SEEKING PUBLIC INPUT FOR THE FUTURE OF SEQUOIA & KINGS CANYON NATIONAL PARKS

General Management Plan • Newsletter 4 - A Planning Workbook • Spring 1999

Dear Friends.

My staff and I are pleased to share our fourth newsletter — actually a workbook — that will help us frame the alternatives for the general management plan. This planning effort began almost two years ago, in the summer of 1997. When it concludes in 2001, we will have defined the broad management framework that will guide the operations of Sequoia and Kings Canyon National Parks for at least the next 20 years.

This workbook, which builds on previous information and comments you have already made, has two main parts:

- The first part describes what has been happening at the parks and what the future trends are. It also describes how management zoning will be used as a tool for managing the parks in the future. This management tool is based on the desired future conditions for each park area and prescribes how they will be achieved.
- The second part asks specific questions that will help define the range of alternatives for the general management plan what kinds of resource conditions and activities are appropriate for the parks as a whole and for certain areas. Achieving these conditions will require trade-offs, and you should be aware of the kinds of trade-offs that are involved in making a decision.

A response form is included with the workbook for you to write down your comments and preferences. You will also be asked to comment about whether we have missed any major issues.

We want you to read the workbook, consider the questions, and fill out the response form. This may take three or four hours. If you do not have the time to go through the entire workbook, your comments on specific questions or areas that are of interest to you will still be welcome.

We hope you will be able to join us for one of the workshops listed on the back of this workbook. If you can come to a workshop, bring this workbook along. At the workshops we will be asking you to talk about what you think certain park areas should be like in the future. Even if you can't come to a workshop, be sure to mail back your response by Friday, April 30, 1999 (no postage is needed). Feel free to enclose additional sheets if you need to. You may want to hang on to this workbook as a handy reference tool throughout the rest of the planning effort. We hope you will find this planning step informative, helpful, and possibly challenging. Your comments about the issues described here will help us develop a range of alternatives for the general management plan. Our next newsletter, which is scheduled for this summer, will present these alternatives, and you will be asked to comment on them. The alternatives will be refined based on your input, and then the alternatives will be analyzed in a draft environmental impact statement, which we hope to distribute for your review the summer of 2000.

This may seem like a long process. It is — but remember what we are doing now will affect the parks for the next generation, and perhaps longer.

We need to be confident that we are looking at all the important issues and concerns and focusing on what we want the parks to be. Your earlier comments and participation in public meetings have helped define park values and identify specific management issues and trade-offs. Your continued participation will help us develop a range of alternatives for the parks. Please continue to help us decide what these parks should be for the future. Thank you for your interest and comments.

Michael Tollefson, Superintendent

Inside This Workbook

Why Are We Planning? — This part, which begins in the next column, explains how various National Park Service (NPS) planning documents are interconnected. It also describes how these parks have changed over the last 100 years, and it looks at possible trends over the next two decades. As part of the background information, the question about how the parks will be managed in the future is raised. NPS policies require that the concept of management zoning be used in deciding how to manage all areas of Sequoia and Kings Canyon in the future. This first part highlights what actions are required by law and policy, and it ends with what you value about the parks.

Trade-offs to Consider in Protecting Resources and Providing for Visitor Use — This part, beginning on page 5, is the heart of the workbook. It looks at questions relating to the overall future of the parks. For each possible answer to a question there are trade-offs to consider. For example, taking one action may require more money than is budgeted, meaning that another program will have to be cut. What trade-offs are acceptable to you? This section provides information and also asks specific questions about what values and visitor experiences are important in certain areas of the parks, such as Cedar Grove, Grant Grove, Lodgepole, and Mineral King.

The answers to these questions will be used by the planning team to define the various desired future conditions for resources and visitor experiences. At the next planning stage these future conditions will be grouped into parkwide alternatives, presenting different ways for how all areas in the parks might be managed in the future. Response Form — The response form that is included with the workbook is designed to be used as you read through the questions. You can fill out the form at home and mail it back to us, or you can bring it to a public meeting and discuss your ideas with others.

Getting in Touch with the Planning Team — This newsletter will be posted on Web sites at http://www.nps.gov/planning/seki/allplans/sekiplans.htm and http://www.nps.gov/planning/seki/allplans/sekiplans.htm and http://www.nps.gov/seki.

For further information contact one of the following individuals:

- Sequoia and Kings Canyon National Parks 47050 Generals Highway Three Rivers, CA 93271-9651
- Dave Graber, Park GMP Coordinator E-mail: <u>david_graber@nps.gov</u> 559-565-3173
- Kris Fister, Public Information Office 559-565-3131
- Susan Spain, Team Captain, DSC-RP PO Box 25287
 Denver, CO 80225-0287
 E-mail: susan spain@nps.gov

GLOSSARY OF TERMS

The following terms are used throughout this workbook.

Desired future condition — a future condition for resources or visitor experiences; when combined, desired future conditions articulate a vision for the parks' future.

Management zoning — a management tool that directs or prescribes how all park areas will be managed in the future in order to achieve the desired future conditions for resources and visitor experiences. (Different management zoning schemes will be presented in the range of alternatives in Newsletter 5 this summer.)

Mission goal — a goal that directly reflects the mission of the parks, as well as of the National Park Service.

Park purpose — the purpose (or purposes) for which a park was created.

Park significance — the many exceptional resources of a park.

Vision — a statement of what the park should be like when desired future conditions for resources and visitor experiences have been achieved.

