stock use and bicycling may be allowed in designated areas. Attractions have a sightseeing emphasis, and both self-guided and guided educational/interpretive programs are offered.

Appropriate Facilities. Access is by way of one- or two-way roads. Roads and parking areas are paved to reduce dust and to withstand higher use levels. To confine impacts, parking areas may have distinct edges created by using rocks and logs, or curbs and gutters. Bicycle routes may be designated.

At resource attractions educational and interpretive wayside facilities are likely to be provided. Historic, interpretive, or activity structures (e.g., the Giant Forest museum, trail centers / kiosks)

may be present. Facilities may include wide paved walks that guide and direct visitors. Fencing or vegetation, boardwalks, and signs may be used to protect adjacent resources.

Other facilities include trailheads, highly maintained trails (paved and unpaved), directional signs at trail intersections, shuttle stops, museums, visitor centers, ranger stations, occasional essential staff residences, corrals or pack stations, picnic areas, restrooms, viewpoints, benches, and informal trailside seating (using natural materials such as logs and boulders). River access may be provided by way of marked and hardened trails; fencing and signs may direct visitors to areas that can withstand use.

Carrying Capacity. At destinations and features within the high-use frontcountry, a multifaceted approach is used to manage carrying capacity. Levels of use are primarily controlled by the physical capacity of facilities, such as parking areas at trails and visitor centers. Facilities at features are sized so that large numbers of people can visit these destinations simultaneously while preserving outstanding viewing opportunities. High use levels may become more typical throughout the year as regional population growth continues.

Day-use facilities are controlled by the number of available parking spaces or the number of visitors that can be accommodated by transit, with the frequency of seasonal transit operations coordinated with parking capacity. Transit vehicles will be sized accordingly. The frequency of transit service is based on the typical time that visitors spend at related destinations, and it varies throughout the day in order to accommodate expected weekend or weekday levels of use.

Data Collection: General information (such as visitor counts at popular destinations, parking lots, and visitor facilities) continues to be collected and analyzed by park staff to identify trends. Some specific resource and visitor experience monitoring also begins.

Indicators: Indicators that are monitored for the high-use frontcountry include the physical capacity of current facilities such as roads, parking lots, and buildings; the number of visitors at one time at popular destinations; the condition of fundamental resources (riparian communities, indicator species, soils, vegetation cover, rock faces, archeological sites, water quality, and natural soundscape), visible impacts (presence of visitor-created trails, unplanned widening of trails, presence of invasive plants), and visitor experiences (perceived solitude).

Based on park management experience and facility capacity, use levels may begin to impact visitor enjoyment in terms of crowding, lack of parking, impediments to viewing, and noise at the following levels:

- 450–500 people at one time at the Grant Tree
- 400–450 people at the Sherman Tree
- 125–150 people at Moro Rock

Ranges for facility-based capacity are also developed for other popular visitor destinations.

Management Actions: Types of management actions that may be undertaken in high-use frontcountry areas as the physical capacity at a particular site is approached (based on visual monitoring) include:

- redirecting visitors to less crowded locations by using communication between onsite staff, transit providers, and traveler information systems (such as park radio announcements and real-time information signs)
- encouraging visitors to hike between transit stops by using in-park media, including information at trail centers and museums, in order to disperse use and improve visitor experiences
- informing visitors and potential visitors of less crowded times to visit the parks by means of various orientation and information approaches

- using seasonal transit in the Giant Forest so that visitors park once and use transit to get to popular destinations; using some roads seasonally only for transit vehicles; extending the transit season as visitation grows; and continuing other ongoing transit planning to reduce traffic and crowding, and to disperse visitors
- redesigning facilities to accommodate desired sustainable levels of visitation
- restoring disturbed sites
- improving trail delineation or hardening trails and trailheads
- expanding education (especially programs emphasizing leave-no-trace practices)

Park Development Zone

Park development includes four distinct functions — *villages* that offer a range of visitor services, *developed campgrounds with amenities*, *park operations* areas, and *residential* areas. The intent is to separate and confine these differing functions for reasons of aesthetics, efficiency, health, and safety.

Desired Natural Resource Condition. Development is larger and more extensive, and impacts are more noticeable, than in the high-use frontcountry. Natural resources within developed areas are likely to be moderately to highly manipulated to accommodate facilities. Adjacent natural resources appear unmanipulated in public parts of this zone; these resources are protected by means such as paved walks, fencing, boardwalks, and signs. Impacts may be widespread and long term, but most are reversible with major restoration efforts. Native plants are typically used in naturalistic landscape plantings. Areas with unplanned impacts (for example, trails created or widened by visitors or staff) are actively restored to prevent further damage. Landscapes are actively maintained as necessary by methods such as restoration, replanting trampled vegetation, removing nonnative plants and hazardous trees.

Desired Cultural Resource Condition. Cultural resources are managed as discussed on page 54.

Carrying Capacity. The capacity of developed areas is essentially based on available parking and the number of people that can be accommodated while maintaining desired resource conditions. The capacity of overnight facilities, such as campgrounds and lodges, is based on desired resource and visitor experience conditions and is incorporated into the facility designs; reservation systems then support that level of use. The parking capacity of NPS operations and housing areas is based on building use and related codes, which then constitutes the carrying capacity.

Roadway level of service affects pedestrian and vehicular experiences, predominantly in villages. Larger villages, such as Lodgepole and Grant Grove, are likely to remain highly used on peak-season days since they provide visitor services. Use levels may become less seasonal as regional population growth continues.

Data Collection: General information (such as lodging and campground occupancy rates, visitor counts at visitor centers and other facilities, and traffic counters on specific road sections where seasonal roadway level of service is D or below) continues to be collected. Park staff then analyze this information for trends. Some specific resource and visitor experience monitoring also begins.

Indicators: An important monitoring indicator in the development zone is seasonal traffic congestion based on roadway level of service. Other indicators may include the condition of fundamental resources (riparian communities, soils, vegetation cover, rock faces, archeological sites, water quality) and visible impacts (presence of trash, new visitor-created or widened trails, or invasive plants).

Management Actions: Types of management actions that may be undertaken in developed areas to address changes in desired resource conditions or visitor experiences include

- defining road and parking trail edges to limit parking only to desired locations and thus prohibit random parking and camping
- defining trails and river access points
- restoring disturbed sites
- improving trail delineation or hardening trails and trailheads
- removing invasive plants
- expanding educational programs (especially those emphasizing leave-no-trace practices)
- directing visitors to another area if facilities are at capacity or no parking is available — During the peak season rangers help direct people to other locations; when day-use facilities approach capacity, based on visual monitoring, communication between onsite staff, transit providers, and traveler information systems (such as park radio announcements and real-time information signs) are used to redirect visitors.
- directing through-traffic to Hume Lake to the alternate route and away from Grant Grove village
- using seasonal transit access to and from popular sites to help disperse use away from some villages and campgrounds, thereby reducing congestion and freeing parking for day users.
- continuing ongoing transit planning to explore additional ways to reduce traffic, crowding, and dispersion of visitors.
- extending the transit season as population grows
- using in-park media, including information at trail centers and museums, to encourage visitors to hike between transit stops in order to disperse use and improve visitor experiences
- continuing to redesign facilities in developed areas to improve resource conditions and visitor experiences — Villages and campgrounds provide pedestrian-friendly environments. Desired levels of overnight accommodations include the replacement of Giant

Forest lodging opportunities at Wuksachi (an additional 312 rooms) and a 10% increase at Grant Grove (9 additional cabins).

- possibly further limiting water withdrawals in dry seasons

■ **Villages**

Description: Villages are areas that provide concentrated visitor services (e.g., visitor centers, lodging, restaurants and informal food service, stores, and equipment rentals). Their size and character may vary. Examples: Wuksachi village, Grant Grove village, Cedar Grove village.

Desired Visitor Experience: Villages offer services and activities where large numbers of people can be accommodated in what is perceived as a traditional national park setting. Visitors are likely to experience traffic congestion in the summer season. Informational, educational, recreational, and other services are provided, but services are limited to those determined to be necessary and appropriate for each site.

Appropriate Activities: Activities are principally related to meeting visitor needs (food, information, lodging, restrooms) and to providing services and educational opportunities that support the parks' purposes. Shopping opportunities may be provided. Visitors may also enjoy observing the adjacent natural scene.

Appropriate Facilities: Villages may offer a visitor center or nature center, a ranger station, amphitheaters, overnight accommodations (lodges; modern, rustic, or tent-top cabins), stores, restaurants, gas stations, stables, public showers and laundry facilities, a post office, and a variety of site furnishings (waysides, benches, signs, fencing, etc.).

Roads are paved, one- or two-way, generally with curbs and gutters. Some roads may be designated for service vehicles, pedestrians, or bicycling. Shuttle stops and parking areas are paved, with edges defined by rocks and logs, or curbs and gutters, to

confine impacts. Roadside parking spaces may be provided.

River access may be provided by way of marked and hardened trails; fencing and signs may direct visitors to areas that can withstand use.

■ **Campgrounds with Amenities**

Description: Campgrounds with amenities are large frontcountry campgrounds, often near villages. Diverse camping opportunities are offered, including car or RV camping and various amenities. Some reserved sites and winter campsites may be available. Examples: Campgrounds at Cedar Grove, Grant Grove, Dorst, and Lodgepole.

Desired Visitor Experience: Campgrounds with amenities are larger and may be noisier than primitive campgrounds. Differing camping preferences may be accommodated — tent, group, family, and RV camping (generators may or may not be allowed). Visitors generally have direct access to their vehicles. Some walk-in sites may be provided at the edge of a campground for those seeking a different experience, or some areas may have early quiet time. Fees are higher than for primitive campgrounds; there may be a check-in area and a campground host.

Evening programs may be provided, as well as day programs. Shuttle service may reduce the need to drive to park attractions or trailheads.

Appropriate Activities: Car, RV, bus, or bicycle camping are appropriate. Recreational activities may include hiking, water play, fishing, and nonmotorized watercraft use.

Appropriate Facilities: Facilities include one- or two-way paved roads and parking areas, paved or unpaved trails, and campgrounds with up to 250 sites, possibly with separate RV areas, tent and group campsites, and an amphitheater. Each campsite has a picnic table and a bear-proof food storage locker. Some areas may have pull-through sites. Cold water, flush toilets, and bear-proof trash bins are provided at central

locations. Public showers, laundry facilities, and RV dump stations may be nearby. Campgrounds may be on shuttle routes and have shuttle stops.

Trails within campgrounds may connect to villages or to local features, with directional information signs and interpretive waysides. River access may be provided by way of marked and hardened trails; fencing and signs may direct visitors to areas that can withstand use.

■ **Park Operations**

Description: Park operation areas generally have concentrated facilities for administration, maintenance, and utilities, and occasionally for visitor use. Examples: Ash Mountain headquarters area, Grant Grove maintenance area, Wolverton water treatment plant.

Desired Visitor Experience: This area is not intended for visitor use, but visitors who need to visit park administrative areas can easily find the facilities.

Appropriate Activities: Public business and park activities necessary to support park operations are appropriate.

Appropriate Facilities: Facilities include park administrative operations (e.g., offices, research, museum collections), maintenance operations (carpenter shop, vehicle service bays), utilities (including water, sewage treatment, and electric systems), firing ranges, emergency and helicopter areas, administrative corrals, and storage areas. Natural features or fencing may be used to screen these areas from public view.

Access is by paved, one- or two-lane roads designed to accommodate large trucks and equipment. Parking areas are paved; curbs and gutters in some areas contain impacts.

Service access to river areas may be provided by way of hardened trails or roads.

■ **Residential Areas**

Description: Residential areas include seasonal or year-round housing for government, contractor, and concession staff, as well as privately owned or permitted recreational housing or inholdings. Private inholdings are subject to a land protection plan that may include scenic easements and historic maintenance agreements. Private dwellings may also be subject to special use permits. Examples: Inholdings with private recreational dwellings (Wilsonia, Silver City, Oriole Lake); permit cabins (Cabin Cove near Mineral King); employee housing at the Grant Grove or the upper Ash Mountain housing areas.

Additional Desired Resource Condition: Nonnative plant materials that are not invasive may be used in residential areas with the approval of the park superintendent. Invasive nonnative plant materials are removed. Natural resources may be used to screen residential areas from public view.

Desired Visitor and Residential Experience: Residential and employee recreation areas are generally separated from park operations to ensure safety, and park staff residential areas are separated from public use areas to preserve privacy. Land that is privately owned is further addressed in the parks' *Land Protection Plan*. Permitted cabins are subject to the conditions of the permit, which may include interpretation and public access so that historic resources may be enjoyed by the general public.

Appropriate Activities: Residential, maintenance, and recreational activities are appropriate.

Appropriate Facilities: Facilities include private or permitted seasonal or year-round residences, parking areas, and utilities. Staff residential areas include housing, yards, garages, playgrounds, community buildings, recreational facilities, daycare, and school bus stops. Access is by two-lane or one-way roads.

High-Use Scenic Driving Zone

Description. High-use scenic driving corridors provide sightseeing opportunities in areas of natural beauty, offer scenic views, and connect heavily visited park features and visitor service areas. Roads are paved; they may be subject to winter closures. Example: Generals Highway.

Desired Natural Resource Condition. Natural resources in the road corridor are managed to accommodate facilities and the aesthetic experience, with vista clearing to maintain desired views. Construction-related impacts are confined to the corridor; impacted resources may be actively restored or left to regenerate naturally (for example, unwanted parking areas may be actively restored, and obstacles may be used to prevent further damage and misuse).

Desired Cultural Resource Condition. Original cultural resources related to historic road corridors are retained and reused, or they are removed or relocated. However, for safety reasons and because of changes in technology, construction methods, and current road standards, the original elements contributing to historic character may need to be replaced or relocated. Other cultural resource conditions are discussed on page 54.

Desired Visitor Experience. The goal is a safe and pleasant driving experience on a park road with rustic character and many opportunities to enjoy diverse scenery. Road character guidelines that were developed in 1990 for the Generals Highway are followed. Natural materials such as stone and wood are used to complement the rustic character, scale, texture, and colors of the original road work. Dry-laid stone walls, stone curbs, stone headwalls on culverts, stone-lined ditches, stone islands, stone drop inlets, wood fences, signs, and guardrails are used to define the character of roads, parking areas, and overlooks. Park roads are well maintained, with moderate speed limits (up to 45 mph). Traffic is generally free flowing, with slowing as a result of heavier traffic during peak midday times and for wildlife sightings. Vehicle sizes may be limited for safety, to facilitate traffic flow, or to improve the driving experience for other visitors.

Advance notice is given about upcoming features, views, or services.

Appropriate Activities. Activities include pleasure driving, sightseeing (with opportunities to stop at viewpoints and features), bus touring, picnicking, and photography. Activities related to using transit shuttles, such as parking and queuing, may occur. Bicycling is only allowed on roads or designated bike routes.

Appropriate Facilities. Highways are paved, with two lanes, shoulders, turn lanes, roadside pullouts for passing, and guard rails/walls as necessary. Visitor facilities include entrance stations, viewpoints, interpretive waysides, picnic areas, ranger stations, trailheads, spur roads, parking areas, shuttle stops and related facilities, and site furnishings (e.g., seating and signs); restrooms may be provided at picnic areas and trailheads. Curbs and gutters are used along high-use road segments (at parking areas and shuttle stops in developed areas, at viewpoints, and at heavily used trailheads) to guide use and contain impacts.

Carrying Capacity. Carrying capacity for the high-use scenic driving zone is based on the physical capacity of facilities such as roads and parking since resource conditions would be maintained to meet desired experiences. Vehicular congestion is a peak summer season problem at the Big Stump entrance station, Kings Canyon Highway from the Wye to Hume Lake Road, the Generals Highway between Grant Grove and Lost Grove, and the Lodgepole and Giant Forest areas, including Moro Rock road. Vehicle congestion occurs when roads are at a level of service (LOS) D, E and F (defined in volume II under “Transportation and Circulation” in “The Affected Environment”). It is expected that congestion may become less seasonal as regional population growth continues.

Data Collection: General information continues to be collected, such as vehicle counts at entrance stations and along sections of park roads. Traffic counters are placed on specific road sections where seasonal traffic flow is at LOS D or below. Park staff analyze incoming information

for trends. Additional specific resource and visitor experience monitoring could also begin.

Indicators: Indicators of change in desired visitor experiences in this zone might include traffic that cannot flow freely, restricted ability to maneuver, traffic delays, and speeds slower than posted levels. The condition of fundamental resources (riparian communities, indicator species, soils, vegetation cover, rock faces, archeological sites, water quality) and visible impacts (presence of trash, visitor created trails, and invasive plants) are also monitored.

Management Actions: The range of management actions that might be undertaken to address changes in conditions within the high-use scenic driving zone includes a multifaceted approach:

- notifying visitors at entrance stations and through park radio announcements or traveler information system signs when traffic conditions are perceived as not achieving LOS D or higher (C, B or A), based on numbers of visitors entering the parks.
- allowing no more day-use visitors to enter if traffic conditions deteriorate to LOS F (gridlock), with the south entrance monitoring roadway conditions on the Generals Highway between Ash Mountain and Giant Forest and the north entrance monitoring conditions on Kings Canyon Highway to Grant Grove Village and the Generals Highway to the Quail Flat Road turnoff
- redesigning facilities to accommodate maximum increases of up to 30% in day-use visitation (for example, crowded conditions in the Grant Grove area could be addressed by redesigning the entrance station, village roads, intersections, and parking to better accommodate desired visitation levels)
- redirecting through-traffic to Hume Lake during the peak season so that it does not contribute to congestion in Grant Grove village
- providing seasonal transit access to popular destinations to help disperse use at peak times

- continuing ongoing transit planning to reduce traffic and crowding, and to better disperse visitors
- encouraging visitors through in-park media (including information at trail centers and museums) to hike between transit stops to disperse use and improve visitor experiences
- using various orientation and information approaches to encourage visitors to come during less crowded times (daily and seasonally) or to visit less visited park areas

BACKCOUNTRY (AND WILDERNESS) PRESCRIPTIONS

Backcountry and Wilderness Experience: Backcountry areas (including designated wilderness, potential wilderness, areas managed as wilderness, and wilderness study areas) are natural areas — relatively remote, roadless portions of the parks, where permits are required for overnight use so as to maintain the desired resource conditions and visitor experiences. These areas may contain the full range of Sierra Nevada ecosystems — from foothills to alpine areas. Levels of backcountry use are intended to be much lower than in the frontcountry. Efforts are made to preserve a sense of remoteness and freedom from human-caused impacts. However, simple amenities (e.g., ranger stations, hitch rails, and campsites) may be present to support administrative activities, reduce or control resource impacts, or provide for research and monitoring. Sensitive or damaged areas may be closed to protect resources. Bicycles are prohibited. Bear-proof food canisters may be required in some areas. High Sierra camps, which provide overnight accommodation and overnight shelters, are allowed in backcountry areas, but not in designated wilderness.

Major Trails

Description. Major trails are high standard, regularly maintained, long-distance trails that access remote natural areas. They accommodate day use, are generally accessed from frontcountry trailheads, and are suitable for sustained heavy use. More evidence of human activity is

likely closer to the beginning of trails, where use is higher. Visitors may have to use designated campsites in some areas. **Examples:** Pacific Crest Trail, John Muir Trail, High Sierra Trail, Rae Lakes Loop (Mist Falls/Paradise Valley), Mineral King lake basins.

Desired Natural Resource Conditions. Natural resources are mostly undisturbed. Impacts are restricted to trails and campsites, facilities, and attractions near the trails. Impacts are reversible, but it may take many years for natural resource regeneration. The goal is to restore disturbed areas, including visitor-created or widened trails.

Desired Cultural Resource Condition. Cultural resources present along trail corridors are managed as discussed on page 54.

Desired Visitor Experience. While day hikers may use trails closer to trailheads, most users are overnight visitors. On the more popular trails there is a moderate to high probability of encountering others, particularly at campsites and attractions. Visitors have opportunities for a wide range of experiences, with some opportunities for solitude and isolation from the sights, sounds, or evidence of other users. Travel is generally along remote but regularly maintained trails that require a moderate degree of outdoor skills and self-reliance. Party sizes may be larger than those allowed on secondary trails or in cross-country areas. Visitors may have to use designated, established campsites in some popular areas.

Appropriate Activities. Activities include hiking, backpacking, fishing, rock climbing, non-motorized watercraft use, and winter uses (cross-country skiing and snowshoeing). Stock use may be permitted, with restrictions on stock party size and the location and timing of use.

Appropriate Facilities. Facilities may include maintained trails, bridges, directional and/or mileage signs, rustic high Sierra camp facilities (not allowed in designated wilderness), staffed backcountry ranger stations, and research/monitoring facilities. If campsites are designated, they may contain facilities such as toilets, food

storage lockers, and fire rings. There may be spur trails with facilities on them. If stock use is allowed, trails and bridges are designed and maintained to stock standards, and appropriate facilities (such as campsites, hitch rails, and drift fences) may be provided.

Carrying Capacity. Backcountry and wilderness areas receive low levels of use by hikers and stock users. Park staff monitor resource conditions, visitor use and trends for backcountry and wilderness use to meet desired resource conditions and visitor experiences.

Data Collection: General information, such as permit information and follow-up use data, continues to be collected. Permit quotas may be adjusted based on monitoring. Specific resource and visitor experience monitoring continues.

Indicators: Indicators, which in this zone might include the condition of fundamental resources (meadow condition and residual biomass, riparian communities, indicator species, soils, vegetation cover, rock faces, archeological sites, water quality, natural soundscape), visible impacts (presence of visitor-created or widened trails and facilities, campsite condition, trash, down-wood availability, invasive or illegal plants), and visitor experience values (such as encounter rates, human or stock excrement, and aesthetics). A combination of indicators are monitored in specific popular or resource sensitive areas to ensure that desired resource conditions are maintained and desired visitor experiences achieved. The wilderness stewardship and stock use plan details monitoring plans and zone application.

Management Actions: The range of management actions beyond controlling use that might be undertaken to address changes in resource conditions or visitor experiences include

- modifying quotas to reduce or shift use
- redesigning trails
- closing or designating campsites, resting and rotating use areas
- providing food storage lockers
- providing toilets

- removing invasive plants
- removing illegal plants and demolishing related construction
- expanding educational programs (especially those emphasizing leave-no-trace practices)

Secondary Trails

Description. Secondary trails access even more remote natural areas than major trails and generally cannot sustain heavy use because of the standard of construction or inherent fragility of the resource through which they pass. Examples: Colby Pass–Kern Kaweah, Tehipite to the Pacific Crest Trail, Martha Lake north to the Pacific Crest Trail.

Desired Natural Resource Conditions. Natural resources are mostly undisturbed. Impacts are generally confined to the immediate area of trails. Damaged areas and unplanned impacts (such as trails created by visitors) are restored or left to regenerate naturally.

Desired Cultural Resource Condition. Cultural resources present along trail corridors are managed as discussed on page 54.

Desired Visitor Experience. Visitors are generally overnight users. Use is lower than on major trails, and there is less probability of visitors encountering others while hiking and camping. Party sizes may be smaller than along major trail corridors. Visitors need self-reliance and outdoor skills. Food canisters may be required.

Appropriate Activities. Activities include hiking, backpacking, fishing, rock climbing, non-motorized watercraft use, and winter uses (cross-country skiing and snowshoeing). Stock use may be permitted on trails that can sustain use without significant resource damage.

Appropriate Facilities. Facilities include minimally maintained trails. Some research, monitoring, and communications facilities may be present. Bridges, ranger stations, and designated campsites are seldom provided, except to protect resources or to provide for visitor safety. Occa-

sional signs and trail guides may also be provided to protect resources and to increase visitor safety.

Carrying Capacity. Backcountry and wilderness areas receive low levels of use by hikers and stock users. Park staff monitor resource conditions, visitor use and trends for backcountry and wilderness use to meet desired resource conditions and visitor experiences.

Data Collection: General information, such as permit information and follow-up use data, continues to be collected. Permit quotas may be adjusted based on monitoring. Specific resource and visitor experience monitoring continues.

Indicators: Indicators, which in this zone might include the condition of fundamental resources (meadow condition and residual biomass, riparian communities, indicator species, soils, vegetation cover, rock faces, archeological sites, water quality, natural soundscape), visible impacts (presence of visitor-created or widened trails and facilities, campsite condition, trash, down-wood availability, invasive or illegal plants), and visitor experience values (such as encounter rates, human or stock excrement, and aesthetics). A combination of indicators are monitored in specific popular or resource sensitive areas to ensure that desired resource conditions are maintained and desired visitor experiences achieved. The wilderness stewardship and stock use plan details monitoring plans and zone application.

Management Actions: The range of management actions beyond controlling use that might be undertaken to address changes in resource conditions or visitor experiences include

- modifying quotas to reduce or shift use
- redesigning trails
- closing areas to use
- closing or designating campsites, resting and rotating use areas
- removing invasive plants
- removing illegal plants and demolishing related construction
- expanding educational programs (especially those emphasizing leave-no-trace practices)

Cross-Country Areas

Description. Cross-country areas are mostly remote, low-use areas where self-sustaining natural systems function largely untouched by humans. This zone may include the full range of Sierra Nevada ecosystems — from foothills to alpine areas. This zone has no maintained trails, but may contain evidence of past trails; otherwise they exhibit relatively little human-caused impact. These areas are more difficult to travel in than areas with maintained trails. Examples: Rock Creek–Miter Basin, Dumbbell Basin.

Desired Natural Resource Conditions. Natural resources are largely undisturbed, with wild and naturally functioning ecosystems. Evidence of past use may be actively removed to reduce resource damage (e.g., restoring previously disturbed areas, or eliminating visitor-created trails and campsites) or left to regenerate naturally.

Desired Cultural Resource Condition. Cultural resources that are present in the backcountry are managed as discussed on page 54.

Desired Visitor Experience. Visitors are generally overnight users, and most need to commit a minimum of two nights to use these areas. Visitation is very low, with a low probability of encounters with other users while hiking and camping. Party sizes are generally small. Visitors may experience challenges and must be self-reliant. Food canisters may be required. Visitors need a high degree of backcountry skills, including map reading and orienteering.

Appropriate Activities. Activities include hiking, backpacking, fishing, rock climbing, non-motorized watercraft use, and winter uses (cross-country skiing and snowshoeing). Stock use may be permitted.

Appropriate Facilities. Some research, monitoring, and communications facilities may be present. Visitor facilities are not provided.

Carrying Capacity. Backcountry and wilderness areas receive low levels of use by hikers and stock users. Park staff monitor resource conditions, visitor use and trends for backcountry and wilderness use to meet desired resource conditions and visitor experiences.

Data Collection: General information, such as permit information and follow-up use data, continues to be collected. Permit quotas may be adjusted based on monitoring. Specific resource and visitor experience monitoring continues.

Indicators: Indicators, which in this zone might include the condition of fundamental resources (meadow condition and residual biomass, riparian communities, indicator species, soils, vegetation cover, rock faces, archeological sites, water quality, natural soundscape), visible impacts (presence of visitor-created or widened trails and facilities, campsite condition, trash, down-wood availability, invasive or illegal plants), and visitor experience values (such as encounter rates, human or stock excrement, and aesthetics). A combination of indicators are monitored in specific popular or resource sensitive areas to ensure that desired resource conditions are maintained and desired visitor experiences achieved. The wilderness stewardship and stock use plan details monitoring plans and zone application.

Management Actions: The range of management actions beyond controlling use that might be undertaken to address changes in resource conditions or visitor experiences include

- modifying quotas to reduce or shift use
- removing trails
- closing areas to use
- resting and rotating use areas
- removing invasive plants
- removing illegal plants and demolishing related construction
- expanding educational programs (especially those emphasizing leave-no-trace practices)

The Management Alternatives

This section presents the range of alternatives that are being considered for the general management plan for Sequoia and Kings Canyon National Parks. Each alternative is structured around a series of visions. There is a vision for the parks as a whole, and then for specific areas within the parks. The visions focus on what the parks and individual areas should be like at some time in the future, and they are worded in the present tense. After the visions, specific actions that would be taken under each alternative to achieve that vision are presented in a table. All of the alternatives were developed on the assumption that certain mitigating actions would be incorporated into the proposed actions in order to reduce the degree of adverse impacts. These mitigating measures are described beginning on page 76.

Many elements and prescriptions in the general management plan are also integral to the comprehensive river management plan for wild and scenic rivers. These include management prescriptions and zoning, river protection measures, the backcountry use quota system, stock use limits, prescriptions relating to campground and lodging locations and sizing, carrying capacity limits, and natural and cultural resource requirements. The section of the alternatives matrix that relates specifically to wild and scenic rivers (boundaries, classifications, and outstandingly remarkable values) begins on page 98.

The presentation of alternatives differs from that in Newsletter 5 in that the continuation of current management (referred to as the no-action alternative), which was originally presented as alternative B, is now presented first as a baseline for comparing the impacts of the other alternatives. The preferred alternative, which was developed based on a preliminary analysis of impacts, is presented second. The other alternatives that were included in Newsletter 5 are then presented. As described in the newsletter, alternative A would emphasize natural ecosystems and biodiversity, with reduced use and development; alternative C would preserve traditional

character and retain the feel of yesteryear, with guided growth; and alternative D would preserve the basic character and adapt to changing user groups.

As the planning team began refining the alternatives in Newsletter 5, it was clear that additional actions were needed to more clearly illustrate the intent of each alternative. Also, actions related to special use permit cabins at Mineral King were revised. The addition of the Dillonwood area to Sequoia National Park necessitated the creation of alternatives for this area, and the establishment of Giant Sequoia National Monument resulted in other revisions.

As previously described, benefits related to resource protection from other alternatives were added to the preferred alternative. The preferred alternative was selected for two major reasons: (1) it would bring additional benefits to the parks, and (2) it would be the most cost-effective.

DEFINITIONS OF PARK CHARACTER

The range of alternatives was developed with public input, and many members of the public valued what they called the character of the park. However, different views of character were described. To explain the alternatives, words that describe park character need further definition. Both titles and park visions for several alternatives use “basic,” “traditional,” and “rustic” to describe park character.

- *Basic* refers to activities that are well-established and common, such as hiking, camping, stock use, fishing, cave tours, water play, winter recreation (snow play, cross-country skiing, and snowshoeing), and recreational scenic driving.
- *Traditional* refers to the historical use patterns from the 1920s to the 1960s. Visitors used private vehicles in the parks and stayed for longer periods of time. Typical visitors were small family groups or back-

packers of similar age. Backcountry use and stock use were much more popular. During that period private recreational communities developed in and around the parks, providing escape from the Central Valley's summer heat.

- *Rustic* refers to the nature of the built environment, with its handcrafted feel and its relationship to the surrounding environment. At Sequoia and Kings Canyon National Parks, rustic architectural character is **common to all alternatives** and is supported by *Architectural Character Guidelines* (NPS 1989b) and *Road Character Guidelines* (NPS 1990). Because developed areas are very small under any alternative, the natural environment predominates over the rustic character of park development.

VISIONS FOR THE ALTERNATIVES

Continue Current Management (No-Action Alternative)

Parkwide

The parks are managed as they are now in accordance with approved plans (such as development concept plans, and the 1996 *Giant Forest Interim Management Plan*); negative resource impacts and visitor demands are responded to by relocating development, reducing some uses, or confining new developed areas. Visitor uses are reassessed and revised as new information about natural and cultural resource impacts and visitor needs emerges. Current facilities are inadequate for park needs and visitor use levels, and crowding is common in some areas.

Wild and Scenic Rivers

National wild and scenic rivers are preserved in free-flowing condition, and they and their immediate environments are protected for the benefit and enjoyment of present and future generations. In managing these rivers, emphasis is given to protecting and enhancing the outstandingly remarkable values of each river segment, including aesthetic, scenic, historic,

archeological, and scientific features. The protection of natural river processes is a high priority.

Backcountry

The land area that is designated wilderness or backcountry that is managed to preserve wilderness characteristics amounts to 96.10% of the parks. The parks' backcountry and wilderness areas continue to have a variety of permitted activities and commercial operations. Existing facilities remain. Most stressors to the backcountry are regionwide, such as air pollution and climate change, rather than from activities within the parks.

Kings Canyon National Park

Cedar Grove and the Floor of the Kings Canyon. The Kings Canyon is a glacially carved deep canyon with waterfalls, lush meadows, campgrounds, and commercial facilities, as well as popular backcountry access, visited mostly by campers and hikers who come to enjoy the quiet or by persons passing through the area to access the backcountry. Cedar Grove village is a low-use area with an extended season.

Grant Grove. Grant Grove is a pristine sequoia grove with the world's third largest tree (the General Grant Tree) and the previously logged Big Stump Grove. Grant Grove continues as a very popular destination, with a highly visited sequoia grove. Grant Grove village offers day and overnight activities, mixed with other park development and uses. Circulation and congestion problems remain.

Sequoia National Park

Dorst / Halstead Meadow / Cabin Creek.

Dorst, Halstead Meadow, and Cabin Creek are within a forested area of open evergreen stands, meadows, and small sequoia groves. The Dorst area provides camping and some facilities along the Generals Highway. It serves as the trailhead to Muir Grove.

Wuksachi. Wuksachi is a new developed area set amid rocky outcrops and surrounded by evergreen forest. Wuksachi village provides

year-round facilities for lodging and food service, plus residential and park operations areas in accordance with the concession contract.

Lodgepole. Lodgepole lies within the beautiful Tokopah Canyon of the Marble Fork of the Kaweah River. The Tokopah Falls trail is a popular day hike. Lodgepole is a very popular campground with amenities, the dominant day-use commercial site, a river recreation site, a wilderness trailhead, and the principal employee residential area, all near one another.

Wolverton. Wolverton, a large open meadow in a forested valley, provides summer picnicking, winter activities, day-hiking trails, and a backcountry trailhead.

Giant Forest. The giant sequoia grove at Giant Forest remains Sequoia National Park's primary day use feature. The grove, site of a major restoration effort, illustrates the premiere, naturally functioning giant sequoia ecosystem, with 6 of the 10 largest trees in the world, meadows, and abundant wildlife. The desired visitor experience is a walk in the woods to see the Big Trees. Visitors focus on the Giant Forest museum / Big Trees Trail area, the General Sherman Tree, Moro Rock, and Crescent Meadow. The extensive trail system is retained. Private vehicular access to the grove is retained but is limited by parking capacities; during peak-use periods some roads and/or parking areas are closed and replaced by shuttle system access.

Crystal Cave. Crystal Cave provides the primary public opportunity to experience the parks' significant cave resources.

Ash Mountain / Foothills. The foothills of Sequoia National Park represent some of the best protected foothill wildlands in the Sierra Nevada, featuring blue oak woodlands, chaparral, riparian corridors, and abundant wildlife. Low levels of year-round visitor use are accommodated. The Ash Mountain area is the parks' primary administrative and operations center, and it provides some seasonal and permanent residences.

Mineral King. Mineral King Valley represents an extraordinary and spectacular experience in the Sierra Nevada because of its unusual metamorphic geology and appearance. Mineral King Road continues to provide access to recreational cabins, a small resort, campgrounds, and the alpine backcountry. Low levels of visitor services and activities are accommodated along the corridor.

Dillonwood. Dillonwood, the previously logged sequoia grove that was added to Sequoia National Park in 2000, is open to pedestrian use. There are experiments with a variety of sequoia forest management techniques.

Preferred Alternative: Accommodate Sustainable Growth and Visitor Enjoyment, Protect Ecosystem Diversity, and Preserve Basic Character While Adapting to Changing User Groups

Parkwide

The parks' appeal is broadened to be more relevant to diverse user groups. Increased day use is accommodated, and overnight visitation is retained. The integrity of park resources is paramount. Stronger educational and outreach programs provide enjoyment and instill park conservation values. The basic character of park activities and the rustic architecture of facilities is retained so that the parks remain strikingly different from surrounding areas. Park administrative facilities are redesigned and may be relocated outside the parks. Park facilities accommodate sustainable growth.

Wild and Scenic Rivers

As described for the no-action alternative, national wild and scenic rivers, as well as rivers that are being studied for designation, are preserved in free-flowing condition, and they and their immediate environments are protected for the benefit and enjoyment of present and future generations. In managing these rivers, emphasis is given to protecting and enhancing the outstandingly remarkable values of each river segment, including aesthetic, scenic,

historic, archeological, and scientific features. The protection of natural river processes is a high priority.

Backcountry

The land area that is designated wilderness or backcountry that is compatible with management as wilderness totals up to 96.10% of the parks. Resource conditions in the parks' backcountry and wilderness areas are improved. Facilities are evaluated for usefulness and compatibility with wilderness, and additional facilities are considered only in the nonwilderness backcountry. Most stressors to the backcountry are regionwide, such as air pollution and climate change, rather than from activities within the parks.

Kings Canyon National Park

Cedar Grove and the Floor of the Kings Canyon. The Kings Canyon is a glacially carved deep canyon with waterfalls, lush meadows, campgrounds, and commercial facilities, as well as popular backcountry access. The identity of the Kings Canyon is strengthened and enhanced, but the area remains less visited and quieter than Grant Grove or Giant Forest. Visitors come to see the canyon's special features. The basic character of camping and backcountry access remains. Cedar Grove village is made more efficient and offers a modestly greater variety of overnight accommodations. The area's season includes more spring and fall time.

Grant Grove. Grant Grove is a pristine sequoia grove with the world's third largest tree (the General Grant Tree) and the previously logged Big Stump Grove. The area continues as a very popular destination, with a highly visited sequoia grove. Grant Grove village offers day and overnight activities. Incompatible visitor and operational functions are separated. Facility development and use are limited to be consistent with sustainable water and sewer capacity. Circulation is redesigned and improved to reduce congestion.

Sequoia National Park

Dorst / Halstead Meadow / Cabin Creek.

Dorst, Halstead Meadow, and Cabin Creek are within a forested area of open evergreen stands, meadows, and small sequoia groves. The Dorst area provides diverse camping opportunities and some facilities along the Generals Highway. It serves as the trailhead to Muir Grove.

Wuksachi. Wuksachi is a new developed area set amid rocky outcrops and surrounded by evergreen forest. Wuksachi village provides year-round facilities for lodging and food service, plus staff residential and park operations areas in accordance with the concession contract.

Lodgepole. Lodgepole lies within the beautiful Tokopah Canyon of the Marble Fork of the Kaweah River. The Tokopah Falls trail is a popular day hike. Lodgepole is a very popular campground with amenities, the dominant day-use commercial site, a river recreation site, a wilderness trailhead, and the principal employee residential area. Lodgepole offers expanded day activities and services, while continuing to provide overnight camping. Incompatible park and visitor functions are separated.

Wolverton. Wolverton, a large open meadow in a forested valley, provides the main day use staging area for backcountry access, and winter uses are expanded.

Giant Forest. The giant sequoia grove at Giant Forest remains Sequoia National Park's primary day use feature. The grove, site of a major restoration effort, illustrates the premiere, naturally functioning giant sequoia ecosystem, with 6 of the 10 largest trees in the world, meadows, and abundant wildlife. The desired visitor experience is a walk in the woods to see the Big Trees. Visitors focus on the Giant Forest museum / Big Trees Trail area, the General Sherman Tree, Moro Rock, and Crescent Meadow. The extensive trail system is retained. Private vehicular access to the grove is retained but is limited by parking capacities; during peak-use periods some roads and/or parking areas are closed and replaced by shuttle system access. (This is the same as the no-action alternative.)

Crystal Cave. Crystal Cave provides the primary public opportunity to experience the parks' significant cave resources.

Ash Mountain / Foothills. The foothills of Sequoia National Park represent some of the best protected foothill wildlands in the Sierra Nevada, featuring blue oak woodlands, chaparral, riparian corridors, and abundant wildlife. Increased levels of recreational use are accommodated primarily along the Middle and North Forks of the Kaweah River. The Ash Mountain area is the parks' primary administrative and operations center. The area continues to have some seasonal as well as permanent residences for essential personnel. A partnership is developed with the gateway community to meet park needs and to retain the character of a small, rural community.

Mineral King. Mineral King Valley represents an extraordinary and spectacular experience in the Sierra Nevada because of its unusual metamorphic geology and appearance. Mineral King Road continues to provide access to the alpine backcountry, public recreation, campgrounds, and Silver City private cabins and resort. Qualities that made the road corridor eligible for listing on the National Register of Historic Places are maintained and preserved, while the road corridor provides increased public recreational access to the alpine backcountry and historic resources. Slightly higher levels of public use are accommodated.

Dillonwood. The previously logged sequoia grove that was added to Sequoia National Park in 2000 is protected, and modest use levels are accommodated. Dillonwood provides backcountry access through a sequoia grove. Day use is allowed. There are experiments with a variety of sequoia forest management techniques that are compatible with the NPS mission. (This is an interim vision pending site-specific planning.)

Alternative A: Emphasize Natural Ecosystems and Biodiversity; Reduce Use and Development

Parkwide

The parks are natural resource preserves; they are primarily valued because they contain publicly owned resources that will be conserved for the future. Levels of use are lower than at present, and visitor experiences are more directly connected to natural resources and provide more solitude. The parks contrast strongly with surrounding lands that are under increasing pressure for use and development. Park managers aggressively cooperate with the managers of surrounding lands to enhance range-wide biodiversity.

Wild and Scenic Rivers

As described for the no-action alternative, national wild and scenic rivers, as well as rivers that are being studied for designation, are preserved in free-flowing condition, and they and their immediate environments are protected for the benefit and enjoyment of present and future generations. In managing these rivers, primary emphasis is given to protecting the outstandingly remarkable values of each river segment, including their aesthetic, scenic, historic, archeological, and scientific features. The protection of natural river processes is a high priority.

Backcountry

The land area that is designated wilderness or is compatible with management as wilderness amounts to approximately 96.11% of the parks. Resource conditions in the parks' backcountry and wilderness areas are improved. Visitor use is reduced from the present; social conflicts are reduced while there are more opportunities for solitude, high-impact activities are eliminated (e.g., no campfires), and facilities are removed where feasible.

Kings Canyon National Park

Cedar Grove and the Floor of the Kings Canyon. As described for the no-action alternative, the Kings Canyon is visited mostly by campers

and hikers who come to enjoy the area's quiet or by persons passing through the area to access the backcountry. Cedar Grove village is a low-use area with an extended season. But under this alternative there is a focus on resource preservation, facilities at Cedar Grove village are reduced in number, and visitation is less than at present.

Grant Grove. Grant Grove continues as a popular destination, with a highly visited sequoia grove. More of the area is returned to natural conditions, with fewer commercial facilities.

Sequoia National Park

Dorst / Halstead Meadow / Cabin Creek. The Dorst area provides less frontcountry camping with improved resource conditions and visitor experiences.

Wuksachi. Wuksachi village provides year-round facilities for lodging and food service, plus residential and park operations areas in accordance with the concession contract (the same as the no-action alternative).

Lodgepole. Lodgepole provides reduced levels of day use and campgrounds that are separated from operations.

Wolverton. Wolverton functions as a summer and winter trailhead.

Giant Forest. The vision for Giant Forest is the same as for the no-action and preferred alternatives. The Giant Forest sequoia grove remains Sequoia National Park's primary day use feature. The desired visitor experience is a walk in the woods to see the Big Trees. Visitors focus on the Giant Forest museum / Big Trees Trail area, the General Sherman Tree, Moro Rock, and Crescent Meadow. The extensive trail system is retained. Private vehicular access to the grove is retained but is limited by parking capacities; during peak-use periods some roads and/or parking areas are closed and replaced by shuttle system access.

Crystal Cave. The visitor experience at Crystal Cave is improved by reducing use.