Why Are We Planning

GENERAL MANAGEMENT PLANNING IN THE NATIONAL PARK SERVICE

Planning for national parks is conducted on several levels. The broadest level of planning is the general management plan (GMP), which is a conceptual plan that clearly defines what resource conditions and visitor experiences are to be provided and why. In addition to general management planning, the Government Performance and Results Act requires the preparation of a strategic plan for the parks, which sets long-term goals and assesses the parks' ability to reach those goals. Other types of plans include implementation plans, which help achieve the goals identified in the general management plan, and annual performance plans, which specify what is to be accomplished each year and how.

The general management plan establishes desired future conditions for what parks will be like in the future and how they will be achieved. Even though a general management plan may have a life of only 15 or 20 years, the precedents it sets may well influence development and use patterns for the next 50 to 100 years. For example, some past decisions at Sequoia and Kings Canyon National Parks proved to be detrimental. The development in Giant Forest, which dated from the early 1900s, posed a direct threat to the giant sequoias. Even though the threat to sequoias was known for over 60 years, it has only been in the last few years that major steps have been taken to address this problem. We can no longer afford to make those sorts of mistakes, because we may not be able to correct them in the future. That is why it is important in the general management plan to decide on a future direction for the parks — one that ensures the protection of resources as well as provides for public enjoyment.

GENERAL MANAGEMENT PLAN

The general management plan focuses on three questions:

- WHY have these parks been established (what is their purpose, based on the establishing legislation)?
- WHAT is our vision for their future (what desired future conditions do we want for resources and visitor experiences)?
- HOW do we accomplish our vision (what actions are needed)?

The general management plan reconfirms the park purpose and significance, and it establishes desired future resource and visitor experience conditions that support the purpose, maintain significant values, and meet legislative mandates. The plan also establishes how to achieve the desired future conditions for each park area.

STRATEGIC PLAN

The strategic plan sets five-year, long-term goals, which describe results to be achieved. Long-term goals incorporate performance measures and are based on a resource assessment of conditions, capacities, and needs. The strategic plan is based on the purpose of the parks, just like the general management plan, and the goals are consistent with that plan.

IMPLEMENTATION PLANS

Imple mentation plans specify the actions needed to achieve long-term goals. They are tied to and support the objectives of the general management plan. Examples include resource management plans, backcountry and wilderness man-agement plans, fire management plans, and construction design and specification plans. Imple mentation plans are more detailed than a general management plan, usually have a shorter life, or may need to be continually updated with new information. These plans give the parks flexibility to make changes but still keep to the course agreed on in the general management plan.

ANNUAL PERFORMANCE PLANS

Annual performance plans set yearly work goals for the parks. This approach allows for long-term consistency in planning combined with the flexibility to deal with specific issues. Annual plans identify specific work objectives, along with the needed funds and staffing levels. They also evaluate the accomplishments of the preceding year, documenting that annual goals were achieved or providing explanations of why they were not.

THE EVOLVING MISSIONS OF THE PARKS

The 1890 legislation for Sequoia and General Grant National Parks states that the parks were set aside as public parks for the benefit and enjoyment of the people, to preserve from injury "all timber, mineral deposits, natural curiosities, or wonders within the parks," and to retain their natural conditions.

In developing a strategic plan for Sequoia and Kings Canyon, the parks' staff re-assessed the role of the parks, based on their purpose and significance, the original enabling legislation, and the overall mission of the National Park Service. The parks' purpose and significance statements, along with their special mandates, establish the framework for what kinds of desired future conditions are appropriate in these parks. The purpose and significance statements on the next page are taken from the parks' Strategic Plan.

The Purposes of the Parks

Sequoia and Kings Canyon exist as national parks to

- 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

The Significance of the Parks

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

Most visitors who have commented generally agree with these statements. Some questioned the use of "appropriate" and "significant" in the purpose statement. What these terms mean will be addressed in the general management plan, and some of the questions in this workbook relate to defining these terms.

THE NATIONAL PARK SERVICE MISSION

The mission of the National Park Service, as defined by Congress in 1916, 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." (1916 Organic Act)

In 1978 this mission was further defined when Congress stated.

■ "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 National Park System and shall not be exercised in derogation of the values and purposes for which these various areas have been established." (1978 Redwood Act)

Special Legislative Mandates, Designations, and Constraints

Laws, policies, and special designations also affect park management. Approximately 736,980 acres have been set aside as wilderness, requiring that these areas be protected and managed to preserve their natural conditions.

Portions of the Kings, Kaweah, and Kern Rivers have been designated or are eligible to be designated as wild and scenic rivers. Such rivers and their surroundings possess outstanding scenic, recreational, geologic, fish and wildlife, historic, cultural, or other similar values. The Wild and Scenic Rivers Act requires that selected rivers and their immediate environments be preserved in a free-flowing condition and protected for the benefit and enjoyment of present and future generations.

Some of the other laws that affect the parks include the National Environmental Policy Act, the National Historic Preservation Act, the Threatened and Endan-gered Species Act, the Clean Air Act, the Clean Water Act, and the Americans with Disabilities Act. All these laws place certain restraints on how resources and the parks are managed.

Special congressional mandates or designations may also affect how specific resources or areas in the national parks are managed. For example, in the act that added Mineral King to Sequoia National Park, Congress permitted the owners of cabins to continue to occupy cabins on federal park land (Public Law 95-625). However, Congress did set expiration limits for the cabins by prohibiting the transfer of permits. The same legislation also prohibited the development of downhill skiing.