Ash Mountain / Foothills. Limited levels of recreational use are accommodated primarily along the Middle Fork of the Kaweah River. Park operations and residential areas at the Ash Mountain area are relocated outside the park, and the sites are restored, improving resource conditions.

Mineral King. Mineral King Road provides access to the alpine backcountry. Lower levels of visitor services and activities are accommodated along the corridor.

Dillonwood. The sequoia grove is protected, and low use levels are accommodated. (This is an interim vision pending site-specific planning.)

Alternative C: Preserve Traditional Character and Retain the Feel of Yesteryear; Guide Growth.

Parkwide

The parks present a traditional park character and a feel of yesteryear, where experiences are more reminiscent of how visitors used the parks in the past. This is conveyed through rustic architecture and lower impact recreational activities (such as sightseeing and hiking) that were popular from the 1920s to the 1960s, and providing an experience that is strikingly different from that in an urban setting. Redesigned developed areas accommodate limited growth; overnight stays are encouraged. Negative impacts on natural resources are controlled, so as to maintain or improve resource conditions.

Wild and Scenic Rivers

As described for the no-action alternative, national wild and scenic rivers, as well as rivers that are being studied for designation, are preserved in free-flowing condition. The outstandingly remarkable values of each river segment, including their aesthetic, scenic, historic, archeological, and scientific features, are protected. The protection of natural river processes is a high priority.

Backcountry

The land area that is designated wilderness or is compatible with management as wilderness amounts to approximately 96.09% of the parks. Resource conditions are improved in some places. Party sizes and use levels are limited and dispersed, reducing the need for onsite regulation. Most commercial and park facilities remain.

Kings Canyon National Park

Cedar Grove and the Floor of the Kings Canyon. The identity of the Kings Canyon is strengthened and enhanced, but the area remains less visited and quieter than Grant Grove or Giant Forest. Visitors come to see the canyon's special features. The traditional character of camping and backcountry access remains. Cedar Grove village is enlarged slightly and offers a modestly greater variety of overnight accommodations. The area's season is lengthened to include more spring and fall time.

Grant Grove. Grant Grove continues as a very popular destination. Grant Grove village becomes a large destination village, with facilities redesigned for more day and overnight use and improved circulation. Overlapping and incompatible uses are separated, and circulation and congestion problems are addressed.

Sequoia National Park

Dorst / Halstead Meadow / Cabin Creek. As described for the no-action alternative, the Dorst area provides camping and some facilities along the Generals Highway. It serves as the trailhead to Muir Grove.

Wuksachi. Wuksachi village provides year-round facilities for lodging and food service, plus residential and park operations areas in accordance with the concession contract (the same as the no-action alternative).

Lodgepole. Lodgepole is redesigned and expanded, with an emphasis on overnight use. Day uses are relocated to other areas, and incompatible uses are separated.

Wolverton. Wolverton provides the main day use staging area for backcountry access and winter use.

Giant Forest. As described for the other alternatives, the Giant Forest sequoia grove remains Sequoia National Park's primary day use feature. The desired visitor experience is a walk in the woods to see the Big Trees. Visitors focus on the Giant Forest museum / Big Trees Trail area, the General Sherman Tree, Moro Rock, and Crescent Meadow. The extensive trail system is retained. Private vehicular access to the grove is retained but is limited by parking capacities; during peak-use periods some roads and/or parking areas are closed and replaced by shuttle system access.

Crystal Cave. As described for the no-action alternative, Crystal Cave provides the primary public opportunity to experience the parks' significant cave resources.

Ash Mountain / Foothills. Increased levels of recreational use are accommodated primarily along the Middle Fork and the North Fork of the Kaweah River. The Ash Mountain area is the parks' primary administrative and operations center. The area continues to have some seasonal as well as permanent residences for essential personnel.

Mineral King. Mineral King Road continues to provide access to recreational cabins, a small resort, and the alpine backcountry. The visual character of the historic road corridor is preserved. Slightly higher levels of public use are accommodated.

Dillonwood. Dillonwood provides primitive camping facilities and backcountry access within a sequoia grove. (This is an interim vision pending site-specific planning.)

Alternative D: Preserve Basic Character and Adapt to Changing User Groups; Guide Growth**Parkwide**

The parks preserve some of their traditional character and rustic architecture, but diverse new

user groups and uses are encouraged. Day use is more common. Facilities are expanded to meet users' needs, while frequent interpretive programs are offered to educate, entertain, and instill a sense of park conservation values. Negative impacts on natural resources are controlled or mitigated, so as to maintain or improve resource conditions.

Wild and Scenic Rivers

As described for the no-action alternative, national wild and scenic rivers, as well as rivers that are being studied for designation, are preserved in free-flowing condition. Outstandingly remarkable values of each river segment, including their aesthetic, scenic, historic, archeological, and scientific features, are protected. The protection of natural river processes is a high priority.

Backcountry

Up to approximately 89.37% of the parks are designated wilderness or are compatible with management as wilderness. The parks' backcountry and wilderness areas have improved conditions in some places. Party sizes and use levels are higher than under alternative C, with greater levels of onsite regulation. Uses are separated and may be concentrated in high-use areas. Additional facilities may be added in the nonwilderness backcountry if needed.

Kings Canyon National Park

Cedar Grove and the Floor of the Kings Canyon. The Kings Canyon becomes a major park feature equal to Grant Grove or Giant Forest, with visitors drawn by the area's strong identity as the "quiet Yosemite." Backcountry access remains an important function. The area's season is lengthened to include more spring and fall time. Cedar Grove village is expanded to provide improved opportunities for more camping and lodging.

Grant Grove. Grant Grove continues as a very popular destination, with a heavily visited sequoia grove. Grant Grove village is expanded, with more facilities for day and overnight use.

Overlapping and incompatible uses are separated, and circulation and congestion problems are addressed by providing new facilities.

Sequoia National Park

Dorst / Halstead Meadow / Cabin Creek.

Similar to the no-action alternative, the Dorst area provides camping and some facilities along the Generals Highway, and it serves as the trailhead to Muir Grove, but it provides more opportunities for visitors.

Wuksachi. An expanded Wuksachi village provides diverse day and overnight uses, including picnic areas, trails, a traditional mix of overnight facilities (lodges and cabins), and food service, plus areas for residential purposes and park operations.

Lodgepole. Lodgepole offers expanded day activities and services, while continuing to provide overnight camping. Incompatible uses are separated.

Wolverton. Wolverton provides the main day use staging area for Giant Forest shuttles. Backcountry access and winter uses are expanded.

Giant Forest. As described for the other alternatives, the Giant Forest sequoia grove remains Sequoia National Park's primary day use feature. The desired visitor experience is a walk in the woods to see the Big Trees. Visitors focus on the Giant Forest museum / Big Trees Trail area, the General Sherman Tree, Moro Rock, and Crescent Meadow. The extensive trail system is retained. Private vehicular access to the grove is retained but is limited by parking capacities; during peak-use periods some roads and/or parking areas are closed and replaced by shuttle system access.

Crystal Cave. Additional types of tours are offered to provide for diverse visitor experiences.

Ash Mountain / Foothills. Increased levels of recreational use are accommodated primarily along the Middle and North Forks of the Kaweah River. The Ash Mountain area is the parks' primary administrative and operations center. The area continues to have some seasonal as well as

permanent residences for essential personnel. (This is the same as alternative C.)

Mineral King. Mineral King Road continues to provide access to recreational cabins, a small resort, campgrounds, and the alpine backcountry. Qualities that made the road corridor eligible for listing on the national register are maintained and preserved, while the road corridor provides increased public recreational access to the alpine backcountry and historic resources. Slightly higher levels of public use are accommodated.

Dillonwood. Dillonwood provides primitive camping facilities and backcountry access within a sequoia grove (the same as C), plus a group education primitive area is provided, and day use exploration is allowed. There are experiments with a variety of sequoia forest management techniques. (This is an interim vision pending site-specific planning.)

MITIGATING MEASURES INCLUDED IN THE ALTERNATIVES

Mitigation for Impacts on Wetlands and Floodplains

Areas in the parks that would be affected by soil or vegetation disturbance will be surveyed for the presence of wetlands as part of project planning and design. If wetlands are present, more detailed wetland mapping will be performed. Adverse impacts on wetlands from activities proposed under any alternative will be avoided to the greatest extent possible. Wetlands that have been damaged or degraded by previous uses will be considered for restoration to mitigate adverse impacts or to meet the goals and intent of the NPS wetland protection guidelines (*Director's Order #77-1*; NPS 2002b). Original functions and values of each wetland will be restored to the greatest extent practicable.

Based on existing information, no new facilities are expected to be constructed in floodplains. More detailed floodplain analysis will be completed prior to any new construction to confirm that facilities are sited outside of floodplains.

Mitigation for Impacts on Threatened, Endangered, or Sensitive Species

If any state or federally listed or proposed threatened or endangered species or other special status species are found in areas that could be affected by construction or visitor use under any of the alternatives, the National Park Service will first consult informally with the U.S. Fish and Wildlife Service. The Park Service will attempt to avoid, minimize, reduce, compensate, or otherwise mitigate any potential impacts. If it is determined through informal consultation that an action or proposed project may adversely affect a listed or proposed species, the Park Service will initiate formal consultation under section 7 of the Endangered Species Act.

Additional protection will be provided for areas where sensitive species are found, such as big-horn sheep lambing and foraging areas, waters with populations of mountain yellow-legged frogs and Yosemite toads, and raptor nesting sites. This could include closures of areas or restrictions on use (e.g., rock climbing in sheep habitat, trail use in the vicinity of occupied raptor nests).

Mitigation for Impacts on Caves

Restrictions will continue to be placed on access to caves in order to protect features such as bat colonies, invertebrate populations, delicate cave formations, archeological sites, and paleontological materials. Caves with particularly sensitive features and fauna will remain closed to recreational use. Other caves with delicate features could be opened for limited recreational use, but permits and required qualifications for trip leaders would serve to control access. Other management provisions to protect resources include prohibitions on camping, the removal of cave features, or the depositing of human wastes; guidelines for minimizing disturbance to cave dwelling animals; inventories and monitoring to document resource conditions and to identify impacts and mitigation; and gating of entrances. Public tours of other caves would occur only after cave resources were evaluated, the impacts of such access were analyzed, and protective measures were identified. Only more resilient

caves (those with less sensitive or unique features and fauna) would be candidates for tours.

Mitigation for Increased Water Withdrawals

A monitoring program for each water system will determine the levels of acceptable withdrawals under different precipitation regimes (that is, years and seasons with higher or lower water availability). If monitoring analysis concludes that continuing the present levels of withdrawals for a particular system may create irreversible or irretrievable impacts to resources, or may create a general trend away from desired future conditions, then the volume of withdrawals will be reconsidered by park managers and will be reduced accordingly.

Studies will also evaluate the cumulative impacts of water withdrawals. Actions to minimize water demand, such as the use of conservation efforts and low-flow fixtures, will continue to be identified and implemented.

Mitigation for Air Quality Impacts

A majority of air pollution in Sequoia and Kings Canyon National Parks originates outside park boundaries, resulting in mitigation measures that are more complex since the National Park Service has no direct control over these sources. Six areas of actions are recommended for reduction of air pollution and its effects on the resources. These include monitoring, park planning, regulatory compliance, education, external relations, and information management.

Air pollution in the parks has been monitored for over 20 years. One of the simplest and perhaps most effective strategies for reducing air pollution is to communicate findings to the public, regulatory agencies, and other interested parties. Communicating this information helps bring air quality issues to the forefront and advocates for more aggressive air pollution-reduction programs throughout the region.

Mitigation for Facility Construction

Most construction will occur in areas that have already been disturbed by facilities, roads, parking areas, or trails. Mitigation will minimize temporary impacts from construction on soils, vegetation, sequoia groves, streams, wildlife, riparian areas, meadows, and other resources. Such measures will include silt fences, erosion control blankets, mulch, and revegetation with native species where appropriate and necessary. Topsoil and vegetation will be salvaged from construction areas and stockpiled for later use in revegetation efforts.

Mitigation for Archeological Resources; Historic Structures, Districts, and Landscapes; and Ethnographic Resources

Mitigation measures for historic structures, districts, and landscapes are based on the regulations of the Advisory Council on Historic Preservation (36 CFR 800). They stress avoidance of impacts. Actions that may affect historic structures, districts, or landscapes should meet the “Secretary of the Interior’s Standards for Rehabilitation” (36 CFR Part 67) and the *Secretary of the Interior’s Standards for the Treatment of Historic Properties* (NPS 1995d; codified at 36 CFR Part 68). Compliance with section 106 of the National Historic Preservation Act will be fully addressed. When adverse effects cannot be avoided, mitigation measures are determined through consultation with the state historic preservation officer and may include documentation according to HABS / HAER / HALS standards.

Prior to the demolition of any structure listed on, or eligible for listing on, the National Register of Historic Places, a survey for archeological resources in the general vicinity of the affected structure will be designed and conducted in consultation with the California state historic preservation officer. The excavation, recordation, and mapping of any significant cultural remains will be completed prior to demolition to ensure that important archeological data that otherwise would be lost is recovered and documented.

When a historic structure is slated for demolition, architectural elements and objects may be salvaged for reuse in rehabilitating similar structures, or they may be added to the parks' museum collection. In addition, the historical alteration of the human environment and reasons for that alteration will be interpreted to park visitors.

A data recovery plan will be developed for all archeological sites that could be affected by visitor use or construction.

Consultations with American Indians linked by ties of kinship, culture, or history to park lands will address the inadvertent discovery of human remains, funerary objects, sacred objects, or objects of cultural patrimony. All provisions outlined in the Native American Graves Protection and Repatriation Act of 1990 (25 USC 3001) will be followed.

IMPLEMENTING CARRYING CAPACITY

As discussed in the management prescriptions, visitor carrying capacity is the type and level of visitor use that can be accommodated while sustaining the quality of park resources and visitor opportunities consistent with the purposes of the parks. Each of the management zones generally addresses these elements. Carrying capacity would be implemented as a tiered approach — watching for broad trends, then focusing on more specific monitoring and management actions in areas of concern. Future implementation plans will develop these methodologies and put them into effect.

This general management plan addresses issues and trends affecting the parks for the next 15 to 20 years. While visitation at Sequoia and Kings Canyon National Parks has generally remained flat, it could grow appreciably during the life of this plan. Depending on the vision selected, growth of up to 30% could be accommodated, primarily in frontcountry areas. This would necessarily result in a shift toward increased day use, particularly as regional populations are expected to double over the next two decades. At the same, backcountry and stock use patterns

would likely continue to decrease, a trend that began in the 1970s. During this time the parks have refined their backcountry permit system and instituted increasingly sophisticated monitoring techniques of resource conditions.

Data Collection

An essential part of the carrying capacity process is for park staff to continue to watch for trends that could signal concerns for resources or visitor experiences. Information currently comes from a variety of sources that may be useful in identifying areas that have specific carrying capacity issues. For example, an increase in the frequency of trash collection at a campground or a notable number of days when visitors exceed the capacity of a visitor center may indicate underlying issues that need to be further monitored or dealt with.

Other types of useful information available to park staff include water withdrawals, vehicle counts at entrance stations, trail counters, vehicle counts, GIS data, requests for incidental business permits, ranger reports, volunteer reports, comments from neighbors, and aerial photographs. The sharing of pertinent information and watching for patterns and significant changes may trigger more specific monitoring and management focused on areas of concern.

Frontcountry Monitoring, Indicators, and Management Actions

Where there are known threats or impacts to resources or visitor experiences in the frontcountry, monitoring would be undertaken to determine the scale of the problem and to identify the range of management actions.

- Water withdrawals would be monitored at Grant Grove / Wilsomia, Wuksachi, Lodgepole, Wolverton, Ash Mountain, and Mineral King.
- Traffic congestion would be monitored in areas with LOS D, E, or F.
- Many overlooks, developed areas, and some of the most popular hiking areas have visitor-created trails and places where

people have left designated trails, impacting soils and vegetation. These areas would be identified, rehabilitated, and improved to contain future impacts.

- A few specific resources are known to be extremely vulnerable to inadvertent visitor damage or vandalism. Site-specific monitoring would be implemented for the most sensitive known resources, for example, regular surveillance at park features, caves, and archeological sites.

Backcountry Monitoring, Indicators, and Management Actions

Similar to what would happen in the front-country, where there are known threats or impacts to resources or visitor experiences in the backcountry, monitoring would be undertaken to determine the scale of the problem and to identify the range of management actions.

- Site-specific monitoring would be implemented for the most sensitive known resources, for example, regular backcountry patrols at the most popular meadows, lakes, camping areas and climbing sites, as well as regular surveillance at backcountry caves and archeological sites.
- Basic information on backcountry use and trail conditions would be collected, with an emphasis on perimeter trailheads and the trails they serve.
 - Data would be collected on the numbers of different kinds of users (e.g., hikers, horseback riders, climbers).
 - Existing trails and routes would be inventoried to determine the condition of tread, resource condition of the corridor, and the location of sensitive natural and cultural resources.

More detailed wilderness and backcountry planning for visitor experience and resource management will be accomplished in the future wilderness stewardship and stock use plan. Planning for backcountry areas would address the following:

- wilderness/backcountry management

- sustained monitoring, including identifying site-specific indicators and standards
- appropriate environmental documentation, as well as conducting appropriate consultation with the U.S. Fish and Wildlife Service and others
- actions to be taken when desired resource conditions or visitor experiences are not being achieved. The range of potential actions is identified in the management prescriptions.

Refinements to Carrying Capacity

Long-term monitoring and management would require additional research and planning. As identified in the management prescriptions, a number of potential indicators and standards and a range of management actions may be needed to achieve or maintain desired conditions. Park staff and other experts would need to continually monitor indicators and standards for natural and cultural resources, and to adjust standards and indicators. This process would also assess the impacts on the parks of actions by other agencies, such as the U.S. Forest Service or the Bureau of Land Management, and the role of other partnerships, such as concession operators, private landowners, and special use permit holders, in managing park resources and conditions.

Adaptive Management

Adaptive management is a systematic process for continually improving management policies and practices by learning from the outcomes of operational programs. This plan addresses future trends that are suggested by data at this time, but not all changes can be foreseen, nor can the effects of actions on a complex ecosystem (including humans) be fully anticipated.

The desired future condition of the parks, expressed in goals and management prescriptions, must be monitored and evaluated to ensure that management actions are geared to achieving and maintaining these conditions. If they are not, the course of action must be adjusted. It is expected that adaptive management adjustments would generally take place through implementation

plans. However, if a substantial change was needed to this plan, an amendment to the general management plan and appropriate public involvement and environmental compliance would be undertaken.

Coordination with the U.S. Forest Service and the Bureau of Land Management

Managers of agencies should periodically review and identify memoranda of agreement and specific actions that could be undertaken in a joint or complementary manner to help maintain desired resource conditions and achieve desired visitor experiences.

Other Partnerships and Coordination

The Sequoia Natural History Association would continue to be instrumental in assisting with scientific, educational, historical, and interpretive activities at the parks, as well as providing on-site condition information. Local governments would be essential to achieving goals in the plan, such as providing a transit system. Volunteers, already an important part of the labor force for the parks, would be even more important by being integrated into all aspects of NPS management to achieve the goals of the plan.

Implementation and Strategic Planning

The general management plan provides an overall framework for future park management, and a number of more detailed implementation plans will follow, such as a wilderness stewardship and stock use plan. Strategic planning will occur at regular intervals, where NPS managers will prioritize actions identified in planning, including carrying capacity standards and management actions to attain them. These actions will then be integrated into the parks' performance plan.

THE ENVIRONMENTALLY PREFERRED ALTERNATIVE

The environmentally preferred alternative is defined as "the alternative that will best promote the national environmental policy as expressed in section 101(b) of the National Environmental

Policy Act" (Council on Environmental Quality 1981).

After the environmental consequences of the alternatives were analyzed, each alternative was evaluated as to how well the goals stated in section 101 of the National Environmental Policy Act are met (see text box). The following discussion highlights how each alternative meets these goals, while Table 2 compares the advantages and disadvantages of each alternative.

The No-Action Alternative. The no-action alternative represents continuity with the present course of management. It responds to resource impacts and visitor demands once they occur rather than managing resources and visitor experiences proactively. Many traditional uses would continue; stock use would be monitored to ensure that resources were not impaired. Most of the parks are backcountry, with over 83% managed as federally designated wilderness. Private land and special use permits would continue, subject to existing law and land protection plans. Congestion would continue to adversely affect visitor access and experiences. Facilities for park operations and visitor use would be gradually replaced with more sustainable facilities.

Resource preservation goals (1, 4) and sustainability goals (3, 6) would not be met to the same degree as under the other alternatives. Similarly, visitor experience goals (2, 3, 5) would be achieved to a lesser degree under the no-action alternative than under the preferred alternative or alternatives C and D.

The Preferred Alternative. Under the preferred alternative, which was developed based on combining the advantages of the other alternatives, resource integrity would be paramount, while sustainable growth and development would be allowed to meet the needs of diverse user groups. Extensive wilderness would continue to be compatible with the vision for this alternative, preserving the natural environment for succeeding generations.

Recreational opportunities and visitor experiences would be enhanced by

Goals of the National Environmental Policy Act

Section 101(b) states that it is the continuing responsibility of the federal government to improve and coordinate federal plans, functions, programs, and resources in order to

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

- regulating stock use to ensure resource protection
- expanding educational and outreach programs to further enhance public enjoyment, park values, and stewardship
- improving facilities, services, and transportation

These actions would ensure safe, healthful, and pleasing surroundings; attain the widest beneficial use of the environment without degradation or other unintended consequences; and achieve a balance between population and resource use that would permit a wide sharing of life's amenities.

Some park operational facilities could be relocated outside the parks if beneficial. Private landownership would be accommodated where it did not affect public use.

Taken as a whole, this alternative is the environmentally preferred alternative because it would best meet all six goals stated in the National Environmental Policy Act.

Alternative A. Alternative A would focus on protecting natural resources, reducing facilities, and limiting use. Extensive wilderness would continue to be compatible with this vision, thus protecting the natural environment for succeeding generations. At the same time this alternative would provide less protection for cultural resources than would the preferred alternative or alternatives C and D. Facilities would be relocated outside the parks as much as possible to protect resources. Fewer visitor facilities and services would adversely affect visitor experiences, not supporting diversity and variety of individual choice. Educational facilities would be reduced, while educational programs and outreach would increase, with reliance on staff and written materials. By eliminating stock use, privately owned land inside park boundaries, and special use permits, along with restoring many previously impacted areas, alternative A would meet natural resource preservation goals for future generations, but it would limit individual choice and a wide sharing of life's amenities.

- meeting needs of diverse user groups
- increasing day use, primarily in high use areas
- providing for traditional and sustainable backcountry uses while ensuring that resource conditions and wilderness character and experiences are protected
- improving access to the parks by redesigning some circulation patterns and parking areas, and by providing a limited transit service
- maintaining the essential elements of park character (from both a natural and a cultural viewpoint) and basic recreational opportunities, including stock use, which would be monitored and regulated to ensure resource protection

Because this alternative would focus on more limited access, fewer facilities, less cultural resource protection, and more restricted recreational and educational opportunities, it would not fully realize goals related to diversity, variety of individual choice, or culturally pleasing surroundings.

Alternative C. Alternative C would focus on traditional park experiences, those typical of the 1920s to the 1960s. Extensive wilderness would continue to be compatible with this vision, protecting the natural environment for succeeding generations. Alternative C would emphasize cultural resources related to specific themes, thus preserving important cultural aspects of our national heritage.

Recreational opportunities and visitor experiences would be enhanced by

- accommodating more use, especially overnight stays, backcountry use, and traditional recreational activities (including stock use, which would be monitored to ensure that no resources were impaired)
- improving facilities, services, and transportation
- reducing backcountry party sizes, allowing more dispersed and less regulated use

While these actions would allow increased visitation and retain traditional experiences, the experiences would not appeal to all Americans.

Privately owned land would remain.

Overall, alternative C would not fully realize the parks' diverse visitation potential for all Americans or achieve a balance between population and resource use and a wide sharing of life's amenities.

Alternative D. Alternative D would focus on preserving the parks' basic natural and cultural character and guiding growth. Extensive wilderness would continue to be compatible with this vision, again protecting the natural environment for succeeding generations. Sustainable visitation would be accommodated, and facilities and programs would be adapted to changing user groups. Orientation, park stewardship, and resource values would be emphasized.

Recreational opportunities and visitor experiences would be enhanced by

- increasing day use and continuing many overnight use opportunities
- expanding educational programs
- providing more facilities for visitor use and diverse recreational opportunities, including stock use that would be monitored to ensure that no resources were impaired
- providing transit in all major areas, redesigning roads, and greatly expanding parking to relieve congestion

These actions would ensure safe, healthful, and pleasing surroundings for all Americans, attain the widest range of beneficial uses of the environment, and allow a wide sharing of life's amenities.

A bypass road would reduce congestion at Grant Grove, but this action would transfer related impacts to the surrounding Giant Sequoia National Monument.

Private landownership would be accommodated where it did not affect public use.

Overall, this alternative would meet most of the goals of the National Environmental Policy, but somewhat less effectively than the preferred alternative, especially for resource preservation.

TABLE 2: COMPARISON OF HOW THE ALTERNATIVES MEET THE GOALS OF THE NATIONAL ENVIRONMENTAL POLICY ACT

NEPA Sec. 101(b) Goals	No-Action Alternative	Preferred Alternative	Alternative A	Alternative C	Alternative D
1. Fulfill the responsibilities of each generation as trustee of the environment for succeeding generations.	Meets goal: - protects naturally functioning ecosystems and preserves biodiversity - establishes river protection measures - manages fire for ecological goals, public safety, and property protection - monitors and regulates stock use to protect resources - implements drought plans as needed Does not meet goal: - seeks new water supply and additional storage - responds to management problems and visitor needs in a piecemeal fashion, without considering the overall effects of individual actions	Meets goal: - preserves naturally functioning ecosystems and biodiversity - establishes river protection measures - manages fire for ecological goals, public safety, and property protection - monitors and regulates stock use to protect resources - limits water withdrawals to protect resources; increases efficiency; implements drought plans - uses management prescriptions as a framework for responding to problems and visitor needs, with limits for development, water use, and carrying capacity	Meets goal: - preserves naturally functioning ecosystems and biodiversity - establishes river protection measures - manages fire for ecological goals, public safety, and property protection - limits water withdrawals to protect resources; reduces water demand; implements drought plans - uses management prescriptions as a framework for responding to problems and visitor needs, with less development and a greater emphasis on backcountry uses Partially meets goal: - bans stock use, thus hampering resource protection efforts	Meets goal: - preserves naturally functioning ecosystems and biodiversity - establishes river protection measures - manages fire for ecological goals, public safety, and property protection - monitors and regulates stock use to protect resources - limits water withdrawals to protect resources; increases efficiency; implements drought plans - uses management prescriptions as a framework for responding to problems and visitor needs, with limits for development, water use, and carrying capacity	Meets goal: - preserves naturally functioning ecosystems and biodiversity - establishes river protection measures - manages fire for ecological goals, public safety, and property protection - monitors and regulates stock use to protect resources - limits water withdrawals to protect resources; increases efficiency; implements drought plans - uses management prescriptions as a framework for responding to problems and visitor needs
2. Ensure for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings.	Meets goal: - continues winter use and cave visitation Partially meets goal: - limits educational facilities, programs and outreach Does not meet goal: - continues deteriorated condition of frontcountry trail system - adversely affects visitor access due to congestion	Meets goal: - continues cave visitation - expands winter use - improves facilities, services, circulation, and transportation - meets recreational and educational needs of diverse visitors - expands educational programs and outreach - improves the frontcountry trail system to meet needs of all users Partially meets goal: - addresses congestion through redesign and relocation of facilities	Meets goal: - continues winter use and cave visitation Does not meet goal: - limits educational programs but expands educational outreach - no stock use - reduces frontcountry trail system - reduces visitor facilities and services	Meets goal: - continues winter use and cave visitation - improves facilities, services, and transportation - expands traditional ranger naturalist programs - improves the frontcountry trail system Partially meets goal: - seeks to meet recreational needs of traditional user groups - addresses congestion through the redesign of roads and parking Does not meet goal: - not all user groups' needs met - eliminates educational outreach	Meets goal: - expands winter use - expands cave visitation - meets recreational and educational needs of diverse visitors - expands educational programs and outreach - improves the frontcountry trail system for all users - improves facilities, services, circulation, and transportation Partially meets goal: - addresses congestion through new road construction and expanded parking

NEPA Sec. 101(b) Goals	No-Action Alternative	Preferred Alternative	Alternative A	Alternative C	Alternative D
3. Attain the widest range of beneficial uses of the environment without degradation, risk of health or safety, or other undesirable and unintended consequences.	Partially meets goal: - replaces facilities with more sustainably designed facilities as needed Does not meet goal: - continues current use patterns	Meets goal: - implements sustainable levels of services, facilities, utilities, and transportation - potentially relocates administrative facilities outside the parks	Does not meet goal: limits access and visitation	Meets goal: implements more sustainable levels of facilities, services, utilities, and transportation	Meets goal: - implements sustainable levels of services, facilities, utilities, and transportation - potentially relocates administrative facilities outside the parks
4. Preserve important historic, cultural, and natural aspects of our national heritage and maintain, wherever possible, an environment that supports diversity and variety of individual choice.	Meets goal: - continues stock use - evaluates and preserves cultural resources Partially meets goal: - continues management of Wilsonia Historic District under an outdated <i>Land Protection Plan</i> - preserves Mineral King cultural landscape through special use permits and cultural resource preservation plan	Meets goal: - continues stock use - evaluates cultural resources; preserves cultural resources representing diverse uses - updates the land protection plan for the Wilsonia Historic District - meets changing user groups' needs - provides diverse recreation Partially meets goal: - separates some uses - preserves Mineral King cultural landscape through special use permits and cultural resource preservation plan	Meets goal: - evaluates cultural resources Partially meets goal: - preserves Mineral King cultural landscape through special use permits and cultural resource preservation plan - preserves key cultural resources Does not meet goal: - calls for acquiring private land in the Wilsonia Historic District and removing all facilities - no stock use - fewer visitor facilities and services - more restricted recreational opportunities	Meets goal: - evaluates cultural resources; preserves cultural resources representing diverse uses - updates the land protection plan for the Wilsonia Historic District - continues stock use Partially meets goal: - encourages traditional uses - disperses back-country use - separates some uses - preserves Mineral King cultural landscape through special use permits and cultural resource preservation plan	Meets goal: - evaluates cultural resources; preserves cultural resources representing diverse uses - updates the land protection plan for the Wilsonia Historic District - continues stock use - offers diverse recreational opportunities Partially meets goal: - concentrates back-country use - separates some uses - preserves Mineral King cultural landscape through special use permits and cultural resource preservation plan
5. Achieve a balance between population and resource use that will permit high standards of living and a wide sharing of life's amenities.	Partially meets goal: - gradually provides more sustainable facilities Does not meet goal: - does not address congestion - does not proactively address increased visitation - does not effectively respond to changing user groups' needs	Meets goal: - accommodates moderate increases in visitation with transit, more day use facilities, and diverse recreational opportunities - provides for sustainable levels of facilities, services, and transportation - meets nontraditional user groups' needs	Partially meets goal: - limits visitation to provide higher quality experience to fewer visitors Does not meet goal: - provides for fewer visitor facilities and services - limits park access and does not address diverse user groups' recreational needs	Partially meets goal: - encourages traditional visitation patterns - improves facilities, services, and transportation Does not meet goal: - focuses on traditional use patterns without responding to diverse user groups' recreational needs	Meets goal: - increases recreational opportunities - provides for sustainable levels of facilities, services, and transportation - supports visitation by diverse groups Partially meets goal: - establishes a pattern of increased visitation, resulting in additional development
6. Enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.	Partially meets goal: - replaces facilities with more sustainably designed facilities as needed - continues some patterns of incompatible development	Meets goal: - provides new facilities designed to meet sustainability goals - potentially relocates administrative facilities outside the parks Partially meets goal: - encourages more compatible patterns of development	Meets goal: - moves administrative facilities outside the parks, and restores impacted areas Partially meets goal: - encourages more compatible patterns of development	Partially meets goal: - provides new facilities designed to meet sustainability goals - encourages more compatible patterns of development	Partially meets goal: - provides new facilities designed to meet sustainability goals - encourages more compatible patterns of development Does not meet goal: - Grant Grove bypass transfers park traffic and resource impacts to adjacent lands

The General Management Plan / Comprehensive Wild and Scenic River Management Plan

How the Alternatives Matrix is Organized

To make actions easier to compare, reference numbers and subheadings are used. Visions and alternative actions are presented in the following order:

Parkwide Visions and Concepts

- natural resources
- cultural resources
- transportation and circulation
- visitor use and facilities (including recreation, education, and facilities)
- private land and special use permits on park land
- park administration and operations

Wild and Scenic Rivers

- Middle Fork of the Kings River
- South Fork of the Kings River
- North Fork of the Kern River

Eligible and Suitable Wild and Scenic Rivers

- South Fork of the San Joaquin River
- Marble Fork of the Kaweah River
- Middle Fork of the Kaweah River
- East Fork of the Kaweah River
- South Fork of the Kaweah River

Backcountry / Wilderness

- wilderness
- visitor use and facilities
- park administration and operations

Kings Canyon National Park

- Cedar Grove and the floor of the Kings Canyon
- Grant Grove

Sequoia National Park

- Dorst / Halstead / Cabin Creek
- Wuksachi
- Lodgepole
- Wolverton
- Giant Forest
- Crystal Cave
- Ash Mountain / Foothills
- Mineral King
- Dillonwood

The General Management Plan / Comprehensive Wild and Scenic River Management Plan — In Detail

	Refer- ence No.	Continue Current Management (No Action) (formerly alternative B)	Preferred Alternative: Accommodate Sustainable Growth and Visitor Enjoyment, Protect Ecosystem Diversity, and Preserve Basic Character While Adapting to Changing User Groups
Parkwide Visions and Concepts			
<i>Park Vision</i>	1.	<i>The parks are managed as they are now in accordance with approved plans (such as development concept plans, and the 1996 Giant Forest Interim Management Plan); negative resource impacts and visitor demands are responded to by relocating development, reducing some uses, or confining new developed areas. Visitor uses are reassessed and revised as new information about natural and cultural resource impacts and visitor needs emerges. Current facilities are inadequate for park needs and visitor use levels, and crowding is common in some areas.</i>	<i>The parks' appeal is broadened to be more relevant to diverse user groups. Increased day use is accommodated, and overnight visitation is retained. The integrity of park resources is paramount. Stronger educational and outreach programs provide enjoyment and instill park conservation values. The basic character of park activities and the rustic architecture of facilities is retained so that the parks remain strikingly different from surrounding areas. Park administrative facilities are redesigned and may be relocated outside the parks. Park facilities accommodate sustainable growth.</i>
<i>Park Zones (relative amounts compared to no action)</i>	2.	Backcountry predominates with a mix of low- and high-use frontcountry along Generals Highway, with several areas of park development .	Backcountry predominates with slightly less low-use frontcountry and slightly more high-use frontcountry along Generals Highway, with several areas of park development .
Natural and Cultural Resources			
<i>Resources Management Plan (The Resources Man- agement Plan is an implementation plan that reflects the direction of the general management plan.)</i>	3.	Perpetuate naturally functioning eco-systems and preserve native biodiversity in accordance with the 1999 <i>Natural and Cultural Resources Management Plan</i>. This plan prescribes resource protection and management practices derived from law and policy. (Some of these practices are referenced in this document.)	Perpetuate naturally functioning eco-systems and preserve native biodiversity in accordance with the 1999 <i>Natural and Cultural Resources Management Plan</i>. This plan prescribes resource protection and management practices derived from law and policy. (Some of these practices are referenced in this document.)

NOTE: All text for the preferred alternative is included so that the alternative is complete in itself, even when the action is identical to the no-action alternative.

Reference No.	A: Emphasize Natural Ecosystems and Biodiversity; Reduce Use and Development	C: Preserve Traditional Character and Retain the Feel of Yesteryear; Guide Growth	D: Preserve Basic Character and Adapt to Changing User Groups; Guide Growth
<i>Parkwide Visions and Concepts</i>			
1.	<i>The parks are natural resource preserves; they are primarily valued because they contain publicly owned resources that will be conserved for the future. Levels of use are lower than at present, and visitor experiences are directly connected to natural resources and provide more solitude. The parks contrast strongly with surrounding lands that are under increasing pressure for use and development, and the parks' boundaries are better identified. Park managers aggressively cooperate with the managers of surrounding lands to enhance range-wide biodiversity.</i>	<i>The parks present a traditional park character and a feel of yesteryear, where experiences are more reminiscent of how visitors used the parks in the past. This is conveyed through rustic architecture and lower impact recreational activities (such as sight-seeing and hiking) popular from the 1920s to the 1960s, providing an experience that is strikingly different from that in an urban setting. Redesignated developed areas accommodate limited growth; overnight stays are encouraged. Negative impacts on natural resources are controlled so as to maintain or improve resource conditions.</i>	<i>The parks preserve some of their traditional park character and rustic architecture, but diverse new user groups and uses are encouraged. Day use is more common. Facilities are expanded to meet users' needs, while frequent interpretive programs are offered to educate, entertain, and instill a sense of park conservation values. Negative impacts on natural resources are contained or mitigated, so as to maintain or improve resource conditions.</i>
2.	More backcountry and less low- and high-use frontcountry and park development .	More low- and high-use frontcountry , slightly more park development and slightly less backcountry .	More low- and high-use frontcountry , slightly more park development and less backcountry .
<i>Natural and Cultural Resources</i>			
3.	Same as the no-action and preferred alternatives.	Same as the no-action and preferred alternatives.	Same as the no-action and preferred alternatives.

	Refer- ence No.	Continue Current Management (No Action) (formerly alternative B)	Preferred Alternative: Accommodate Sustainable Growth and Visitor Enjoyment, Protect Ecosystem Diversity, and Preserve Basic Character While Adapting to Changing User Groups
River Protection Measures (Also see "Wild and Scenic Rivers — Boundaries, Classifications, and Outstandingly Remarkable Values" for additional protection measures.)	4.	Establish river protection measures, such as no overnight facilities or designated campsites within 100-year floodplains (NPS <i>Management Policies 2001</i>, sec. 4.6.4). Base set-back development on 100-year floodplains, which will vary depending on the terrain adjacent to the river. Other measures cover removal of facilities within floodplains, river-based recreation management, river-bank restoration, and prohibition of motorized watercraft.	Establish river protection measures, such as no overnight facilities (such as designated campsites) within 100-year floodplains (NPS <i>Management Policies 2001</i>, sec. 4.6.4). Base set-back development on 100-year floodplains, which will vary depending on the terrain adjacent to the river. Other measures cover removal of facilities within floodplains, river-based recreation management, river-bank restoration, and prohibition of motorized watercraft.
Fire and Fuels Management (The Fire and Fuels Management Plan is an implementation plan that reflects the direction of the NPS Management Policies 2001, the Natural and Cultural Resources Management Plan, and the general management plan.)	5.	Manage wildland fire to address its profound ecological role in park ecosystems and its potential impacts on public safety, health, well-being, and property. As specified in the <i>Fire and Fuels Management Plan</i>, use prescribed fire and mechanical treatments to enhance ecosystem health while providing for public health, safety, well-being, and property protection. Give prescribed fire a higher priority than mechanical treatments in the <i>Fire and Fuels Management Plan</i>.	Manage wildland fire to address its profound ecological role in park ecosystems and its potential impacts on public safety, health, well-being, and property. As specified in the <i>Fire and Fuels Management Plan</i>, use prescribed fire and mechanical treatments to enhance ecosystem health while providing for public health, safety, well-being, and property protection. Give prescribed fire a higher priority than mechanical treatments in the <i>Fire and Fuels Management Plan</i>.
Sensitive Species	6.	Protect and manage threatened, endangered, and sensitive species in accordance with the NPS mission. (The <i>Resources Management Plan</i> addresses specific topics, such as bighorn sheep and mountain yellow-legged frogs.)	Protect and manage threatened, endangered, and sensitive species in accordance with the NPS mission. (The <i>Resources Management Plan</i> addresses specific topics, such as bighorn sheep and mountain yellow-legged frogs.)
Cultural Resources (Archeological resources, historic structures / districts, and cultural landscapes)	7.	Evaluate cultural resources.	Evaluate cultural resources.
	8.	Preserve, adaptively reuse, rehabilitate, or remove cultural resources.	Preserve, adaptively reuse, rehabilitate, or remove cultural resources, ensuring preservation of a full spectrum of resources that portray diverse park cultural themes.
	9.	Conduct section 106 consultation with the State Historic Preservation Office as required by law.	Conduct section 106 consultation with the State Historic Preservation Office as required by law.

Reference No.	A: Emphasize Natural Ecosystems and Biodiversity; Reduce Use and Development	C: Preserve Traditional Character and Retain the Feel of Yesteryear; Guide Growth	D: Preserve Basic Character and Adapt to Changing User Groups; Guide Growth
4.	Same as the no-action and preferred alternatives.	Same as the no-action and preferred alternatives.	Same as the no-action and preferred alternatives.
5.	Same as the no-action and preferred alternatives.	Same as the no-action and preferred alternatives.	Same as the no-action and preferred alternatives.
6.	Same as the no-action and preferred alternatives.	Same as the no-action and preferred alternatives.	Same as the no-action and preferred alternatives.
7.	Same as the no-action and preferred alternatives.	Same as the no-action and preferred alternatives.	Same as the no-action and preferred alternatives.
8.	Preserve key cultural resources as development was removed.	Preserve cultural resources associated with development prior to the 1950s.	Same as the preferred alternative.
9.	Same as the no-action and preferred alternatives.	Same as the no-action and preferred alternatives.	Same as the no-action and preferred alternatives.

	Refer- ence No.	Continue Current Management (No Action) (formerly alternative B)	Preferred Alternative: Accommodate Sustainable Growth and Visitor Enjoyment, Protect Ecosystem Diversity, and Preserve Basic Character While Adapting to Changing User Groups
<i>Native American Relations</i>	10.	Consult with local Native American tribes as required by law. Accommodate resource access and use of ethnographic resources to the extent allowed by law and policy.	Consult with local Native American tribes as required by law. Accommodate resource access and use of ethnographic resources to the extent allowed by law and policy; provide interpretation of Native American uses of the area; and offer local Native American crafts at park stores.
Transportation and Circulation			
<i>Vehicle Traffic</i>	11.	Accept growing vehicle traffic as a result of changing user groups and increased levels of day use.	Deal with increasing vehicle traffic by improving the north entrance station, redesigning some roads and parking, improving signs, and redirecting traffic.
<i>Transit Systems</i>	12.	Provide a transit system in Giant Forest. Explore the feasibility of additional alternative transportation parkwide.	- Provide a transit system in Giant Forest. Explore the feasibility of additional alternative transportation parkwide. - Pursue transit connections to valley hub locations (Fresno and Visalia).
<i>Generals Highway</i>	13.	Continue to rebuild the Generals Highway to sustain existing traffic and preserve character.	Continue to rebuild the Generals Highway to sustain existing traffic and preserve character.
	14.	No special designation for the Generals Highway.	Explore special designation for the Generals Highway.
Visitor Use and Facilities			
<i>Visitation</i>	15.	Limit growth to current / proposed facility capacity	Accommodate moderate increased visitation, with an emphasis on day use. Encourage diverse user groups.
<i>Educational Facilities</i>	16.	Assess the need for some current educational facilities.	Expand, redesign, or add educational facilities.
<i>Park Education / Interpretive Programs</i>	17.	- Manage the parks' interpretive programs under the present "Long-Range Interpretive Plan." - Emphasize written interpretive materials for visitor education, focusing on providing basic visitor information, resource protection, orientation, and safety; continue to provide limited ranger naturalist programs.	- Prepare a comprehensive interpretation plan. - Increase park orientation in developed areas. Expand ranger naturalist programs that focus on understanding and helping preserve park resources, safety, and teaching backcountry skills. Increase interpretation of cultural resources. Provide more day use educational opportunities.