At the heart of the national park system is the belief that nationally significant resources and places belong to all citizens. The International Biosphere Reserve Program, which was established by the United Nations Educational, Scientific, and Cultural Organization, carries this concept one step further by declaring that certain resources have worldwide significance. Sequoia and Kings Canyon have been designated as an international biosphere reserve. 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 CHANGING FACES OF SEQUOIA AND KINGS CANYON — HAVE THEY ALWAYS BEEN THE SAME?

Even though each of us may have a clear concept of what the parks are (or were), both parks have changed almost constantly. In 1890 Sequoia National Park was an isolated tract of 252 square miles, while the future Kings Canyon National Park consisted of 4 square miles of sequoia groves known as General Grant National Park. There were no facilities — only cattle trails and two crude roads. As the population grew and society changed, visitor expectations and needs also evolved, and over time Congress expanded the boundaries of both parks. The result is that the parks are not the same as they were 50, 20, or even 10 years ago.

Examples of change include the rise of automobile touring in the 1920s, park construction programs associated with Franklin Roosevelt's New Deal in the 1930s, and the beginning of the environmental conservation movement in the 1960s. Although national in scope, each of these events changed the character of Sequoia and Kings Canyon. The mode of transportation has changed from horses to automobiles, visitor use has increased from a few hundred visitors to hundreds of thousands, and management concerns have expanded to a global scale. A quick glance at the parks' timeline (see insert on page 4) shows how the parks have changed.

Styles of management have also changed. During the parks' early period (1890-1913) park operations focused on providing facilities for visitors to encourage them to come to the parks. During the Civilian Conservation Corps (CCC) era in the 1930s, larger concession facilities were built, and there was a greater emphasis on recreation. Visitation increased tremendously, often at the expense of fragile resources, including the giant sequoias themselves. In the 1960s the National Park Service entered an era when it was recognized that natural park environments needed to be restored to the greatest extent possible, a management philosophy that continues to evolve today. Different people at different times have proposed different ways to manage these two parks. This raises a perplexing question — what about the parks, or what aspects of the parks, should be maintained? And how do we deal with future changes that will undoubtedly affect the parks?

TRENDS THAT MAY AFFECT THE PARKS IN COMING DECADES

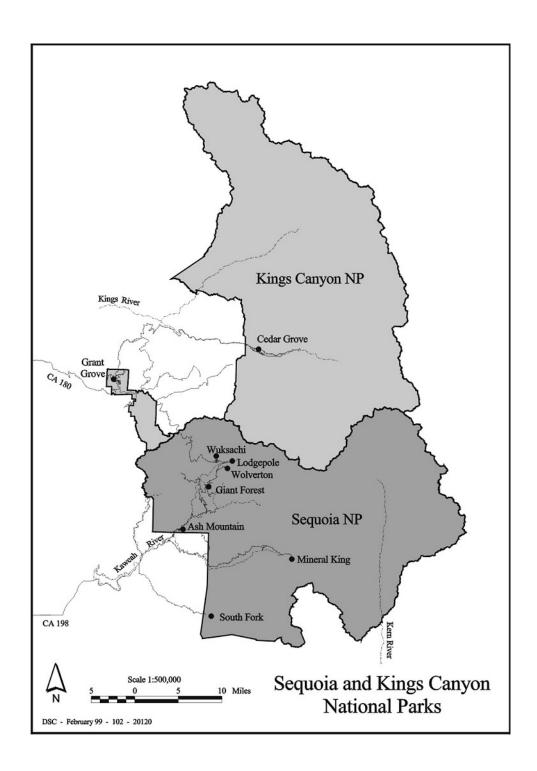
Outside influences will continue to affect the parks. Predicting what they will be is not easy, but a number of trends do stand out.

First and foremost is regional population growth. In the next two decades, California's population is projected to grow from a current 33.5 million people to 45.5 million. San Joaquin Valley's population is predicted to increase to 4.3 million by 2010, a jump of 37.4% from 1995. These rapid and enormous increases in local population can be expected to dramatically increase the demand for moun-tain recreation in the southern Sierra Nevada.

ABOUT THOSE COMMENTS

In response to Newsletter 1, we received over 300 pages of public comments. What exactly did we do with those comments? First, we organized them by grouping them under the categories introduced in Newsletter 2 and included in this workbook (e.g., park character, resource protection). Then we determined whether the comments addressed GMP issues, or issues better dealt with in an implementation or annual performance plan. The comments pertaining to GMP issues formed the basis for the core park values and management issues discussed in this workbook. The remaining comments will be kept as a reference for future implementation planning. All of your comments have been very helpful in letting us know what issues are important to you. Thank you for your help, and please stay involved as the planning process continues!

By 2020 Fresno is forecast to be as large as either San Francisco or San Jose is today, and Visalia is forecast to be the size of Fresno today. As a result, the San Joaquin Valley regions adjacent to the parks may begin to look like the suburban valleys adjoining the San Gabriel and San Bernardino mountain areas in southern California. Sequoia and Kings Canyon may become "urban fringe" national parks.



A TIMELINE FOR SEQUOIA AND KINGS CANYON NATIONAL PARKS

pre-1858

Native Americans, including the Owens Valley Paiute, western Mono, and Foothill Yokuts, inhabited the Sequoia and Kings Canyon area. Their descendants continue to live in this region.

1858 Giant Forest visited by Hale Tharp, the first Euro-American to see the Big Trees.

1875 John Muir named the Giant Forest. 1879 Sherman Tree discovered and named; Mineral King Road built.

1890 Sequoia National Park created by Congress as the second national park on September 25; General Grant National Park was the fourth national park created by Congress on October 1. 1894 First stocking of trout in Giant Forest and nearby streams. Actions taken to control sheep grazing and wildlife poaching in Sequoia.