Reference No.	A: Emphasize Natural Ecosystems and Biodiversity; Reduce Use and Development	C: Preserve Traditional Character and Retain the Feel of Yesteryear; Guide Growth	D: Preserve Basic Character and Adapt to Changing User Groups; Guide Growth
10.	Same as the no-action alternative.	Same as the preferred alternative.	Same as the preferred alternative.
<i>Transportation and Circulation</i>			
11.	Reduce vehicle traffic by restricting visitor use.	Redesign some roads and parking to reduce vehicle traffic in some villages and in high-use frontcountry areas.	Redesign some roads and parking to help reduce vehicle traffic throughout the parks.
12.	Provide a transit system in Giant Forest. Do not provide additional transit because of reduced use.	Same as the no-action alternative.	- Provide transit services to all major areas. Use a more extensive transit system, possibly linking to public transit outside the parks. - Pursue transit connections to valley hub locations (Fresno and Visalia).
13.	Same as the no-action and preferred alternatives.	Same as the no-action and preferred alternatives.	Same as the no-action and preferred alternatives, plus identify and facilitate the use of additional features along the Generals Highway corridor to disperse visitation and serve as a transportation corridor for buses.
14.	Same as the no-action alternative.	Same as the no-action alternative.	Seek "All-America Road" status for the Generals Highway.
<i>Visitor Use and Facilities</i>			
15.	Limit visitation to a level compatible with uncrowded, resource-based experiences.	Accommodate more visitors, with an emphasis on overnight visitation; retain current day use visitation.	Accommodate more visitors, with an emphasis on day use. Encourage diverse user groups.
16.	Reduce the number of educational facilities to limit the amount of development within the parks.	Replace or expand some educational facilities.	Replace or add educational facilities.
17.	- Prepare a comprehensive interpretation plan. - Minimize ranger naturalist programs; emphasize written interpretive materials for visitor education, focusing on resource protection, orientation, safety, stewardship, and leave-no-trace programs.	- Prepare a comprehensive interpretation plan. - Increase park orientation in developed areas. Reestablish and expand traditional ranger naturalist programs; focus on resource education during campfire programs. Emphasize cultural resources.	Similar to the preferred alternative except emphasize day use education.

	Refer- ence No.	Continue Current Management (No Action) (formerly alternative B)	Preferred Alternative: Accommodate Sustainable Growth and Visitor Enjoyment, Protect Ecosystem Diversity, and Preserve Basic Character While Adapting to Changing User Groups
<i>Educational Programs outside the Parks</i>	18.	Provide educational programs limited in scope and intent outside the parks.	Support resource protection efforts within the parks through greatly enlarged outreach efforts. Develop numerous partnerships. Have NPS staff and/or partners take programs to many regional classrooms. Create a classroom-focused website to share the parks' missions. Connect the parks with a more diverse public by enlarging educational efforts outside the parks.
<i>Visitor Facilities</i>	19.	Retain existing facilities inside the parks, and complete approved projects.	Redesign and make existing developed areas more efficient to accommodate moderate increases and more diverse uses. When beneficial, move administrative facilities out of the parks.
	20.	Retain RV dump stations unless they cannot comply with state regulations.	Retain RV dump stations unless they cannot comply with state regulations.
<i>Frontcountry Trails</i>	21.	Continue the existing functioning trail system (trails are deteriorating or difficult to follow in some areas).	Diversify experiences provided by the existing extensive trail system; reopen, restore, and expand the trail system as needed; enhance the frontcountry trail system with signs, guides, and multi-lingual education.
<i>Stock Use</i>	22.	Continue administrative, commercial, and private stock under current NPS policies.	Continue administrative, commercial, and private stock use under current NPS policies. Improve management through expanded use of controls on stock party size, regulation of dates and locations, designation of areas, and appropriate closures as needed.
<i>Watercraft</i>	23.	Prohibit motorized watercraft. Prohibit nonmotorized watercraft on the South Fork of the Kings River to protect resources and visitor experiences.	Prohibit motorized watercraft. Prohibit nonmotorized watercraft on the South Fork of the Kings River to protect resources and visitor experiences. Manage nonmotorized watercraft through means such as permits, quotas, restricted areas, and designated access points to protect resources and visitor experiences.
<i>Winter Use</i>	24.	Continue existing winter use activities.	Encourage and accommodate increased, sustainable winter use.
<i>Caves</i>	25.	Provide a limited number and type of tours to Crystal Cave.	Provide a limited number and type of tours to Crystal Cave.
	26.	Allow access to other caves by permit only.	Allow access to other caves by permit only.

Reference No.	A: Emphasize Natural Ecosystems and Biodiversity; Reduce Use and Development	C: Preserve Traditional Character and Retain the Feel of Yesteryear; Guide Growth	D: Preserve Basic Character and Adapt to Changing User Groups; Guide Growth
18.	Support resource protection efforts within the parks through greatly enlarged outreach efforts. Develop numerous partnerships. Have NPS staff and/or partners take programs to many regional classrooms. Create a classroom-focused website to share the parks' missions.	Eliminate educational programs outside the parks; concentrate on in-park education.	Similar to alternative A except connect the parks with a more diverse public by enlarging educational efforts outside the parks.
19.	Reduce facilities. Move facilities outside the parks as much as possible to provide for more wildness in the parks and to allow further natural resource restoration.	Redesign some existing facilities to emphasize traditional character and retain most facilities inside the parks.	Redesign and expand existing developed areas to provide for increased and more diverse uses. When economically feasible, move facilities out of the parks.
20.	Same as the no-action and preferred alternatives.	Same as the no-action and preferred alternatives.	Same as the no-action and preferred alternatives.
21.	Reduce the number of trails; where trails are no longer needed, restore areas to natural conditions.	Improve the condition of the existing frontcountry trail system.	Same as the preferred alternative.
22.	No administrative, commercial, or private stock use in the parks.	Reduce commercial and private stock party sizes; disperse and regulate use; designate use areas within the parks. Continue administrative stock use.	Increase commercial and private stock party sizes in some areas; separate stock use and hiking areas. Continue administrative stock use.
23.	Same as the preferred alternative. except discourage use of nonmotorized watercraft.	Same as the preferred alternative.	Same as the preferred alternative.
24.	Same as the no-action alternative.	Encourage winter use.	Encourage and expand winter use.
25.	Same as the no-action and preferred alternatives.	Same as the no-action and preferred alternatives.	Diversify and expand Crystal Cave tours.
26.	Restrict access to other caves to specialists.	Provide for guided public access to more caves.	Provide a variety of additional cave tours

	Refer- ence No.	Continue Current Management (No Action) (formerly alternative B)	Preferred Alternative: Accommodate Sustainable Growth and Visitor Enjoyment, Protect Ecosystem Diversity, and Preserve Basic Character While Adapting to Changing User Groups
New Activities	27.	Assess new activities to determine their impact on resources and other visitors and allow those with no impact or acceptable impacts.	Assess new activities to determine their impact on resources and other visitors; allow those that have no impact or acceptable impacts and that relate to park resources; separate activities to improve visitor experiences.
Air Tours	28.	Pursuant to the National Parks Air Tour Management Act of 2000, work cooperatively with the Federal Aviation Administration to control commercial sightseeing flights over the parks and to protect park values.	Pursuant to the National Parks Air Tour Management Act of 2000, work cooperatively with the Federal Aviation Administration to control commercial sightseeing flights over the parks and to protect park values.
Private Land and Special Use Permits on Park Land			
Inholdings* (<i>Inholdings are privately owned lands within the parks at Oriole Lake, Wilsonia, Silver City, and Mineral King.</i>)	29.	Private inholdings remain. Some properties continue to be purchased from willing sellers when funds are available.	Actively seek to purchase from willing sellers or acquire through donation private inholdings at Oriole Lake and the Mineral King Valley. Private inholdings continue at Wilsonia and Silver City, thereby perpetuating recreation communities. Purchase from willing sellers or acquire through donation properties at Wilsonia and Silver City as opportunities occur.
Special Use Permits (<i>There are three types of special use permits — for hydroelectric power, a Boy Scout camp, and Mineral King permit cabins</i>)	30.	- Special use permits continue subject to law and regulation. ◊ Hydroelectric facilities — See the discussion under Ash Mountain. ◊ Wolverton Boy Scout camp — See the discussion under Wolverton. ◊ Mineral King permit cabins — See the discussion under Mineral King.	- Special use permits continue subject to law and regulation. ◊ Hydroelectric facilities — See the discussion under Ash Mountain. ◊ Wolverton Boy Scout camp — See the discussion under Wolverton. ◊ Mineral King permit cabins — See the discussion under Mineral King.
Adjoining Lands	31.	Maintain an informal cooperative relationship with the regional land trust.	Cooperate with the regional land trust to find compatible uses for lands that adjoin the parks.
Park Administration and Operations			
Facilities	32.	Retain existing facilities inside the parks, and complete approved projects.	Redesign and make existing developed areas more efficient to provide for moderate increases and more diverse uses. Relocate some functions and facilities outside the parks to meet management needs (see specific areas).

Reference No.	A: Emphasize Natural Ecosystems and Biodiversity; Reduce Use and Development	C: Preserve Traditional Character and Retain the Feel of Yesteryear; Guide Growth	D: Preserve Basic Character and Adapt to Changing User Groups; Guide Growth
27.	Same as the no-action alternative.	Same as the no-action alternative but encourage traditional activities and allow new low-impact activities related to park resources.	Same as the preferred alternative.
28.	Same as the no-action and preferred alternatives.	Same as the no-action and preferred alternatives.	Same as the no-action and preferred alternatives.
<i>Private Land and Special Use Permits on Park Land</i>			
29.	Actively seek to purchase private inholdings from willing sellers to allow areas to be returned to natural conditions.	Continue private inholdings, thereby perpetuating recreational communities (see descriptions for specific areas).	Continue private inholdings and allow diversified public access (see descriptions for specific areas).
30.	Same as the no-action and preferred alternatives.	Same as the no-action and preferred alternatives.	Same as the no-action and preferred alternatives.
31.	Same as the preferred alternative.	Same as the preferred alternative.	Same as the preferred alternative.
<i>Park Administration and Operations</i>			
32.	Reduce facilities. Move facilities outside the parks as much as possible to allow further natural resource restoration.	Redesign some existing facilities to emphasize traditional character and retain most facilities inside the parks.	Redesign and expand existing developed areas to provide for increased and more diverse uses. When economically feasible, move facilities out of the parks.

	Refer- ence No.	Continue Current Management (No Action) (formerly alternative B)	Preferred Alternative: Accommodate Sustainable Growth and Visitor Enjoyment, Protect Ecosystem Diversity, and Preserve Basic Character While Adapting to Changing User Groups
<i>Work Camps (bunkhouse, kitchen, restrooms, storage/shop)</i>	33.	• Provide a work camp for ranger activities, maintenance teams, interagency groups, and researchers at Grant Grove.	• Provide work camps near developments for staff, partners, and volunteers to support ranger activities, maintenance, resource protection, interpretation, interagency projects.
<i>Power / Telephone Systems</i>	34.	• Provide electrical power, telephone, and propane systems for developed areas and facilities.	• Provide sustainable and efficient electrical power, telephone, and propane systems for developed areas and facilities.
<i>Water Supplies</i>	35.	• React to growth / water needs by seeking new water sources and creating additional storage. • Continue to implement drought plans as needed.	• Conduct in-depth watershed studies as part of the update of the 1989 <i>Water Resources Management Plan</i> to develop a system to monitor and manage water availability, spring water recharge, and groundwater availability under differing precipitation regimes. • Make more efficient use of existing water supply and upgrade water distribution system to reduce water loss. • Because water availability may periodically limit water use in some developed areas, limit dry season water withdrawals to average levels of the most recent five years until more refined information is available to protect resources. Continue to implement drought plans as needed.
<i>Wastewater Systems</i>	36.	• Upgrade wastewater treatment as necessary to meet requirements and to improve park resource protection.	• Upgrade wastewater treatment as necessary to meet requirements and to improve park resource protection.
<i>Powerlines</i>	37.	• Retain overhead powerlines.	• Underground overhead powerlines where possible.
<i>Park Housing</i>	38.	• A limited amount of housing is provided in park developments for some permanent and seasonal employees.	• A limited amount of housing is provided in park developments for some permanent and seasonal employees.
<i>Transit-Related Housing</i>	39.	• Locate housing to support transit staff outside the parks when it does not fit within existing developed areas.	• Locate housing to support transit staff outside the parks when it does not fit within existing developed areas.
<i>Roads and Parking Areas</i>	40.	• Condition of many roads and parking areas continues to deteriorate; repair roads and parking areas as funding is available.	• Condition of many roads and parking areas continues to deteriorate; repair roads and parking areas as funding is available.

Reference No.	A: Emphasize Natural Ecosystems and Biodiversity; Reduce Use and Development	C: Preserve Traditional Character and Retain the Feel of Yesteryear; Guide Growth	D: Preserve Basic Character and Adapt to Changing User Groups; Guide Growth
33.	• Provide work camps near developments for staff, partners and volunteers to support resource protection and facilities.	• Same as the no-action alternative.	• Same as alternative A.
34.	• Same as the preferred alternative.	• Same as the preferred alternative.	• Same as the preferred alternative.
35.	• Implement actions listed for the preferred alternative; no increased demand expected because of reduced use. • Implement actions listed for the preferred alternative; no increased demand expected because of reduced use.	• Same as the preferred alternative.	• Same as the preferred alternative.
36.	• Same as the no-action alternative but reduced use would mitigate the need to upgrade facilities.	• Same as the no-action and preferred alternatives.	• Same as the no-action and preferred alternatives.
37.	• Same as the preferred alternative.	• Same as the preferred alternative.	• Same as the preferred alternative.
38.	Minimal housing is provided near park developments for critical permanent and seasonal employees.	• Same as the no-action and preferred alternatives.	• Same as the no-action and preferred alternatives.
39.	• Locate housing to support transit staff outside the parks.	• Same as the no-action and preferred alternatives.	• Same as the no-action and preferred alternatives.
40.	• Same as the no-action and preferred alternatives.	• Same as the no-action and preferred alternatives.	• Same as the no-action and preferred alternatives.

	Refer- ence No.	Continue Current Management (No Action) (formerly alternative B)	Preferred Alternative: Accommodate Sustainable Growth and Visitor Enjoyment, Protect Ecosystem Diversity, and Preserve Basic Character While Adapting to Changing User Groups
Wild and Scenic Rivers — Boundaries, Classification, and Outstandingly Remarkable Values			
Vision	41.	National wild and scenic rivers are preserved in free-flowing condition, and they and their immediate environments are protected for the benefit and enjoyment of present and future generations. In managing these rivers, primary emphasis is given to protecting the outstandingly remarkable values of each river segment, including their aesthetic, scenic, historic, archeological, and scientific features. The protection of natural river processes is a high priority.	
Carrying Capacity	42.	No intensive use of park rivers occurs or is expected, even with increased use under some alternatives. Tools for addressing user capacity in wild and recreational segments are defined below. In addition, regulations at 36 CFR Parts 1–6 provide NPS managers tools to control and regulate visitor use of the parks to protect park resources and outstandingly remarkable values. • Rivers classified or eligible as wild — Manage a total of 82.5 miles of designated rivers in backcountry and designated wilderness as wild; manage eligible rivers classified as wild in the same manner. Continue to manage use and impacts on outstandingly remarkable values through backcountry limits such as permits, overnight wilderness quotas, stock party size limits, location restrictions, and area closures. • Rivers classified or eligible as recreational — Limited visitor use due to the remoteness of the Kings Canyon, manage the floor of the Kings Canyon as low-use frontcountry, restrict park development areas, and set overnight limitations by the number of campsites, parking spaces, and lodging rooms. Manage eligible recreational rivers by limiting areas of park development, restricting overnight stays, and adopting river protection measures (see line 4 of the matrix).	
Middle Fork of the Kings River			
Segment and Boundary	43.	From the outlet of Lake Helen to park boundary — 29.5 miles. Boundary extends 0.25 mile on each side of the river.	
Classification	44.	Wild	
Park Zone	45.	Backcountry.	
Outstandingly Remarkable Values*	46.	Scenery — “The upper section encompasses continuous vistas of spectacular high mountain peaks. The river either cascades turbulently down canyons or flows smoothly through lakes and alpine meadows. In the middle section, the river is dominated by very steep, glaciated valley walls, several thousand feet high. At the lower end of this valley, Tehipite Dome rises almost vertically 3,600 feet above the valley floor” (USFS 1982a).	

* The National Park Service based its determination of outstandingly remarkable values for the Middle Fork of the Kings River on the 1991 *Sierra National Forest Land and Resource Management Plan* (USFS 1991b) and subsequent information. Outstandingly remarkable values for the Middle Fork of the Kings River on USFS land outside Kings Canyon National Park were determined to be geologic, botanic, wildlife, fishery, recreation, scenic, and cultural (USFS 1989). The NPS planning/study team in applying methodology for outstandingly remarkable values within Kings Canyon National Park, determined that the fishery does not meet the “unique, rare or exemplary” criteria. The populations of fish in the Middle Fork are not nationally or regionally important resident or anadromous populations, and no fish species are threatened or endangered or of notable diversity. Likewise the habitat for fish is not nationally or regionally significant (USFS and NPS 1999).

Refer- ence No.	A: Emphasize Natural Ecosystems and Biodiversity; Reduce Use and Development	C: Preserve Traditional Character and Retain the Feel of Yesteryear; Guide Growth	D: Preserve Basic Character and Adapt to Changing User Groups; Guide Growth
Wild and Scenic Rivers — Boundaries, Classification, and Outstandingly Remarkable Values			
41.	Same as the no-action and preferred alternatives.		
42.	Same as the no-action and preferred alternatives.		
Middle Fork of the Kings River			
43.	Same as the no-action and preferred alternatives.		
44.	Same as the no-action and preferred alternatives.		
45.	Same as the no-action and preferred alternatives.		
46.	Same as the no-action and preferred alternatives.		

	Refer- ence No.	Continue Current Management (No Action) (formerly alternative B)	Preferred Alternative: Accommodate Sustainable Growth and Visitor Enjoyment, Protect Ecosystem Diversity, and Preserve Basic Character While Adapting to Changing User Groups
<i>Outstandingly Remarkable Values (cont.)</i>		Recreation — Much of the Middle Fork is paralleled by popular wilderness trails, with the upper end accessible by a segment of the John Muir and Pacific Crest Trails. The exceptional and remote alpine scenery provides a variety of high-quality wilderness recreational opportunities, including hiking, climbing, photography, and experiencing solitude. Geology — Tehipite Valley is a classic and spectacular “Yosemite,” having been carved out by glaciation and river erosion. It is among the deepest and most scenic in the contiguous 48 states. Glaciation has resulted in a wide variety of picturesque rock formations along and above the canyon, including domes, horns, arete ridges, cirques, nunatacks, as well as classic U-shaped valleys. Tehipite Dome is a premier example of granitic exfoliation in the United States. In addition to the predominant granite, meta-volcanics are present at high elevations and compose a few peaks in the drainage. Wildlife — With a 6,000-foot change in elevation, native river-dependent wildlife is extremely diverse. Prehistory/History — Before 1900 Indians, sheepherders, and a few explorers had entered the region. Tehipite Valley contains Indian village sites that include rock paintings of significance. Other Indian sites probably occur, but have not been catalogued. Muir Pass, just above the river’s source, has a small stone shelter erected about 1930 and eligible for the National Register of Historic Places. Vegetation — The area between Tehipite Valley and Simpson Meadow has remarkable stands of sugar pine (some trees are 8 feet in diameter). Where the river slows and broadens, it passes through lush meadows. Populations of insectivorous sundews can be found in Big Pete, Grouse, and the unnamed meadows south of Simpson Meadow; these likely represent elevational range extensions for this species. Near Big Pete Meadow the river is lined by ericaceous vegetation, which is unusually rich in members of the heath family. Mats of blueberry, heather, and Labrador tea emerge from a thick carpet of sphagnum mosses, including a rare species of <i>Helodium</i> unknown elsewhere in California. At least three rare plants occur in the drainage — Muir’s raillardella, Tehipite jewel flower, and Kings Canyon sedge (USFS 1986).	
<i>River Protection Measures</i>	47.	• Evaluate water resources projects — Determine whether a proposed project (e.g., fisheries habitat and watershed restoration, bridges and other roadway construction/reconstruction, bank stabilization) would have a direct and adverse impact to the values for which the river was designated, in accordance with section 7 of the Wild and Scenic Rivers Act. • Assess river, floodplain, wetland, and riparian areas — Maintain and enhance the integrated ecological functions to protect and enhance the natural hydrologic and free-flow condition of the river. As projects are proposed, assess necessity and impacts of all facilities within the 100-year floodplain. Use tiered planning in developing project alternatives. • Restore native ecological processes by reintroducing native plants and animals and removing nonnative species where practicable — Restore native natural ecological elements in river corridors. Ecological restoration is a primary goal of national parks (NPS <i>Management Policies 2001</i>, sec. 4.1.5) • Manage impacts on riverbanks — Use existing controls and develop new controls to minimize riverbank damage caused by stock animals or other backcountry use.	

Reference No.	A: Emphasize Natural Ecosystems and Biodiversity; Reduce Use and Development	C: Preserve Traditional Character and Retain the Feel of Yesteryear; Guide Growth	D: Preserve Basic Character and Adapt to Changing User Groups; Guide Growth
	Same as the no-action and preferred alternatives.		
47.	Same as the no-action and preferred alternatives.		

			Preferred Alternative: Accommodate Sustainable Growth and Visitor Enjoyment, Protect Ecosystem Diversity, and Preserve Basic Character While Adapting to Changing User Groups
	Refer- ence No.	Continue Current Management (No Action) (formerly alternative B)	
South Fork of the Kings River			
Upper Segment of the South Fork Kings River*			
Segment and Boundary	48.	From the outlet of Lake 11,599 to wilderness boundary at Copper Creek — 24.1 miles. Boundary extends 0.25 mile on each side of the river.	
Classification	49.	Wild	
Park Zone	50.	Backcountry.	
Outstandingly Remarkable Values**	51.	Scenery — The headwaters provide exemplary scenery of the classic high Sierra, lake-studded alpine basins. “The entire river corridor is considered as Variety Class A within the landscape character type. Waterfalls, unique geologic formations and a diversity of plant species enhance the characteristics of this free-flowing stream” (USFS 1988). Recreation — The upper reaches (Upper Basin) and middle reaches (Paradise Valley) provide exceptional recreational opportunities and are extremely popular with wilderness users for hiking, photography, and experiencing solitude. Geology — The South Fork flows through spectacular examples of valley glaciation. The Upper Basin contains examples of cirques, arete, and horn development. Deeply glaciated canyons, including the remote Muro Blanco and the picturesque Paradise Valley, present an exceptional and rare string of canyons along the river’s course.	
River Protection Measures	52.	Same as line 47.	
Lower Segment of the South Fork Kings River			
Segment and Boundary	53.	From wilderness boundary to park boundary — 7.6 miles. Boundary extends 0.25 mile on each side of the river.	
Classification	54.	Recreational.	
Park Zones	55.	Low-use frontcountry, with some areas zoned as development.	
Outstandingly Remarkable Values***	56.	Scenery — The spectacular, vertical cliffs, with the river alternately meandering and cascading through the flat-bottomed valley, is world-class scenery. Recreation — River-related recreation, such as water play and swimming. Geology — The Kings Canyon is one of the Sierra Nevada’s rare and best examples of a “Yosemite,” a deep canyon with sheer granite cliff faces on either side of the river valley that rivals the true Yosemite.	

* The Roaring River, a tributary of the South Fork of the Kings River, was not considered as a part of this study. It is wholly within designated wilderness in Kings Canyon National Park. The planning/study team has determined that the Roaring River receives adequate protection from this status.

** The National Park Service based its determination of outstandingly remarkable values for the South Fork of the Kings River on the 1988 Sequoia National Forest Land and Resource Management Plan (USFS 1988) and subsequent information.

*** The National Park Service based its determination of outstandingly remarkable values for the South Fork of the Kings River on the 1988 Sequoia National Forest Land and Resource Management Plan (USFS 1988) and subsequent information. Outstandingly remarkable values for the South Fork of the Kings River on USFS land outside Kings Canyon National Park were determined to be geologic, botanic, wildlife, fishery, recreation, scenic, and cultural (USFS 1989). The NPS planning/study team, in applying the methodology for outstandingly remarkable values to river sections within Kings Canyon National Park, determined that the values of botanic, wildlife, fishery, and cultural do not meet the criteria because there are no "unique, rare or exemplary" features, as defined in The Wild and Scenic Rivers Study Process (USFS and NPS 1999).

Refer- ence No.	A: Emphasize Natural Ecosystems and Biodiversity; Reduce Use and Development	C: Preserve Traditional Character and Retain the Feel of Yesteryear; Guide Growth	D: Preserve Basic Character and Adapt to Changing User Groups; Guide Growth
South Fork of the Kings River			
Upper Segment of the South Fork Kings River			
48.	Same as the no-action and preferred alternatives.		
49.	Same as the no-action and preferred alternatives.		
50.	Same as the no-action and preferred alternatives.		
51.	Same as the no-action and preferred alternatives.		
52.	Same as the no-action and preferred alternatives.		
Lower Segment of the South Fork Kings River			
53.	Same as the no-action and preferred alternatives.		
54.	Same as the no-action and preferred alternatives.		
55.	Same as the no-action and preferred alternatives.		
56.	Same as the no-action and preferred alternatives.		

	Refer- ence No.	Continue Current Management (No Action) (formerly alternative B)	Preferred Alternative: Accommodate Sustainable Growth and Visitor Enjoyment, Protect Ecosystem Diversity, and Preserve Basic Character While Adapting to Changing User Groups
<i>River Protection Measures</i>	57.	• Evaluate water resources projects — Determine whether a proposed project (e.g., fisheries habitat and watershed restoration, bridges and other roadway construction/reconstruction, bank stabilization) would have a direct and adverse impact to the values for which the river was designated, in accordance with section 7 of the Wild and Scenic Rivers Act. • Assess river, floodplain, wetland, and riparian areas — Maintain and enhance the integrated ecological functions to protect and enhance the natural hydrologic and free-flow condition of the rivers. As projects are proposed, assess necessity and impacts of all facilities within the 100-year floodplain. Use tiered planning in developing project alternatives. During frontcountry campground redesign and rehabilitation projects, determine setbacks from the river to protect river values through floodplain studies. Analyze all bridge and trail projects (frontcountry and backcountry) in accordance with section 7. After a large flood with severe damage, evaluate the restoration of facilities on a case-by-case basis, and determine whether to close, remove, or relocate damaged facilities and to restore the location to natural conditions. • Restore native ecological processes by reintroducing native plants and animals and removing nonnative species where practicable — Restore native natural ecological elements in river corridors. Ecological restoration is a primary goal of national parks (NPS <i>Management Policies 2001</i>, sec. 4.1.5). • Manage river-based recreation — Allow recreational use consistent with management zoning, NPS policy, and the protection of river values. Manage public use and access to protect the outstandingly remarkable values. Monitor level of use and effects, and take steps to reduce/control use if standards are not being met. Control access points in developed areas in a manner that would minimize impacts on river edge and riparian environments. (Measures could include delineating routes to protect resources, removing resource-damaging routes, using resource protection and wayfinding signs, using fencing to guide pedestrians, and paving trails. Measures could also include managing parking areas and limiting use.) • Prohibit motorized watercraft — Enforce regulations that prohibit the use of motorized watercraft on designated wild and scenic rivers. • Manage stock impacts on riverbanks — Use existing controls and develop controls to minimize riverbank resource damage caused by stock use.	
<i>North Fork of the Kern River*</i>			
<i>Segment and Boundary</i>	58.	From 12,000' just southeast of Harrison Pass to park boundary — 28.9 miles. Boundary extends 0.25 mile on each side of the river.	
<i>Classification</i>	59.	Wild	
<i>Park Zone</i>	60.	Backcountry.	

* The Kern-Kaweah River was not considered as a part of this study. It is a tributary of the North Fork of the Kern River and is wholly within designated wilderness in Sequoia National Park. The planning/study team has determined that the Kern-Kaweah River receives adequate protection from this status.

Reference No.	A: Emphasize Natural Ecosystems and Biodiversity; Reduce Use and Development	C: Preserve Traditional Character and Retain the Feel of Yesteryear; Guide Growth	D: Preserve Basic Character and Adapt to Changing User Groups; Guide Growth
57.	Same as the no-action and preferred alternatives.		
North Fork of the Kern River			
58.	Same as the no-action and preferred alternatives.		
59.	Same as the no-action and preferred alternatives.		
60.	Same as the no-action and preferred alternatives.		

	Refer- ence No.	Continue Current Management (No Action) (formerly alternative B)	Preferred Alternative: Accommodate Sustainable Growth and Visitor Enjoyment, Protect Ecosystem Diversity, and Preserve Basic Character While Adapting to Changing User Groups
<i>Outstandingly Remarkable Values*</i>	61.	Scenery — “High contrast to visual elements (headwaters to Junction Meadow); long, linear U-shaped valley; the height and steepness of canyon walls; crystal clear water in rapids and small pools; and numerous waterfalls. Again, the total experience is considered outstandingly remarkable” (USFS 1982a). Recreation — Outstanding recreational opportunities, such as hiking, camping, climbing, photography, and opportunities to experience solitude. Geology — The North Fork Kern River canyon is the longest, linear glacially sculpted valley in the Sierra Nevada. The canyon is a rare example of a fault structured river corridor. The canyon contains a regionally unique feature known as Kernbutts (round to elongate granitic knobs) and Kerncols (depressions between the Kernbutts). These features were first identified and named in the Kern Canyon. The river flows in a north-south direction along the Kaweah Peaks Pluton-Kern Canyon Fault. Fish — The North Fork Kern has a rare, and likely the highest, distinct native subspecies of trout in the Sierra Nevada, the Kern River rainbow trout.	
<i>River Protection Measures</i>	62.	Same as reference number 47.	
<i>Eligible and Suitable Wild and Scenic Rivers</i>			
<i>South Fork of the San Joaquin River</i>			
<i>Segment and Boundary</i>	63.	From outlet of Martha Lake to park boundary — 11.4 miles. Boundary extends 0.25 mile on each side of the river.	
<i>Classification</i>	64.	Wild	
<i>Park Zone</i>	65.	<i>Backcountry.</i>	
<i>Outstandingly Remarkable Values</i>	66.	Scenery — Spectacular subalpine and alpine scenery with colorful metamorphic rocks, tall cliffs, and cascading waterfalls. Extensive subalpine meadows in a steep walled, glacially eroded canyon surrounded by alpine peaks. Recreation — The adjacent trail provides exceptional hiking and camping opportunities. Excellent opportunities for unconfined recreation, such as mountain and rock climbing, and for solitude. Geology — The South Fork of the San Joaquin forms below the crest of the Goddard Divide in both granitic and metamorphosed volcanic rocks (Goddard roof pendant). Tributary streams from some of the largest lake basins in the Sierra Nevada form the headwaters. The river flows at the bottom of a spectacular, steep-walled U-shaped canyon formed by glaciation. Outstanding examples of Sierran geology and river erosion are present. There are excellent examples of glacial features and a deeply incised river canyon.	
<i>Current Status of Landownership and Use</i>	67.	Federally owned and administered by the National Park Service. Primary uses are preservation and recreation.	

* The National Park Service based its determination of outstandingly remarkable values on the 1982 *Sequoia National Forest North Fork Kern Wild and Scenic River Study* (USFS 1982) and subsequent information. Outstandingly remarkable values for the North Fork of the Kern River on USFS land outside Sequoia National Park were determined to be geology, vegetation, fisheries, recreation, scenic, and heritage (USFS 1994). In applying the methodology for outstandingly remarkable values to river sections within Kings Canyon National Park, the NPS planning/study team determined that the values of vegetation, fisheries, and heritage do not meet the criteria because there are no “unique, rare or exemplary” features, as defined in *The Wild and Scenic Rivers Study Process* (USFS and NPS 1999).

Refer- ence No.	A: Emphasize Natural Ecosystems and Biodiversity; Reduce Use and Development	C: Preserve Traditional Character and Retain the Feel of Yesteryear; Guide Growth	D: Preserve Basic Character and Adapt to Changing User Groups; Guide Growth
61.	Same as the no-action and preferred alternatives.		
62.	Same as the no-action and preferred alternatives.		
	Eligible and Suitable Wild and Scenic Rivers		
	South Fork of the San Joaquin River		
63.	Same as the no-action and preferred alternatives.		
64.	Same as the no-action and preferred alternatives.		
65.	Same as the no-action and preferred alternatives.		
66.	Same as the no-action and preferred alternatives.		
67.	Same as the no-action and preferred alternatives.		

	Refer- ence No.	Continue Current Management (No Action) (formerly alternative B)	Preferred Alternative: Accommodate Sustainable Growth and Visitor Enjoyment, Protect Ecosystem Diversity, and Preserve Basic Character While Adapting to Changing User Groups
<i>Uses and Resources That Would be Enhanced, Curtailed, or Foreclosed</i>	68.	Little if any effect on primary uses in Sequoia National Park because of management to protect and conserve resources. No other uses would be foreclosed or curtailed because of designation. Designation would provide additional long-term protection against downstream water resource projects outside the park that could degrade upstream river corridor quality.	
<i>Manageability to Protect Outstandingly Remarkable Values</i>	69.	Ongoing protection of outstandingly remarkable values would be consistent with park management policies.	
<i>Costs for Acquisition and Management</i>	70.	No additional cost.	
<i>Cost Sharing with State and Local Governments</i>	71.	No additional cost.	
Marble Fork of the Kaweah River			
Marble Fork — Upper Segment			
<i>Segment and Boundary</i>	72.	From Lake 10,559 to wilderness boundary just below Tokopah Falls — 4.1 miles. Boundary extends 0.25 mile on each side of the river.	
<i>Classification</i>	73.	Wild	
<i>Park Zone</i>	74.	Backcountry.	
<i>Outstandingly Remarkable Values</i>	75.	Scenery — The scenery is dramatic throughout the reach, from the glacially carved alpine Tablelands to the deeply incised canyon in the foothills. The Tokopah Falls are dominant in the landscape and are classic examples of cascading, free-falling waterfalls. Recreation — Excellent opportunities for backcountry hiking, camping, exploring, and experiencing solitude. Geology — The Marble Fork has its origins on the Tablelands, west of the Great Western Divide and south of the Kings-Kaweah Divide. The Tokopah Falls and Marble Falls are the largest in the region. The entire upper extent of the drainage is in granitic rock, with large open slabs dominating. The Marble Fork has a significant elevation drop from source to its junction with the Middle Fork of the Kaweah, among the steepest in the United States, from 10,000 feet to 2,000 feet in 15 miles.	
<i>Current Status of Landownership and Use</i>	76.	Federally owned and administered by the National Park Service. Primary uses are preservation and recreation.	
<i>Uses and Resources That Would be Enhanced, Curtailed, or Foreclosed</i>	77.	There would be little if any effect on primary uses in Sequoia National Park because of management to protect and conserve resources. No other uses would be foreclosed or curtailed because of designation. Designation would provide additional long-term protection against downstream water resource projects outside the park that could degrade the upstream river corridor quality.	
<i>Manageability to Protect Outstandingly Remarkable Values</i>	78.	Ongoing protection of outstandingly remarkable values would be consistent with park management policies.	

NOTE: The North Fork of the Kaweah River (11.9 miles from the confluence of Stony and Dorst creeks to the park boundary) was determined not to be eligible as a wild and scenic river because no outstandingly remarkable values were identified. The Bureau of Land Management determined that the portion of the North Fork outside the park is eligible as a scenic and recreational river, with wildlife, cultural, and visual values (BLM 1996).

Reference No.	A: Emphasize Natural Ecosystems and Biodiversity; Reduce Use and Development	C: Preserve Traditional Character and Retain the Feel of Yesteryear; Guide Growth	D: Preserve Basic Character and Adapt to Changing User Groups; Guide Growth
68.	Same as the no-action and preferred alternatives.		
69.	Same as the no-action and preferred alternatives.		
70.	Same as the no-action and preferred alternatives.		
71.	Same as the no-action and preferred alternatives.		
	<i>Marble Fork of the Kaweah River</i>		
	<i>Marble Fork — Upper Segment</i>		
72.	Same as the no-action and preferred alternatives.		
73.	Same as the no-action and preferred alternatives.		
74.	Same as the no-action and preferred alternatives.		
75.	Same as the no-action and preferred alternatives.		
76.	Same as the no-action and preferred alternatives.		
77.	Same as the no-action and preferred alternatives.		
78.	Same as the no-action and preferred alternatives.		

	Refer- ence No.	Continue Current Management (No Action) (formerly alternative B)	Preferred Alternative: Accommodate Sustainable Growth and Visitor Enjoyment, Protect Ecosystem Diversity, and Preserve Basic Character While Adapting to Changing User Groups
<i>Costs for Acquisition and Management</i>	79.	No additional cost.	
<i>Cost Sharing with State and Local Governments</i>	80.	No additional cost.	
Marble Fork — Lower Segment			
<i>Segment and Boundary</i>	81.	From the wilderness boundary to the confluence with the Middle Fork — 11.2 miles. Boundary extends 0.25 mile on each side of the river.	
<i>Classification</i>	82.	Recreational	
<i>Park Zone</i>	83.	Backcountry.	
<i>Outstandingly Remarkable Values</i>	84.	Scenery — Same as for the upper segment, plus Marble Falls. Recreation — Excellent opportunities for river-based recreation, such as swimming and water play, as well as photography. Geology — The lower reaches contain a textbook example of the U-shaped Tokopah Valley, with river-created, deeply incised and steep canyons through Mesozoic metamorphic rocks. There are rare examples of the river actually flowing through caves at Wild Child and Marble Falls.	
<i>Current Status of Landownership and Use</i>	85.	Federally owned and administered by the National Park Service. Primary uses are preservation and recreation; secondary use is for hydroelectric power generation (impoundment and diversion). While the free-flowing condition and ecological function of the river is affected, the small scale of the impoundment and diversion does not preclude inclusion in the wild and scenic rivers system.	
<i>Uses and Resources That Would be Enhanced, Curtailed, or Foreclosed</i>	86.	There would be little if any effect on primary uses in Sequoia National Park because of management to protect and conserve resources. No other uses would be foreclosed or curtailed because of designation. Designation would provide additional long-term protection against downstream water resource projects outside the park that could degrade upstream river corridor quality.	
<i>Manageability to Protect Outstandingly Remarkable Values</i>	87.	Ongoing protection of outstandingly remarkable values would be consistent with park management policies. The only exception could be in the impoundment and diversion area for hydroelectric power generation.	
<i>Costs for Acquisition and Management</i>	88.	No additional cost.	
<i>Cost Sharing with State and Local Governments</i>	89.	No additional cost.	
Middle Fork of the Kaweah River			
Middle Fork — Upper Segment			
<i>Segment and Boundary</i>	90.	From the confluence of Lone Pine and Hamilton (Deer) creeks to the wilderness boundary — 10.9 miles. Boundary extends 0.25 mile on each side.	
<i>Classification</i>	91.	Wild	
<i>Park Zone</i>	92.	Backcountry.	
<i>Outstandingly Remarkable Values</i>	93.	Scenery — The Middle Fork is the deepest cut (5,000') of all the forks of the Kaweah (and among the deepest in the Sierra Nevada), providing exceptional and dramatic scenery. The large and dominant granite outcrops of Castle Rocks and Moro Rock are prominent throughout the river corridor. The river flows directly adjacent to a large grove of giant sequoias in Redwood Meadow Grove, with other groves also in the watershed.	

Reference No.	A: Emphasize Natural Ecosystems and Biodiversity; Reduce Use and Development	C: Preserve Traditional Character and Retain the Feel of Yesteryear; Guide Growth	D: Preserve Basic Character and Adapt to Changing User Groups; Guide Growth
79.	Same as the no-action and preferred alternatives.		
80.	Same as the no-action and preferred alternatives.		
	<i>Marble Fork — Lower Segment</i>		
81.	Same as the no-action and preferred alternatives.		
82.	Same as the no-action and preferred alternatives.		
83.	Same as the no-action and preferred alternatives.		
84.	Same as the no-action and preferred alternatives.		
85.	Same as the no-action and preferred alternatives.		
86.	Same as the no-action and preferred alternatives.		
87.	Same as the no-action and preferred alternatives.		
88.	Same as the no-action and preferred alternatives.		
89.	Same as the no-action and preferred alternatives.		
	<i>Middle Fork of the Kaweah River</i>		
	<i>Middle Fork — Upper Segment</i>		
90.	Same as the no-action and preferred alternatives.		
91.	Same as the no-action and preferred alternatives.		
92.	Same as the no-action and preferred alternatives.		
93.	Same as the no-action and preferred alternatives.		

	Refer- ence No.	Continue Current Management (No Action) (formerly alternative B)	Preferred Alternative: Accommodate Sustainable Growth and Visitor Enjoyment, Protect Ecosystem Diversity, and Preserve Basic Character While Adapting to Changing User Groups
<i>Current Status of Landownership and Use</i>	94.	Federally owned and administered by the National Park Service. Primary uses are preservation and recreation.	
<i>Uses and Resources That Would be Enhanced, Curtailed, or Foreclosed</i>	95.	Little if any effect on primary uses in Sequoia National Park because of management to protect and conserve resources. No other uses would be foreclosed or curtailed because of designation. Designation would provide additional long-term protection against downstream water resource projects outside the park that could degrade upstream river corridor quality.	
<i>Manageability to Protect Outstandingly Remarkable Values</i>	96.	Ongoing protection of outstandingly remarkable values would be consistent with park management policies.	
<i>Costs for Acquisition and Management</i>	97.	No additional cost.	
<i>Cost Sharing with State and Local Governments</i>	98.	No additional cost.	
Middle Fork — Lower Segment			
<i>Segment and Boundary</i>	99.	From the wilderness boundary to the park boundary — 7.6 miles. Boundary extends 0.25 mile on each side of the river.	
<i>Classification</i>	100.	Recreational	
<i>Park Zone</i>	101.	Backcountry.	
<i>Outstandingly Remarkable Values</i>	102.	Scenery — Same as for the upper segment. Recreation — Excellent opportunities for river-based recreation, such as swimming and water play. Occasionally “extreme” kayakers also use the lower reaches. Prehistory/History — There is much evidence of occupation by prehistoric peoples — pictographs, village sites, and bedrock mortars, especially in the Hospital Rock and Potwisha areas. Historic resources include the Generals Highway (ca. 1926).	
<i>Current Status of Landownership and Use</i>	103.	Federally owned and administered by the National Park Service. Primary uses are preservation and recreation; secondary use is for hydroelectric power generation (impoundment and diversion). While the impoundment and diversion adversely impact the free-flowing condition and ecological function of the river, the small scale of the facilities does not preclude inclusion in the wild and scenic rivers system.	
<i>Uses and Resources That Would be Enhanced, Curtailed, or Foreclosed</i>	104.	There would be little if any effect on primary uses in Sequoia National Park because of management to protect and conserve resources. No other uses would be foreclosed or curtailed because of designation. Designation would provide additional long-term protection against downstream water resource projects outside the park that could degrade the upstream river corridor quality.	
<i>Manageability to Protect Outstandingly Remarkable Values</i>	105.	Ongoing protection of outstandingly remarkable values would be consistent with park management policies. The only exception could be in the impoundment and diversion area if hydroelectric facilities remained operational.	
<i>Costs for Acquisition and Management</i>	106.	No additional cost.	
<i>Cost Sharing with State and Local Governments</i>	107.	No additional cost.	