1899 First commercial transportation and camp operations permitted in the park.

1903 Road completed to Giant Forest.

1907 First telephone line constructed; first post office established at Giant Forest.

1913 First well-graded road to General Grant National Park built.

1920 First winter accommodation at Giant Forest — "Magley Hotel." Giant Forest campgrounds constructed.

1926 Sequoia's boundaries enlarged to include Kern Canyon and Mount Whitney.

1932 Moro Rock stairway built.

1933 Civilian Conservation Corps (CCC) camps established to carry out park construction and trail development; eventually there were seven CCC camps.

1934 Generals Highway opened to General Grant National Park. Skating rink at Lodgepole and ski area at Wolverton prepared by the CCC.

1940 Kings Canyon National Park created, including the original General Grant National Park. Crystal Cave opened to the public.

1943 Administration of Sequoia and Kings Canyon National Parks unified.

1965 Cedar Grove and Tehipite Valley added to Kings Canyon National Park.

1968 Prescribed fires introduced.

1978 Mineral King added to Sequoia National Park.

1984 Wilderness designated at Sequoia and Kings Canyon National Parks.

1991 Wolverton downhill skiing ends.

1998 Last commercial facilities closed in Giant Forest; visitor services and concessions at Giant Forest removed.

1999 Commercial visitor facilities open at Wuksachi Village.

Intensifying the impact of these changes will be major shifts in the makeup of the population. In the next several decades Hispanics will become the dominant ethnic group not only in Fresno and Tulare Counties, but in California as a whole.

Other ethnic groups, particularly persons of Asian heritage, will become much more numerous. The Caucasian middle class that has formed the parks' primary user group throughout the past century will become a smaller portion of California society. Caucasian visitors will tend to reflect the general aging trend that is changing American society. At the same time, younger visitors will tend to be increasingly Hispanic.

Changes in regional transportation patterns could affect how visitors get to the parks. State plans call for converting California Highway 180, the parks' northern entrance route, to a freeway that would end about 30 minutes away from the Big Stump entrance. Another proposal calls for a new Sierra Foothills Freeway that would parallel California 99 but run along the base of the mountains, providing much closer connections between foothill communities and Sequoia, Kings Canyon, and Yosemite National Parks.

Renewed interest is being shown in public transportation in California, especially in the San Joaquin Valley. The development of a state-funded, European-style, high-speed rail system is being considered. Such a system would reduce ground travel times between Fresno and either Los Angeles or San Francisco to less than two hours, potentially providing easy access to the parks for millions of people.

International tourism can be expected to further expand as long-distance travel becomes easier for larger segments of the world population.

Biological factors will also affect the parks. As recently as 1950, the regional ecosystem surrounding the parks had been only minimally affected by road building and logging. Today, only the surrounding high country remains unchanged; nearly all of the foothills and middle altitude lands in the surrounding national forests have been subject to extreme alteration. The effect has been to make the parks more like a biological island cut off from the support of a broader ecosystem. Forecasts for global climate change, if true, could result in additional challenges to the biological integrity of the parks. A climate change of only 3 degrees could, in effect, represent a 1,000-foot elevation shift for every plant growing in the parks. What this might mean is far from clear.

History tells us that we cannot yet predict all of the trends that will affect these parks in the early decades of the new century, but the trends summarized above suggest that preserving the parks "unchanged," a goal that park users and neighbors often share with park managers, is going to be a challenging endeavor.

WHAT IS IT ABOUT THE PARKS THAT IS IMPORTANT TO PRESERVE?

If the parks have been constantly changing since their creation, then what is it that so many people want to "stay the same?" In 1936 Superintendent John R. White faced the same issue. He concluded that what should remain constant is something that is intangible. It is the park atmosphere — those things that draw people to the parks in the first place and that nourish them. He noted that preserving the park atmosphere "depends on what we permit in the way of public use, and equally what we do not permit." This may be good advice as we jointly define what park atmosphere we wish to have for future generations.

WHAT YOU VALUE ABOUT THE PARKS

In looking at the comments we received and talking with some of you, we concluded that the following are aspects of these parks that you particularly value:

 publicly owned national parks that protect the natural and cultural resources and park character in a manner that leaves them unimpaired or restored for future generations

- continued public enjoyment and access to park resources, popular destinations, and traditional outdoor activities and interpretive programs
- an atmosphere free of urban intrusions, urban activities, commercialism, noise, and crowding
- affordable, fiscally responsible, and well-run parks that provide simple, needed facilities and services in an efficient, friendly manner

These public values set the stage for how the parks should be managed.

First and foremost is regional population growth. In the next two decades, California's population is projected to grow from a current 33.5 million people to 45.5 million. San Joaquin Valley's population is predicted to increase to 4.3 million by 2010, a jump of 37.4% from 1995. These rapid and enormous increases in local population can be expected to dramatically increase the demand for mountain recreation in the southern Sierra Nevada.

I. Is There a Significant Value We Have Missed?

HOW SHOULD THE PARKS BE MANAGED IN THE FUTURE?

Sequoia and Kings Canyon National Parks can be managed in many ways, as reflected by the changes over the last 100 years. That is why it is so important to keep in mind what we want them to be like in the future. Defining a vision is the first step toward that goal. You generally told us that your broad vision is to keep the parks the way they are, but that is not an easy task. The questions in the next part of the workbook will help us further refine that vision for the parks and specific areas within them. This workbook includes a postage-paid response form so you can tell us more about what you value in the parks, what trade-offs in managing the parks are acceptable, and if there are any issues we've missed, as well as your ideas and comments.