Reference No.	A: Emphasize Natural Ecosystems and Biodiversity; Reduce Use and Development	C: Preserve Traditional Character and Retain the Feel of Yesteryear; Guide Growth	D: Preserve Basic Character and Adapt to Changing User Groups; Guide Growth
94.	Same as the no-action and preferred alternatives.		
95.	Same as the no-action and preferred alternatives.		
96.	Same as the no-action and preferred alternatives.		
97.	Same as the no-action and preferred alternatives.		
98.	Same as the no-action and preferred alternatives.		
	<i>Middle Fork — Lower Segment</i>		
99.	Same as the no-action and preferred alternatives.		
100.	Same as the no-action and preferred alternatives.		
101.	Same as the no-action and preferred alternatives.		
102.	Same as the no-action and preferred alternatives.		
103.	Same as the no-action and preferred alternatives.		
104.	Same as the no-action and preferred alternatives.		
105.	Same as the no-action and preferred alternatives.		
106.	Same as the no-action and preferred alternatives.		
107.	Same as the no-action and preferred alternatives.		

			Preferred Alternative: Accommodate Sustainable Growth and Visitor Enjoyment, Protect Ecosystem Diversity, and Preserve Basic Character While Adapting to Changing User Groups
	Reference No.	Continue Current Management (No Action) (formerly alternative B)	
East Fork of the Kaweah River			
East Fork — Upper Segment			
Segment and Boundary	108.	From the 9,000' contour to the 8,000' contour — 1.0 mile. Boundary extends 0.25 mile on each side of the river.	
Classification	109.	Wild	
Park Zone	110.	Backcountry.	
Outstandingly Remarkable Values	111.	Scenery — Scenic features are the dramatic subalpine valley of Mineral King, with extremely colorful and picturesque rock formations. A deeply incised river canyon with views of high peaks. Recreation — Excellent opportunities for hiking, camping, picnicking, photography, and enjoying solitude. Geology — The East Fork forms on the crest of the Great Western Divide, with spectacular granitic peaks. Tributary streams quickly encounter Mesozoic metamorphic rocks in the vicinity of glaciated Mineral King Valley. Glaciation extended to an elevation of 7,000 feet, below which is a deep granitic canyon, extending to and outside the park boundary. The upper U-shaped river canyon (Mineral King Valley) is one of the few glaciated metamorphic landscapes in the Sierra Nevada. This area has a variety of specialized geologic features, including tufa deposits and soda springs, which are rare in the region. Karst features in the area are extensive and notable due to their alpine location. The river then rapidly descends into a steep and deeply incised granite V-shaped canyon, which is essentially inaccessible.	
Current Status of Landownership and Use	112.	Federally owned and administered by the National Park Service. Primary uses are preservation and recreation; secondary use is hydroelectric power generation. While four impoundments above Mineral King Valley adversely impact the free-flowing condition and ecological function of the river, the small-scale facilities do not preclude the inclusion of the East Fork in the system.	
Uses and Resources That Would be Enhanced, Curtailed, or Foreclosed	113.	There would be little if any effect on primary uses in Sequoia National Park because of management to protect and conserve resources. No other uses would be foreclosed or curtailed because of designation. Designation would provide additional long-term protection against downstream water resource projects outside the park that could degrade the upstream river corridor quality.	
Manageability to Protect Outstandingly Remarkable Values	114.	Ongoing protection of outstandingly remarkable values would be consistent with park management policies.	
Costs for Acquisition and Management	115.	No additional cost.	
Cost Sharing with State and Local Governments	116.	No additional cost.	
East Fork — Center Segment			
Segment and Boundary	117.	From the 8,000' contour to the Atwell Mill trail bridge (~5,800') — 5.2 miles. Boundary extends 0.25 mile on each side of the river.	
Classification	118.	Recreational	
Park Zone	119.	Backcountry.	

Refer- ence No.	A: Emphasize Natural Ecosystems and Biodiversity; Reduce Use and Development	C: Preserve Traditional Character and Retain the Feel of Yesteryear; Guide Growth	D: Preserve Basic Character and Adapt to Changing User Groups; Guide Growth
East Fork of the Kaweah River			
East Fork — Upper Segment			
108.	Same as the no-action and preferred alternatives.		
109.	Same as the no-action and preferred alternatives.		
110.	Same as the no-action and preferred alternatives.		
111.	Same as the no-action and preferred alternatives.		
112.	Same as the no-action and preferred alternatives.		
113.	Same as the no-action and preferred alternatives.		
114.	Same as the no-action and preferred alternatives.		
115.	Same as the no-action and preferred alternatives.		
116.	Same as the no-action and preferred alternatives.		
East Fork — Center Segment			
117.	Same as the no-action and preferred alternatives.		
118.	Same as the no-action and preferred alternatives.		
119.	Same as the no-action and preferred alternatives.		

	Refer- ence No.	Continue Current Management (No Action) (formerly alternative B)	Preferred Alternative: Accommodate Sustainable Growth and Visitor Enjoyment, Protect Ecosystem Diversity, and Preserve Basic Character While Adapting to Changing User Groups
<i>Outstandingly Remarkable Values</i>	120.	Scenery — The scenic river canyon changes abruptly from a U-shaped valley to a deeply incised V-shaped canyon with crashing cascades. Dramatic peaks and ridges are visible from the river's edge. Recreation — Excellent opportunities for hiking, picnicking, and photography.	
<i>Current Status of Landownership and Use</i>	121.	Federally owned and administered by the National Park Service, except for the Disney and Kaweah Han inholdings which are proposed for acquisition or easement. Primary uses are preservation and recreation.	
<i>Uses and Resources That Would be Enhanced, Curtailed, or Foreclosed</i>	122.	There would be little if any effect in Sequoia National Park because of management to protect and conserve resources. No other uses would be foreclosed or curtailed. Designation would provide additional long-term protection against downstream water resource projects outside the park that could degrade the upstream river corridor quality.	
<i>Manageability to Protect Outstandingly Remarkable Values</i>	123.	Ongoing protection of outstandingly remarkable values would be consistent with park management policies.	
<i>Costs for Acquisition and Management</i>	124.	No additional cost.	
<i>Cost Sharing with State and Local Governments</i>	125.	No additional cost.	
East Fork — Lower Segment			
<i>Segment and Boundary</i>	126.	From the Atwell Mill trail bridge (~5,800') to the park boundary — 8.0 miles. Boundary extends 0.25 mile on each side of the river.	
<i>Classification</i>	127.	Wild	
<i>Park Zone</i>	128.	Backcountry.	
<i>Outstandingly Remarkable Values</i>	129.	Scenery — The deeply incised canyon presents a wild and rugged scene with high mountain peaks.	
<i>Current Status of Landownership and Use</i>	130.	Federally owned and administered by the National Park Service. Primary uses are preservation and recreation.	
<i>Uses and Resources That Would be Enhanced, Curtailed, or Foreclosed</i>	131.	There would be little if any effect on primary uses in the park because of management to protect and conserve resources. No other uses would be foreclosed or curtailed. Designation would provide additional long-term protection from downstream projects outside the park that could degrade the upstream river corridor quality.	
<i>Manageability to Protect Outstandingly Remarkable Values</i>	132.	Ongoing protection of outstandingly remarkable values would be consistent with park management policies.	
<i>Costs for Acquisition and Management</i>	133.	No additional cost.	
<i>Cost Sharing with State and Local Governments</i>	134.	No additional cost.	

Refer- ence No.	A: Emphasize Natural Ecosystems and Biodiversity; Reduce Use and Development	C: Preserve Traditional Character and Retain the Feel of Yesteryear; Guide Growth	D: Preserve Basic Character and Adapt to Changing User Groups; Guide Growth
120.	Same as the no-action and preferred alternatives.		
121.	Same as the no-action and preferred alternatives.		
122.	Same as the no-action and preferred alternatives.		
123.	Same as the no-action and preferred alternatives.		
124.	Same as the no-action and preferred alternatives.		
125.	Same as the no-action and preferred alternatives.		
East Fork — Lower Segment			
126.	Same as the no-action and preferred alternatives.		
127.	Same as the no-action and preferred alternatives.		
128.	Same as the no-action and preferred alternatives.		
129.	Same as the no-action and preferred alternatives.		
130.	Same as the no-action and preferred alternatives.		
131.	Same as the no-action and preferred alternatives.		
132.	Same as the no-action and preferred alternatives.		
133.	Same as the no-action and preferred alternatives.		
134.	Same as the no-action and preferred alternatives.		

	Refer- ence No.	Continue Current Management (No Action) (formerly alternative B)	Preferred Alternative: Accommodate Sustainable Growth and Visitor Enjoyment, Protect Ecosystem Diversity, and Preserve Basic Character While Adapting to Changing User Groups
<i>South Fork of the Kaweah River</i>			
<i>Segment and Boundary</i>	135.	From the outlet of Green Meadow to the bridge above the South Fork camp-ground — 11.4 miles. Boundary extends 0.25 mile on each side of the river.	
<i>Classification</i>	136.	Wild	
<i>Park Zone</i>	137.	<i>Backcountry.</i>	
<i>Outstandingly Remarkable Values</i>	138.	Scenery — Giant sequoia groves, including Garfield and South Fork groves, are close to the river; the montane scenery is frequently interspersed by large meadows. Spectacular scenic canyons, with frequent waterfalls and cataracts. Geology — The South Fork of the Kaweah originates west of the Great Western Divide. It consolidates on the granitic and relatively low-elevation Hockett Plateau, then flows through a steep granitic canyon to areas of Mesozoic metamorphic marine rocks near the park boundary. Prominent depositional terraces line the river in its lower reach. The South Fork Canyon has been cut by glaciation and river erosion. The South Fork is an example of a “captured stream,” whose pre-glacial course was notably altered by glaciation. Several examples of karst topography, among them Clough Cave, are present.	
<i>Current Status of Landownership and Use</i>	139.	Federally owned and administered by the National Park Service. Primary uses are preservation and recreation.	
<i>Uses and Resources That Would be Enhanced, Curtailed, or Foreclosed</i>	140.	There would be little if any effect on primary uses in Sequoia National Park because of management to protect and conserve resources. No other uses would be foreclosed or curtailed. Designation would provide additional long-term protection against downstream water resource projects outside the park that could degrade the upstream river corridor quality.	
<i>Manageability to Protect Outstandingly Remarkable Values</i>	141.	Ongoing protection of outstandingly remarkable values would be consistent with park management policies.	
<i>Costs for Acquisition and Management</i>	142.	No additional cost.	
<i>Cost Sharing with State and Local Governments</i>	143.	No additional cost.	

Reference No.	A: Emphasize Natural Ecosystems and Biodiversity; Reduce Use and Development	C: Preserve Traditional Character and Retain the Feel of Yesteryear; Guide Growth	D: Preserve Basic Character and Adapt to Changing User Groups; Guide Growth
<i>South Fork of the Kaweah River</i>			
135.	Same as the no-action and preferred alternatives.		
136.	Same as the no-action and preferred alternatives.		
137.	Same as the no-action and preferred alternatives.		
138.	Same as the no-action and preferred alternatives.		
139.	Same as the no-action and preferred alternatives.		
140.	Same as the no-action and preferred alternatives.		
141.	Same as the no-action and preferred alternatives.		
142.	Same as the no-action and preferred alternatives.		
143.	Same as the no-action and preferred alternatives.		

	Refer- ence No.	Continue Current Management (No Action) (formerly alternative B)	Preferred Alternative: Accommodate Sustainable Growth and Visitor Enjoyment, Protect Ecosystem Diversity, and Preserve Basic Character While Adapting to Changing User Groups
<i>Backcountry / Wilderness</i>			
<i>Vision</i> <i>Most stressors to the backcountry are regionwide, such as air pollution and climate change, rather than from activities within the parks.</i>	144.	<i>Up to 96.10% of the parks are designated wilderness or backcountry areas that are managed to preserve wilderness characteristics. The parks' backcountry and wilderness areas continue to have a variety of permitted activities and commercial operations. Existing facilities remain.</i>	<i>Up to 96.10% of the parks are designated wilderness or are compatible with management as wilderness. Resource conditions in the parks' backcountry and wilderness areas are improved. Facilities are evaluated for usefulness and compatibility with wilderness, and additional facilities are considered only in the nonwilderness backcountry.</i>
<i>Zones</i>	145.	A mix of major and secondary trails and cross-country areas .	A mix of major and secondary trails and cross-country areas .
<i>Carrying Capacity</i>	146.	Continue current use limits in the backcountry, with the majority of use occurring in the major trails zone. Continue the daily trailhead quota system based on existing backcountry travel patterns.	Revise trailhead/zone quota system in a new wilderness stewardship and stock use plan based on monitoring of wilderness character, wild and scenic rivers, outstandingly remarkable values, and travel patterns to protect resources and visitor experiences.
<i>Areas Managed as Wilderness</i>			
<i>Hockett Plateau*</i>	147.	Continue to manage to preserve wilderness characteristics.	Compatible with management as wilderness. Explore a small nonwilderness backcountry exclusion (less than 40 acres) for a high Sierra camp.
<i>Redwood Canyon*</i>	148.	Continue to manage to preserve wilderness characteristics.	Compatible with management as wilderness.
<i>North Fork of the Kaweah*</i>	149.	Continue to manage to preserve wilderness characteristics.	Compatible with management as wilderness.
<i>Chimney Rock*</i>	150.	Continue to manage to preserve wilderness characteristics.	Compatible with management as wilderness.
<i>Mineral King Area*</i>	151.	Manage Mineral King areas found eligible for wilderness (except road corridor, Silver City, Kaweah Han, cabin communities, and other present development).	Manage Mineral King areas found eligible for wilderness (except road corridor, Silver City, Kaweah Han, cabin communities, and other present development).

*Wilderness studies that could lead to wilderness designation are not part of this plan. They would be undertaken separately by the parks. Wilderness designation would require recommendations to Congress by the secretary of the interior and the president, followed by congressional legislation.

Reference No.	A: Emphasize Natural Ecosystems and Biodiversity; Reduce Use and Development	C: Preserve Traditional Character and Retain the Feel of Yesteryear; Guide Growth	D: Preserve Basic Character and Adapt to Changing User Groups; Guide Growth
Backcountry / Wilderness			
144.	Up to 96.11% of the parks are designated wilderness or are compatible with management as wilderness. Resource conditions in the parks' backcountry and wilderness areas are improved. Visitor use is reduced from the present; social conflicts are reduced while there are more opportunities for solitude; high-impact activities are eliminated (e.g., no campfires), and facilities are removed where feasible.	Up to 96.09% of the parks are designated wilderness or are compatible with management as wilderness. Resource conditions in the parks' backcountry and wilderness areas are improved in some places. Party sizes and use levels are limited and dispersed, reducing the need for onsite regulation. Most commercial and park facilities remain.	Up to 89.37% of the parks are designated wilderness or are compatible with management as wilderness. The parks' backcountry and wilderness areas have improved conditions in some places. Party sizes and use levels are higher than under alternative C, with greater levels of onsite regulation. Uses are separated and may be concentrated in high-use areas. Additional facilities may be added in the non-wilderness backcountry if needed.
145.	More secondary trails and cross-country areas . Fewer major trails .	A mix of major and secondary trails and cross-country areas .	More major trails .
146.	Reduce backcountry visitation and designate more secondary trails and cross-country zones to disperse backcountry use.	Same as the no-action alternative.	Designate more major trail zones, resulting in more wilderness use than now.
Areas Managed as Wilderness			
147.	Compatible with management as wilderness.	Same as alternative A.	Manage Hockett Plateau as nonwilderness backcountry.**
148.	Same as the preferred alternative.	Same as the preferred alternative.	Same as the preferred alternative.
149.	Same as the preferred alternative.	Same as the preferred alternative.	Wilderness designation compatible for the North Fork area except for the Colony Mill Road trail corridor.**
150.	Same as the preferred alternative.	Same as the preferred alternative.	Manage the Chimney Rock area as nonwilderness backcountry. Provide for historic camps.**
151.	Same as the no-action and preferred alternatives.	Same as the no-action and preferred alternatives.	Same as the no-action and preferred alternatives.

**Changes in management could affect wilderness characteristics. "The National Park Service will take no action that would diminish the wilderness suitability of an area possessing wilderness characteristics until the legislative process has been completed" (NPS *Management Policies 2001*, sec. 6.3.1).

	Refer- ence No.	Continue Current Management (No Action) (formerly alternative B)	Preferred Alternative: Accommodate Sustainable Growth and Visitor Enjoyment, Protect Ecosystem Diversity, and Preserve Basic Character While Adapting to Changing User Groups
<i>Potential Wilderness and Other Areas</i>	152.	- Designate areas at Bearpaw Meadow, Pear Lake, and two utility corridors as wilderness if facilities removed in accordance with the California Wilderness Act. - If inholdings at Oriole Lake acquired, designate as wilderness once facilities removed.	- Designate areas at Bearpaw Meadow, Pear Lake, and two utility corridors as wilderness if facilities removed in accordance with the California Wilderness Act. - If inholdings at Oriole Lake acquired, designate as wilderness once facilities removed.
<i>Historic Structures</i>	153.	Preserve historic ranger cabins, Smithsonian Institution shelter (Mount Whitney shelter), Pear Lake ski hut, and other structures.	Preserve or rehabilitate historic ranger cabins, Smithsonian Institution shelter (Mount Whitney shelter), Pear Lake ski hut, and other structures.
	154.	Preserve and / or stabilize the Shorty Lovelace Historic District cabins or allow them to molder.	Preserve and / or stabilize the Shorty Lovelace Historic District cabins or allow them to molder.
	155.	Evaluate some trails to determine their eligibility for the National Register of Historic Places.	Evaluate some trails to determine their eligibility for the National Register of Historic Places, plus provide historic trails information.
<i>Visitor Use and Facilities</i>			
<i>Backcountry Use</i>	156.	Maintain current quotas for backcountry use.	Modify backcountry quota system as needed for resource protection; accommodate sustainable levels of use.
	157.	Adhere to party size limits determined in the current 1986 <i>Backcountry Management Plan</i>.	Determine party size limits through a wilderness stewardship and stock use plan.
<i>Trail System</i>	158.	Retain the current backcountry trail system.	Inventory and reassess elements of the trail network as part of the wilderness stewardship and stock use plan.
	159.	Work with volunteer groups to maintain and improve the trail system.	Work with volunteer groups to maintain and improve the trail system.
<i>Stock Use</i>	160.	Continue administrative, commercial, and private stock use under current NPS restrictions.	Provide for administrative, commercial, and private stock use up to current levels. Conduct stock use, visitor capacity, and grazing studies to establish standards and indicators for monitoring, and adapt regulations.
<i>Commercial Pack Stock Operations</i>	161.	Continue to provide for commercial pack operations headquartered in the parks; no limit on operations headquartered outside the parks.	Limit commercial pack operations and manage to protect park resources. Refine commercial stock use permit system for resource protection.
<i>High Sierra Camps (commercial concession)</i>	162.	Continue the commercial concession high Sierra camp at Bearpaw.	Continue the high Sierra camp at Bearpaw Meadow; study feasibility of a camp in a nonwilderness backcountry area on Hockett Plateau.

Reference No.	A: Emphasize Natural Ecosystems and Biodiversity; Reduce Use and Development	C: Preserve Traditional Character and Retain the Feel of Yesteryear; Guide Growth	D: Preserve Basic Character and Adapt to Changing User Groups; Guide Growth
152.	Same as the no-action alternative.	No facilities removed, so no additional areas designated as wilderness.	Same as alternative C.
153.	Same as the no-action alternative, but record structures, then allow to deteriorate if not needed.	Same as the no-action alternative.	Same as the no-action alternative.
154.	Allow Shorty Lovelace Historic District cabins to molder.	Same as the no-action and preferred alternatives.	Same as the no-action and preferred alternatives.
155.	Same as the no-action alternative.	Same as the preferred alternative.	Same as the preferred alternative.
<i>Visitor Use and Facilities</i>			
156.	Reduce backcountry use.	Modify the quota system as needed for resource protection; disperse use in small groups.	Permit increase in amount of use and concentrate in major trail corridors.
157.	Reduce party size.	Same as alternative A.	Provide opportunities for different party sizes, both large and small, in different places and at different times.
158.	Reduce the trail system.	Same as the no-action alternative.	Reopen and upgrade abandoned trails and build some new ones.
159.	Improve the condition of remaining trails.	Same as the no-action and preferred alternatives.	Same as the no-action and preferred alternatives.
160.	No stock use.	Reduce commercial and private stock party size, disperse and regulate use; designate use areas within the parks. Continue administrative stock use.	Increase commercial and private stock party size in some areas; separate stock use and hiking areas. Continue administrative stock use.
161.	No pack operations.	Cap growth of commercial pack operations.	Encourage more commercial pack operations to enhance backcountry and wilderness access.
162.	Remove the high Sierra camp at Bearpaw Meadow.	Same as the no-action alternative.	Same as the no-action alternative plus add high Sierra camps in nonwilderness backcountry areas on Hockett Plateau.

	Refer- ence No.	Continue Current Management (No Action) (formerly alternative B)	Preferred Alternative: Accommodate Sustainable Growth and Visitor Enjoyment, Protect Ecosystem Diversity, and Preserve Basic Character While Adapting to Changing User Groups
Park Administration and Operations			
<i>Backcountry Facilities</i>	163.	• Maintain backcountry ranger stations.	• Assess backcountry ranger stations and replace or rehabilitate as necessary.
<i>Helicopter Use</i>	164.	• Continue current emergency and administrative helicopter use.	• Limit emergency and administrative helicopter use to minimum necessary for managing wilderness and backcountry.
Kings Canyon National Park			
Cedar Grove and the Floor of the Kings Canyon			
<i>Vision</i> <i>The Kings Canyon is a glacially carved deep canyon with waterfalls, lush meadows, campgrounds, and commercial facilities, as well as popular backcountry access.</i>	165.	<i>The Kings Canyon is visited mostly by campers and hikers who come to enjoy the area's quiet or by persons passing through the area to access the backcountry. Cedar Grove village is a low-use area with an extended season.</i>	<i>The identity of the Kings Canyon is strengthened and enhanced, but the area remains less visited and quieter than Grant Grove or Giant Forest. Visitors come to see the canyon's special features. The basic character of camping and wilderness / backcountry access remains. Cedar Grove village is made more efficient and offers a modestly greater variety of overnight accommodations. The area's season includes more spring and fall time.</i>
<i>Zones</i>	166.	Low-use frontcountry with park development.	Low-use frontcountry with park development.
Cultural Resources			
<i>Historic Resources</i>	167.	• Preserve Knapp's cabin.	• Preserve Knapp's cabin.
<i>Visitor Facilities</i>	168.	• Evaluate roads, facilities, and structures for eligibility for the National Register of Historic Places.	• Evaluate roads, facilities, and structures for eligibility for the National Register of Historic Places.
Transportation and Circulation			
<i>Kings Canyon Highway (California 180)</i>	169.	• Maintain present seasonal highway access.	• Encourage the California Department of Transportation to keep the highway open longer in the spring and fall.
Visitor Use and Facilities			
<i>Visitor Facilities</i>	170.	• Maintain a small visitor services area, including the ranger contact station, backcountry permit station, lodge, store, food service, RV dump station, and the pack station.	• Provide a visitor center. Redesign or modestly expand lodging facilities to provide some variety in lodging; maintain the pack station; no RV dump station.
<i>Frontcountry Trails</i>	171.	• Retain the trail network.	• Improve the condition of the trail network.
<i>Backcountry Access</i>	172.	• Continue access to the existing system of trailheads.	• Continue access to the existing system of trailheads.

Reference No.	A: Emphasize Natural Ecosystems and Biodiversity; Reduce Use and Development	C: Preserve Traditional Character and Retain the Feel of Yesteryear; Guide Growth	D: Preserve Basic Character and Adapt to Changing User Groups; Guide Growth
Park Administration and Operations			
163.	• Same as the preferred alternative.	• Same as the preferred alternative.	• Same as the preferred alternative.
164.	• Same as the preferred alternative.	• Same as the no-action alternative.	• Same as the no-action alternative.
Kings Canyon National Park			
Cedar Grove and the Floor of the Kings Canyon			
165.	<i>Same as the no-action alternative except the focus is on resource preservation, facilities at Cedar Grove village are reduced in number, and visitation is less than at present.</i>	<i>The identity of the Kings Canyon is strengthened and enhanced, but the area remains less visited and quieter than Grant Grove or Giant Forest. Visitors come to see the canyon's special features. The traditional character of camping and backcountry access remains. Cedar Grove village is enlarged slightly and offers a greater variety of overnight accommodations. The area's season is lengthened to include more spring and fall time.</i>	<i>The Kings Canyon becomes a major park feature equal to Grant Grove or Giant Forest, with visitors drawn by the area's strong identity as the "quiet Yosemite." Backcountry access remains an important function. The area's season is lengthened to include more spring and fall time. Cedar Grove village is expanded to provide improved opportunities for more camping and lodging.</i>
166.	Low-use frontcountry with less park development.	Low-use frontcountry with slightly more park development.	Same as alternative C.
Cultural Resources			
167.	• Allow Knapp's cabin to molder.	• Same as the no-action and preferred alternatives.	• Same as the no-action and preferred alternatives.
168.	• Same as the no-action and preferred alternatives.	• Same as the no-action and preferred alternatives.	• Same as the no-action and preferred alternatives.
Transportation and Circulation			
169.	• Same as the no-action alternative.	• Same as the preferred alternative.	• Same as the preferred alternative.
Visitor Use and Facilities			
170.	• No visitor center. Remove lodging, the RV dump station, and the pack station.	• Provide a visitor center. Add rustic guest cabins adjacent to the lodge; enhance food service; and maintain the RV dump station and the pack station.	• Provide a visitor center. Redesign or expand lodging facilities to provide some variety in lodging; maintain the pack station; remove the RV dump station.
171.	• Reduce the trail network.	• Same as the preferred alternative.	• Provide additional short day hiking or loop trails to increase variety for visitors.
172.	• Same as the no-action and preferred alternatives.	• Same as the no-action and preferred alternatives.	• Provide additional access points to backcountry trails and interpret these with signs and guides. Develop a new Roaring River trail.

	Refer- ence No.	Continue Current Management (No Action) (formerly alternative B)	Preferred Alternative: Accommodate Sustainable Growth and Visitor Enjoyment, Protect Ecosystem Diversity, and Preserve Basic Character While Adapting to Changing User Groups
<i>Picnicking</i>	173.	• No designated picnic areas.	• Provide formal picnic areas.
<i>Bicycle Use</i>	174.	• Continue bicycle use on park roads.	• Facilitate bicycle use by providing designated bicycle routes and bike lanes on the highway. Close much of the River Road to public motorized vehicles.
<i>River Access</i>	175.	• Continue unlimited access to the Kings River and tributaries at developments.	• Define access points along the Kings River and tributaries with trails and guides to reduce bank damage from increased use.
	176.	• Prohibit all watercraft.	• Prohibit all watercraft to preserve the quality of the riparian corridor (natural quiet and riverbank vegetation).
	177.	• Allow summer season water play.	• Allow summer season water play.
<i>Campgrounds (Relocate campsites >100' from the river to protect river values in wild and scenic river plan)</i>	178.	• Maintain four campgrounds, all with amenities.	• Redesign campgrounds with fewer sites and to better meet the needs of separate user groups (RV, tents only, quiet areas); provide walk-in or bike-in campsites; provide larger sites for families and small groups; allow some sites to be reserved.
Park Administration and Operations			
<i>Operations Areas</i>	179.	• Replace maintenance and operations areas as needed, with replacement locations assessed for less resource impacts and improved sustainability.	• Replace maintenance and operations areas as needed, with replacement locations assessed for less resource impacts and improved sustainability.
<i>Work Camps</i>	180.	• No work camps.	• Provide a work camp at Lewis Creek.
<i>Residential Areas</i>	181.	• Maintain the housing area.	• Maintain the housing area. Remove housing from all of the "Picnic Estates" area.
<i>Utilities</i>	182.	• Continue operation of utility systems; upgrade as necessary to meet standards.	• Continue operation of utility systems; upgrade as necessary to meet standards.
<i>Bridges</i>	183.	• Replace Cedar Grove village bridge (and other bridges as needed), with replacement locations assessed for less resource impacts and improved sustainability.	• Replace Cedar Grove Village bridge (and other bridges as needed), with replacement locations assessed for less resource impacts and improved sustainability.

Reference No.	A: Emphasize Natural Ecosystems and Biodiversity; Reduce Use and Development	C: Preserve Traditional Character and Retain the Feel of Yesteryear; Guide Growth	D: Preserve Basic Character and Adapt to Changing User Groups; Guide Growth
173.	• Same as the no-action alternative.	• Same as the preferred alternative.	• Same as the preferred alternative plus increase picnic opportunities.
174.	• Same as the no-action alternative.	• Facilitate bicycle use by providing bike lanes.	• Same as the preferred alternative.
175.	• Limit access to the Kings River and tributaries to minimize bank damage.	• Same as the preferred alternative.	• Harden access points and control circulation to reduce bank damage from increased use.
176.	• Same as the no-action alternative.	• Same as the no-action alternative.	• Allow nonmotorized watercraft when safe water conditions permit.
177.	• Same as the no-action and preferred alternatives.	• Same as the no-action and preferred alternatives.	• Same as the no-action and preferred alternatives.
178.	• Redesign campgrounds with fewer sites and more space between sites; designate some campgrounds as walk-in and "quiet areas" for tents only.	• Redesign campgrounds to better accommodate family groups; provide two small additional primitive campgrounds along the River Road; provide trailhead and backpacker campsites at road's end; allow some sites to be reserved.	• Same as the preferred alternative.
Park Administration and Operations			
179.	• Reduce park operations areas.	• Same as the no-action and preferred alternatives.	• Same as the no-action and preferred alternatives.
180.	• Same as the preferred alternative.	• Same as the no-action alternative.	• Same as the preferred alternative.
181.	• Minimize housing.	• Infill the housing area. Relocate some housing from the "Picnic Estates" area. Provide a volunteer camp at Lewis Creek.	• Expand and further separate the housing and operations areas from one another. Remove housing from all of the "Picnic Estates" area.
182.	• Same as the no-action and preferred alternatives.	• Same as the no-action and preferred alternatives.	• Same as the no-action and preferred alternatives.
183.	• Same as the no-action and preferred alternatives.	• Same as the no-action and preferred alternatives.	• Same as the no-action and preferred alternatives.

	Refer- ence No.	Continue Current Management (No Action) (formerly alternative B)	Preferred Alternative: Accommodate Sustainable Growth and Visitor Enjoyment, Protect Ecosystem Diversity, and Preserve Basic Character While Adapting to Changing User Groups
Grant Grove			
Vision <i>Grant Grove is a pristine sequoia grove with the world's third largest tree (the General Grant Tree) and the previously logged Big Stump Grove.</i>	184.	<i>Grant Grove continues as a very popular destination, with a highly visited sequoia grove. Grant Grove village offers day and overnight activities, mixed with other park development and uses. Circulation and congestion problems remain.</i>	<i>Grant Grove continues as a very popular destination, with a highly visited sequoia grove. Grant Grove village offers day and overnight activities. Incompatible visitor and operational functions are separated. Facility development and use are limited to be consistent with sustainable water and sewer capacity. Circulation is redesigned and improved to reduce congestion.</i>
Zones	185.	A large park development zone along with a mix of both low- and high-use frontcountry.	A large park development zone along with a mix of both low- and high-use frontcountry.
Cultural Resources			
Historic Resources	186.	• Adaptively reuse historic structures in the village.	• Adaptively reuse historic structures in village.
	187.	• Preserve the Redwood Mountain residence.	• Adaptively reuse the Redwood Mountain residence.
	188.	• Preserve historic resources at Grant Tree.	• Preserve historic resources at Grant Tree.
Cultural Landscape	189.	• Review the potential cultural significance of Big Stump Basin.	• Review the potential cultural significance of Big Stump Basin.
Wilsonia Historic District	190.	• Retain NPS historic structures in the historic district.	• Evaluate NPS historic buildings for preservation and adaptive use. Update the <i>Land Protection Plan</i> to acknowledge the national register status of the Wilsonia Historic District.
Transportation and Circulation			
Entrance Station	191.	• Retain and upgrade the entrance station.	• Redesign or relocate the entrance station to facilitate traffic flow.
Traffic, Parking, and Circulation	192.	• Retain traffic, parking, and circulation systems.	• Redesign village roads, intersections, and parking areas for improved circulation.
Access to Hume Lake	193.	• Primary route to Hume Lake Camp is through Grant Grove village via California Highway 180.	• Redirect Hume Lake traffic through Quail Flat (10-mile road).

Reference No.	A: Emphasize Natural Ecosystems and Biodiversity; Reduce Use and Development	C: Preserve Traditional Character and Retain the Feel of Yesteryear; Guide Growth	D: Preserve Basic Character and Adapt to Changing User Groups; Guide Growth
<i>Grant Grove</i>			
184.	<i>Grant Grove continues as a popular destination, with a highly visited sequoia grove. More of the area is returned to natural conditions, with fewer commercial facilities.</i>	<i>Grant Grove continues as a very popular destination, with a heavily visited sequoia grove. Grant Grove village becomes a large destination village, with facilities redesigned for more day and overnight use and improved circulation. Overlapping and incompatible uses are separated, and circulation and congestion problems are addressed.</i>	<i>Similar to alternative C except Grant Grove village is expanded, with more facilities for day and overnight use, and congestion problems are addressed by providing new facilities.</i>
185.	Less extensive park development , some high-use frontcountry , and expanded low-use frontcountry .	Slightly more park development , more high-use frontcountry , and less low-use frontcountry .	Similar to alternative C except more park development .
<i>Cultural Resources</i>			
186.	• Preserve historic structures in village area that can be adaptively reused for essential services.	• Same as the no-action and preferred alternatives.	• Same as the no-action and preferred alternatives.
187.	• Record and remove the Redwood Mountain residence.	• Same as the no-action alternative.	• Convert the Redwood Mountain residence to a nature center or environmental education camp.
188.	• Same as the no-action and preferred alternatives.	• Same as the no-action and preferred alternatives.	• Same as the no-action and preferred alternatives.
189.	• Same as the no-action and preferred alternatives.	• Same as the no-action and preferred alternatives.	• Same as the no-action and preferred alternatives.
190.	• Eventually record and remove the NPS cabins in the Wilsonia Historic District.	• Same as the preferred alternative.	• Preserve or adaptively reuse NPS buildings for public use; or record and remove NPS cabins, and provide needed public facilities.
<i>Transportation and Circulation</i>			
191.	• Remove the Big Stump entrance station and provide entrance stations at Cedar Grove and Lost Grove to facilitate traffic flow.	• Redesign the entrance station to facilitate traffic flow.	• Relocate the entrance station outside the park to facilitate traffic flow.
192.	• No upgrades required for traffic, parking, and circulation systems because of reduced use.	• Redesign village roads, intersections, and parking areas for improved circulation and greater capacity while accommodating bicycle use.	• Same as alternative C plus accommodate tour buses.
193.	• Same as the preferred alternative.	• Same as the preferred alternative plus request the state to transfer the California Highway 180 designation to the Quail Flat road.	• Divert traffic around Grant Grove with a bypass on Giant Sequoia National Monument land. Close California Highway 180 from Grant Grove junction to north boundary.

	Refer- ence No.	Continue Current Management (No Action) (formerly alternative B)	Preferred Alternative: Accommodate Sustainable Growth and Visitor Enjoyment, Protect Ecosystem Diversity, and Preserve Basic Character While Adapting to Changing User Groups
<i>Transit</i>	194.	• Assess viability for local transit.	• Assess viability for local transit.
	195.	• Continue parkwide transportation planning.	• Continue parkwide transportation planning, including shuttle service from Grant Grove to Giant Forest and possibly to the San Joaquin Valley.
<i>Grant Tree Area</i>	196.	• Continue parking at the Grant Tree.	• Continue parking at the Grant Tree with some redesign.
<i>Redwood Saddle/ Redwood Mountain</i>	197.	• Continue low levels of vehicular access on the Redwood Mountain Road.	• Continue low levels of vehicular access on the Redwood Mountain Road.
Visitor Use and Facilities			
<i>Educational Facilities</i>	198.	• Retain the visitor center.	• Redesign and expand the visitor center. • Consider the gas station for a potential visitor facility.
<i>Trail System</i>	199.	• Continue the current trail system.	• Upgrade the trail system, providing signs and guides. Connect with trails in Giant Sequoia National Monument (Converse Basin and areas to the east). Provide an enhanced, self-guided trail system for Grant Grove and the surrounding area.
<i>Big Stump Basin</i>	200.	• Manage as a recovering giant sequoia grove, with many of the stumps gradually hidden in vegetation, reducing the visual impact of logging.	• Manage to maintain visible logging history, as well as to illustrate a recovering giant sequoia grove.
	201.	• Establish a self-guided trail.	• Establish a self-guided trail.
<i>Park Ridge Lookout</i>	202.	• Hiking and bicycle access to the lookout	• Hiking and bicycle access to the lookout
<i>Picnicking</i>	203.	• Provide picnic areas at Big Stump and Columbine.	• Accommodate day use by converting part of Crystal Springs to a picnic area, and the remainder to day use parking; continue picnicking at Big Stump and Columbine.
<i>Stock Corral</i>	204.	• Retain the corral.	• Retain the corral.

Reference No.	A: Emphasize Natural Ecosystems and Biodiversity; Reduce Use and Development	C: Preserve Traditional Character and Retain the Feel of Yesteryear; Guide Growth	D: Preserve Basic Character and Adapt to Changing User Groups; Guide Growth
194.	• No local transit.	• Implement a voluntary local transit system to reduce traffic and parking congestion, with staging and maintenance near the Wye.	• Implement an extensive voluntary day use transit system, with access to Big Stump, Grant Tree, and national monument destinations. Develop a staging area close to the relocated visitor center.
195.	• No transit needed because of reduced use.	• Provide a shuttle between local overnight locations (Hume, USFS campgrounds, Montecito-Sequoia).	• Provide shuttle service from Grant Grove to Giant Forest.
196.	• Reduce parking at the Grant Tree to improve resource conditions and visitor experiences.	• Redesign the Grant Tree area to improve visitor experiences and provide summer season transit stops and accessible parking and trails.	• Same as alternative C.
197.	• Same as the no-action and preferred alternatives.	• Encourage use of the Redwood Mountain Road and the trails it accesses. Provide highway signs to direct visitors.	• Pave the Redwood Mountain Road and encourage use of it and the trails it accesses through better guides and signs.
Visitor Use and Facilities			
198.	• Same as the no-action alternative.	• Redesign the visitor center as needed • Convert the gas station to a history museum.	• Relocate the visitor center to the Wye area to create space for future village services and to make access easier for park visitors.
199.	• Reduce the amount of hiking trails and restore areas where trails are removed.	• Improve the trail system, emphasizing high trail standards.	• Similar to the preferred alternative except expand the trail system.
200.	• Same as the no-action alternative.	• Manage to maintain visible logging history.	• Same as the preferred alternative.
201.	• Same as the no-action and preferred alternatives.	• Same as the no-action and preferred alternatives.	• Same as the no-action and preferred alternatives.
202.	• Same as the no-action and preferred alternatives.	• Same as the no-action and preferred alternatives.	• Allow public vehicle / bicycle use of the road to the lookout.
203.	• No formal picnic areas.	• Same as the no-action alternative.	• Increase picnicking facilities and convert the Crystal Spring campground to a picnic area. Urge additional Giant Sequoia National Monument picnic spaces.
204.	• Remove the corral.	• Same as the no-action and preferred alternatives.	• Remove the corral and provide public parking at the corral site.

	Refer- ence No.	Continue Current Management (No Action) (formerly alternative B)	Preferred Alternative: Accommodate Sustainable Growth and Visitor Enjoyment, Protect Ecosystem Diversity, and Preserve Basic Character While Adapting to Changing User Groups
<i>Campgrounds</i>	205.	Retain current camping areas.	Redesign campgrounds to accommodate use patterns, and reduce the number of campsites and their resource impacts. Convert Crystal Spring to day use and encourage the U.S. Forest Service to expand camping opportunities in adjacent Giant Sequoia National Monument.
<i>RV Dump Station</i>	206.	No RV dump station.	No RV dump station.
<i>Other Services</i>	207.	Retain the store, restaurant, gift shop.	Retain the store, restaurant, gift shop.
	208.	Expand lodging per concession contract, with a traditional mix of rustic cabins and lodges.	Expand lodging per concession contract, with a traditional mix of rustic cabins and lodges.
	209.	No gas station provided.	No gas station provided.
<i>Winter Use</i>	210.	Maintain winter use at current levels.	Maintain snowplay areas and extend cross-country skiing and snowshoeing trails. Encourage more concession equipment rentals.
<i>Private Land and Special Use Permits on Park Land</i>			
<i>Wilsonia*</i> <i>(inholding)</i>	211.	Acquire properties on a willing-seller / willing-buyer basis only when funding is available or resources are threatened. Remove structures not contributing to the historic district and return sites to natural conditions after acquisition.	Private residential uses continue in the recreational community. Evaluate NPS-owned historic buildings for adaptive reuse through the historic leasing program for seasonal staff residences, public lodging, or concession housing. (Septic constraints could limit adaptive reuse.) Remove nonhistoric NPS structures and restore the areas. Acquire properties on a willing-seller / willing-buyer basis when funding is available or resources are threatened.
<i>Snowmobile Use</i> <i>(NPS Management Policies 2001 prohibit snowmobiles in the parks)</i>	212.	Continue to allow snowmobiles on private land / roads in Wilsonia.	Continue to allow snowmobiles on private land / roads in Wilsonia.

* Inholdings in Wilsonia are privately owned lands within the park.

Reference No.	A: Emphasize Natural Ecosystems and Biodiversity; Reduce Use and Development	C: Preserve Traditional Character and Retain the Feel of Yesteryear; Guide Growth	D: Preserve Basic Character and Adapt to Changing User Groups; Guide Growth
205.	Redesign campgrounds to reduce the number of campsites and resource impacts.	Redesign campgrounds to improve the experience and to reduce the number of campsites (provide more space between sites), and/or provide for more day use and picnicking. Make Crystal Springs a quiet, tents-only campground.	Same as alternative A, except convert Crystal Spring to day use and encourage the U.S. Forest Service to expand camping opportunities in adjacent Giant Sequoia National Monument.
206.	Same as the no-action and preferred alternatives.	Same as the no-action and preferred alternatives.	Provide a dump station at the gas station or recommend at a site in Giant Sequoia National Monument.
207.	Same as the no-action and preferred alternatives.	Same as the no-action and preferred alternatives.	Same as the no-action and preferred alternatives.
208.	Reduce the amount of lodging.	Same as the no-action and preferred alternatives.	Expand the quantity and variety of lodging available.
209.	Same as the no-action and preferred alternatives.	Same as the no-action and preferred alternatives.	Provide a gas station near the Wye.
210.	Same as the no-action alternative	Expand snowplay areas and cross-country skiing and snowshoeing trails.	Same as the preferred alternative.
<i>Private Land and Special Use Permits on Park Land</i>			
211.	Seek funds and acquire structures from willing sellers; remove all NPS-owned structures and private structures as they are acquired; restore the area to natural conditions.	Seek to preserve a private recreational community; continue private residential uses; adaptively reuse NPS-owned historic buildings through the historic leasing program for seasonal staff residences, public lodging, or concession housing. Remove nonhistoric NPS structures and restore the areas.	- In Wilsonia either - Expand the residential recreational community by permitting commercial use, with vacant lots to be infilled; repair or replace nonhistoric NPS structures for adaptive use; build a sewer system; and change the current regulations to allow lodging. - or - Expand and diversify public use by acquiring all structures to support park recreation needs (such as parking, shuttle staging, picnicking, or camping).
212.	Allow no snowmobiles after inholdings purchased.	Same as the no-action and preferred alternatives.	Same as the no-action and preferred alternatives.