Based on what you tell us, including the answers to questions in this workbook, the general management plan will present a vision for the parks. To achieve the vision, desired future resource conditions and visitor experiences will be defined. The National Park Service uses the concept of management zoning to articulate how those desired conditions and experiences relate to each park area. The intent of management zoning is to guide management actions in all park areas and to provide a framework for determining the range of acceptable conditions and for solving conflicts, including unforeseen challenges. While all areas of the parks must be zoned, zones can be tailored or refined to achieve a specific vision for a particular area.

What has happened at Giant Forest in the last few years is an example of what can be accomplished by changing from managing existing conditions to establishing a vision and looking at desired future conditions. Development in Giant Forest was endangering the existence of the grove, which was what attracted people in the first place. Planning begun in 1980 consistently confirmed that the desired future resource condition was to restore the fragile sequoia grove ecosystem and that the desired future visitor experience was to have a day use area with concentrated activities for visitors. As a result, hundreds of tiny cabins and other buildings, tons of asphalt paving, and miles of roads are being removed. Selected historic buildings will be adaptively reused (one as a museum), while others have been recorded and removed. Visitor lodging, stores, and a restaurant have been reestablished in a less fragile area of the park. The new development, known as Wuksachi, will open to the public this spring. You can see how critical it is to develop a shared vision for the future management of the parks. Parks can then be zoned to manage what we want to occur.

Trade-offs to Consider in Protecting Resources and Providing for Visitor Use

HOW DO WE BALANCE WHAT WE WANT WITH THE REALITY OF WHAT WE CAN DO OR AFFORD TO DO?

As you know from your own life, when you can't achieve all of your goals at the same time, you have to decide what is more important. When you make any decision, there are trade-offs — you give up one thing in exchange for something else. This part of the workbook asks you to think about what trade-offs might be acceptable in managing

Sequoia and Kings Canyon National Parks. Your desired future conditions, your vision for certain areas, and what you think are suitable trade-offs will help us determine the range of alternatives that will be considered. The trade-offs will be further analyzed in the draft environmental impact statement.

The trade-offs in this section are based on specific issues described in the first three newsletters. The issues are grouped into the following categories: park character, resource protection, park enjoyment, park users, transportation, park operations, and park context. Parkwide issues, as well as those specific to certain developed areas, are presented.

Each category begins with a background discussion, followed by one or more questions relating to an issue, along with a series of choices and potential trade-offs. Generally, trade-offs are presented in the broad categories of resources, visitor experience, and cost (only general comparative costs are discussed as a means of contrasting the choices). If you do not agree with any of the choices or trade-offs, add your solutions or comments in the space provided on the response form.

Newsletter I asked you to comment on various park-related issues, and you raised many additional concerns. However, not all of these issues need to be addressed in a general management plan. Some of the issues are mandated by law (e.g., wilderness management or threatened and endangered species), and the National Park Service must address them. Other issues are more appropriately addressed in implementation plans because of the level of detail. Still others are beyond the scope of the general management plan.

For example, campground reservations will not be addressed as a topic in the general management plan. Two campgrounds (Dorst and Lodgepole) allow visitors to make reservations by phone, fax, or the Internet. Whether this system should be used at other campgrounds, and if so, how many sites should be set aside for reservations, are operational questions for park managers to decide, with input from campers. The general management planning issue revolves around campground character and whether there should be more camping, the same amount, or less, but not how campgrounds should be managed.

PARK CHARACTER

Many visitors feel that the natural qualities of Sequoia and Kings Canyon give the parks a unique character or atmosphere that is worth preserving. However, character means different things to different people. For many visitors the parks offer a place to escape the stresses of urban life, to reconnect with nature and themselves. For these visitors solitude and the restorative and peaceful atmosphere of the parks is of critical importance. Other individuals place great value on more social experiences, with facilities such as camp-grounds, lodging, food service, and visitor centers, mingled with easily accessible park features and destinations. How Should We Preserve the Existing Character of the Parks?

Background: The character of the parks has evolved gradually over the past century. Nonetheless, the planning team has received many public comments during the GMP scoping process saying that they valued the parks' "traditional character." This character appears to relate to levels of park use, density of use at certain sites, and the nature and appearance of park facilities and services. For example, a number of commenters identified the 1950s or 1960s as the time when the parks' traditional character was at its best. Others refer to Sequoia and Kings Canyon as "the quiet alternative" to Yosemite National Park.

Related to the issue of preserving park character is the question of providing park experiences to a growing and rapidly diversifying population. Many of these groups may wish to use the parks in ways that do not fit within traditional use patterns.

2. To what extent should traditional park experiences be changed to accommodate new use patterns?

(a) Emphasize the traditional park values of solitude, hiking, and camping; reduce facilities and limit visitation.

Trade-offs: Reduced facilities would allow more natural resources to be protected. The visitor experience would be closer to what people enjoyed in the 1950s and 1960s — multiday car camping trips where visitors can explore park features in depth. Limits on visitation would prevent some people from enjoying the parks. Facilities would fail to meet increasing demands for visitor services. The needs of changing user groups would not be met. Trails would be better defined and maintained. Trail maintenance costs would increase.

(b) Resist changes to the parks' traditional character by limiting visitation and maintaining current facilities and services.

Trade-offs: There would be no additional resource impacts. A more traditional visitor experience would be preserved, but visitation would have to be limited, initiating a series of difficult questions about how such a goal might be achieved. Facilities would fail to meet increasing demands for visitor services. New park users would be forced to fit into existing use patterns and facility types. Their needs might not be met. The cost would be minimal.