	Refer- ence No.	Continue Current Management (No Action) (formerly alternative B)	Preferred Alternative: Accommodate Sustainable Growth and Visitor Enjoyment, Protect Ecosystem Diversity, and Preserve Basic Character While Adapting to Changing User Groups
Park Administration and Operations			
<i>Work Camps</i>	213.	Retain Swale fire crew housing / work camp.	Retain Swale fire crew housing / work camp. Consider expansion for volunteer work crews. Explore option to colocate fire facilities on monument lands.
<i>Residential Areas</i>	214.	Retain current levels of housing and park operations.	Retain current housing and park operations; expand housing inside or outside the park if needed and sustainable.
<i>Water Supplies</i>	215.	- React to growth / needs by establishing new storage. - Implement drought plans as needed to ensure an adequate water supply.	In addition to actions listed in line 35, as part of future water studies assess the impact of private wells in Wilsonia and explore additional water storage for Grant Grove.
<i>Wastewater Systems</i>	216.	Upgrade wastewater treatment as necessary to meet requirements and improve park resource protection.	Upgrade wastewater treatment as necessary to meet requirements and improve park resource protection.
Sequoia National Park			
<i>Dorst / Halstead Meadow / Cabin Creek</i>			
<i>Vision</i> <i>Dorst, Halstead Meadow, and Cabin Creek are within a forested area of open evergreen stands, meadows, and small sequoia groves.</i>	217.	<i>The Dorst area provides camping and some facilities along the Generals Highway. It serves as the trailhead to Muir Grove.</i>	<i>The Dorst area provides diverse camping opportunities and some facilities along the Generals Highway. It serves as the trailhead to Muir Grove.</i>
<i>Zones</i>	218.	Park development (campground with amenities) surrounded by low-use frontcountry and backcountry .	Park development (campground with amenities) surrounded by low-use frontcountry and backcountry .
<i>Historic Structures</i>	219.	Adaptively reuse Cabin Creek structures as seasonal residences.	Adaptively reuse Cabin Creek structures as seasonal residences.
<i>Lost Grove</i>	220.	Preserve the Lost Grove comfort station.	Preserve the Lost Grove comfort station.
	221.	Retain the Lost Grove interpretive wayside on Generals Highway.	Retain the Lost Grove interpretive wayside on Generals Highway.
<i>Transit</i>	222.	No transit in area.	Explore transit and provide shuttle stops in area if need develops.
<i>Trails</i>	223.	Maintain trails to Muir Grove, Lost Grove, and Little Baldy.	Better define trails to Muir Grove, Lost Grove, and Little Baldy; improve signs to reduce resource damage; remove unplanned trails created by visitors. Develop links to backcountry trails and connecting trails to USFS / Giant Sequoia National Monument areas.

Reference No.	A: Emphasize Natural Ecosystems and Biodiversity; Reduce Use and Development	C: Preserve Traditional Character and Retain the Feel of Yesteryear; Guide Growth	D: Preserve Basic Character and Adapt to Changing User Groups; Guide Growth
<i>Park Administration and Operations</i>			
213.	• Same as the no-action alternative.	• Same as the no-action alternative, plus add capacity for other park operational needs.	• Same as alternative C.
214.	• Move housing and operations out of the park.	• Expand housing and operations near the existing residential and operations areas if needed and sustainable.	• Expand housing and operations to support increased visitor services.
215.	• Implement actions listed in line 35; no increased demand expected because of reduced use.	• In addition to actions listed in line 35, seek new water sources outside the parks.	• Same as alternative C.
216.	• No need to increase sewer and wastewater systems because of reduced use.	• Expand wastewater treatment as necessary to meet requirements and improve park resource protection.	• Same as the no-action alternative.
<i>Sequoia National Park</i>			
<i>Dorst / Halstead Meadow / Cabin Creek</i>			
217.	<i>The Dorst area provides less front-country camping with improved resource conditions and visitor experiences.</i>	<i>Same as the no-action alternative.</i>	<i>Similar to the no-action alternative with more opportunities for visitors.</i>
218.	A smaller amount of park development (campground with amenities) and more backcountry .	Park development (campground with amenities) surrounded by low-use frontcountry .	Park development (campground with amenities) surrounded by both low- and high-use frontcountry .
219.	• Record and remove structures and restore Cabin Creek site to natural conditions.	• Same as the no-action and preferred alternatives.	• Same as the no-action and preferred alternatives.
220.	• Same as the no-action and preferred alternatives.	• Same as the no-action and preferred alternatives.	• Same as the no-action and preferred alternatives.
221.	• Remove Lost Grove wayside.	• Same as the no-action and preferred alternatives.	• Same as the no-action and preferred alternatives.
222.	• Same as the no-action alternative.	• Same as the no-action alternative.	• Provide shuttle bus stops in area.
223.	• Better define trails to reduce resource damage; remove unplanned trails created by visitors.	• Same as alternative A plus improve sign and better define trailheads.	• Same as alternative C plus add short trails to disperse use; develop links to backcountry trails and connecting trails to USFS / Giant Sequoia National Monument areas.

	Refer- ence No.	Continue Current Management (No Action) (formerly alternative B)	Preferred Alternative: Accommodate Sustainable Growth and Visitor Enjoyment, Protect Ecosystem Diversity, and Preserve Basic Character While Adapting to Changing User Groups
<i>Pack Station / Stock Stable</i>	224.	No commercial pack station or riding stables available. No trailhead support for pack and saddle stock available.	Examine four locations (Dorst / Halstead / Cabin Creek, Wuksachi, Lodgepole, and Wolverton) to find a single suitable site for a commercial pack station / day ride operation to replace the Wolverton pack station. Use the following criteria: convenience for visitors and operators; no major, adverse resource impacts; and reasonable development / operation costs for the government and the operator. Conduct an economic / business feasibility analysis of operations. If economically feasible, prepare a site analysis and physical plan for the most suitable site.
<i>Picnicking</i>	225.	Retain the Halstead Meadow picnic area.	Retain the Halstead Meadow picnic area.
<i>Dorst Campground</i>	226.	Retain Dorst campground sites and the RV dump station.	Redesign some campsites at Dorst campground to better meet the needs of diverse user groups; remove the RV dump station.
<i>Transitory Storage Area</i>	227.	Retain the Dorst pit for transitory storage.	Retain the Dorst pit for transitory storage.
Wuksachi			
<i>Vision</i> <i>Wuksachi is a new developed area set amid rocky outcrops and surrounded by evergreen forest.</i>	228.	<i>Wuksachi village provides year-round facilities for lodging and food service, plus residential and park operations areas in accordance with the concession contract.</i>	<i>Wuksachi village provides year-round facilities for lodging and food service, plus residential and park operations areas in accordance with the concession contract.</i>
<i>Zones</i>	229.	<i>Park development (village) adjacent to backcountry.</i>	<i>Park development (village) adjacent to backcountry.</i>
<i>Cultural Resources</i>	230.	Preserve the Clover Creek bridge (a national register property).	Preserve the Clover Creek bridge (a national register property).
<i>Transit</i>	231.	Service by means of the Giant Forest transit system with constructed shuttle stops.	Service by means of the Giant Forest transit system with constructed shuttle stops.
<i>Visitor Educational Programs</i>	232.	Provide fewer ranger naturalist programs.	Increase traditional ranger naturalist programs.
<i>Visitor Facilities</i>	233.	Provide an amphitheater for NPS interpretive programs.	Provide an amphitheater for NPS interpretive programs.

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224.	No pack station (no stock use in park).	Same as the preferred alternative.	Same as the preferred alternative.
225.	Remove the Halstead Meadow picnic area and return to natural conditions.	Same as the no-action alternative plus add picnic sites at or near Halstead Meadow and Suwanee Creeks to disperse/accommodate more use.	Same as alternative C.
226.	Reduce the number of Dorst campground sites to improve the visitor experience and resource conditions; remove the RV dump station.	Same as the no-action alternative.	Redesign some campsites at the Dorst campground to better meet the needs of diverse user groups; retain the RV dump station. Add a camper store to provide basic supplies.
227.	Remove the storage area and return to natural conditions.	Same as the no-action alternative.	Same as the no-action alternative.
<i>Wuksachi</i>			
228.	<i>Same as the no-action and preferred alternatives.</i>	<i>Same as the no-action and preferred alternatives.</i>	<i>An expanded Wuksachi village provides diverse day and overnight uses, including picnic areas, trails, a traditional mix of overnight facilities (lodges and cabins), and food service, plus areas for residential purposes and park operations.</i>
229.	<i>Same as the no-action and preferred alternatives.</i>	<i>Same as the no-action and preferred alternatives.</i>	<i>A larger park development (village) adjacent to backcountry.</i>
230.	Same as the no-action and preferred alternative.	Same as the no-action and preferred alternative.	Same as the no-action and preferred alternative.
231.	Same as the no-action and preferred alternatives.	Same as the no-action and preferred alternatives.	Same as the no-action and preferred alternatives.
232.	Same as the no-action alternative.	Same as the preferred alternative.	Same as the preferred alternative plus provide a diverse array of educational opportunities.
233.	Same as the no-action and preferred alternatives.	Same as the no-action and preferred alternatives.	Same as the no-action and preferred alternatives.

	Refer- ence No.	Continue Current Management (No Action) (formerly alternative B)	Preferred Alternative: Accommodate Sustainable Growth and Visitor Enjoyment, Protect Ecosystem Diversity, and Preserve Basic Character While Adapting to Changing User Groups
<i>Use Season</i>	234.	• Year-round use.	• Year-round use.
<i>Trails</i>	235.	• Retain trails to Lodgepole.	• Add new trails from Wuksachi to Little Baldy and J. O. Pass junction.
<i>Pack Station / Stock Stables</i>	236.	• No commercial pack station or riding stables available. No trailhead support for pack and saddle stock available.	• Same as line 224 — examine four locations (Dorst / Halstead / Cabin Creek, Wuksachi, Lodgepole, and Wolverton) to find a single suitable site for a commercial pack station / day ride operation to replace the Wolverton pack station.
<i>Winter Use</i>	237.	• Offer some equipment rental and assistance with winter recreational activities.	• Support winter recreational activities at Wuksachi.
<i>Other Services</i>	238.	• Provide lodging, gift shop, and restaurant (up to the present concession contract limits).	• Provide lodging, gift shop, and restaurant (up to the present concession contract limits).
<i>Gas Station</i>	239.	• No gas station.	• No gas station.
<i>Red Fir Maintenance Area</i>	240.	• Continue to use Red Fir as the maintenance site for the area.	• Continue to use Red Fir as the maintenance site for the area.
<i>Transit Support</i>	241.	• Designate Red Fir as the interim location for light maintenance functions for the Giant Forest transit system. (Provide heavy maintenance outside the park.)	• Designate Red Fir as the interim location for light maintenance functions for the Giant Forest transit system. (Provide heavy maintenance outside the park.)
<i>Wuksachi Residential Area</i>	242.	• Retain a limited residential area.	• Meet park and concession residential needs.
<i>Water Supplies</i>	243.	• Adhere to water capacity designs for the planned build-out of Wuksachi village, which incorporate efficient water use. Limit dry season water withdrawals to current levels to protect resources. Address planned expansion through more efficient use of existing supply.	• In addition to actions in line 35, adhere to water capacity designs for the planned build-out of Wuksachi village, which incorporate efficient water use.
<i>Wastewater Systems</i>	244.	• Upgrade wastewater treatment systems as necessary to meet requirements and to improve protection of park resources.	• Upgrade wastewater treatment systems as necessary to meet requirements and to improve protection of park resources.

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234.	• Three-season use.	• Same as alternative A.	• Same as the no-action alternative.
235.	• Same as the no-action alternative.	• Same as the no-action alternative.	• Add new trails to Little Baldy and J. O. Pass junction.
236.	• No pack station (no stock use in park).	• Same as the preferred alternative.	• Same as the preferred alternative.
237.	• No winter use.	• Same as alternative A.	• Same as the no-action alternative plus groom some trails for skiing.
238.	• Same as the no-action and preferred alternatives.	• Same as the no-action and preferred alternatives.	• Same as the no-action and preferred alternatives plus encourage expanded facilities if needed to meet demand.
239.	• Same as the no-action and preferred alternatives.	• Provide a gas station.	• Same as the no-action and preferred alternatives.
240.	• Same as the no-action and preferred alternatives.	• Same as the no-action and preferred alternatives.	• Same as the no-action and preferred alternatives.
241.	• Same as the no-action and preferred alternatives.	• Same as the no-action and preferred alternatives.	• Same as the no-action and preferred alternatives.
242.	• Same as the no-action alternative.	• Enlarge residential area to meet park and concession staff needs.	• Same as alternative C.
243.	• Same as the preferred alternative.	• Same as the preferred alternative.	• Same as the preferred alternative.
244.	• Same as the no-action and preferred alternatives but reduced use could mitigate the need to upgrade facilities.	• Same as the no-action and preferred alternatives.	• Same as the no-action and preferred alternatives.

	Refer- ence No.	Continue Current Management (No Action) (formerly alternative B)	Preferred Alternative: Accommodate Sustainable Growth and Visitor Enjoyment, Protect Ecosystem Diversity, and Preserve Basic Character While Adapting to Changing User Groups
<i>Lodgepole</i>			
<i>Vision</i> <i>Lodgepole lies within the beautiful Tokopah Canyon of the Marble Fork of the Kaweah River. The Tokopah Falls trail is a popular day hike.</i>	245.	<i>Lodgepole is a very popular campground with amenities, the dominant day use commercial site, a river recreation site, a wilderness trailhead, and a principal employee residential area, all near one another.</i>	<i>Lodgepole is a very popular campground with amenities, the dominant day use commercial site, a river recreation site, a wilderness trailhead, and a principal employee residential area. Lodgepole offers expanded day activities and services, while continuing to provide overnight camping. Incompatible park and visitor functions are separated.</i>
<i>Zones</i>	246.	Park development (campground, village, park operations, and residential) surrounded by both low- and high-use frontcountry .	Park development (campground, village, residential, and some park operations) and more high-use frontcountry .
<i>Historic Resources</i>	247.	• Evaluate facilities for historic status.	• Preserve historic buildings that can be adaptively reused. Allow relocated and new infill housing.
	248.	• Preserve the Marble Fork bridge.	• Preserve the Marble Fork bridge.
<i>Traffic, Parking, and Circulation</i>	249.	• Maintain existing parking and circulation (day use parking lot remains in the middle of the campground).	• Redesign roads and parking to separate day and overnight uses, improve resource conditions, increase efficiency of day use parking, and facilitate traffic flow.
<i>Transit</i>	250.	• Provide a shuttle stop.	• Provide a shuttle stop.
<i>Visitor Use and Facilities</i>			
<i>Visitor Educational Programs and Facilities</i>	251.	• Retain the visitor center and the nature center in the campground.	• Retain the visitor center and develop new thematic exhibits and programs with a wilderness emphasis. Remove the nature center.
<i>Trails</i>	252.	• Provide trails to Tokopah, Wuksachi, Wolverton, and Giant Forest.	• Provide trails to Tokopah, Wuksachi, Wolverton, and Giant Forest; improve trail conditions.
<i>Picnicking</i>	253.	• Provide a small picnic area west of the Generals Highway.	• Provide a small picnic area west of the Generals Highway.
<i>River Access</i>	254.	• Continue unlimited access to the Marble Fork of the Kaweah River.	• Define river access points to protect riverbanks from the impacts of increased use; allow water play.

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<i>Lodgepole</i>			
245.	<i>Lodgepole provides reduced levels of day use and campgrounds that are separated from operations.</i>	<i>Lodgepole is redesigned and expanded, with an emphasis on overnight use. Day uses are relocated to other areas, and incompatible uses are separated.</i>	<i>Lodgepole offers expanded day activities and services, while continuing to provide overnight camping. Incompatible uses are separated.</i>
246.	Less park development (campground, village, residential, and park operations); some high-use frontcountry .	Park development (campground, village, and residential) with more high-use frontcountry .	Park development (campground, village, and some park operations) more high-use frontcountry .
247.	• Preserve historic buildings that can be adaptively reused.	• Same as alternative A, but allow relocated and new infill housing.	• Record and remove housing area.
248.	• Same as the no-action and preferred alternatives.	• Same as the no-action and preferred alternatives.	• Same as the no-action and preferred alternatives.
249.	• Reduce the size of parking areas and redesign to improve resource conditions.	• Redesign village roads and parking areas to facilitate traffic flow.	• Similar to the preferred alternative except relocate and expand day use parking.
250.	• Same as the no-action and preferred alternatives.	• Same as the no-action and preferred alternatives.	• Same as the no-action and preferred alternatives.
<i>Visitor Use and Facilities</i>			
251.	• Move visitor center functions and education to the Giant Forest museum. Remove the nature center. Provide only administrative functions at Lodgepole.	• Move visitor center functions and education to the Giant Forest museum. Remove the nature center but add some educational and nature activities at the shuttle stop.	• Provide a nature center. Assess the need for a visitor center; retain administrative functions.
252.	• Same as the no-action alternative.	• Same as the no-action alternative plus improve trail conditions in the Lodgepole area.	• Same as alternative C plus convert the Tokopah Falls trail to a loop on both sides of the river. Redesign the Tokopah Falls trailhead.
253.	• Same as the no-action and preferred alternatives.	• Same as the no-action and preferred alternatives.	• Convert the Log Bridge campground to a day use and picnic area.
254.	• Limit trail access to a few areas to improve and protect riparian resources.	• Same as the preferred alternative.	• Harden access points and control circulation to reduce bank damage from increased use.

	Refer- ence No.	Continue Current Management (No Action) (formerly alternative B)	Preferred Alternative: Accommodate Sustainable Growth and Visitor Enjoyment, Protect Ecosystem Diversity, and Preserve Basic Character While Adapting to Changing User Groups
<i>Pack Station / Stock Stables</i>	255.	• No commercial pack station or riding stables available. No trailhead support for pack and saddle stock available.	• Same as line 224 — examine four locations (Dorst / Halstead / Cabin Creek, Wuksachi, Lodgepole, and Wolverton) to find a single suitable site for a commercial pack station / day ride operation to replace the Wolverton pack station.
<i>Winter Use</i>	256.	• Continue the cross-country ski center and winter rentals.	• Provide an activity center and rentals as needed at Wuksachi, Lodgepole, or Wolverton.
<i>Campgrounds (Relocate campsites >100' from river to protect river values in wild and scenic river plan.)</i>	257.	• Continue to rebuild portions of the campground to improve resource conditions and the camping experience.	• Redesign the campground to further separate sites from day uses; provide hike-in sites; provide larger sites for family groups; keep portions of the campground open year-round.
	258.	• No additional campsites.	• No additional campsites.
	259.	• Retain the Log Bridge campground.	• Retain the Log Bridge campground.
	260.	• Provide winter camping.	• Provide winter camping.
	261.	• Allow all sites to be reserved.	• Allow all sites to be reserved.
<i>RV Dump Station</i>	262.	• Retain RV dump station unless it cannot be upgraded to comply with state regulations.	• Retain RV dump station unless it cannot be upgraded to comply with state regulations.
<i>Other Visitor Services</i>	263.	• Retain current visitor services (food service, supplies, showers, public laundry, and post office).	• Provide visitor services focused on meeting day use (expand food service) and overnight user needs (supplies, post office, showers, public laundry).
	264.	• Retain nature center, unused ice rink site, and parking area.	• Remove ice rink site and parking area; include these areas in a redesigned campground or return to natural conditions.
	265.	• Gas station no longer operational.	• Do not provide a service station function; rehabilitate building to meet rustic guidelines. Consider a self-service gas pump at the market.

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255.	No pack station (no stock use in park).	Same as the preferred alternative.	Same as the preferred alternative.
256.	No winter activity center or rentals.	Same as the no-action alternative.	Same as the preferred alternative.
257.	Redesign and reduce the number of campsites to improve resource conditions and the camping experience. Provide more hike-in sites.	Reduce the number of campsites to improve resource conditions and the camping experience.	Same as the preferred alternative.
258.	Same as no-action and preferred alternatives.	Same as no-action and preferred alternatives.	Possibly provide campsites at nature center, ice rink site, and parking area.
259.	Same as no-action and preferred alternatives.	Same as no-action and preferred alternatives.	Convert the Log Bridge campground to a day use and picnic area.
260.	Same as no-action and preferred alternatives.	Same as no-action and preferred alternatives.	Provide winter camping somewhere in the Giant Forest / Lodgepole area.
261.	Allow half of the sites to be reserved.	Same as the no-action and preferred alternatives.	Same as the no-action and preferred alternatives.
262.	Remove the RV dump station.	Same as the no-action and preferred alternatives.	Same as alternative A.
263.	Remove visitor services (food service, supplies, showers), and post office; restore area.	Provide visitor services focused on meeting overnight user needs (supplies, post office, showers, public laundry). Convert the visitor center to natural history association sales, food service, and nature center.	Provide visitor services focused on meeting day user needs; expand food service. Remove post office.
264.	Remove nature center, ice rink site, and parking area; return to natural conditions.	Convert nature center and ice rink site to seasonal lab and bunk facilities for visiting researchers.	Same as alternative A.
265.	No gas station.	No gas station.	Provide a gas station.

	Refer- ence No.	Continue Current Management (No Action) (formerly alternative B)	Preferred Alternative: Accommodate Sustainable Growth and Visitor Enjoyment, Protect Ecosystem Diversity, and Preserve Basic Character While Adapting to Changing User Groups
Park Administration and Operations			
Administrative Functions	266.	• Retain administrative functions in the visitor center building.	• Retain administrative functions in the visitor center building, assess visitor center.
	267.	• Retain emergency vehicles.	• Study relocation of park emergency services out of the Wuksachi fire station.
Work Camp	268.	• No work camp provided.	• No work camp provided.
Residential Areas	269.	• Retain limited permanent staff housing and continue to provide seasonal housing.	• Redesign residential area. Construct year-round housing, including dormitory for volunteers and short-term staff, as well as facilities for permanent staff.
Transit Support	270.	• Provide no transit support facilities.	• Provide transit support at Wolverton.
Water Supplies	271.	• React to growth / water needs by seeking new water sources and creating additional storage. • Continue to implement drought plans.	• In addition to actions in line 35, upgrade water distribution system to reduce water loss.
Wastewater Systems	272.	• Upgrade wastewater treatment as necessary to meet requirements and to improve protection of park resources.	• Upgrade wastewater treatment as necessary to meet requirements and to improve protection of park resources.
Wolverton			
Vision <i>Wolverton is a large, open meadow in a forested valley.</i>	273.	<i>Wolverton provides summer picnicking, winter activities, day-hiking trails, and a backcountry trailhead.</i>	<i>Wolverton provides the main day use staging area for backcountry access, and winter uses are expanded.</i>
Zones	274.	A mix of low- and high-use front-country .	Slightly more high-use frontcountry .
Historic Resources	275.	• Evaluate residence and restroom structures.	• Evaluate residence and restroom structures.
Traffic, Parking, and Circulation	276.	• As described in the 1996 <i>Interim Management Plan</i> , consider use as an overflow parking and staging area for shuttle access to Giant Forest destinations if need develops. Provide a new parking area closer to the Sherman Tree. Provide shuttle access to the backcountry trailhead at Crescent Meadow.	• As described in the 1996 <i>Interim Management Plan</i> , consider use as an overflow parking and staging area for shuttle access to Giant Forest destinations if need develops. Provide a new parking area closer to the Sherman Tree. Provide shuttle access to the backcountry trailhead at Crescent Meadow.

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<i>Park Administration and Operations</i>			
266.	• Use the visitor center building to meet administrative needs.	• Use the visitor center building to meet administrative and concession needs.	• Same as alternative C.
267.	• Relocate park emergency service to Red Fir.	• Same as the no-action alternative.	• Same as the preferred alternative.
268.	• Provide a work camp.	• Same as the no-action alternative.	• Same as alternative A.
269.	• Retain limited staff housing area and replace some seasonal housing.	• Expand residential area. Construct year-round housing dormitory for volunteers and short-term staff / seasonal staff in the residential area.	• Relocate housing to the Wuksachi / Red Fir area. Convert the housing area to shuttle staging and light maintenance.
270.	• Same as the no-action and preferred alternatives.	• Provide transit support at Wolverton.	• Convert the housing area to a light maintenance and staging facility for shuttles.
271.	• Implement actions listed in line 35; no increased demand expected because of reduced use.	• Same as the preferred alternative.	• Same as the preferred alternative.
272.	• Same as the no-action alternative but reduced use would mitigate the need to upgrade facilities.	• Same as the no-action and preferred alternatives.	• Same as the no-action and preferred alternatives.
<i>Wolverton</i>			
273.	<i>Wolverton is the main day use staging area for Giant Forest shuttles. It also functions as a summer and winter trailhead.</i>	<i>Wolverton provides the main day-use staging area for backcountry access, and winter uses are expanded.</i>	<i>Wolverton provides the main day-use staging area for Giant Forest shuttles. Backcountry access and winter uses are expanded.</i>
274.	Slightly more low-use frontcountry .	Slightly more high-use frontcountry .	More high-use frontcountry .
275.	• Record and remove structures. Remove remaining elements of former ski area and dam, and restore to natural function.	• Move residence to Lodgepole housing area. Record and remove other structures if they cannot be adaptively reused or rehabilitated.	• Record and remove structures if they cannot be adaptively reused or rehabilitated.
276.	• Same as the no-action and preferred alternatives.	• Same as the no-action and preferred alternatives.	• As described in the 1996 <i>Interim Management Plan</i> , use as an overflow parking and staging area for shuttle access to Giant Forest destinations; construct a 1,700-car parking garage (proposed in the 1980 <i>Giant Forest / Lodgepole Development Concept Plan</i>) to greatly increase day use parking capacity; provide shuttle service between Giant Forest and Grant Grove.

	Refer- ence No.	Continue Current Management (No Action) (formerly alternative B)	Preferred Alternative: Accommodate Sustainable Growth and Visitor Enjoyment, Protect Ecosystem Diversity, and Preserve Basic Character While Adapting to Changing User Groups
<i>Hiking</i>	277.	• Provide trailhead for day use trails to General Sherman Tree and Lodgepole, and backcountry trails to Pear Lake and Alta Meadow.	• Provide trailhead for day use trails to General Sherman Tree and Lodgepole, and backcountry trails to Pear Lake and Alta Meadow.
<i>Picnicking</i>	278.	• Maintain picnic area in parking lot island.	• Provide limited picnic area to support shuttle and trailhead users.
<i>Pack Station / Stock Stables</i>	279.	• No commercial pack station or riding stables available. No trailhead support for pack and saddle stock available.	• Same as line 224 — examine four locations (Dorst / Halstead / Cabin Creek, Wuksachi, Lodgepole, and Wolverton) to find a single suitable site for a commercial pack station / day ride operation to replace the Wolverton pack station.
<i>Winter Use at Wolverton</i>	280.	• Operate as a winter snow play area with concession support buildings.	• Accommodate increased winter use; evaluate need for winter use facilities. Enhance and expand opportunities for various activities, separating activities such as snowplay, cross-country skiing, and snowshoeing.
<i>Other Services</i>	281.	• Retain restrooms, warming hut, snack bar, ranger hut, and concession building.	• Replace existing facilities as needed, and provide limited food service.
<i>Boy Scout Camp</i>	282.	• Retain the permit Boy Scout camp.	• Convert the Boy Scout camp to a camp for park volunteers; permit Boy Scout use as possible.
Park Administration and Operations			
<i>Long Meadow</i>	283.	• Retain the residence and storage warehouse.	• Retain the residence; remove the storage warehouse.
<i>Residential Areas</i>	284.	• Provide no volunteer housing at Wolverton.	• Provide seasonal volunteer / residential camp in the area of the Wolverton Boy Scout camp, while accommodating continued Boy Scout use.
<i>Transit Facilities</i>	285.	• Locate permanent light maintenance facilities outside the park.	• Locate light maintenance facility for transit at the former Wolverton stables site; incorporate sustainable water-saving measures.
<i>Water Supplies</i>	286.	• Limit dry season water withdrawals to current levels to protect resources.	• In addition to actions in line 35, address new demand of transit maintenance facility through recycled water use and possible additional storage.
<i>Wastewater Systems</i>	287.	• Upgrade wastewater treatment systems as necessary to meet requirements and improve protection of park resources.	• Upgrade wastewater treatment systems as necessary to meet requirements and improve protection of park resources.

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277.	• Provide trailhead and parking at Wolverton for High Sierra Trail to improve resource conditions.	• Same as alternative A plus redefine and simplify summer and winter day use trails to make them easier to follow; improve backcountry trailheads.	• Same as alternative C.
278.	• No picnic facilities.	• Same as the preferred alternative.	• Same as the preferred alternative.
279.	• No pack station (no stock use in park).	• Same as the preferred alternative.	• Same as the preferred alternative.
280.	• No facilities for winter use.	• Same as the preferred alternative plus expand cross-country skiing opportunities.	• Same as alternative C plus expand winter concession services / rentals.
281.	• Retain restrooms. Remove concession building.	• Same as the no-action alternative.	• Same as the preferred alternative except provide expanded food service.
282.	• Remove the permit Boy Scout camp, and restore the area to natural conditions.	• Same as the no-action alternative.	• Convert the Boy Scout camp to a camp or work center for park volunteer groups
Park Administration and Operations			
283.	• Remove residence and storage warehouse.	• Same as alternative A.	• Same as the preferred alternative.
284.	• Same as the no-action alternative.	• Same as the no-action alternative.	• Add a campground for park volunteer groups near the water treatment facility or the Boy Scout camp.
285.	• Same as the no-action alternative.	• Same as the preferred alternative.	• Provide a light maintenance facility at Lodgepole.
286.	• Implement actions listed in line 35; no increased demand expected because of reduced use.	• Same as the preferred alternative.	• Same as the preferred alternative.
287.	• Same as the no-action and preferred alternatives.	• Same as the no-action and preferred alternatives.	• Same as the no-action and preferred alternatives.

	Refer- ence No.	Continue Current Management (No Action) (formerly alternative B)	Preferred Alternative: Accommodate Sustainable Growth and Visitor Enjoyment, Protect Ecosystem Diversity, and Preserve Basic Character While Adapting to Changing User Groups
Giant Forest			
<i>The following actions are compatible with the 1996 Giant Forest Interim Management Plan, which proposes the adaptive reuse of historic buildings. The actions would be the same under all the alternatives.</i>			
Vision	288.	<i>The giant sequoia grove at Giant Forest remains Sequoia National Park's primary day use feature. The grove, site of a major restoration effort, illustrates the premiere, naturally functioning giant sequoia ecosystem, with 6 of the 10 largest trees in the world, meadows, and abundant wildlife. The desired visitor experience is a walk in the woods to see the Big Trees. Visitors focus on the Giant Forest museum / Big Trees Trail area, the General Sherman Tree, Moro Rock, and Crescent Meadow. The extensive trail system is retained. Private vehicular access to the grove is retained but is limited by parking capacities; during peak-use periods some roads and/or parking areas are closed and replaced by shuttle system access.</i>	
Zone	289.	High-use frontcountry.	
Cultural Resources	290.	Two historic districts have been recorded and removed in consultation with the state historic preservation officer to protect the sequoia trees. The Giant Forest market building is being adaptively reused as a museum. The district ranger residence and restrooms have been rehabilitated and preserved. The Moro Rock staircase, Cattle cabin, Squatters cabin, and Tharp's Log have been preserved and interpreted. Named trees are protected from further trampling around their bases.	
Transit and Circulation	291.	Provide shuttle service to Moro Rock and Crescent Meadow, possibly mandatory during peak-use periods; during shoulder seasons, allow private vehicles to access Moro Rock. Provide shuttle stops at features.	
Visitor Parking	292.	Provide limited year-round visitor parking at the Giant Forest museum and the General Sherman Tree.	
Trail System	293.	Retain the existing trail system, removing only those short sections that have been made obsolete as a result of removing commercial facilities; upgrade and rehabilitate where necessary. Harden trail surfaces when it is determined that heavy use requires such action. Improve trailhead information, and maintain good trail system signing. Expand the number of trails accessible to disabled users.	
Giant Forest Visitor Facilities	294.	Maintain the Giant Forest museum, interpretive waysides, shuttle stops, residence, education center, restrooms at the museum area, museum overflow parking, Big Trees Trail at Round Meadow, Moro Rock, Crescent Meadow, Sherman Tree, and trail centers. No food service provided.	
Interpretation / Education	295.	Giant Forest museum provides a visitor information desk. Provide self-guiding interpretive opportunities at the museum, along the adjoining Big Trees and Hazelwood trails, and along the Congress Grove trail.	
	296.	Provide ranger/naturalist interpretive services at key locations in the grove.	
Beetle Rock Recreation Hall	297.	Adaptively reuse Beetle Rock as a year-round, primarily day-use center that provides a site for park-related educational activities.	
Picnicking	298.	Maintain a picnic area at Pinewood.	
Winter Use	299.	Provide opportunities for cross-country skiing and snowshoeing.	

Refer- ence No.	A: Emphasize Natural Ecosystems and Biodiversity; Reduce Use and Development	C: Preserve Traditional Character and Retain the Feel of Yesteryear; Guide Growth	D: Preserve Basic Character and Adapt to Changing User Groups; Guide Growth
<i>Giant Forest</i>			
288.	<i>Same as the no-action and preferred alternatives.</i>		
289.	Same as the no-action and preferred alternatives.		
290.	Same as the no-action and preferred alternatives.		
291.	Same as the no-action and preferred alternatives.		
292.	Same as the no-action and preferred alternatives.		
293.	Same as the no-action and preferred alternatives.		
294.	Same as the no-action and preferred alternatives.		
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296.	Same as the no-action and preferred alternatives.		
297.	Same as the no-action and preferred alternatives.		
298.	Same as the no-action and preferred alternatives.		
299.	Same as the no-action and preferred alternatives.		

	Refer- ence No.	Continue Current Management (No Action) (formerly alternative B)	Preferred Alternative: Accommodate Sustainable Growth and Visitor Enjoyment, Protect Ecosystem Diversity, and Preserve Basic Character While Adapting to Changing User Groups
<i>Water Supply</i>	300.	Follow sustainable practices in supplying water from the Wolverton system for the museum complex, Sherman Tree, and the Pinewood picnic area. At Moro Rock / Crescent Meadow, limit dry season water withdrawals to current levels to protect resources.	
<i>Wastewater Systems</i>	301.	Maintain existing wastewater systems for the museum complex, Beetle Rock education center, Sherman Tree, and Pinewood picnic area. Maintain existing systems or provide vault toilets at Moro Rock and Crescent Meadow. Provide vault toilets at Lower Sherman Tree and Big Trees Trail. Upgrade or replace systems as necessary to meet regulatory requirements.	
<i>Powerline</i>	302.	Replace underground cross-country powerline through Giant Forest with new line under Crescent Meadow / Moro Rock road corridor.	
<i>Park Operations</i>	303.	Continue to support Giant Forest park operations from Lodgepole / Red Fir.	
<i>Crystal Cave</i>			
<i>Vision</i>	304.	<i>Crystal Cave provides the primary public opportunity to experience the parks' significant cave resources.</i>	<i>Crystal Cave provides the primary public opportunity to experience the parks' significant cave resources.</i>
<i>Zone</i>	305.	High-use frontcountry.	High-use frontcountry.
<i>Cave Tours</i>	306.	Retain a variety of tours.	Retain a variety of tours.
<i>Restrooms</i>	307.	Maintain restrooms near the parking lot but provide no restrooms at the cave.	Maintain restrooms near the parking lot; provide restrooms at cave if technology makes it feasible.
<i>Water, Wastewater, and Electricity Systems</i>	308.	Continue operation of small, onsite water, wastewater, and electricity systems; upgrade as necessary to meet standards.	Continue operation of small, onsite water, wastewater, and electricity systems; upgrade as necessary to meet standards or to improve resource protection.
<i>Ash Mountain / Foothills</i>			
<i>Vision</i> <i>The foothills of Sequoia National Park represent some of the best protected foothill wildlands in the Sierra Nevada, featuring blue oak woodlands, chaparral, riparian corridors, and abundant wildlife.</i>	309.	<i>Low levels of year-round visitor use are accommodated. The Ash Mountain area is the parks' primary administrative and operations center, and it provides some seasonal and permanent residences.</i>	<i>Increased levels of recreational use are accommodated primarily along the Middle and North Forks of the Kaweah River. The Ash Mountain area is the parks' primary administrative and operations center. The area continues to have some seasonal as well as permanent residences for essential personnel. A partnership is developed with the gateway community to meet park needs and to retain the character of a small, rural community.</i>
<i>Zones</i>	310.	Park development (operations and residential areas) surrounded by low-use frontcountry ; some high-use frontcountry .	Park development (operations and residential areas), with a mix of low- and high-use frontcountry .

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300.	Same as the no-action and preferred alternatives.		
301.	Same as the no-action and preferred alternatives.		
302.	Same as the no-action and preferred alternatives.		
303.	Same as the no-action and preferred alternatives.		
Crystal Cave			
304.	The visitor experience at Crystal Cave is improved by reducing use.	Same as the no-action and preferred alternatives.	Additional types of tours are offered to provide for diverse visitor experiences.
305.	Same as the no-action alternative.	Same as the no-action alternative.	Same as the no-action alternative.
306.	• Reduce group size on cave tours.	• Same as the no-action and preferred alternatives.	• Expand the number and types of tours.
307.	• Same as the no-action alternative.	• Same as the no-action alternative.	• Same as the preferred alternative.
308.	• Same as the preferred alternative.	• Same as the preferred alternative.	• Same as the preferred alternative.
Ash Mountain / Foothills			
309	Limited levels of recreational use are accommodated primarily along the Middle Fork of the Kaweah River. Park operations and residential areas are relocated outside the park, and sites are restored, improving area resource conditions.	Increased levels of recreational use are accommodated primarily along the Middle and North Forks of the Kaweah River. The Ash Mountain area is the parks' primary administrative and operations center. The area continues to have some seasonal as well as permanent residences for essential personnel.	Same as alternative C.
310.	Less park development, more low-use frontcountry and backcountry.	Park development (operations and residential areas), with slightly more high-use frontcountry.	Park development (operations and residential areas), with more high-use frontcountry and additional facilities in low-use frontcountry.

	Refer- ence No.	Continue Current Management (No Action) (formerly alternative B)	Preferred Alternative: Accommodate Sustainable Growth and Visitor Enjoyment, Protect Ecosystem Diversity, and Preserve Basic Character While Adapting to Changing User Groups
Cultural Resources			
<i>Ethnographic Resources</i>	311.	• Preserve Hospital Rock and Potwisha ethnographic resources.	• Preserve Hospital Rock and Potwisha ethnographic resources.
<i>Historic Resources</i>	312.	• Preserve Tunnel Rock, park entrance sign, and CCC era work along the Generals Highway.	• Preserve Tunnel Rock, park entrance sign, and CCC era work along the Generals Highway.
	313.	• Pursue Ash Mountain and Sycamore CCC camp historic districts.	• Pursue Ash Mountain and Sycamore CCC camp historic districts.
	314.	• Preserve three CCC era buildings, including the recreation hall.	• Preserve three CCC era buildings, including the recreation hall.
	315.	• Retain the historic Colony Mill Road as a trail.	• Retain the historic Colony Mill Road as a trail.
	316.	• Pursue listing of hydroelectric facilities (Kaweah no. 3) on the National Register of Historic Places, at the behest of Southern California Edison.	• Pursue listing of hydroelectric facilities (Kaweah no. 3) on the National Register of Historic Places, at the behest of Southern California Edison.
<i>Collections Storage</i>	317.	• Keep museum collection in headquarters building.	• Expand collections storage; improve facility to meet museum standards.
Transportation and Circulation			
<i>Traffic, Parking, and Circulation</i>	318.	• Retain existing parking areas at the Foothills visitor center and the picnic area (at capacity or congested during high use times).	• Redesign existing parking areas at the Foothills visitor center, administrative offices, and the picnic area to increase capacity and reduce congestion.
<i>Transit</i>	319.	• No foothills transit. Continue to assess parkwide transit feasibility.	• Continue to assess parkwide transit feasibility. Seek public transit service to various park areas and surrounding communities, serving public, staff, and concession transit needs.
Visitor Use and Facilities			
<i>Visitor Use</i>	320.	• Accommodate current levels of visitation, with visitors primarily passing through to other areas of the parks.	• Provide concentrated use areas from Buckeye Flat to Ash Mountain, with Hospital Rock as a feature; provide additional recreational opportunities in other foothills areas.
<i>Visitor Educational Programs and Facilities</i>	321.	• Retain the Foothills visitor center.	• Expand the Foothills visitor center within the current building to meet visitor demand.
	322.	• No cooperative information with outside partners.	• Explore opportunities with outside partners for orientation, education, and management.

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<i>Cultural Resources</i>			
311.	• Same as the no-action and preferred alternatives.	• Same as the no-action and preferred alternatives.	• Same as the no-action and preferred alternatives, plus provide additional opportunities to learn about Native American culture.
312.	• Same as the no-action and preferred alternatives.	• Same as the no-action and preferred alternatives.	• Same as the no-action and preferred alternatives.
313.	• See "Residential Areas" (lines 338–40).	• Same as alternative A.	• Same as alternative A.
314.	• Record and remove the recreation hall.	• Same as the no-action and preferred alternatives.	• Same as the no-action and preferred alternatives.
315.	• See "North Fork" topic (line 345).	• Same as alternative A.	• Same as alternative A.
316.	• Same as the no-action and preferred alternatives.	• Same as the no-action and preferred alternatives.	• Same as the no-action and preferred alternatives.
317.	• Same as the no-action alternative.	• Same as the preferred alternative.	• Same as the preferred alternative.
<i>Transportation and Circulation</i>			
318.	• Maintain present parking areas (reduced parking demand with less use).	• Enlarge parking areas to meet increased demand.	• Provide parking at new visitor center facility.
319.	• Same as the no-action alternative.	• Develop employee shuttles to reduce staff parking demand.	• Seek public transit service to various park areas and surrounding communities, serving public, staff, and concession transit needs.
<i>Visitor Use and Facilities</i>			
320.	• No additional facilities or opportunities because of reduced levels of visitation.	• Expand day use and camping opportunities fall through spring.	• Similar to the preferred alternative plus provide more picnicking.
321.	• Same as the no-action alternative.	• Construct a new visitor center or enlarge the existing building.	• Build new foothills visitor center at the Potwisha staging area or outside the park.
322.	• Same as the no-action alternative.	• Same as the no-action alternative.	• Same as the no-action alternative.