(c) Gradually accommodate more visitation and adapt to visitor desires by redesigning facilities to meet the needs of more and different types of users.

Trade-offs: Redesigning existing facilities would minimize new impacts on natural resources. The character of the parks would gradually change. Use levels and changing use patterns would be accommodated over time. Facility development costs could be substantial but would be spread over several years.

(d) Plan to meet demands related to major population growth and changing types of users; expand or redesign facilities as needed.

Trade-offs: Natural resources might be affected by increased levels of use and development. The character of the parks would change; many aspects of the parks' traditional character would be lost. Use could grow significantly; facilities and services would likely change the most. In-creasing visitor demand would be better addressed, as would the needs of new and diverse park users. Facility development costs could be substantial.

Should Day Visitor Use Be Emphasized?

Background: Current statistics show that the average visitor remains in the parks for only three to four hours. The next most common use pattern is for visitors to stay one or more nights in campgrounds or lodges. With increasing population in the region and ready access to the parks, day visitation is expected to become an even larger portion of park visitation. Some say that the parks are best experienced in-depth over several days, and therefore overnight stays should be encouraged. However, others say that with fewer overnight facilities, the parks could accommodate a larger number of day visitors, benefiting more people.

While some facilities serve both day and overnight visitors, others clearly accommodate one or the other. Given a limited amount of space and resources available, the park may not be able to fulfill future demand for both day and overnight use.

3. Where should park managers place emphasis when planning for future visitor use trends?

(a) Maintain the current balance of day and overnight use facilities.

Trade-offs: Impacts on resources would not significantly change. Demands for both day and overnight use of the parks would not be completely met. As demand increased, use limits would be required, particularly for day users, preventing some people from visiting. However, people who gained access could stay longer and have a less hurried experience. Increased staff would be needed to implement use restrictions.

(b) Increase services and facilities for day visitors (picnic areas, day hiking trails, snow play areas, etc.), and decrease services and facilities for overnight users (hotels, lodges, campgrounds); encourage the development of overnight facilities outside the parks.

Trade-offs: Increasing facilities for visitors would have impacts on resources. A larger number of people would be served overall, but fewer visitors would have opportunities for extended stays within the parks. Costs to add more facilities would be moderate (more than "a" but probably less than "c").

(c) Increase overnight accommodations to fully meet potential demand; manage increased demand for day use by redirecting users to other areas (e.g., to developments in the adjacent national forests) or by restricting the number of day users.

Trade-offs: Resource impacts would not be substantially different than now because day areas could also meet the needs of overnight users. A smaller number of visitors would be served, but they would have maximum opportunities to experience the parks. As demand increased, use might have to be limited, particularly day use. Providing more overnight facilities could be expensive. As day use increased, management costs could increase as a result of implementing restrictions.

Should We Maintain Present Levels of Access to Park Features?

Background: Park visitors can easily drive to a variety of features, including the Giant Forest sequoia grove, Moro Rock, Crystal Cave, Cedar Grove, and the Kings Canyon. Also along the highways are pulloffs for vistas, trailheads, and several picnic areas. However, there are comparatively few pulloffs, and overcrowding of the existing facilities is not uncommon during the peak summer months.

Visitation will continue to increase. Consequently, preserving a desired experience at these features will likely require that access be more closely controlled or that easy access be provided to more sites.

4. How should we respond to congestion at park features?

(a) Limit the number of visitors at sites to maintain a quality visitor experience; do not provide any additional access.

Trade-offs: There would be no additional resource impacts, and resources would be protected. Present visitor experiences would be preserved, but visitors would lose the freedom to choose what and when to visit. Reservations could be required for specific sites, like they are at Crystal Cave. There would be no additional development costs, but management costs to restrict visitation would increase eventually.

(b) Identify additional park features near roads, such as sequoia groves, views, streams, and meadows. Tell people about these recreational opportunities through handouts, the park newspaper, and road signs.

Trade-offs: Developing additional access would directly affect more natural resources. Visitors would have more opportunities to see and learn about various park environments and activities. Dispersing use would help maintain a less crowded experience at park features, making visits more relaxing and enjoyable. This option would establish a precedent for limited expansion in the future instead of restricting visitor use. Costs for developing additional access to areas would be moderate.

(c) Redesign and improve existing parking areas and turnouts along Generals Highway to accommodate more cars. Separate these areas from the traffic lanes and provide advance notification. Improve the design of the entrances for safety and to accommodate a continuous traffic flow.

Trade-offs: Expanded parking areas and turnouts would affect adjacent resources. More visitors would have access to park features, but potential crowding could affect the quality of the visitor experience. Costs to redesign areas would be moderate.

(d) Use mass transit to move more visitors between existing features.

Trade-offs: There could be additional resource impacts as a result of developing parking for more vehicles. Visitors would lose freedom and spontaneity in choosing what to see and do. Visitor numbers would increase, but vehicular congestion along park roads and at parking areas at features would decrease. There would be additional development costs, and mass transit capital and operating costs could be substantial.

What Kind of Visitor Facilities Should Be Provided and Where?

Background: The types of park experiences that people expect are related to the types and numbers of facilities. Some visitors want to remove all facilities, while others want basic facilities improved or expanded. While most visitors say that the parks should remain the same, the differing opinions on what kinds of services and facilities should be offered makes this impossible.

A related question is where to provide facilities. In recent decades many national parks, confronted with replacing or requiring new facilities to serve visitors or park operations, have elected to place these outside park boundaries. This is often more economical and allows park areas to be returned to natural conditions or remain undisturbed. Such facilities include visitor centers and contact stations, maintenance facilities, and even administrative centers. They can also include commercial visitor services such as lodging and dining. The gateway community of Three Rivers already is increasing the variety of lodging and dining facilities to meet tourist demands.

5. What level of facilities should be provided in the future?

(a) Limit facilities to the basic ones needed to support a visit to a natural area. Reduce commercial developments within the parks (e.g., stores, food service, motel-like lodging) and encourage their replacement in adjacent communities. Reduce the number of gas stations in the parks.

Trade-offs: Some facilities would be removed, allowing small areas to be returned to natural conditions. While fewer facilities would appeal to some visitors, the experience would be unappealing to others. Costs to remove facilities could be substantial, but maintenance costs would be reduced over the long term. More development in surrounding communities could add to current congestion, but economic opportunities could be expanded.

(b) Retain the current mix of commercial and visitor use facilities in the parks; do not expand them.

Trade-offs: There would be no additional resource impacts. Circulation problems in developed areas would continue. Crowding would still occur at main park features, and some people would find that facilities would not meet their needs. Costs would be minimal.

(c) Replace or redesign existing facilities to support some additional visitation and to disperse use. Do not provide any new major developed areas, but allow for some minor expansion within existing disturbed areas.

Trade-offs: The minor expansion of facilities would minimize new resource impacts. More visitors could be accommodated, pedestrian and vehicular circulation could be improved, and use could be more dispersed. Gas stations could be consolidated, and some could be replaced by visitor facilities. Costs to redesign or modestly expand facilities would be moderate.

(d) Expand commercial and visitor facilities within the parks to meet substantial visitation increases.

Trade-offs: More natural resources would be affected by development. More people could come to the parks, but the visitor experience could be gradually degraded by more and more use and development. Costs to expand facilities to meet visitation could be substantial. Economic opportunities in adjacent communities would likely be affected.

RESOURCE PROTECTION

Resource protection involves a wide range of activities. For example,

- surveying the parks to identify the location, distribution, and condition of resources
- monitoring the condition of resources through time
- stabilizing, restoring, or lessening damage to resources

Many of these actions are required or encouraged by laws or NPS policies. Because resource protection issues frequently deal with specific actions and goals, they often are dealt with in implementation plans, such as a resource management plan or a fire management plan.

But required actions sometimes affect what alternatives can be considered in terms of proposed development, visitor use, and required expenditures. For example, monitoring water quality is necessary to ensure public health, as well as to protect resources, and poor water quality has the potential to affect people outside the parks. The need to comply with state water quality standards was a contributing factor in removing facilities from Giant Forest and limited the alternatives considered.

Fire as a Way to Maintain and Protect Park Ecosystems. Fire is a natural process that has shaped the plant and animal communities native to these parks. Until the 20th century, lightning-caused fires burned freely. As a result, natural ecosystems and species adapted to frequent low-to-moderate intensity fires. Beginning in the late 1800s, attempts were made to suppress all fires in the parks in a well-intended effort to protect park resources. In the absence of frequent fire, vegetation became denser while dead and down vegetation accumulated as fuel. Such conditions led to less frequent but more intense fires, with the potential to damage park ecosystems and threaten public safety. Full fire suppression resulted in other serious impacts, including the failure of giant sequoia trees to reproduce because fire is needed to stimulate and facilitate the reproduction of these trees.

In the late 1960s Sequoia and Kings Canyon began a proactive fire management program to correct the problems caused by suppressing fires. Since 1968 these parks have managed over 500 lightning and ranger-set fires, restoring the natural role of fire to over 90,000 acres. Over 7,000 of the acres burned were in giant sequoia groves, stimulating dense pockets of sequoia reproduction.

As more urbanized communities grow up around the parks, impacts of the current fire management program (especially smoke impacts) on local residents have raised questions about what role fire should play in the future management of park ecosystems. Due to highly flammable vegetation types, hot dry summers, and abundant lightning ignitions, natural fires will continue to occur in the parks.

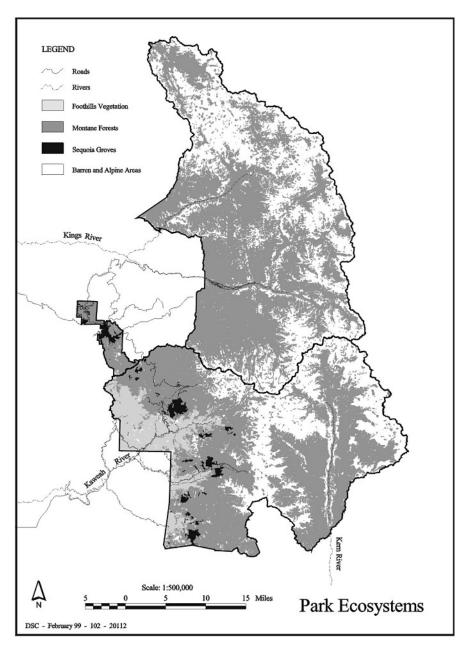
NPS Management Policies allow a range of fire management strategies to be used — from the full suppression of all fires to allowing lightning fires to burn under managed conditions. Each park may select which strategies to apply locally to meet its needs. The parks could

- suppress all fires, resulting in a return to unnatural conditions in the forest environment
- allow only lightning-caused fires to burn in low risk areas, resulting in unnatural conditions in other areas
- use lightning-caused fires with a fire program to restore or maintain forest conditions, resulting in a comparatively healthy forest ecosystem, but having some impact on visitors and surrounding communities
- seek to change policy and allow all human-caused fires (intentional or not) to be managed for resource benefit

The desired future condition of the resources and the vision for the parks as determined in the general management plan will guide how the parks make these choices or use a combination of these approaches within the parameters of policy and law.