	Refer- ence No.	Continue Current Management (No Action) (formerly alternative B)	Preferred Alternative: Accommodate Sustainable Growth and Visitor Enjoyment, Protect Ecosystem Diversity, and Preserve Basic Character While Adapting to Changing User Groups
<i>Hiking</i>	323.	Retain the limited frontcountry trail system.	Develop or restore trails for expanded winter and shoulder season use, including stock and bicycling opportunities; develop loop trails. Reconstruct the Hospital Rock to Buckeye Flat trail footbridge. Provide hiking opportunities along hydroelectric access ways.
<i>Picnicking</i>	324.	Retain the picnic area at the Foothills visitor center.	Redesign the picnic area at the Foothills visitor center to better accommodate day use.
	325.	Retain the Hospital Rock picnic area and public restrooms.	Retain the Hospital Rock picnic area and public restrooms.
<i>Bicycling</i>	326.	Allow bicycles only on park roads.	In addition to allowing bicycles on park roads, designate Shepherd Saddle Road as a bike trail.
<i>Stock Use</i>	327.	Provide limited private recreational stock opportunities in the South Fork and North Fork areas. No commercial stock use.	Accommodate sustainable stock use with improved access, trails / trailheads and primitive campgrounds.
<i>River Access</i>	328.	Continue to provide parking near popular river access points along various forks of the Kaweah.	Provide parking at sustainable locations near popular river access points along various forks of the Kaweah.
	329.	Allow water play and swimming when water conditions are safe.	Allow water play and swimming when water conditions are safe.
	330.	Nonmotorized watercraft allowed.	Nonmotorized watercraft allowed.
<i>Campgrounds</i>	331.	Maintain the campground at Buckeye Flat.	Maintain the campground at Buckeye Flat.
	332.	Redesign the Potwisha campground for its current use level and continue winter camping.	Redesign the Potwisha campground for its current use level, and continue winter camping.
<i>Shepherd Saddle</i>	333.	Maintain Shepherd Saddle Road as a service road closed to public motor vehicles.	Maintain Shepherd Saddle Road as a service road that can be used for public equestrian and bicycle use.
	334.	No camping opportunities.	No camping opportunities.

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323.	• Same as the no-action alternative.	• Same as the no-action alternative.	• Same as the preferred alternative.
324.	• Same as the no-action alternative.	• Same as the preferred alternative.	• Redesign the area currently occupied by the Foothills visitor center / administration building for day use.
325.	• Same as the no-action and preferred alternatives.	• Same as the no-action and preferred alternatives.	• Same as the no-action and preferred alternatives.
326.	• Same as the no-action alternative.	• Same as the no-action alternative.	• In addition to allowing bicycles on park roads, designate Colony Mill Road and Shepherd Saddle Road as bike trails.
327.	• No administrative, commercial, or private stock use.	• Encourage private and commercial recreational stock use. Accommodate sustainable stock use with improved access, trails, and primitive campgrounds, but limit party size.	• Similar to C with diverse party size, plus develop primitive equestrian campgrounds in the Sycamore and North Fork areas.
328.	• Same as the no-action alternative plus restrict trail access to a few areas to improve and protect riparian resources.	• Same as alternative A, but define and possibly harden river access points. Develop a day-use river access parking area near Potwisha.	• Same as alternative C.
329.	• Same as the no-action and preferred alternatives.	• Same as the no-action and preferred alternatives.	• Same as the no-action and preferred alternatives.
330.	• Prohibit nonmotorized watercraft.	• Same as alternative A.	• Same as the no-action and preferred alternatives.
331.	• Same as the no-action alternative.	• Same as the no-action alternative.	• Same as the no-action alternative.
332.	• Remove the Potwisha campground.	• Same as the no-action and preferred alternatives, plus interpret Native American use of the area.	• Remove the Potwisha campground to provide a site for a visitor center and picnic area.
333.	• Convert Shepherd Saddle Road to a trail and stabilize to improve resource conditions.	• Same as the preferred alternative.	• Designate the Shepherd Saddle Road as a motor nature trail to the North Fork area.
334.	• Same as the no-action and preferred alternatives.	• Develop primitive camping opportunities for bicyclists and stock users.	• Same as alternative C, plus develop an equestrian group camp near Sycamore Creek. Provide stock support at campground (hitch posts).

	Refer- ence No.	Continue Current Management (No Action) (formerly alternative B)	Preferred Alternative: Accommodate Sustainable Growth and Visitor Enjoyment, Protect Ecosystem Diversity, and Preserve Basic Character While Adapting to Changing User Groups
<i>Special Use Permits</i>			
<i>Hydroelectric Facilities</i>	335.	If authorized by the secretary of the interior, facilities may continue to operate until September 8, 2026, in accordance with the amendment of PL 99-338 and subject to permit conditions. Because no new hydroelectric infrastructure would be permitted in the national parks, the secretary of the interior may consider termination of the special use permit if catastrophic damage requiring reconstruction occurred to existing facilities.	If authorized by the secretary of the interior, facilities may continue to operate until September 8, 2026, in accordance with the amendment of PL 99-338 and subject to permit conditions. Because no new hydroelectric infrastructure would be permitted in the national parks, the secretary of the interior may consider termination of the special use permit if catastrophic damage requiring reconstruction occurred to existing facilities.
<i>Park Administration and Operations</i>			
<i>Park Functions</i>	336.	Continue overlapping administration, park operations, and residential uses.	Relocate some Ash Mountain administrative / managerial functions outside the park when beneficial. Retain some critical park management and operations in the park.
<i>Administrative Stock Facilities</i>	337.	Continue use of historic corral complex to support administrative stock operations.	Continue use of historic corral complex to support administrative stock operations.
<i>Administrative Pastures</i>	338.	Retain administrative pasture in most of area.	Decrease size of the administrative pasture to protect resources. Explore benefits of light (reduced) grazing to sustain some native plant species.
<i>Work Camps</i>	339.	No foothills work camp.	Provide a work camp at Cricket Hollow.
<i>Residential Areas</i>	340.	Retain housing in upper Ash Mountain.	Retain housing in upper Ash Mountain.
	341.	Retain trailer sites at Sycamore.	Retain Sycamore trailer sites.
	342.	Retain the Buckeye housing area.	Retain the Buckeye housing area.
<i>Water Supplies</i>	343.	React to growth / needs by seeking new water sources and providing additional storage.	In addition to actions listed in line 35, explore additional storage to increase water capacity.
<i>Wastewater Systems</i>	344.	Upgrade wastewater treatment as needed to meet requirements and to improve protection of park resources.	Upgrade wastewater treatment as needed to meet requirements and to improve protection of park resources.
<i>Other Foothills Areas</i>			
<i>North Fork of the Kaweah River</i>	345.	Maintain small parking area and trailhead with no facilities.	Construct a primitive trailhead campground for stock users and manage cooperatively with the adjacent BLM recreational lands. Provide infrastructure to support a ranger presence.

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<i>Special Use Permits</i>			
335.	• Same as the no-action and preferred alternatives.	• Same as the no-action and preferred alternatives.	• Same as the no-action and preferred alternatives.
<i>Park Administration and Operations</i>			
336.	• Relocate all Ash Mountain administrative functions outside the park.	• Retain administrative functions on site and replace as needed; separate residential, administrative, and operational functions. Provide for expanded operational functions.	• Develop a new administration building at lower Ash Mountain to consolidate staff. Provide for expanded operational functions.
337.	• Adaptively reuse historic corral building.	• Adaptively reuse historic corral building for park operations.	• Same as alternative A plus relocate NPS corrals and administrative stock pasturing outside park.
338.	• No grazing. Provide a protected foothill riparian ecosystem at Sycamore Creek for visitors to experience.	• Reduce administrative pasture to protect resources.	• No administrative use of area.
339.	• Provide a work camp.	• Same as the no-action alternative.	• Same as alternative A
340.	• Retain minimum housing necessary and locate in upper Ash Mountain.	• Same as the no-action alternative.	• Provide seasonal and required housing in upper Ash Mountain.
341.	• Remove Sycamore trailer sites.	• Same as the no-action and preferred alternatives.	• Same as alternative A.
342.	• Replace the Buckeye housing area with operations facilities.	• Same as the no-action and preferred alternatives.	• Same as alternative A.
343.	• Implement actions listed in line 35, but no increased demand expected because of reduced use.	• In addition to actions listed in line 35, seek new water sources outside the parks.	• Same as the preferred alternative.
344.	• Same as the no-action alternative.	• Same as the no-action alternative.	• Same as the no-action alternative.
<i>Other Foothills Areas</i>			
345.	• Same as the no-action alternative.	• Improve trailhead and partner to improve road.	• Construct a primitive North Fork campground for both stock users and bicyclists and manage cooperatively with the adjacent BLM recreational lands. Provide a ranger residence.

	Refer- ence No.	Continue Current Management (No Action) (formerly alternative B)	Preferred Alternative: Accommodate Sustainable Growth and Visitor Enjoyment, Protect Ecosystem Diversity, and Preserve Basic Character While Adapting to Changing User Groups
<i>North Fork of the Kaweah River (cont.)</i>	346.	• Seek to purchase the Alley property in the North Fork drainage and make a related boundary adjustment.	• Seek to purchase the Alley property in the North Fork drainage and make a related boundary adjustment.
	347.	• Retain Colony Mill Road as a trail.	• Retain Colony Mill Road as a trail.
<i>South Fork of the Kaweah River</i>	348.	• Retain the South Fork campground and trailhead at its current size.	• Retain the South Fork campground and trailhead at its current size.
	349.	• Limited stock use.	• Provide improved stock support at trailhead (hitch posts, trailer parking).
<i>Mineral King</i>			
<i>Vision</i> <i>Mineral King Valley represents an extraordinary and spectacular experience in the Sierra Nevada because of its unusual metamorphic geology and appearance.</i>	350.	<i>Mineral King Road continues to provide access to recreational cabins, a small resort, campgrounds, and the alpine backcountry. Low levels of visitor services and activities are accommodated along the corridor.</i>	<i>Mineral King Road continues to provide access to the alpine backcountry, public recreation, campgrounds, and Silver City private cabins and resort. Qualities that made the road corridor eligible for listing on the National Register of Historic Places are maintained and preserved, while the road corridor provides increased public recreational access to the alpine backcountry and historic resources. Slightly higher levels of public use are accommodated.</i>
<i>Zones</i>	351.	A low-use frontcountry corridor surrounded by backcountry , with park development (small village, limited operations and residential areas).	A mix of low- and high-use frontcountry with park development (less residential, operations, but with some village development).
<i>Cultural Resources</i>			
<i>Mineral King Road Cultural Landscape District</i>	352.	• Manage the Mineral King Road Cultural Landscape District, consisting of the road corridor and contributing elements. If any leases or permits are not renewed, record structures before removal, including some historic structures contributing to the historic landscape.	• Develop a cultural resource preservation plan for the Mineral King Road Cultural Landscape District in consultation with the state historic preservation officer and the Mineral King Preservation Society (also see line 372). • Emphasize the variety of historical themes associated with the landscape district (such as logging, mining, hydroelectric power generation, recreational cabin areas, and national park evolution).
<i>NPS Historic Structures</i>	353.	• Stabilize and preserve NPS historic facilities.	• Stabilize and preserve NPS historic facilities.
	354.	• Preserve Atwell Mill and the Alles cabin.	• Preserve Atwell Mill and the Alles cabin, plus use the Alles cabin to illustrate the conservation movement in the Mineral King area.

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346.	• Same as the no-action and preferred alternatives.	• Same as the no-action and preferred alternatives.	• Same as the no-action and preferred alternatives.
347.	• Same as the no-action and preferred alternatives.	• Same as the no-action and preferred alternatives.	• Designate Colony Mill Road as a bike trail.
348.	• Convert the South Fork campground to a trailhead with campsites.	• Same as the no-action and preferred alternatives.	• Redesign the South Fork campground for various user groups.
349.	• No stock use.	• Same as the preferred alternative.	• Same as the preferred alternative.
<i>Mineral King</i>			
350.	<i>Mineral King Road provides access to the alpine backcountry. Lower levels of visitor services and activities are accommodated along the corridor.</i>	<i>Mineral King Road continues to provide access to recreational cabins, a small resort, and the alpine backcountry. The visual character of the historic road corridor is preserved. Slightly higher levels of public use are accommodated.</i>	<i>Mineral King Road continues to provide access to recreational cabins, a small resort, campgrounds, and the alpine backcountry. Qualities that made the road corridor eligible for listing on the National Register of Historic Places are maintained and preserved, while the road corridor provides increased public recreational access to the alpine backcountry and historic resources. Slightly higher levels of public use are accommodated.</i>
351.	More backcountry and low-use frontcountry with less park development (operations and residential areas).	Same as the no-action alternative with slightly more park development (residential and limited operations) and low-use frontcountry .	A mix of low- and high-use frontcountry with park development (less residential, operations, but more village development).
<i>Cultural Resources</i>			
352.	• Same as the no-action alternative.	• Same as the preferred alternative except emphasize the theme of a recreation community.	• Same as the preferred alternative except if any leases or permits not renewed, preserve only selected examples of contributing recreation cabin structures (in consultation with the state historic preservation officer).
353.	• Same as the no-action and preferred alternatives.	• Same as the no-action and preferred alternatives.	• Same as the no-action and preferred alternatives.
354.	• Same as the no-action alternative.	• Same as the no-action alternative.	• Same as the preferred alternative.

	Refer- ence No.	Continue Current Management (No Action) (formerly alternative B)	Preferred Alternative: Accommodate Sustainable Growth and Visitor Enjoyment, Protect Ecosystem Diversity, and Preserve Basic Character While Adapting to Changing User Groups
<i>NPS Historic Structures (cont.)</i>	355.	• Moldering mining remnants may be seen.	• Moldering mining remnants may be seen.
<i>Lookout Point</i>	356.	• Preserve the historic Lookout Point residence.	• Preserve the historic Lookout Point residence.
Transportation and Circulation			
<i>Mineral King Road</i>	357.	• Maintain the road character (alignment and width) but continue to pave additional sections to reduce maintenance and resource damage. Improve road drainage to prevent erosion. Discourage RVs and trailers.	• Maintain the road character (alignment and width) but continue to pave additional sections to reduce maintenance and resource damage. Improve road drainage to prevent erosion. Limit vehicle length on the road.
<i>East Mineral King Trailhead Parking</i>	358.	• Current trailhead parking areas on private land (see "Mineral King Private Land and Special Use Permits on Park Land").	• Redesign trailheads and parking areas to improve circulation; allow minor expansion.
Visitor Use and Facilities			
<i>Educational Programs and Facilities</i>	359.	• Provide for low levels of day use and interpretation in the Atwell sequoia grove; provide a backcountry trailhead.	• Provide for higher levels of day use; provide more interpretive services and displays. Manage the Atwell sequoia grove to better interpret the logging story.
<i>Trails</i>	360.	• Retain the trail system, with major backcountry trailheads providing access to all directions.	• Retain the trail system, with major backcountry trailheads providing access to all directions.
<i>Stock Pack Station</i>	361.	• Retain the pack station at its present location.	• Relocate the pack station to improve resource conditions.
<i>Winter Use</i>	362.	• Continue current uses (road not plowed; limited parking at gate; no winter use facilities; uses include informal cross-country skiing and snowshoeing).	• Continue current uses (road not plowed; limited parking at gate; no winter use facilities; uses include informal cross-country skiing and snowshoeing).
<i>Campgrounds</i>	363.	• Maintain the Atwell Mill campground without improvements.	• Close the Atwell Mill campground to remove all campgrounds from sequoia groves and restore the area to natural grove ecology (provide more primitive camping opportunities in Mineral King Valley).
<i>(Relocate campsites >100' from river to protect river values in wild and scenic river plan.)</i>	364.	• Retain current camping levels at the Cold Spring campground.	• Expand camping in the vicinity of the Cold Spring campground and West Mineral King cabin sites. Designate a portion of the camp for groups, work groups, and volunteers.
<i>Trailhead Campsites</i>	365.	• No designated trailhead camping.	• Provide trailhead campsites for backpackers starting multiday trips.

Reference No.	A: Emphasize Natural Ecosystems and Biodiversity; Reduce Use and Development	C: Preserve Traditional Character and Retain the Feel of Yesteryear; Guide Growth	D: Preserve Basic Character and Adapt to Changing User Groups; Guide Growth
355.	• Same as the no-action and preferred alternatives.	• Same as the no-action and preferred alternatives.	• Same as the no-action and preferred alternatives.
356.	• Same as the no-action and preferred alternatives.	• Same as the no-action and preferred alternatives.	• Same as the no-action and preferred alternatives.
<i>Transportation and Circulation</i>			
357.	• Same as the no-action alternative except remove all developments and roads above West Mineral King.	• Same as the no-action alternative.	• Same as the no-action alternative
358.	• Relocate trailhead parking to limit resource impacts.	• Same as the preferred alternative.	• Expand or relocate trailhead parking and improve access to trails.
<i>Visitor Use and Facilities</i>			
359.	• Same as the no-action alternative.	• Manage the Atwell sequoia grove to better interpret the logging story.	• Provide for higher levels of day use; provide more interpretive services and displays.
360.	• Permit hiking only east of the ranger station (roads are removed) so the valley can be restored to more natural conditions.	• Same as the no-action alternative plus improve the condition of local trails and trailheads.	• Same as the no-action alternative plus improve the condition of valley trails and relocate trailheads to improve resource conditions.
361.	• Remove the pack station, no stock use in parks.	• Relocate the pack station to a more suitable location.	• Same as alternative C.
362.	• Do not facilitate winter access (limited winter use includes cross-country skiing and snowshoeing).	• Same as the no-action and preferred alternatives.	• Encourage winter activities, such as cross-country skiing, snowshoeing, camping; develop winter overnight opportunities.
363.	• Same as the preferred alternative.	• Redesign and enlarge the Atwell Mill campground while protecting grove resources.	• Same as alternative C, plus accommodate more diverse user groups.
364.	• Expand camping in the vicinity of the Cold Spring campground and West Mineral King cabin sites.	• Same as the no-action alternative.	• Same as alternative A.
365.	• Same as the preferred alternative.	• Same as the preferred alternative.	• Same as the preferred alternative.

	Refer- ence No.	Continue Current Management (No Action) (formerly alternative B)	Preferred Alternative: Accommodate Sustainable Growth and Visitor Enjoyment, Protect Ecosystem Diversity, and Preserve Basic Character While Adapting to Changing User Groups
<i>Other Services</i>	366.	• Maintain ranger station, amphitheater, restrooms, visitor parking, and small picnic area.	• Maintain ranger station, amphitheater, restrooms, visitor parking, and small picnic area.
<i>Private Land and Special Use Permits on Park Land</i>			
<i>Hydroelectric Facilities</i>	367.	• If authorized by the secretary of the interior, facilities may continue to be operated until September 8, 2026, in accordance with PL 99-338 as amended, subject to the following provisions: ◊ expansion is prohibited ◊ an independent safety assessment must be conducted and any deficiencies corrected ◊ the July 1983 report on the impact of operations on Sequoia National Park must be updated ◊ the permittee is to pay the park compensation ◊ any other reasonable terms and conditions deemed necessary and proper for the management and care of Sequoia National Park and the purposes for which it was established ◊ because no new hydroelectric infrastructure would be permitted in the national parks, consider termination of the special use permit by the secretary of the interior if catastrophic damage requiring reconstruction occurred to existing facilities	• If authorized by the secretary of the interior, facilities may continue to be operated until September 8, 2026, in accordance with PL 99-338 as amended, subject to the following provisions: ◊ expansion is prohibited ◊ an independent safety assessment must be conducted and any deficiencies corrected ◊ the July 1983 report on the impact of operations on Sequoia National Park must be updated ◊ the permittee is to pay the park compensation ◊ any other reasonable terms and conditions deemed necessary and proper for the management and care of Sequoia National Park and the purposes for which it was established ◊ because no new hydroelectric infrastructure would be permitted in the national parks, consider termination of the special use permit by the secretary of the interior if catastrophic damage requiring reconstruction occurred to existing facilities
<i>Oriole Lake Inholdings*</i>	368.	• Acquire the Oriole Lake inholdings from willing sellers and remove structures to improve resource conditions. After removal of facilities, designate as wilderness.	• Acquire the Oriole Lake inholdings from willing sellers, return to natural conditions, and provide trail access. After removal of facilities, designate as wilderness.
<i>Silver City Inholdings*</i>	369.	• Silver City includes a resort and inholdings; some additional development may occur on private property.	• Develop a partnership with the Silver City resort to provide expanded services within scenic easement constraints; inholdings and services remain. Update Land Protection Plan.
<i>Kaweah Han Inholding*</i>	370.	• Continue private ownership residence.	• Seek to acquire a scenic easement with the private owner and update the Land Protection Plan.

* Inholdings are privately owned lands within the park.

Reference No.	A: Emphasize Natural Ecosystems and Biodiversity; Reduce Use and Development	C: Preserve Traditional Character and Retain the Feel of Yesteryear; Guide Growth	D: Preserve Basic Character and Adapt to Changing User Groups; Guide Growth
366.	Remove picnic area and amphitheater. Remove all developments and roads above West Mineral King; permit only hiking east of the ranger station.	Same as the no-action and preferred alternatives.	Same as the no-action alternative, but relocate visitor contact station and parking to provide larger and more useful facilities. Provide limited food service.
<i>Private Land and Special Use Permits on Park Land</i>			
367.	Same as the no-action and preferred alternatives.	Same as the no-action and preferred alternatives.	Same as the no-action and preferred alternatives.
368.	Same as the preferred alternative.	Do not acquire the Oriole Lake inholdings; provide public access to the lake.	Acquire the Oriole Lake inholdings from willing sellers; remove facilities to improve resource conditions; provide road access; and provide a primitive picnic area and trail access.
369.	At Silver City acquire inholdings from willing sellers; restore natural resource conditions.	Allow limited expansion of facilities and services at Silver City; inholdings remain as a recreation community.	Same as the preferred alternative.
370.	Acquire from willing sellers and remove structures.	Encourage use for commercial lodging.	Acquire from willing sellers and partner with another entity to develop an education center.

	Refer- ence No.	Continue Current Management (No Action) (formerly alternative B)	Preferred Alternative: Accommodate Sustainable Growth and Visitor Enjoyment, Protect Ecosystem Diversity, and Preserve Basic Character While Adapting to Changing User Groups
<i>Valley Inholdings*</i>	371.	Acquire remaining inholdings from willing sellers; retain the trailhead parking area and facilities.	Acquire remaining inholdings from willing sellers; redesign or relocate the trailhead parking area to improve resource conditions; acquire selected historic facilities for public use.
<i>Permit Cabins**</i> <i>(In accordance with PL 108-447, any renewals or extensions of the original special use permits may be transferred to heirs, successors, and assigns. Actions are now the same under all alternatives.)</i>	372.	- Undertake a comprehensive review of existing permit terms and convert all existing permits to new, up-to-date permits within three years. Pending the development of updated permits, extend existing permits for up to three years. Issue updated permits for terms not longer than five years. Thereafter, review all cabin permits at the end of each term and consider renewing or extending the permits for an additional term not to exceed five years. Include the following conditions in the updated permits: - standard termination provisions, including those that may be triggered if the National Park Service determines that ongoing use of a cabin is incompatible with the administration of the park or that the land is needed for park purposes - requirements that cabins meet applicable health and safety codes, and provisions designed to avoid unacceptable adverse impacts to park resources - cabin appearance, utilities, self-sustaining funding to maintain the historic community appearance, interpretation of historic resources, and other issues to ensure that park resources are protected and that public use of public land is preserved - the process for NPS approval of the assignment or transfer of permits to heirs, successors, and assigns - Cabins may be acquired by the National Park Service through donation or purchase; however, partial (percentage) acquisition of a cabin could be difficult for the agency to manage. Cabins acquired in sound condition would be managed according to the "Secretary's Standards." - Develop a cultural resource preservation plan for the Mineral King Road Cultural Landscape District in consultation with the state historic preservation officer and the Mineral King Preservation Society that identifies - a viable management / maintenance strategy, including an appropriate treatment method according to the "Secretary's Standards" - measures for resource protection (e.g., addressing cabins in wetland locations or within floodplains, or actions to make non-contributing cabins more compatible with historical appearance of the cultural landscape district) - a decision process for determining whether to repair, replace, or remove cabins in the event they are damaged by natural disaster (such as a tree fall, flood, or avalanche)	
<i>Snowmobile Use</i> <i>(NPS Management Policies 2001 prohibit snowmobiles in the parks)</i>	373.	Allow snowmobiles only on the road corridor for access to private land or permit cabins.	Allow snowmobiles only on the road corridor for access to private land or permit cabins.

* Inholdings are privately owned lands within the park.

** Privately owned cabins that are permitted to remain on public land for a limited time in accordance with PL 95-625, as amended by PL 108-447 (16 USC 45f(d)(2)(b), PL 108-447, Division E, Title 1, Section 314(b)): "Any renewals or extensions of leases or permits shall be granted only to those persons who were lessees or permittees of record on November 10, 1978, and to their heirs, successors, and assigns, and any such lease or permit shall provide that the lease or permit may be terminated by the Secretary [of the Interior] at any time if the Secretary determines that such lease or permit is incompatible with the administration of the park pursuant to this section or that the land is needed for park purposes."

Reference No.	A: Emphasize Natural Ecosystems and Biodiversity; Reduce Use and Development	C: Preserve Traditional Character and Retain the Feel of Yesteryear; Guide Growth	D: Preserve Basic Character and Adapt to Changing User Groups; Guide Growth
371.	Acquire remaining inholdings from willing sellers; remove facilities and the trailhead parking area to improve resource conditions.	Acquire remaining inholdings from willing sellers; redesign the trailhead parking area to improve resource conditions; and maintain historic facilities.	Same as the preferred alternative.
372.	Same as the no-action and preferred alternatives.		
373.	No snowmobiles.	Same as the no-action and preferred alternatives.	Similar to no-action and preferred alternatives except only for access to private inholdings.

	Refer- ence No.	Continue Current Management (No Action) (formerly alternative B)	Preferred Alternative: Accommodate Sustainable Growth and Visitor Enjoyment, Protect Ecosystem Diversity, and Preserve Basic Character While Adapting to Changing User Groups
Park Administration and Operations			
<i>Ranger Station</i>	374.	Retain the Mineral King Valley ranger station.	Improve the Mineral King Valley ranger station to better meet public needs.
<i>Residential Areas</i>	375.	Retain existing staff housing at Atwell Mill and the NPS site near Silver City.	Relocate some existing staff housing at Atwell Mill to the NPS site near Silver City. Improve employee housing.
<i>Work Camps</i>	376.	Maintain staff camp near NPS housing near Silver City.	Designate area / group camp within an enlarged campground at Cold Spring.
<i>Water Supply</i>	377.	- React to growth or additional demand by more efficient use of existing supply. - Continue memorandum of agreement with the West Mineral King Water and Improvement Association for the operation and joint use of the water system.	- In addition to actions listed in line 35, in water studies assess the impacts of water use by private owners (Silver City, Kaweah Han) and by special use permittees in three areas of Mineral King. - Continue memorandum of agreement with the West Mineral King Water and Improvement Association for the operation and joint use of the water system.
<i>Wastewater</i>	378.	Assess wastewater treatment feasibility for all areas. Upgrade public use areas to meet state standards.	Assess wastewater treatment feasibility for all areas. Upgrade public use areas to meet state standards.
<i>Utilities</i>	379.	No electrical service provided. Small solar system at the ranger station for operations.	No electrical service provided. Small solar system at the ranger station for operations.
Dillonwood			
<i>Interim Vision</i> <i>Dillonwood, a previously logged sequoia grove contiguous with Garfield Grove in Sequoia National Park, was added to the park in 2000. Long-term use will be defined through site-specific planning.</i>	380.	<i>Dillonwood is open to pedestrian use. There are experiments with a variety of sequoia forest management techniques.</i>	<i>The sequoia grove is protected, and modest use levels are accommodated. Dillonwood provides backcountry access through a sequoia grove. Day use is allowed. There are experiments with a variety of sequoia forest management techniques that are compatible with the NPS mission.</i>
Zones	381.	Primarily park operations .	Primarily low-use frontcountry with some backcountry .
Natural Resources	382.	Monitor and maintain giant sequoia grove forest health.	Develop a long-term resources plan. Monitor and enhance giant sequoia grove health. Use as an education and research area. Pursue cooperation with research / educational facilities and use as a remote field site.

Reference No.	A: Emphasize Natural Ecosystems and Biodiversity; Reduce Use and Development	C: Preserve Traditional Character and Retain the Feel of Yesteryear; Guide Growth	D: Preserve Basic Character and Adapt to Changing User Groups; Guide Growth
<i>Park Administration and Operations</i>			
374.	• Same as the no-action alternative.	• Same as the no-action alternative..	• Move the ranger station to a location where it can be expanded.
375.	• Same as the no-action alternative.	• Same as the no-action alternative.	• Same as the no-action alternative but add new employee and concession housing area near Cold Spring.
376.	• Same as the preferred alternative.	• No work camps.	• Same as the preferred alternative.
377.	• Implement actions listed in line 35; no increased demand expected because of reduced use.	• Same as the preferred alternative.	• Same as the preferred alternative.
378.	• Same as the no-action alternative, but reduced use should mitigate the need to upgrade wastewater systems.	• Same as the no-action and preferred alternatives.	• Same as the no-action and preferred alternatives.
379.	• Same as the no-action and preferred alternatives.	• Same as the no-action and preferred alternatives.	• Same as the no-action and preferred alternatives.
<i>Dillonwood</i>			
380.	<i>The sequoia grove is protected, and low use levels are accommodated.</i>	<i>Dillonwood provides primitive camping facilities and backcountry access within a sequoia grove.</i>	<i>Same as alternative C, plus a group education primitive area is provided, and day use exploration is allowed. There are experiments with a variety of sequoia forest management techniques.</i>
381.	More backcountry .	Primarily low-use frontcountry with some backcountry .	Primarily low-use frontcountry .
382.	• Same as the no-action alternative.	• Same as the no-action alternative.	• Same as the no-action alternative plus use as education and research area. Pursue cooperation with University of California as a remote field site.

	Refer- ence No.	Continue Current Management (No Action) (formerly alternative B)	Preferred Alternative: Accommodate Sustainable Growth and Visitor Enjoyment, Protect Ecosystem Diversity, and Preserve Basic Character While Adapting to Changing User Groups
<i>Cultural Resources</i>	383.	• Evaluate structures and facilities.	• Evaluate structures and facilities.
<i>Road Access</i>	384.	• Coordinate with the U.S. Forest Service to maintain administrative road access.	• Partner with the U.S. Forest Service and others to maintain road access. Determine future public road access through long-term planning.
<i>Trails and Trailheads</i>	385.	• No trail system connection to park or Giant Sequoia National Monument.	• Establish trail connections to Hockett Plateau and Giant Sequoia National Monument.
	386.	• No trailhead provided.	• Provide trailhead suitable for foot and stock use.
<i>Visitor Facilities</i>	387.	• Assess condition of buildings.	• Determine facilities needed for visitor use, research, and educational purposes through long-term planning.
<i>Education and Orientation</i>	388.	• No facilities or education provided	• Define needs for orientation and education.
	389.	• Begin to work with the U.S. Forest Service to provide orientation and education.	• Explore partnership opportunities with the U.S. Forest Service for orientation and education.
<i>Stock Use</i>	390.	• No current use.	• Provide stock support at trailhead (hitch posts, trailer parking).
<i>Camping</i>	391.	• No camping facilities.	• Assess camping need and feasibility through long-term planning. Assess partnership opportunities with the U.S. Forest Service to provide camping facilities.
	392.	• No trailhead camping.	• Assess trailhead camping through long-term planning.
<i>Residential Areas</i>	393.	• No housing provided.	• Assess need for staff housing in long-term planning.
<i>Utilities</i>	394.	• Determine need for facilities and develop minimum utilities necessary.	• Determine need for facilities and develop minimum utilities necessary.

Reference No.	A: Emphasize Natural Ecosystems and Biodiversity; Reduce Use and Development	C: Preserve Traditional Character and Retain the Feel of Yesteryear; Guide Growth	D: Preserve Basic Character and Adapt to Changing User Groups; Guide Growth
383.	• Same as the no-action and preferred alternatives.	• Same as the no-action and preferred alternatives.	• Same as the no-action and preferred alternatives.
384.	• Remove most roads. Allow limited visitor access, but no vehicular access. Partner to develop parking area at gate.	• Upgrade road access and continue road access to cabin. Open to public.	• Upgrade road access and open to public.
385.	• Convert some roads to trails.	• Improve trail connections to Hockett Plateau.	• Same as the preferred alternative.
386.	• Develop trailhead near gate.	• Provide trailhead with stock support.	• Same as alternative C.
387.	• Remove facilities.	• Same as the no-action alternative.	• Provide facilities for picnicking and educational purposes.
388.	• Same as the no-action alternative.	• Same as the preferred alternative.	• Same as the preferred alternative.
389.	• Same as the no-action alternative.	• Same as the no-action alternative.	• Same as the preferred alternative.
390.	• No stock use.	• Same as the preferred alternative.	• Same as the preferred alternative.
391.	• Allow backcountry camping.	• Provide horse camp.	• Same as alternative C plus provide a primitive group campground.
392.	• Same as the no-action alternative.	• Same as the no-action alternative.	• Provide a trailhead campground.
393.	• No housing provided.	• Provide housing for staff.	• Same as alternative C.
394.	• Same as the no-action alternative.	• Same as the no-action alternative.	• Same as the no-action alternative.

Summary of the Environmental Consequences of the Alternatives

NOTE: No park resources or values related to the natural or cultural environment, or to wild and scenic rivers or wilderness areas, would be impaired under any alternative.

Impact Topic	Continue Current Management (No Action) (formerly alternative B)	Preferred Alternative: Accommodate Sustainable Growth and Visitor Enjoyment, Protect Ecosystem Diversity, and Preserve Basic Character While Adapting to Changing User Groups
<i>Natural Resources</i>		
<i>Cave Resources</i>	At Crystal Cave limiting use and pursuing existing management programs to control impacts would not result in any additional long-term impacts, which would remain negligible. A few caves could sustain localized negligible to minor, adverse, long-term impacts from limited recreational use. Most of the parks' other caves, including those with particularly sensitive resources, would remain unaffected.	The preferred alternative would provide a high degree of protection for the vast majority of high-quality caves in the parks, with a standard of visitor use for the others that would ensure protection of their natural integrity. Most caves, including those with particularly sensitive resources, would remain unaffected. Limiting use and undertaking management programs to control impacts would continue in Crystal Cave, and any additional long-term impacts would be negligible. In other caves where limited recreational use was allowed, impacts would be localized, negligible to minor, and long term.
<i>Water Resources</i>	No additional impacts are expected from the continued operation of small-scale hydroelectric facilities on the Marble and Middle Forks of the Kaweah River and four small dams in Mineral King that feed the East Fork of the Kaweah. Requiring Mineral King permit cabin owners to meet state and local wastewater regulations would result in minor, beneficial, long-term effects.	
	Alternative A would have minor to moderate, beneficial effects as a result of removing and redesigning facilities. Continued use and development, along with increased visitation, would have minor to possibly moderate adverse, long-term, localized impacts on water quality, hydrologic processes, and biological communities.	The preferred alternative would result in minor to moderate beneficial effects to water quality, the free-flowing condition of the South Fork of the Kings River, floodplains, and biological communities. Contributing factors include no increased water withdrawals, better located and designed trails and river access points, improved backcountry conditions, and redesigned or relocated facilities. Minor, adverse, short-term, site-specific impacts would occur because of construction activities.

A: Emphasize Natural Ecosystems and Biodiversity; Reduce Use and Development	C: Preserve Traditional Character and Retain the Feel of Yesteryear; Guide Growth	D: Preserve Basic Character and Adapt to Changing User Groups; Guide Growth
<i>Natural Resources</i>		
Impacts would be similar to the no-action alternative except in other caves where use would be restricted to specialists, impacts would be reduced compared to the no-action alternative and would be localized, negligible to minor, and long term.	Impacts would be similar to the no-action alternative for Crystal Cave.. Providing guided public tours of additional caves would increase the potential for adverse impacts, but a careful selection process would ensure that only the more resilient caves (those with less sensitive or unique features and fauna) would be candidates for tours, resulting in minor, long-term impacts. Most of the parks' other caves, including those with particularly sensitive resources, would remain unaffected. Impacts from limited recreational use, including guided tours, would be negligible to minor, long term, and adverse.	Same as alternative C.
Same as the no-action and preferred alternatives.		
Alternative A would result in minor to moderate, long-term, beneficial effects on water quality, floodplains, biological communities, and hydrological processes as a result of removing facilities and reducing high use areas near streams or lakes. Adverse impacts from limited new development and facility removal would be minor and short term.	Alternative C would result in minor, beneficial effects on water quality, the free-flowing condition of the South Fork of the Kings River, and biological communities as a result of providing better located and designed trails and river access points, expanded shuttle systems, and less concentrated backcountry use. Increased use and development would have minor, adverse, long-term, localized impacts on water quality and biological habitat. Minor, short-term, site-specific impacts would occur from construction activities. Minor, incremental adverse effects to the natural hydrology and biological communities of some streams would occur due to increased water diversions.	Similar to alternative C except increased frontcountry use and development and more concentrated backcountry use would have minor, long-term, localized adverse impacts on water quality and biological habitat.

Impact Topic	Continue Current Management (No Action) (formerly alternative B)	Preferred Alternative: Accommodate Sustainable Growth and Visitor Enjoyment, Protect Ecosystem Diversity, and Preserve Basic Character While Adapting to Changing User Groups
<i>Vegetation and Soils</i>	The no-action alternative would continue to have negligible to possibly moderate, adverse, long-term, localized impacts on vegetation and soils, primarily in existing areas of concentrated use and development.	Limiting backcountry use to improve resource conditions would result in minor to moderate, beneficial long-term, localized effects. The construction and use of new facilities would result in minor, adverse, short- and long-term, site-specific impacts. The development zone would increase by 142 acres, an 8% increase compared to the no-action alternative.
<i>Giant Sequoia Groves</i>	Giant sequoia groves would continue to be managed as integral to the ecosystem. Grove conditions within some high-use groves would continue to be manipulated or altered to maintain specimen trees or to accommodate visitor use and facilities but would not result in additional impacts. Impacts associated with future visitor use increases would be mitigated to the extent possible; impacts would be negligible to minor, localized, long term, and adverse. Present water withdrawals at Atwell Mill, Redwood Mountain, and Grant Grove may be contributing to moisture stress within sequoia groves in affected drainages; however, there is no direct evidence of impacts at present. Water consumption is relatively low at Atwell Mill and Redwood Mountain, and it is not expected to change under this alternative. More day use at Grant Grove would raise annual water consumption; but water management and conservation should preclude higher summer water withdrawals, with no additional impacts.	Giant sequoia groves would continue to be managed as integral to the ecosystem. Not allowing development zones in sequoia groves would improve resource conditions. Not increasing peak-season water withdrawals at Grant Grove, and implementing additional conservation measures to reduce withdrawals, could result in beneficial effects, depending on the extent to which withdrawals were decreased. Other actions under the preferred alternative should not result in any additional impacts on sequoia groves. Manipulating or altering grove conditions at Big Stump to maintain site-specific conditions related to historic logging and to accommodate increased visitor use, along with limited new facilities in some groves, would result in negligible to minor, localized, adverse impacts, with intensive visitor management and other measures used to minimize impacts.

A: Emphasize Natural Ecosystems and Biodiversity; Reduce Use and Development	C: Preserve Traditional Character and Retain the Feel of Yesteryear; Guide Growth	D: Preserve Basic Character and Adapt to Changing User Groups; Guide Growth
Alternative A would result in minor to moderate, long-term, localized, beneficial effects from a reduction in use and development within the parks. The development zone would be reduced by 435 acres (25%) compared to the no-action alternative. Facility removal and limited new development would result in minor to moderate, adverse, short-term impacts.	Some negligible to minor, long-term, beneficial impacts would occur as a result of improving the frontcountry trail system. Reducing the extent of high-use backcountry areas would result in minor to moderate, localized, long-term benefits. New facilities, as well as increased frontcountry use and dispersed backcountry use, would result in minor, site-specific, long-term impacts. The development zone would increase by 241 acres, or 14%, compared to the no-action alternative.	Constructing new facilities, including trails, would have negligible to minor, site-specific, long-term impacts; however, constructing a Grant Grove bypass road (if allowed) could have moderate impacts, depending on site-specific conditions and project design. Concentrating use and allowing higher backcountry use levels would result in an incremental increase in minor, long-term, localized impacts (e.g., compaction, erosion, trampling, loss of vegetation), primarily in new high-use areas. Adding a high Sierra camp in the Hockett Plateau area could result in moderate impacts as use increased. Designating a few trails for hikers only should reduce impacts associated with stock use to a negligible to minor level. The development zone would increase by 388 acres, or 22%, compared to the no-action alternative.
Giant sequoia groves would continue to be managed as integral to the ecosystem. Alternative A would have localized negligible to minor benefits on the General Grant and Atwell Mill Groves because use and the amount of facilities would be reduced, resulting in less withdrawal of surface and subsurface water. Reductions could be substantial due to the removal of overnight facilities, which use approximately 75% more water than day facilities. Reducing impacts to grove hydrology and potential contributions to moisture stress on Grant Grove, sequoia groves south of Grant Grove, and Atwell Mill Grove would be a long-term benefit.	Impacts would be similar to the no-action alternative except localized manipulation or alteration of grove conditions at Big Stump to maintain conditions related to historic logging, along with limited new facilities within some groves to accommodate increased visitor use, would result in minor, adverse impacts. Increased visitor use and development at Grant Grove and Atwell Mill would increase water consumption. Because of the uncertainty of water withdrawal impacts on giant sequoia systems, no increased peak-season withdrawals would occur, and if new water sources had to be sought outside the parks, studies would be needed to ensure that there would be no adverse effects on other sequoia groves. With mitigating measures and no peak-season increased water consumption at Grant Grove, alternative C should not result in any additional impacts.	Similar to alternative C.

Impact Topic	Continue Current Management (No Action) (formerly alternative B)	Preferred Alternative: Accommodate Sustainable Growth and Visitor Enjoyment, Protect Ecosystem Diversity, and Preserve Basic Character While Adapting to Changing User Groups
<i>Giant Sequoia Groves (cont.)</i>	Because of the uncertainty of the impacts on giant sequoia systems, no increased water withdrawals would occur until future studies had been completed and a monitoring program implemented to determine potential impacts. Water system modifications or other mitigating measures to reduce or eliminate potential impacts would be studied.	
<i>Meadow / Riparian / Aquatic Communities</i>	Continued and slightly increased use and facility development would have minor to moderate, adverse, long-term effects on meadows, riparian, and aquatic communities, primarily in developed areas, around popular lakes and streams, at stream crossings, and below water withdrawal diversions. Removing some facilities would have minor to moderate adverse, short-term impacts.	Impacts to meadows, riparian areas, and aquatic communities in localized areas would be minor to moderate, beneficial, and long term, primarily at Lodgepole, Cedar Grove, and Ash Mountain, and where resource conditions were improved in the backcountry. The preferred alternative would also result in localized minor, long-term, adverse impacts such as vegetation trampling due to increased use in some areas. Facility removal would have minor to moderate, adverse, short-term impacts.
<i>Wildlife and Wildlife Habitat</i>	Wildlife populations and habitat would continue to be influenced to varying degrees by existing facilities and visitor use that affect natural movements of wildlife, habitat, and food sources. Increased use would have negligible to minor, adverse, long-term impacts. Impacts would be related to more visitor use displacing or disturbing wildlife, conflicts with animals associating humans with food, and the injury or loss of wildlife from motor vehicle collisions.	Improving the frontcountry trail system would have negligible to minor, beneficial, long-term impacts to wildlife habitat. Limiting backcountry use where necessary for resource protection would result in localized minor to moderate benefits. Constructing new facilities, increasing frontcountry and winter use, and dispersing backcountry use would increase the potential for conflicts between humans and wildlife. Impacts would range from wildlife learning to associate humans with food sources (leading to more interactions) to injury or loss of wildlife from motor vehicle collisions. Impacts would be negligible to minor, localized, and long term.
<i>Threatened, Endangered, or Sensitive Species</i>	The no-action alternative would have no effect or would not be likely to adversely affect any special status species. If impacts were expected, mitigating measures would be taken as necessary in consultation with the U.S. Fish and Wildlife Service.	The preferred alternative would have no effect or would not be likely to adversely affect any special status species. Mitigation in consultation with the U.S. Fish and Wildlife Service would be implemented as necessary.

A: Emphasize Natural Ecosystems and Biodiversity; Reduce Use and Development	C: Preserve Traditional Character and Retain the Feel of Yesteryear; Guide Growth	D: Preserve Basic Character and Adapt to Changing User Groups; Guide Growth
Alternative A would result in minor to moderate, long-term, localized beneficial impacts to meadows, riparian areas, and aquatic communities, primarily in developed areas, around popular lakes, at streams and stream crossings, and below water withdrawal points. Facility removal would have minor to moderate, adverse impacts over the short term.	Alternative C would result in minor to moderate, beneficial, long-term impacts to meadows, riparian areas, and aquatic communities in some areas, primarily at Lodgepole, Cedar Grove, and Ash Mountain and in the backcountry where use was dispersed. Also, the potential of irreversible impacts to some heavily grazed meadows could be reduced, which would be a major, long-term benefit. However, alternative C would also result in minor to moderate, adverse, long-term impacts due to incremental increases in water diversions and increased dispersal of visitors in the backcountry.	Alternative D would result in minor, long-term, benefits to meadows, riparian areas, and aquatic communities in some areas, primarily in the Lodgepole, Cedar Grove, and Ash Mountain developed areas. Alternative D would result in localized, long-term, minor, adverse impacts where river access points were developed in currently unaffected locations. Minor, adverse, long-term impacts would also result from greater use in high-use backcountry areas and from an incremental increase in water diversions.
Alternative A would result in minor to moderate, long-term, beneficial impacts as a result of reduced use and fewer facilities, and minor, long-term, adverse impacts from the construction of limited new concession developments.	Similar to the preferred alternative. The construction and use of new facilities, more frontcountry and winter use, and the dispersal of backcountry use would result in an increased potential for conflicts between humans and wildlife. Reducing the extent of high-use backcountry areas would result in minor to moderate, localized, long-term benefits.	New facilities, increased frontcountry use, high-use backcountry corridors, and winter use, as well as an increased potential for interactions between people and wildlife seeking food, and injury or loss of wildlife from motor vehicle collisions, would all result in localized, negligible to minor, long-term impacts. Constructing a Grant Grove bypass (if allowed) would have minor to moderate adverse impacts. Designating river access points would reduce localized impacts and increase opportunities for habitat restoration, particularly riparian habitat, a minor benefit.
Impacts would be similar to the no-action alternative except there could be beneficial impacts on some special status species because of reduced development and use.	Impacts would be the same as the no-action alternative.	Impacts would be the same as the no-action alternative.

Impact Topic	Continue Current Management (No Action) (formerly alternative B)	Preferred Alternative: Accommodate Sustainable Growth and Visitor Enjoyment, Protect Ecosystem Diversity, and Preserve Basic Character While Adapting to Changing User Groups
<i>Air Quality</i>	Proposed actions within the parks would not increase levels of stationary source emissions above conformity <i>de minimis</i> values (50–100 tons/ year). Smoke emissions from the parks' managed wildland fires over the next 10 years have been included in the San Joaquin Valley's State Implementation Plan. Despite increased park traffic projections under the no-action alternative, automobile-related emissions are expected to decrease by 2010, primarily as a result of decreases in fleetwide average emission factors. Adverse emission impacts within the parks would range from negligible to moderate.	Proposed actions within the parks would not increase levels of stationary source emissions above conformity <i>de minimis</i> values, the same as the no-action alternative. Smoke emissions from the parks' managed wildland fires over the next 10 years have been included in the San Joaquin Valley's State Implementation Plan. Despite increased park visitor traffic projections, automobile-related emissions are expected to decrease by 2010, primarily as a result of lower fleetwide average emissions. By 2010 adverse vehicle emission impacts within the parks would range from negligible to moderate, with no change from the no-action alternative.
<i>Wild and Scenic Rivers</i>		
<i>Hydroelectric Facilities (common to all alternatives)</i>	The continued operation of small-scale hydroelectric facilities on the Marble and Middle Forks of the Kaweah River, and of four small dams in Mineral King that feed the East Fork of the Kaweah, is expected to have minor, adverse impacts on flows but would not preclude the inclusion of these segments in the wild and scenic rivers system, since they remain "generally natural and riverine in appearance." Impacts on scenic values are expected to be moderate, adverse, and long term because facilities are visible intrusions on the natural scene. Recreational activities have occurred along the access routes, resulting in moderate, beneficial impacts.	
<i>Impacts on Outstandingly Remarkable Values</i>	While unregulated river access in some frontcountry areas would continue, the overall impact on designated and eligible river segments and their outstandingly remarkable values would be minor, beneficial, and long term due to improved facilities as well as facilities being relocated out of floodplains.	With controlled river access and improved facilities, designated and eligible wild and scenic river segments would be more protected, ensuring the preservation of outstandingly remarkable values. This would result in minor to moderate, beneficial, long-term impacts. Visitor use in localized areas would continue to result in minor, adverse, long-term impacts on outstandingly remarkable values.

A: Emphasize Natural Ecosystems and Biodiversity; Reduce Use and Development	C: Preserve Traditional Character and Retain the Feel of Yesteryear; Guide Growth	D: Preserve Basic Character and Adapt to Changing User Groups; Guide Growth
Similar to the no-action alternative except park visitor traffic projections are expected to decrease by 10%.	Similar to the preferred alternative.	Similar to the preferred alternative except automobile emission projections would be higher, although adverse vehicle emission impacts would still range from negligible to moderate.
<i>Wild and Scenic Rivers</i>		
Same as the no-action and preferred alternatives.		
Impacts would be the same as the no-action alternative.	With controlled river access and improved facilities, designated and eligible wild and scenic river segments would be protected, and their outstandingly remarkable values preserved, resulting in minor to moderate, beneficial, long-term impacts.	Impacts would be the same as the preferred alternative.

Impact Topic	Continue Current Management (No Action) (formerly alternative B)	Preferred Alternative: Accommodate Sustainable Growth and Visitor Enjoyment, Protect Ecosystem Diversity, and Preserve Basic Character While Adapting to Changing User Groups
<i>Backcountry / Wilderness</i>		
<i>Backcountry / Wilderness</i>	The no-action alternative would continue current management of designated wilderness and nonwilderness backcountry areas, with negligible, beneficial, long-term impacts. Nonwilderness backcountry areas would continue to be managed to preserve wilderness characteristics. Some visitors might be unaware of the wilderness designation.	A very small additional amount of park land would be compatible and consistent with management as wilderness under the preferred alternative, which would protect ecosystem diversity, preserve park character, and accommodate sustainable growth. Primarily as a result of improving education about wilderness values, the preferred alternative would have negligible to minor, beneficial, long-term impacts on wilderness values and recreational opportunities. At the same time, potentially expanding the popular backcountry high Sierra tent-hotel concept would result in a negligible, adverse, long-term impact.
<i>Cultural Resources</i>		
<i>Historic Structures, Districts, and Cultural Landscapes</i>	The impacts of preserving facilities associated with the Kaweah no. 3 hydroelectric generation system would be minor, beneficial, and long term. A cultural resource preservation plan for private cabins on public land in the Mineral King Valley would define actions for management, maintenance, and resource protection, as well as a decision process for determining whether to replace cabins damaged by natural disaster, resulting in minor to moderate, long-term, beneficial impacts because the cultural landscape district, as well as contributing historic resources, would be preserved.	
	The no-action alternative would result in minor to moderate, beneficial, long-term impacts on historic structures, districts, and landscapes that would be preserved and adaptively used by the National Park Service for interpretive purposes or park operations.	The preferred alternative would preserve cultural resources that portray the parks' diverse cultural themes, with minor to moderate, beneficial, long-term effects for these properties. Removing some historic structures would generally have moderate to major, adverse, permanent effects.

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<i>Backcountry / Wilderness</i>		
Reducing use and development could create a park environment slightly more attuned to wilderness values. Similar to the no-action alternative, over 96% of the parks would be designated wilderness or would be compatible with management as wilderness. Minor, beneficial, long-term impacts on wilderness values and recreation would result from reduced park visitation, management of slightly over 300 additional acres as compatible with wilderness, and increased education.	Like the other alternatives, over 96% of the parks would be managed as designated wilderness or would be compatible with management as wilderness. Negligible, adverse, long-term impacts on wilderness characteristics would result from reducing the amount of compatible area by 32 acres. Traditional ranger programs are not likely to reach or inspire many backcountry users, resulting in negligible, adverse, long-term impacts on wilderness values and recreational opportunities.	About 89.5% of the parks would be managed as designated wilderness or as compatible with wilderness. A slight decrease in areas compatible with wilderness would be consistent with guided growth and adaptation to changing users under this alternative, while retaining the basic park character. Increased visitor education on resource protection and stewardship, as well as teaching backcountry skills, could make visitors more aware of wilderness designation and values. However, more concentrated use by larger groups would result in negligible to moderate, adverse, and long-term impacts on wilderness values.
<i>Cultural Resources</i>		
Same as the no-action and preferred alternatives.		
Alternative A would result in minor to moderate, beneficial, long-term impacts on historic structures, districts, and landscapes that would be preserved and adaptively used by the National Park Service for interpretive purposes or park operations. However, preserving only key cultural resources and removing others, or allowing them to deteriorate, would generally have moderate to major, adverse, long-term to permanent impacts.	This alternative would provide for the preservation of more historic structures, districts, and landscapes than under any of the other alternatives, and impacts would be generally minor to moderate, beneficial, and long term. However, removing some historic structures and elements of historic landscapes, along with the deterioration of others, would have moderate to major, adverse, permanent impacts.	Under alternative D preserving a full spectrum of cultural resources that portray diverse park themes would result in generally minor to moderate, beneficial, long-term impacts.

Impact Topic	Continue Current Management (No Action) (formerly alternative B)	Preferred Alternative: Accommodate Sustainable Growth and Visitor Enjoyment, Protect Ecosystem Diversity, and Preserve Basic Character While Adapting to Changing User Groups
<i>Archeological Resources</i>	Potential impacts to archeological resources associated with the removal of historic structures would be adverse, minor to moderate in intensity, and permanent. Known archeological resources would be avoided to the greatest extent possible during the construction of picnic areas and the rehabilitation of parking areas and trails. If national register eligible or listed archeological resources could not be avoided, any adverse impacts would be minor to moderate in intensity and long term or permanent in duration. Long-term, potential impacts to archeological sites from visitor use would be adverse but negligible to minor in intensity. Potential impacts to archeological resources resulting from stock use and erosion would be negligible to minor in intensity, adverse, and long term or permanent.	Potential impacts to archeological resources associated with the removal of historic structures would be adverse, minor to moderate in intensity, and permanent. Known archeological resources would be avoided to the greatest extent possible during the undergrounding of utilities, the construction of picnic areas, the rehabilitation of parking areas and trails, and the upgrading of visitor facilities. If archeological resources eligible for or listed on the national register could not be avoided, any adverse impacts would be minor to moderate in intensity and long term or permanent in duration. Long-term, potential impacts to archeological sites from visitor use would be adverse but negligible to minor in intensity. Potential impacts to archeological resources from stock use and erosion could be negligible to minor in intensity, adverse, and long term or permanent.
<i>Ethnographic Resources and Landscapes</i>	The continuing impacts of visitors interrupting or distracting traditional American Indian practitioners would be minor, adverse, and long term. The extent to which knowledge was shared by American Indians with park staff about indigenous plants would lead to better resource management of certain plants and plant areas as ethnographic resources, resulting in minor, beneficial, long-term impacts.	The continuing impacts of visitors interrupting or distracting traditional American Indian practitioners would be minor, adverse, and long term, the same as the no-action alternative. If American Indians shared knowledge about indigenous plants with park staff, certain plants and plant areas could be managed as ethnographic resources, resulting in minor, beneficial, long-term impacts.
<i>Museum Collections and Archives</i>	Museum collections and archives would continue to be safe and secure. Over the life of this management plan, however, part of the museum collections and archives would likely have to be moved to other park facilities. Moving artifacts, specimens, and documents would have minor, adverse, short-term impacts. The impact of having additional curatorial and storage space that met museum standards would be moderate, beneficial, and long term.	The parks' museum collections and archives would be expanded and improved, meeting state-of-the-art museum standards and resulting in a moderate, beneficial, long-term impact.

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Impacts would be similar to the no-action alternative; known archeological resources would be avoided to the greatest extent possible during the rehabilitation of parking areas and the removal of trails or campgrounds.	Impacts would be the same as the preferred alternative.	Impacts would be similar to the preferred alternative except construction would include three proposed visitor centers (Wye, Potwisha, and Cedar Grove), a bypass road around Grant Grove, and a gasoline station.
Impacts would be similar to the no-action alternative except removing the Potwisha campground would result in negligible, long-term impacts on access to ethnographic resources. Providing a demolition staging area could result in some minor, adverse, short-term impacts by temporarily obstructing access to ethnographic resources.	Impacts would be the same as the no-action alternative.	Impacts would be similar to the no-action alternative except under alternative D there would be negligible, adverse, long-term impacts on access to ethnographic resources as a result of locating a visitor center in a previously disturbed area across the road from the Potwisha campground. The visitor center could cause minor, adverse, short-term impacts on access to ethnographic resources.
Impacts would be the same as the no-action alternative.	Impacts would be the same as the preferred alternative.	Impacts would be the same as the preferred alternative.

Impact Topic	Continue Current Management (No Action) (formerly alternative B)	Preferred Alternative: Accommodate Sustainable Growth and Visitor Enjoyment, Protect Ecosystem Diversity, and Preserve Basic Character While Adapting to Changing User Groups
<i>Transportation</i>		
<i>Transportation</i>	Traffic is projected to increase by 23% by 2010. There would be a negligible, adverse, peak-season impact on transportation carrying capacity in the Cedar Grove area. Impacts at Wuksachi / Lodgepole / Wolverton (potential parking constraints should be compensated for by the Giant Forest transit system), Ash Mountain, and Mineral King would be negligible and year-round; impacts in the other activity areas examined (North Fork, Colony Mill Road, South Fork, and Dillonwood) would be negligible. There would be a moderate adverse impact on transportation carrying capacity in the Grant Grove / Big Stump area during peak seasons, with severe parking capacity shortages at Grant Tree and Grant Grove village, and extensive summer congestion for inbound traffic at the Big Stump entrance station.	Traffic is projected to increase by 30% by 2010. The preferred alternative would have a negligible, peak-season impact on transportation carrying capacity in the Cedar Grove area and a minor, beneficial impact in the Grant Grove / Big Stump area in peak seasons as a result of relocating the entrance station and making circulation and parking improvements. The preferred alternative would have negligible, year-round impacts on carrying capacity in the Wuksachi / Lodgepole / Wolverton area, Ash Mountain, and Mineral King. In other activity areas (North Fork, Colony Mill Road, South Fork, and Dillonwood) impacts would be minor and beneficial.
<i>Visitor Experience</i>		
<i>Park Character, Visitation, Educational Opportunities, Recreational Opportunities, Visitor Services</i>	The Mineral King dams are classified as a significant hazard should they fail (NPS 1992b), particularly to the East Mineral King cabins and the Cold Spring campground. With updated mitigation plans and mitigation funding, long-term impacts to public health and safety are expected to be negligible and adverse, while impacts related to continued recreational activities along the access routes would be moderate and beneficial. At the same time, the visual intrusion of structures used for hydro-electric power generation would result in moderate, adverse, long-term impacts on scenic values.	

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<i>Transportation</i>		
Traffic is projected to decrease by 10% by 2010. Alternative A would have a negligible, year-round impact on transportation carrying capacity in the Cedar Grove area. Overall, alternative A would have a moderate beneficial impact on transportation carrying capacity in the Grant Grove / Big Stump area during peak seasons by improving the entrance station capacity and reducing overall use in the area. In the Wuksachi / Lodgepole / Wolverton area impacts on transportation carrying capacity in peak seasons would be negligible. Reducing overall use would result in minor, beneficial, year-round impacts on transportation carrying capacity in the Ash Mountain area, the Mineral King area, and other areas (North Fork / Colony Mill Road, South Fork, and Dillonwood) by reducing overall use.	Traffic is projected to increase by 30% by 2010, the same as the preferred alternative. Alternative C would have a negligible, year-round impact on transportation carrying capacity in the Cedar Grove area, the Wuksachi / Lodgepole / Wolverton area, and the Mineral King area because daily traffic capacity would not be changed. There would be a moderate, beneficial impact in the Grant Grove / Big Stump area in peak seasons as a result of improving the capacity of the entrance station and the Grant Grove parking areas and implementing a local transit service. Alternative C would have a minor, beneficial impact on transportation carrying capacity in the Ash Mountain area during peak seasons as a result of increasing parking and establishing an employee shuttle. Improving road access to North Fork and Dillonwood would result in minor, beneficial impacts.	Traffic is projected to increase by 48% by 2010. Alternative D would have a major, beneficial, impact on transportation carrying capacity in the Grant Grove / Big Stump area in peak seasons as a result of a bypass road (if allowed), additional parking capacity, transit parking near the Wye, and transit service to activity areas. In the Wuksachi / Lodgepole / Wolverton area alternative D would have a moderate beneficial impact on transportation carrying capacity in peak seasons as a result of the substantial increase in parking capacity for the transit system. Alternative D would have a negligible impact on transportation carrying capacity in the Cedar Grove area in peak seasons, as well as at North Fork, South Fork, and Dillonwood. Impacts in the Ash Mountain area would be minor, beneficial, and year-round since the new visitor center would increase parking capacity; transit service use would probably be relatively limited. Impacts in the Mineral King area would be negligible and year-round.
<i>Visitor Experience</i>		
Same as the no-action and preferred alternatives.		

Impact Topic	Continue Current Management (No Action) (formerly alternative B)	Preferred Alternative: Accommodate Sustainable Growth and Visitor Enjoyment, Protect Ecosystem Diversity, and Preserve Basic Character While Adapting to Changing User Groups
<i>Visitor Experience (cont.)</i>	Continuing current management practices and policies would maintain visitors' present experiences, with some change as facilities were replaced. Crowding would persist in some areas, trails would continue to deteriorate, and educational opportunities would remain inadequate. Transit would be limited to Giant Forest, and bicycling would continue to be mixed with traffic on park roads. At the same time, gradual improvements of existing facilities would continue to occur in all areas of the parks, as would the planned expansion of concession facilities and new facilities at Giant Forest. Despite minor to moderate, beneficial, long-term impacts on visitors from gradually improving facilities and continued opportunities, traffic congestion in the most popular areas would generally result in moderate, adverse, long-term impacts.	The preferred alternative would enhance visitor recreational and educational opportunities to enjoy and understand the parks while retaining their basic character and accommodating some growth in visitation. Limited facility expansion and redesign would offer visitors more choice and convenience, while improving access to park resources. Taken together, the actions in the preferred alternative would have moderate to major, beneficial, long-term impacts on experiences for all visitors. The following actions would specifically contribute to the beneficial impacts: • improved diverse and comprehensive visitor orientation and educational programs, upgraded educational facilities, more ranger naturalist programs, focus on park values and learning outdoor skills, and expanded outreach • redesigned and more efficient visitor circulation systems, including transit • improved trail systems • more choices in lodging • facility improvements — a new visitor center and bike routes at Cedar Grove; improved visitor center, historic museum and redesigned circulation at Grant Grove; new facilities at Giant Forest; improved Ash Mountain visitor center, with added bicycling, hiking and camping opportunities in the foothills • enhanced ability to meet the needs of diverse visitor groups and increased accessibility to park resources by disabled visitors

A: Emphasize Natural Ecosystems and Biodiversity; Reduce Use and Development	C: Preserve Traditional Character and Retain the Feel of Yesteryear; Guide Growth	D: Preserve Basic Character and Adapt to Changing User Groups; Guide Growth
Since the focus of alternative A is to reduce use and development, the general impact on visitor experiences would be moderate, long term, and adverse. New facilities at Giant Forest would improve education, park experiences, and accessibility for physically disabled visitors. But on the whole, the parks would be less convenient and offer less choice, more restrictions, a loss of traditional activities, and fewer facilities to a limited number of visitors.	Compared to the no-action alternative, alternative C would provide improved visitor opportunities, characterized by moderate, beneficial impacts over the long term. The differences from the preferred alternative include fewer day use facilities, in-park educational programs focused on ranger naturalist programs, and the elimination of an outreach program. The actions in alternative C that would generally contribute to moderate, beneficial, long-term impacts on visitor experiences include: • new educational facilities at Giant Forest, Cedar Grove, and Ash Mountain • expanded ranger naturalist programs • a limited, voluntary shuttle system • improved campgrounds, frontcountry trails, and bicycling opportunities • more lodging	Alternative D would generally have moderate to major, beneficial, long-term impacts on visitor experiences. The expansion of facilities would offer choices and convenience, while improving access to park resources. There could be a minor adverse impact on basic activities as a result of accommodating new activities, but these activities would have to relate to park resources. The following actions would specifically contribute to the beneficial impact: • a redesigned and more efficient circulation system • a larger, improved trail system • a maximized transit system • more choices in lodging • a new visitor center and bike routes at Cedar Grove • a relocated visitor center and bypass at Grant Grove • new facilities at Giant Forest • a new foothills visitor center • added bicycling, hiking, and camping opportunities • improved and diversified educational programs (including more ranger naturalist programs, as well as a focus on park values and learning outdoor skills), and increased accessibility to park resources by disabled visitors

Impact Topic	Continue Current Management (No Action) (formerly alternative B)	Preferred Alternative: Accommodate Sustainable Growth and Visitor Enjoyment, Protect Ecosystem Diversity, and Preserve Basic Character While Adapting to Changing User Groups
<i>Private Land and Special Use Permits on Park Land</i>		
<i>Hydroelectric Facilities</i>	Impacts of special use permits for hydroelectric utilities on public land are expected to be moderate, adverse, and long term, primarily as a result of visual intrusions on the natural setting.	
<i>Special Use Permit Cabins</i>	Impacts due to private use of public land would be major, adverse, and long term, despite the minor to moderate, beneficial impact resulting from the preservation of the cabin community and requirements to meet permit conditions, because the general public would still not have access to public land.	
<i>Private Land, Special Use Permits, Boundary Adjustments</i>	The no-action alternative would generally result in minor, beneficial, long-term impacts on public use and ownership of national park lands. These actions would allow slight increases in the public use of public lands. This impact would result from acquiring ownership of limited amounts of private land within and outside the parks from willing sellers to increase resource protection in some areas and public access in others. Private use of private land would be continued at Wilsonia and Silver City.	The preferred alternative would result in minor, beneficial, long-term impacts because public use of public land would be increased by acquiring a small amount of private land in and around the parks to increase public access, while generally allowing private use of private land at Wilsonia and Silver City to continue.
<i>Park Management, Operations, and Facilities</i>		
<i>Hydroelectric Facilities</i>	There would be no additional impacts on park operations from continued private operation.	
<i>Special Use Permit Cabins</i>	There would be no additional impacts on park operations from requiring permit cabin owners to meet state and local standards for utility systems. Continuing the present partnership with the Mineral King special use permit community to develop maintenance standards and to establish and maintain a water system in West Mineral King for cabins and the NPS ranger station would result in moderate, beneficial, long-term impacts.	
<i>Staffing, Infrastructure, Visitor Facilities, and Services; Operations of Non-NPS Entities, Operations of Other Federal Agencies</i>	Gradually replacing facilities with more sustainable and efficient ones would result in moderate, beneficial, long-term impacts. Impacts from the continued use of stock, helicopters, and snowmobiles for park operations would be negligible and beneficial. Generally impacts on park operations would be minor to moderate, adverse, and long term, primarily due to an aging infrastructure, inadequate housing, and insufficient staffing. Assistance from other groups (the natural history association, volunteers, concessioners, commercial or incidental business permit holders, and partners) would have minor to major, beneficial impacts.	The preferred alternative would generally have moderate, beneficial impacts on park operations because of improved infrastructure and more sustainable facilities over the long term. Impacts from the continued use of stock, helicopters, and snowmobiles for park operations would be negligible and beneficial. Impacts on park operations from the assistance of other groups would be minor to major and beneficial. Adverse impacts of additional park and concession staffing on housing demand would be moderate, adverse, and long term.

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<i>Private Land and Special Use Permits on Park Land</i>		
Same as the no-action and preferred alternatives.		
Same as the no-action and preferred alternatives.		
Reducing use and development would substantially increase public ownership of private land in the parks. Use of special use permit cabins would continue in accordance with law and NPS policies. All private uses and private land inside the parks would eventually be acquired and the areas returned to natural conditions, resulting in moderate to major, beneficial, long-term impacts on public ownership and use of the parks. At the same time reduced opportunities for recreational use would result in moderate, adverse, long-term impacts.	Same as the preferred alternative.	Alternative D would result in minor, beneficial, long-term impacts from acquiring a small amount of private land in and around the parks to increase public access. Private use of private land would be continued at Wilsonia and Silver City.
<i>Park Management, Operations, and Facilities</i>		
Same as the no-action and preferred alternatives.		
Same as the no-action and preferred alternatives.		
Alternative A would have major, adverse, long-term impacts on park operations as a result of reduced staff and eliminating the use of stock, helicopters, and snowmobiles for administrative purposes. Impacts on park operations from the assistance of other groups — the natural history association, volunteers, concessioners, commercial or incidental business permit holders, and partners — would be minor to major and beneficial. Generally there would be moderate to major, adverse, long-term impacts on other entities from either reduced use or the acquisition and removal of privately owned land or structures.	Overall, alternative C would generally have moderate, beneficial, long-term impacts on park operations as a result of expanded staffing and improved facilities. There would be negligible, beneficial impacts from the continued use of stock, helicopters, and snowmobiles for park operations. Impacts on park operations from the assistance of other groups — the natural history association, volunteers, concessioners, commercial or incidental business permit holders, and partners — would be minor to major and beneficial.	Alternative D would generally have moderate to major, beneficial impacts on park operations over the long term as a result of improved facilities and increased park staffing. There would be negligible, beneficial impacts from the continued use of stock, helicopters, and snowmobiles for park operations. Impacts on park operations from the assistance of other groups — the natural history association, volunteers, concessioners, commercial or incidental business permit holders, and partners — would be minor to major and beneficial. Impacts as a result of housing shortages would be moderate, adverse, and long term.

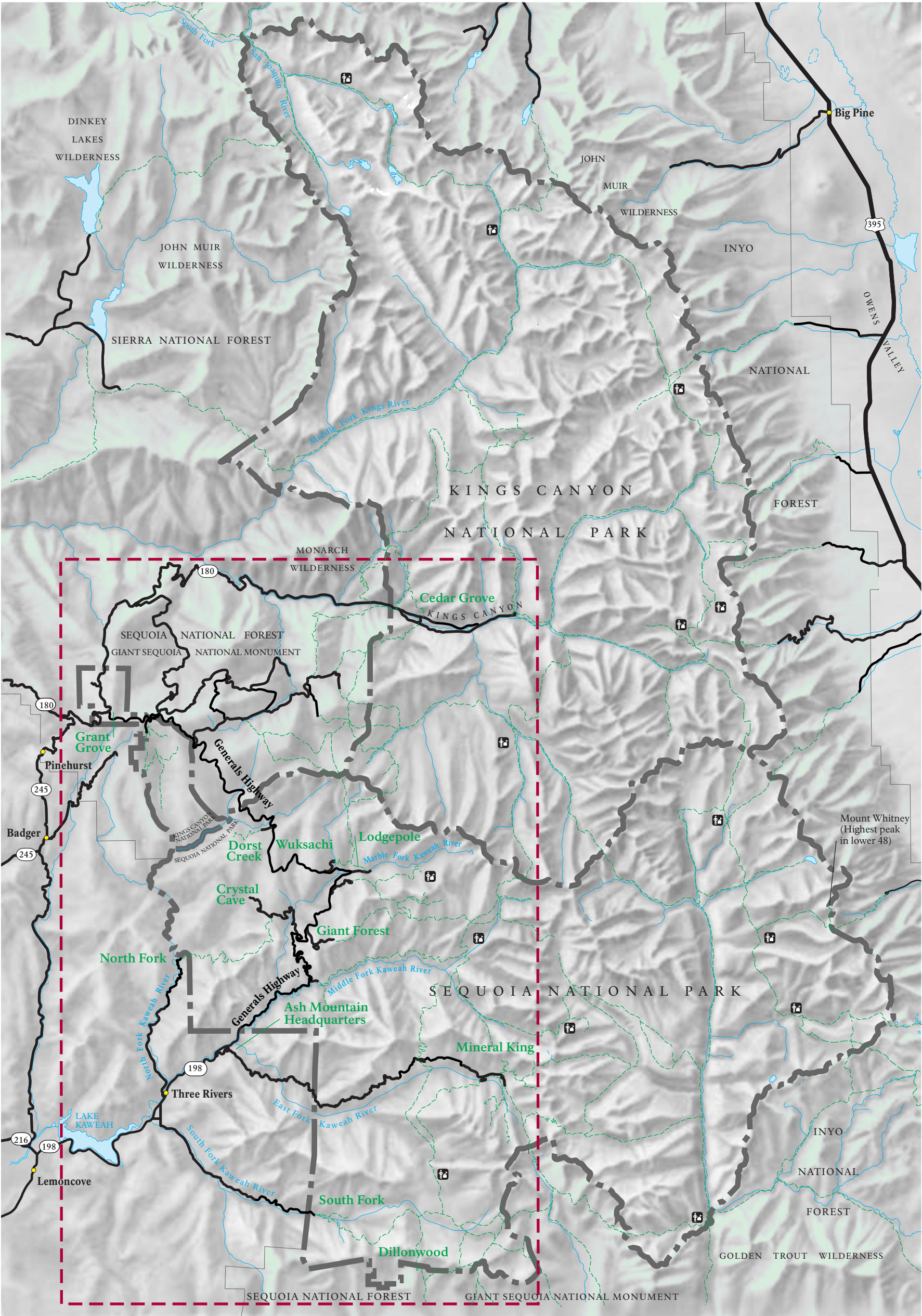
Impact Topic	Continue Current Management (No Action) (formerly alternative B)	Preferred Alternative: Accommodate Sustainable Growth and Visitor Enjoyment, Protect Ecosystem Diversity, and Preserve Basic Character While Adapting to Changing User Groups
<i>Socioeconomic Environment</i>		
<i>Hydroelectric Facilities</i>	Impacts from the continued operation of hydroelectric facilities are expected to be minor to moderate, beneficial, and long term as a result of compensation to the park.	
<i>Special Use Permit Cabins</i>	Special use permits for private cabins in the Mineral King Valley would result in on-going annual fee income to the park, plus property taxes to Tulare County. Impacts would be negligible to minor, beneficial, and long term.	
<i>Regional and Local Economy</i>	Approved projects that would be funded under the no-action alternative would amount to about \$125 million. These projects would be phased over a number of years, so impacts on individual firms and employees could be moderate to major and beneficial over the short term, but impacts on the regional economy would be negligible. The current range and level of impacts on adjacent communities due to tourist spending would continue to be beneficial, providing income, employment, and business opportunities to the affected area's economy.	Approximately \$144 million would be spent on projects over the life of the plan, an increase of \$19 million compared to the no-action alternative. Expenditures could result in moderate to major, short-term, beneficial impacts to individual firms and employees because of increased business and profits, more employment opportunities, and higher income. Overall regional economic impacts would be negligible because of the economy's size and the phasing of projects over the next 15 to 20 years. Projects would encourage more visitation to the parks, with beneficial effects on adjacent communities in terms of increased visitor expenditures for locally provided goods and services. Moving administrative functions and park employee housing outside the parks would result in the purchase or long-term lease of land and the construction of buildings in local gateway areas, with short-term, beneficial impacts on the local economy, mostly the construction sector.
<i>Private Lands</i>	The acquisition of private lands within the parks on a willing-seller / willing-buyer basis would benefit the general public because additional resources within the parks would be protected and available for public access.	The acquisition of private land within the parks on a willing-selling / willing-buyer basis, as well as the expiration of special use permits, would have negligible, long-term impacts on the property tax bases and revenue of both Fresno and Tulare counties.

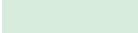
A: Emphasize Natural Ecosystems and Biodiversity; Reduce Use and Development	C: Preserve Traditional Character and Retain the Feel of Yesteryear; Guide Growth	D: Preserve Basic Character and Adapt to Changing User Groups; Guide Growth
<i>Socioeconomic Environment</i>		
Same as the no-action and preferred alternatives.		
Same as the no-action and preferred alternatives.		
Based on expenditures of \$126.6 million for restoration and other projects (an increase of only \$1.6 million over the no-action alternative), impacts on individual firms and individuals would be moderate to major, short term, and beneficial. The projects would be accomplished in phases over the next 15 to 20 years. Impacts on the economies of gateway communities would most likely be minor to moderate and beneficial over the long term, but benefits to the regional economy would be negligible. Whether these effects were beneficial or adverse would depend on whether the public's demand for facilities and services removed from the parks were supplied by the private sector in adjacent areas.	An estimated \$159.5 million would be spent over the life of the plan to construct various projects, an increase of \$34.5 million compared to the no-action alternative. Benefits for individual firms and employees in the construction industry would be moderate to major, short term, and beneficial. Impacts on the regional economy would be negligible because of the size of the projects, which would be phased over the next 15 to 20 years.	Approximately \$250.6 million would be spent over the life of the plan on various projects, an increase of \$125.6 million compared to the no-action alternative. While impacts on individual firms and employees in the construction industry could be moderate to major, beneficial, and short term, impacts on the regional economy would be negligible and beneficial because of the size projects, which would be phased over the next 15 to 20 years. These projects would encourage greater visitation to the parks, with beneficial effects on adjacent communities, particularly for firms along the access corridors; impacts would be minor to moderate and beneficial over the long term.
The impact of acquiring private land within the parks on a willing-seller / willing-buyer basis would be the same as the no-action alternative except more owners could be affected. Both counties would experience negligible, long-term decreases in their respective property tax bases and revenue.	The acquisition of private lands within the parks on a willing-selling / willing-buyer basis, as well as the expiration of special use permits, would have negligible, long-term impacts on the property tax bases and revenue of both Fresno and Tulare counties.	Local property taxes from special use permits and the acquisition of private lands within the parks on a willing-seller / willing-buyer basis would result in negligible, adverse, long-term impacts on property tax bases of both Fresno and Tulare counties.

Impact Topic	Continue Current Management (No Action) (formerly alternative B)	Preferred Alternative: Accommodate Sustainable Growth and Visitor Enjoyment, Protect Ecosystem Diversity, and Preserve Basic Character While Adapting to Changing User Groups
<i>Park Concessioners</i>	Current impacts relating to concessioners would continue, with negligible changes in short- or long-term effects on their business operations.	There would be some additional moderate, beneficial impacts over the long term for concessioners and other businesses within the parks due to the expansion of facilities and increased visitor use.
<i>Park Staffing and Budget</i>	The parks' staff levels and base budget would not change under the no-action alternative other than as a result of adjustments for inflation and rising labor and materials costs.	An increase in park staffing levels by 37.6 full-time employees and 41.7 seasonal employees, along with a substantial budget increase, would have a moderate, beneficial impact on the local gateway communities' economies because staff would likely purchase many goods and services locally. The impact on the regional economy, however, would be negligible, but beneficial.

A: Emphasize Natural Ecosystems and Biodiversity; Reduce Use and Development	C: Preserve Traditional Character and Retain the Feel of Yesteryear; Guide Growth	D: Preserve Basic Character and Adapt to Changing User Groups; Guide Growth
Some concessioners and their employees, and commercial stock users and their employees would experience long-term, moderate to major, adverse impacts with the loss of business and jobs. Over the long term, these firms and individuals would find other commercial and employment opportunities within the region, resulting in negligible impacts. The public could look to the private sector within the gateway communities to provide services no longer offered in the parks.	Park concessioners would benefit over the long term as a result of a growth in visitor services. Effects would be negligible.	Impacts on park concessioners and other businesses would be beneficial over the long term as a result of providing additional visitor services.
Park staffing increases of 5.7 permanent employees and 6.3 seasonal employees, and a small increase in the parks' budget, would have negligible, beneficial, long-term impacts on the local and regional economies because of the small increase in jobs.	An increase in park staffing levels by 37.6 permanent employees and 41.7 seasonal employees, along with a substantial rise in the parks' budget, would have a minor, beneficial, long-term impact on the local economy but a negligible impact on the regional economy.	Park staffing levels would increase by 65.6 permanent employees and 72.8 seasonal employees, the most of any alternative. The parks' budget would have to increase the most of any alternative, but with minor, beneficial impacts on the local economy and negligible, beneficial impacts on the regional economy.

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-  Ranger Station
-  Park Boundary
-  National Forest Areas
-  Roads
-  Designated Area Shown for Alternatives
-  Trails
-  Water

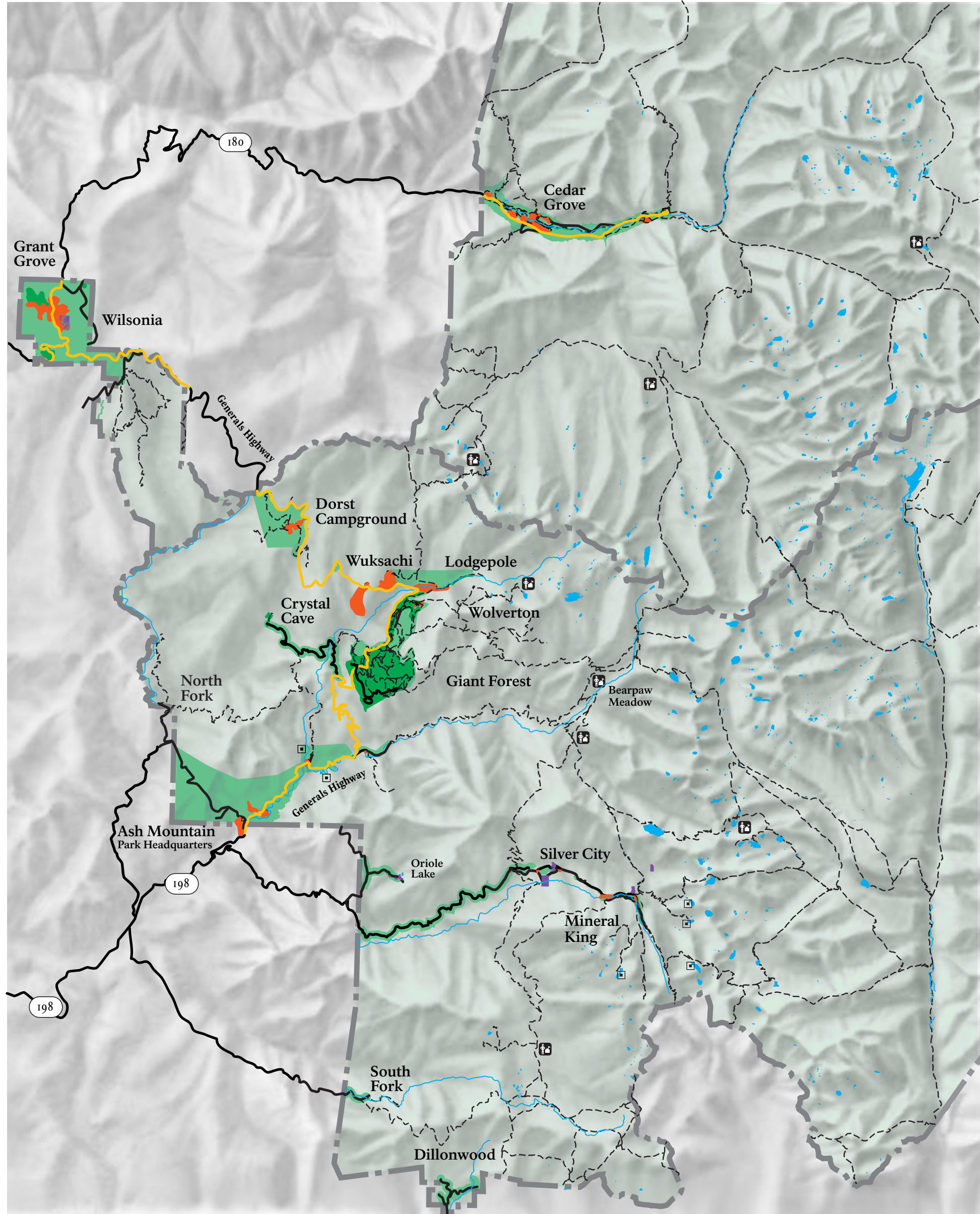


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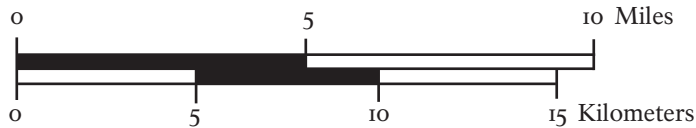
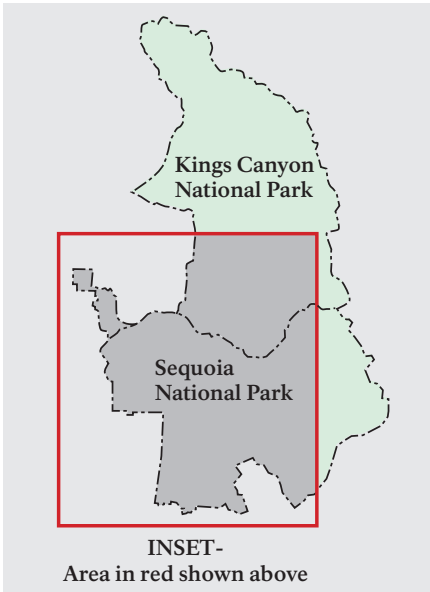
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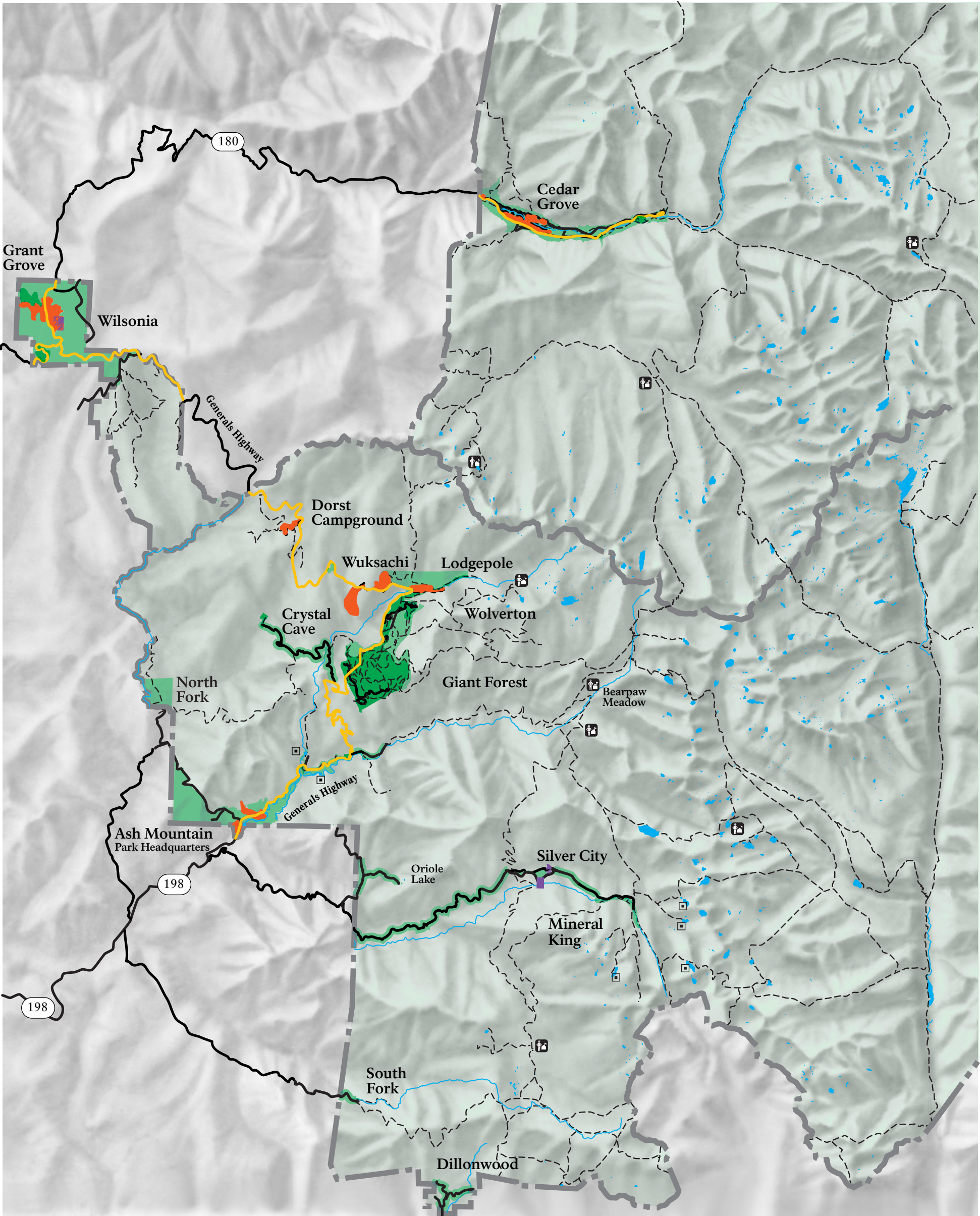
- Park Boundaries
 - Lakes, Rivers and Streams
 - - - Trails
 - Roads
 - Private Property
 - 👤 Backcountry Ranger Stations
 - Hydroelectric Utility Dams
- Management Prescriptions / Zones**
- High Use Scenic Driving (Road corridor)
 - Development
 - High Use Frontcountry
 - Low Use Frontcountry*
 - Backcountry

* Low Use Frontcountry areas adjacent to roads enlarged for visibility



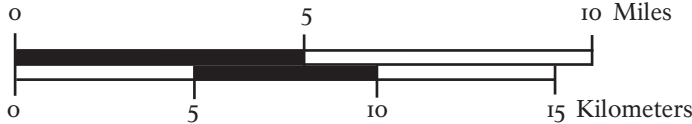
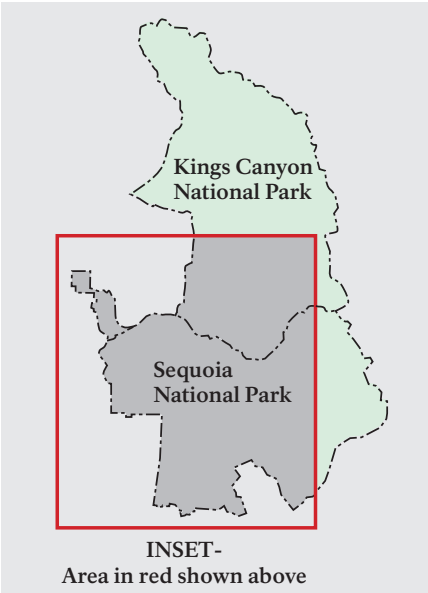
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- Park Boundaries
 - Lakes, Rivers and Streams
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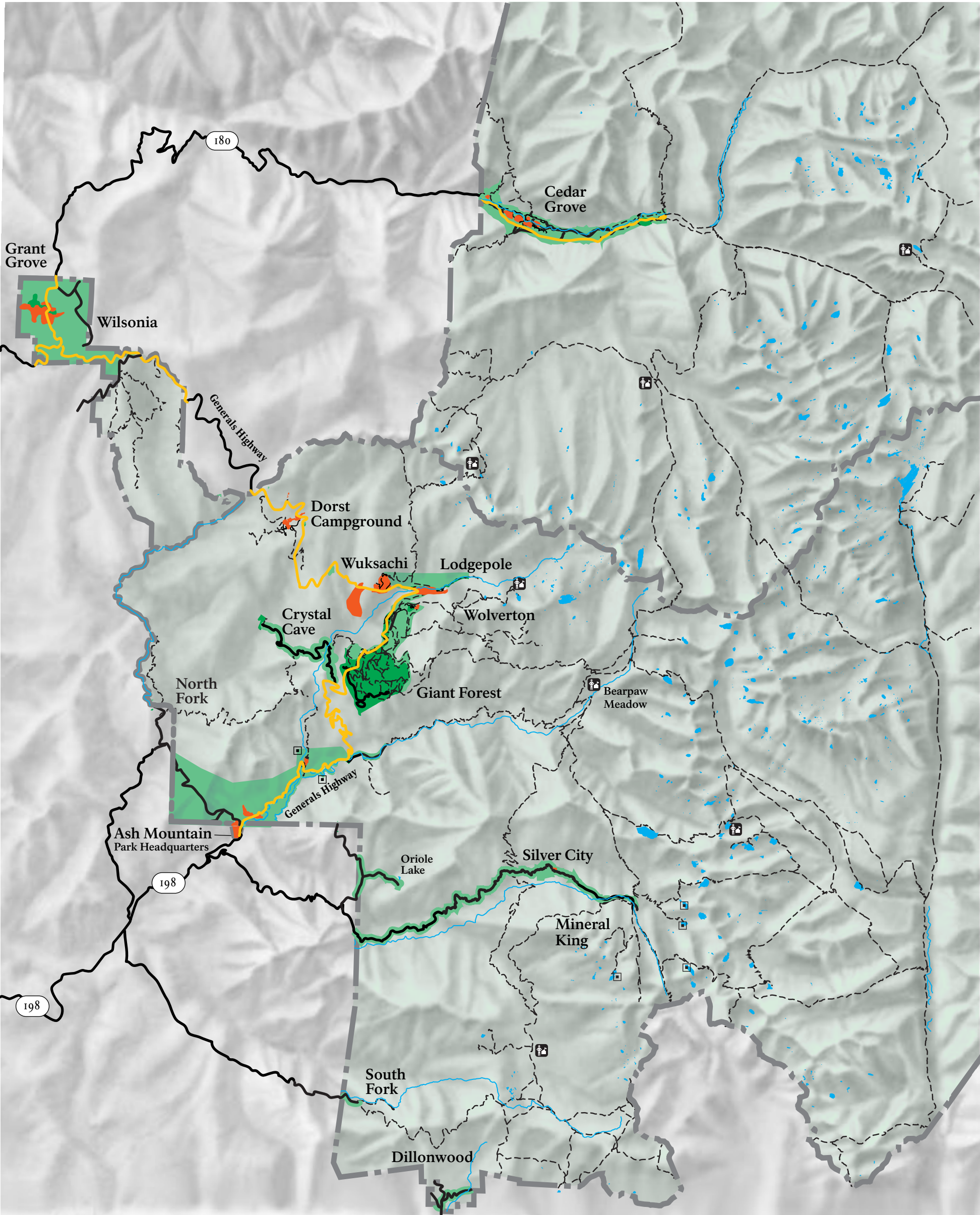


PREFERRED ALTERNATIVE

Sequoia & Kings Canyon National Park

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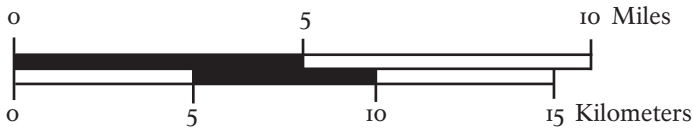
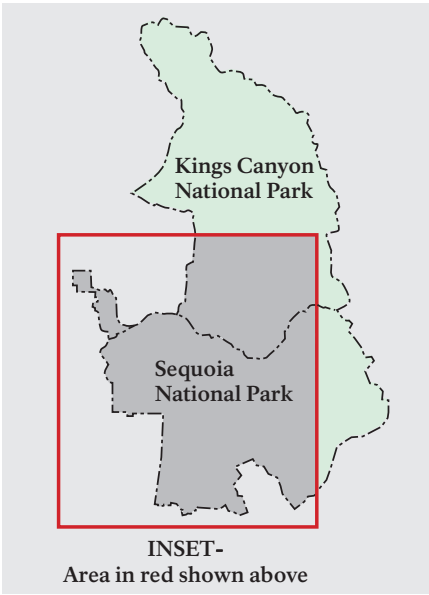
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- Park Boundaries
- Lakes, Rivers and Streams
- - - Trails
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- 👤 Backcountry Ranger Stations
- ▣ Hydroelectric Utility Dams

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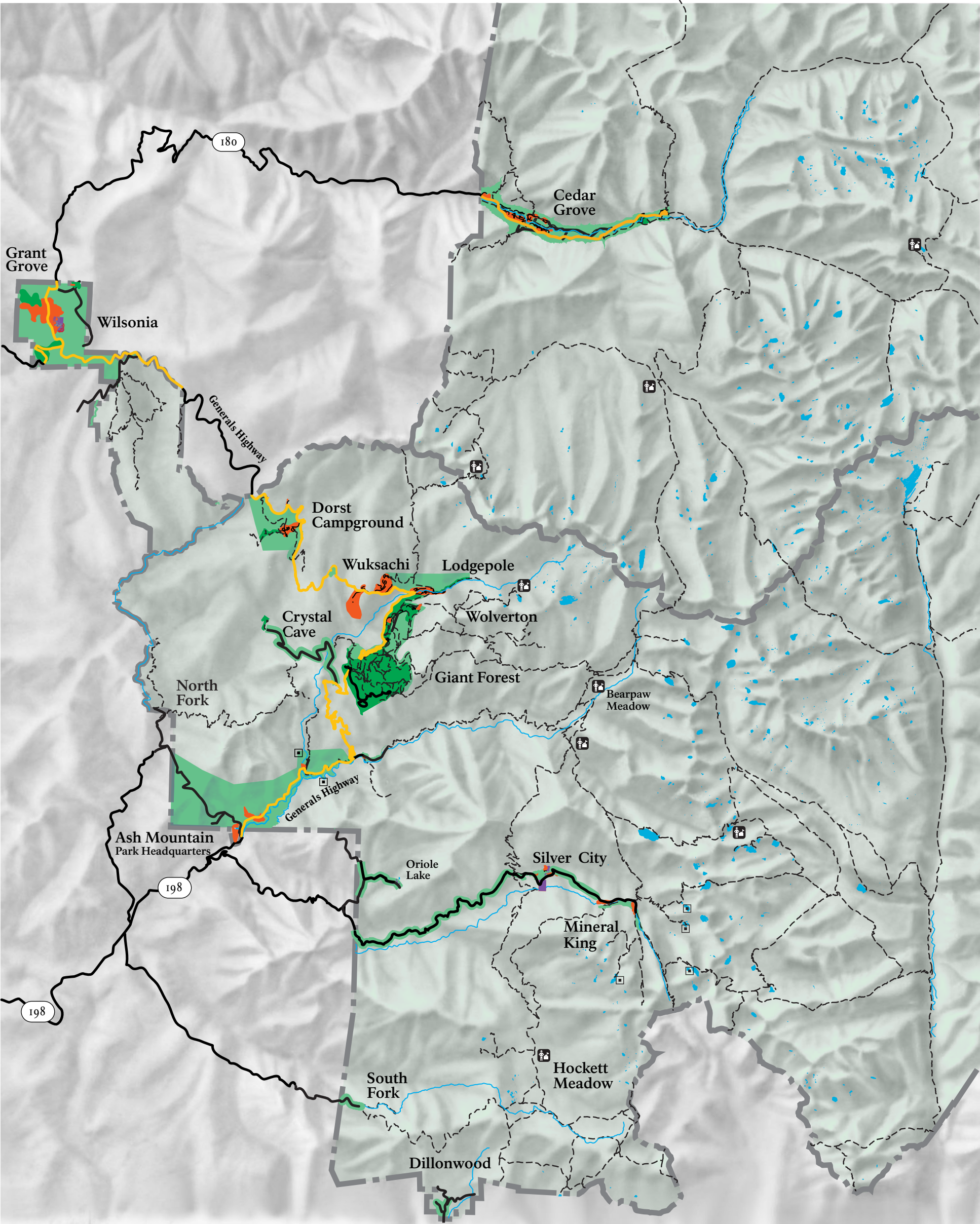
* Low Use Frontcountry areas adjacent to roads enlarged for visibility



ALTERNATIVE A

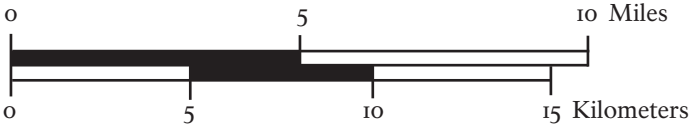
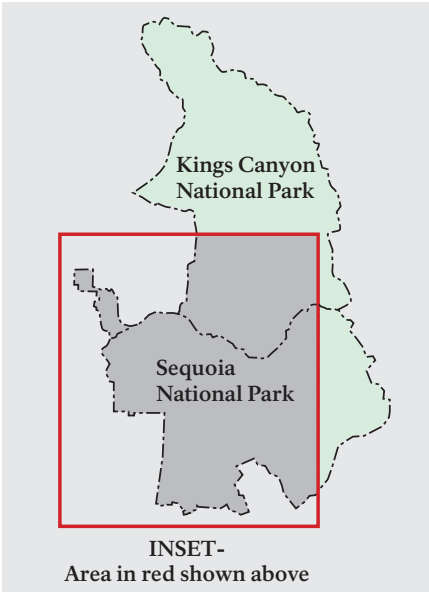
Sequoia & Kings Canyon National Parks

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- Park Boundaries
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 - Roads
 - Private Property
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 - Hydroelectric Utility Dams
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 - High Use Frontcountry
 - Low Use Frontcountry*
 - Backcountry

* Low Use Frontcountry areas adjacent to roads enlarged for visibility

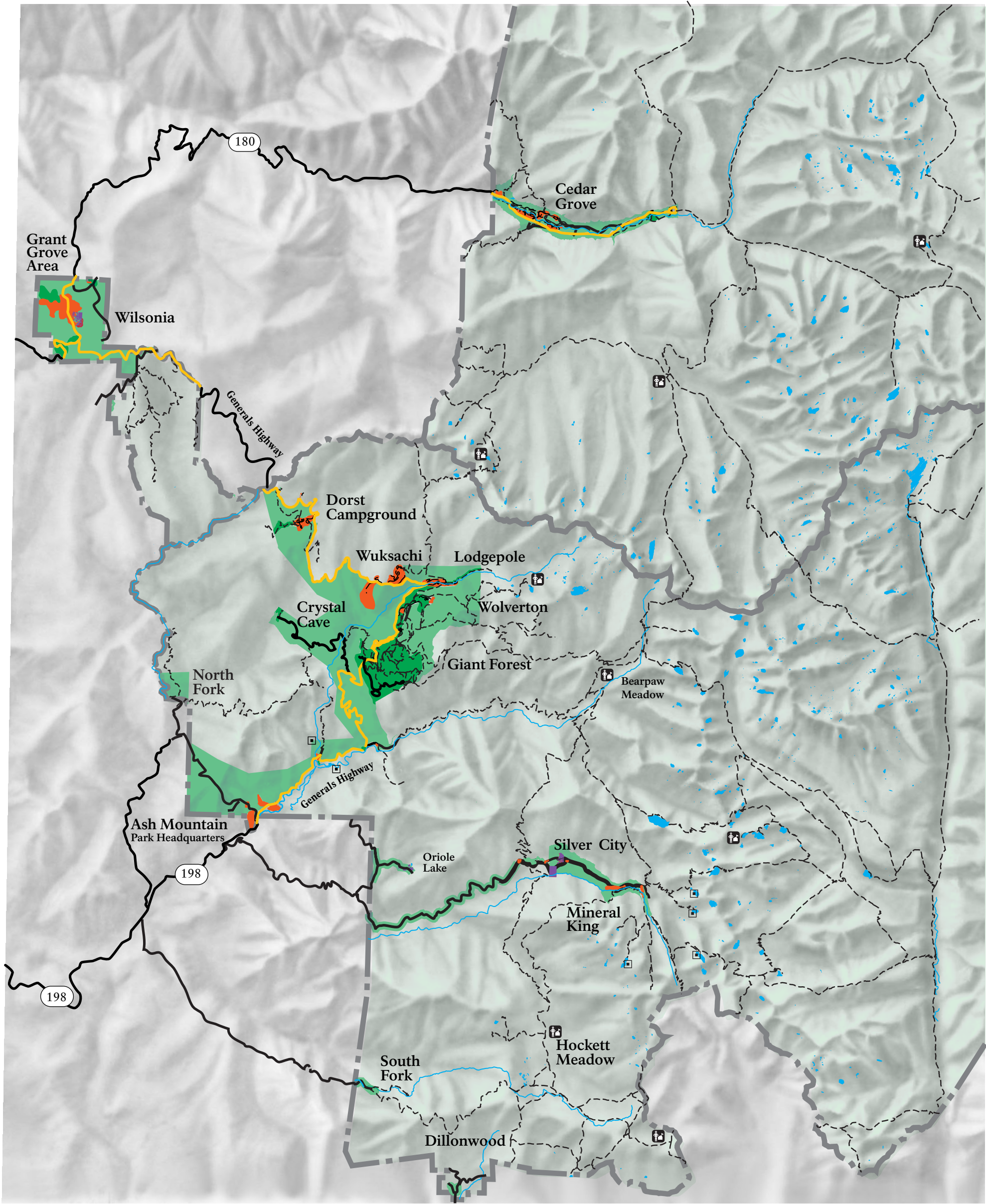


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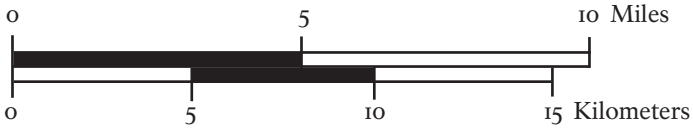
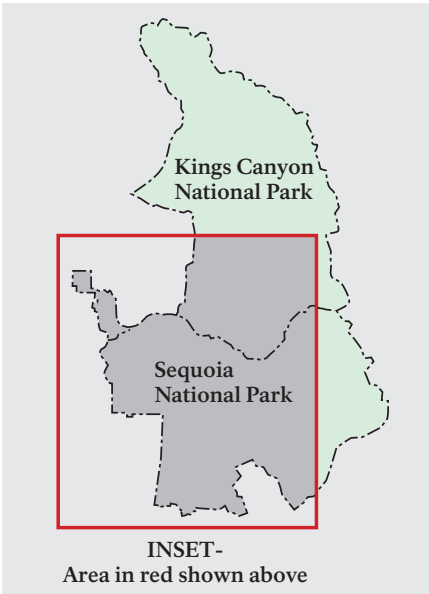
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- Park Boundaries
 - Lakes, Rivers and Streams
 - - - Trails
 - Roads
 - Private Property
 - 🏠 Backcountry Ranger Stations
 - ▣ Hydroelectric Utility Dams
- Management Prescriptions / Zones**
- High Use Scenic Driving (Road corridor)
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 - High Use Frontcountry
 - Low Use Frontcountry*
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* Low Use Frontcountry areas adjacent to roads enlarged for visibility

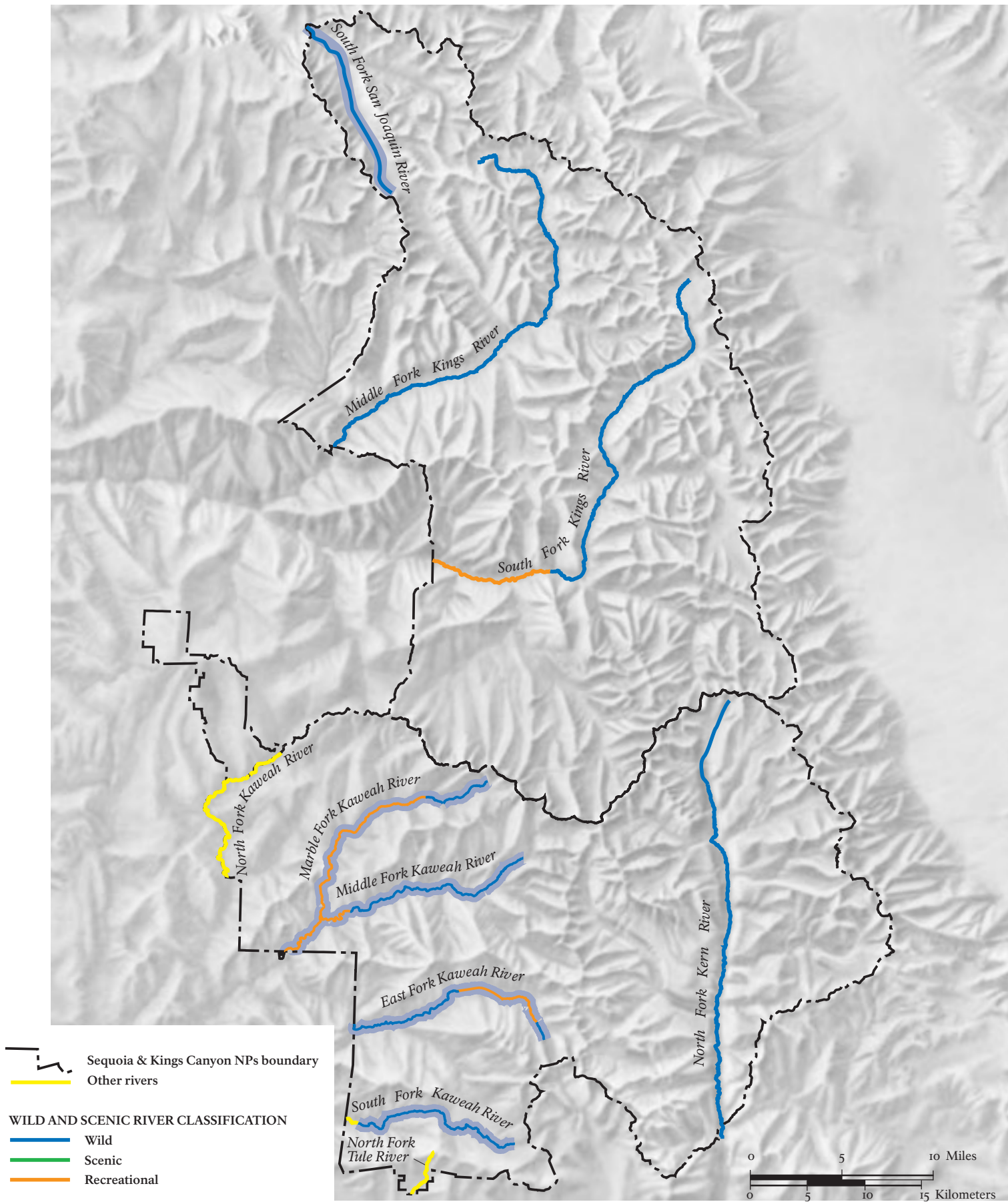


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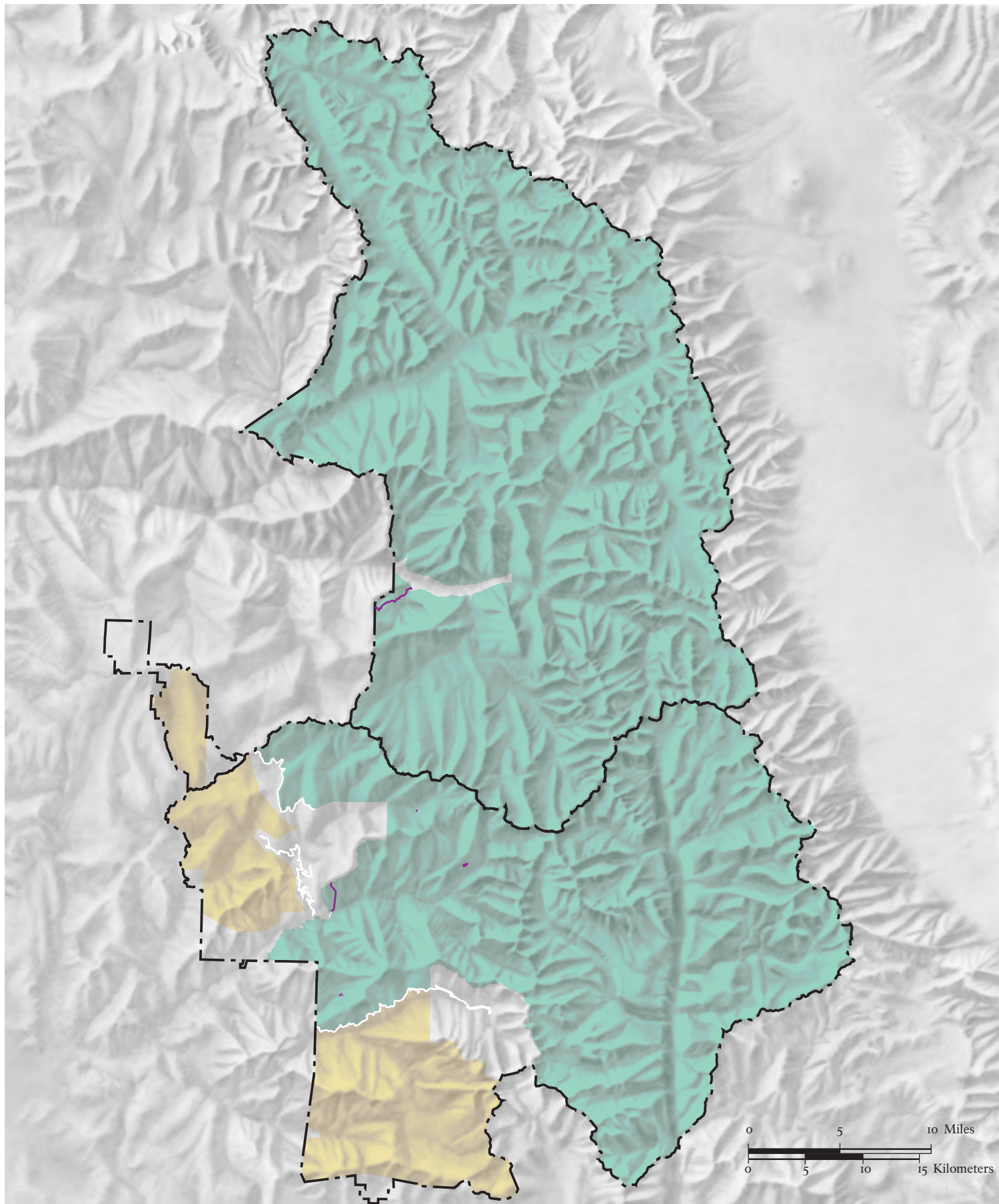


WILD & SCENIC RIVERS

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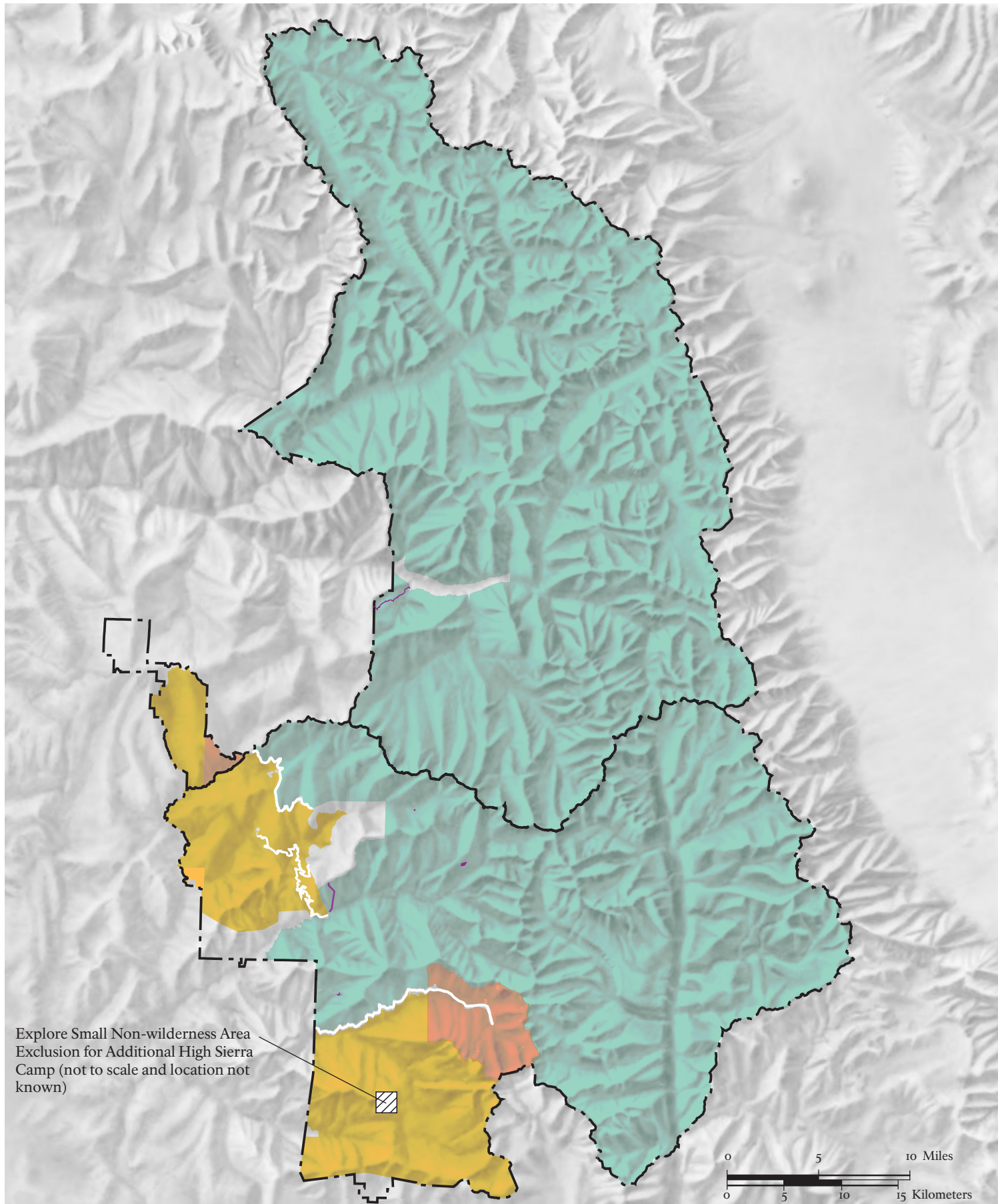
- Sequoia-Kings Canyon Wilderness
- Potential Wilderness
- Recommended Wilderness

EXISTING WILDERNESS No Action -Continue Current Management Backcountry/Wilderness

Sequoia & Kings Canyon National Parks

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Explore Small Non-wilderness Area
Exclusion for Additional High Sierra
Camp (not to scale and location not
known)

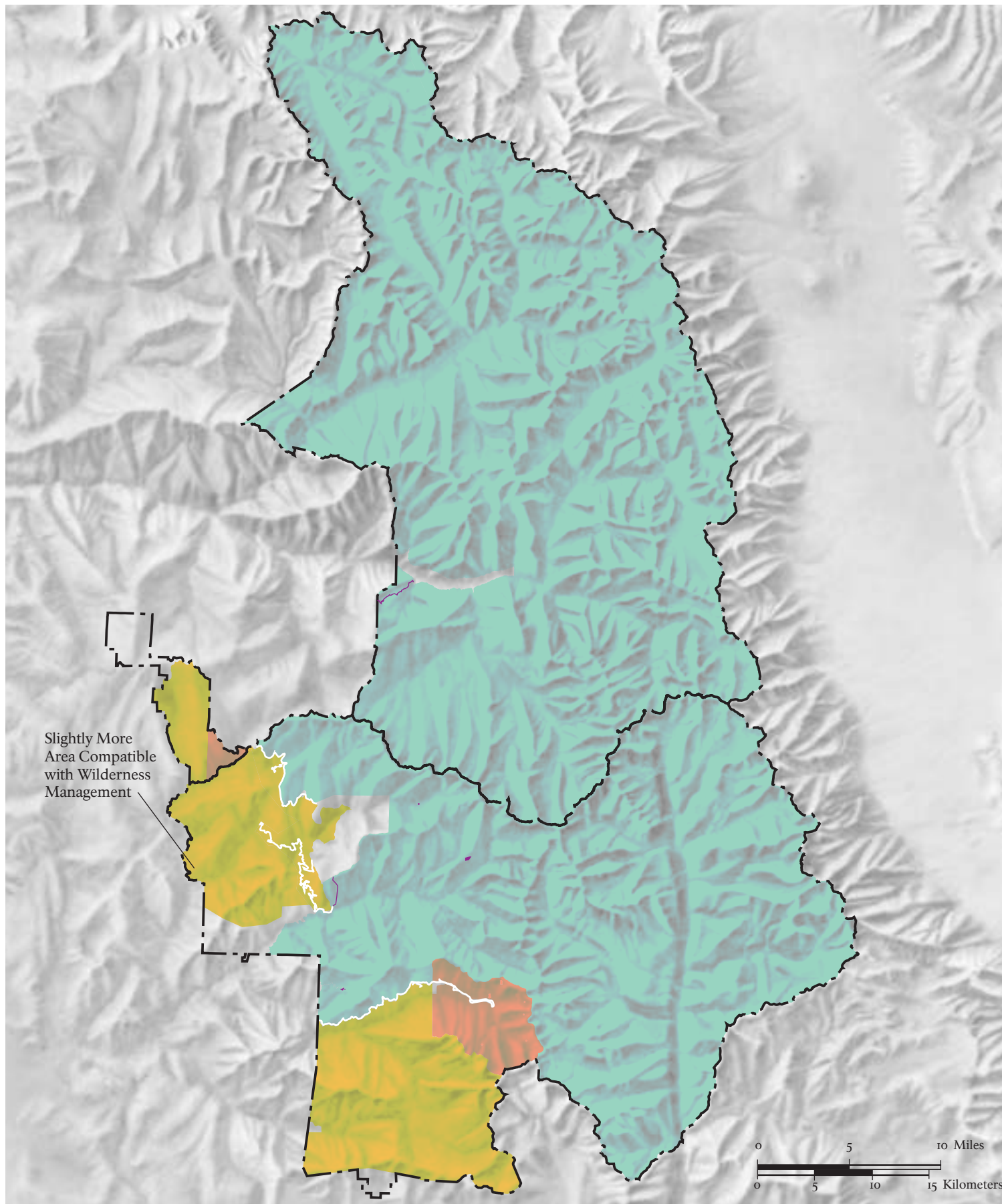
0 5 10 Miles
0 5 10 15 Kilometers

- Sequoia-Kings Canyon Wilderness
- Potential Wilderness
- Compatible with Wilderness Management
- To Be Studied
- Non-wilderness Backcountry

PREFERRED ALTERNATIVE Backcountry/Wilderness

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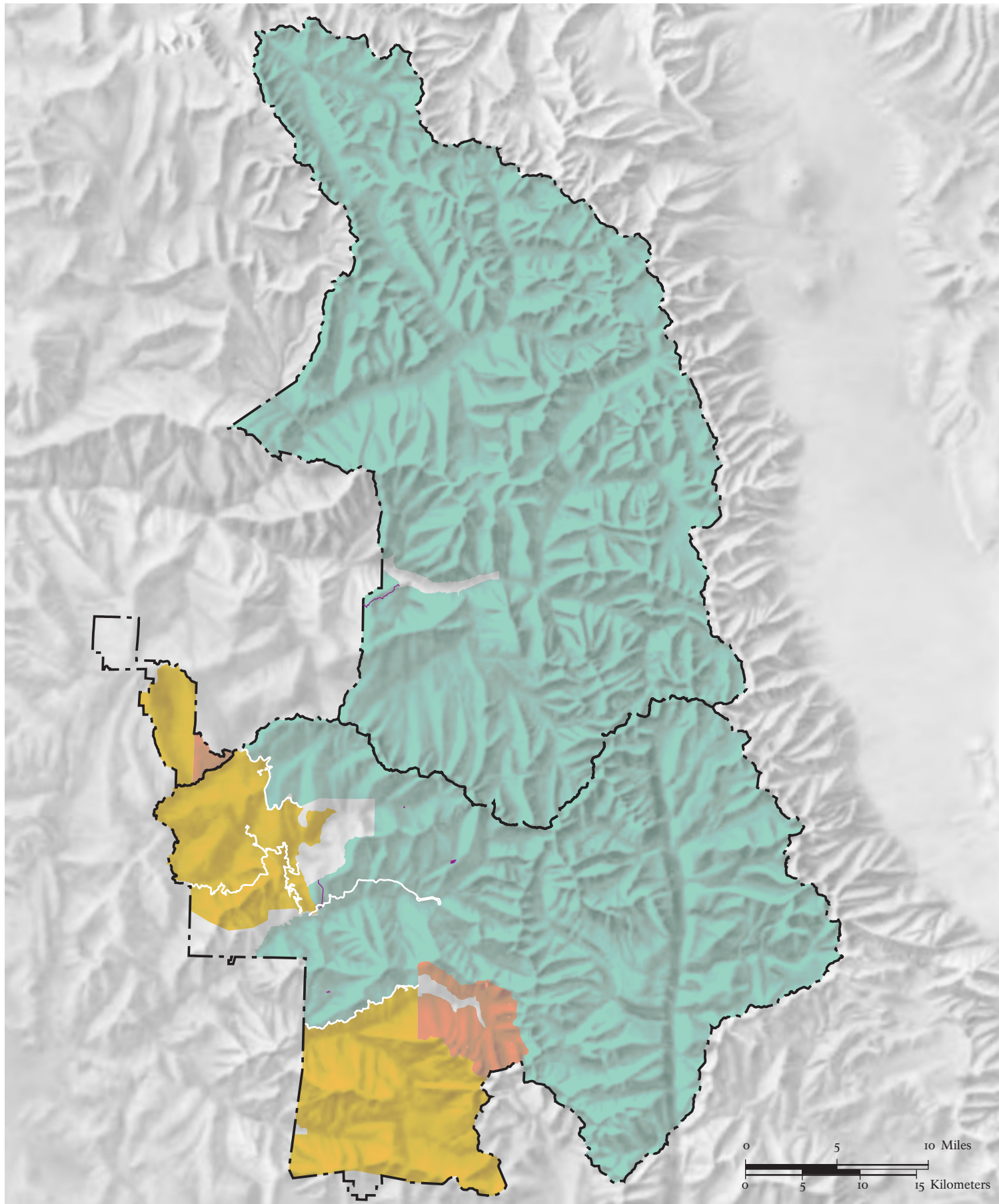


Slightly More
Area Compatible
with Wilderness
Management

- Sequoia-Kings Canyon Wilderness
- Potential Wilderness
- Compatible with Wilderness Management
- To Be Studied

ALTERNATIVE A
Backcountry/Wilderness
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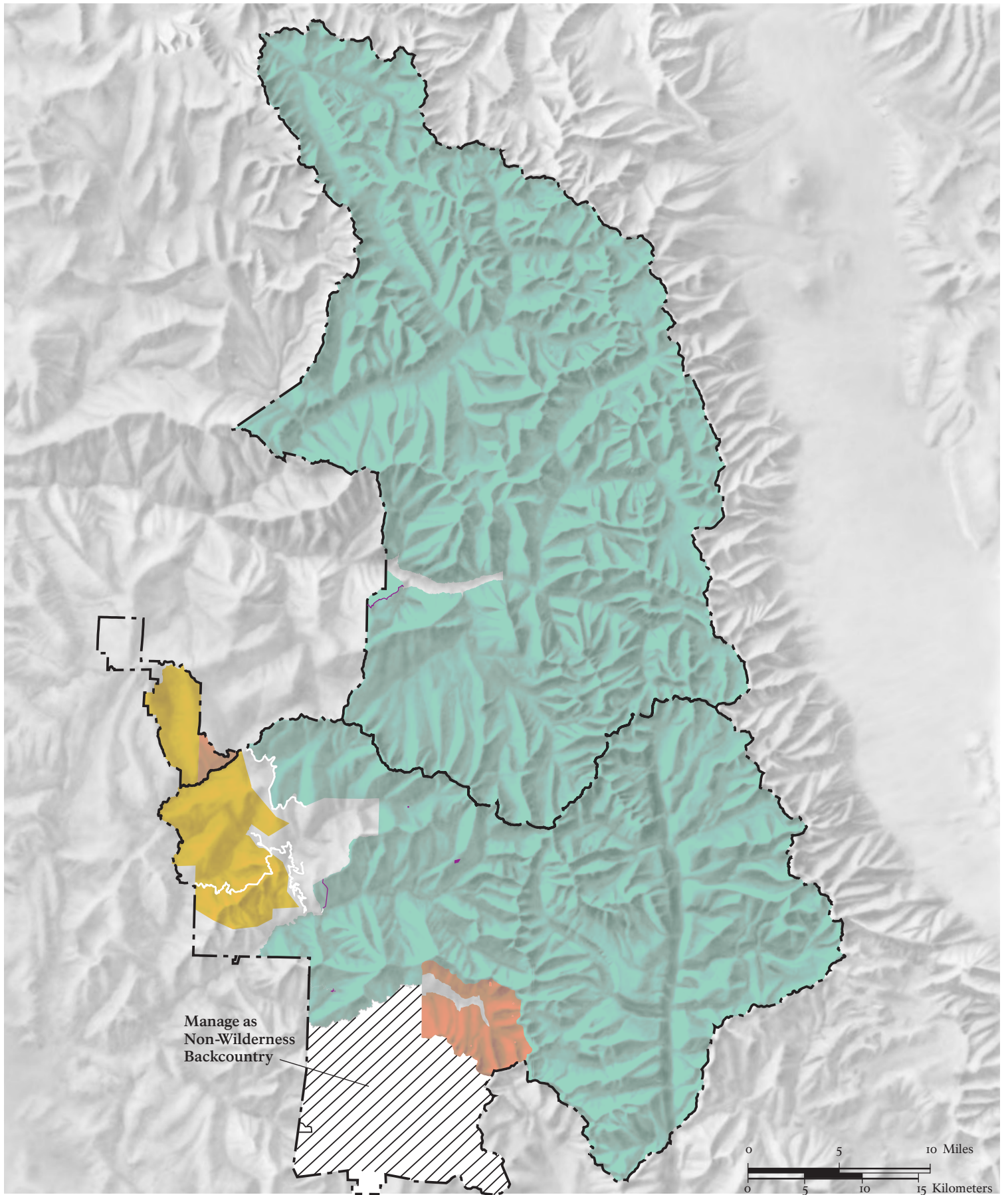
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- Sequoia-Kings Canyon Wilderness
- Potential Wilderness
- Compatible with Wilderness Management
- To Be Studied

ALTERNATIVE C
Backcountry/Wilderness
Sequoia & Kings Canyon National Parks
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-  Sequoia-Kings Canyon Wilderness
-  Potential Wilderness
-  Compatible with Wilderness Management
-  To Be Studied
-  Non-Wilderness Backcountry

ALTERNATIVE D Backcountry/Wilderness

Sequoia & Kings Canyon National Parks
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