The general management plan will identify desired future resource conditions. Achieving these conditions will require priorities to be set, which will be dealt with in annual performance plans. While it is important for the public to understand the specific types of issues that must be dealt with, the trade-offs will be addressed within the fire management plan.

Other Resource Issues. Occasionally issues are more conceptual in nature. Should an area be designated wilderness? Should public access be provided to more caves? What impacts would these options have? Answers to these questions will have long-term implications for the parks, and therefore they should be addressed by the general management plan.



What Should the Management Emphasis Be for Natural Resources?

Background: Until the mid 20th century, it seemed sufficient to protect the parks' natural resources from exploitation and damage. However, a number of factors may mean that it will not be possible to preserve the parks' natural resources in an unimpaired condition for future generations.

The condition of many natural resources is being degraded. Species such as bighorn sheep, frogs, and turtles are in serious decline. Native species are being displaced by nonnative plant and animal species across the parks. Air pollution from the Central Valley and other urban areas is affecting the health of forest trees. Furthermore,

aggressive suppression of fires earlier in the century has resulted in a hazardous buildup of forest fuels and has altered the composition of giant sequoia groves and other forests.

As you recall from the parks' purpose statements, Sequoia and Kings Canyon were established to protect forever their ecosystems. You can see this goal is difficult to achieve. Factors limiting the parks' ability to address these issues include limited funding, information gaps requiring further research and study, and limitations on the technologies needed to remedy certain problems. The desired future conditions for resources and the vision for the parks, as presented in the general management plan, will be used to guide how the parks set resource management priorities within the parameters of policy and law.

6. What major emphasis should the parks place on the preservation and protection of naturally functioning ecosystems? (None of the choices listed below would exclude the others.)

(a) Emphasize the restoration and maintenance of more naturally appearing areas.

Trade-offs: The parks would appear relatively natural, but natural ecosystem functions such as plant succession and fire would not be fully restored. Resources would continue to degrade. Visitors might not be aware that they were experiencing an unnatural system, and many could be satisfied. Educational opportunities could be lost. The cost to restore and maintain a more natural appearance would be low to moderate.

(b) Emphasize the restoration and maintenance of more aesthetically pleasing natural areas.

Trade-offs: The parks would appear relatively natural, but natural ecosystem functions such as plant succession and fire would not be fully restored. Resources would continue to degrade. Visitors might be unaware that they were experiencing an unnatural system. They might be pleased with more aesthetic appearances, but opinions about what is pleasing would likely differ. Education about naturally functioning ecosystems often changes people's views about what is attractive. The cost to restore and maintain a more aesthetically pleasing natural appearance would be moderate.

(c) Emphasize the restoration, preservation, and maintenance of more naturally functioning ecosystems.

Trade-offs: More of the parks' natural resources would be improved, and more ecosystems would function naturally. While visitors could see more natural ecosystems, they might not be aware of the differences, and they might need to be educated about what makes a healthy ecosystem. The cost to fully understand, preserve, protect, and maintain a functioning ecosystem would be substantial and would require a continuing fiscal commitment that would impact other park operations.

Should There Be More Wilderness?

Background: In 1984, 85% of the parks were designated as wilderness by Congress. At the same time the National Park Service proposed three additional areas for wilderness — Hockett Meadow, North Fork Kaweah, and Redwood Canyon — but they were not designated by Congress. Under NPS Management Policies areas that have been formally proposed as wilderness are to be managed as wilderness, and this policy has been followed for these three areas. As a part of this planning process, these three wilderness proposals are now being reviewed.

- The Hockett Meadow tract consists of approximately 48,090 acres in the southwestern corner of Sequoia National Park and can be accessed by a trail network that connects points along the Mineral King Road with the South Fork campground in Sequoia National Park and the Mountain Home State Forest south of the park. The area contains a variety of natural resources, including extensive tracts of giant sequoia forest, but is dominated by the 8,500-foot-high Hockett Plateau. The area receives significant stock and backpacker use and includes one backcountry ranger station. Portions of the area adjoin the Golden Trout Wilderness of Sequoia National Forest.
- The North Fork Kaweah in the northwestern section of Sequoia National Park is rugged terrain and ranges from low foothill country to coniferous forests. Several sequoia groves are included. Most trails in the area

were abandoned decades ago, and today only one park-maintained trail enters the zone — the historic Colony Mill route, originally built as a wagon road in the late 19th century. A second route, the old North Fork fire road, is being reopened for foot and stock use by a volunteer group. Use is light and mostly in the spring and fall. Proposals have been made to open the Colony Mill route to bicycles, which would require a modification of this wilderness proposal. This area adjoins both a BLM wilderness study area and the Redwood Canyon proposed wilderness area.

■ Redwood Canyon, the third formal wilderness proposal, is in Kings Canyon National Park and consists of approximately 7,900 acres, which includes the largest sequoia grove in the two parks. The area also contains extensive karst features, including Lilburn Cave (one of the most extensive in California). Access is by way of a maintained trail system entering the area from the north; the area is used each summer by both hikers and stock parties. The area is adjacent to the North Fork Kaweah wilderness proposal area and to Forest Service lands.

In addition to these three areas, one additional portion of Sequoia National Park contains lands that should be assessed for wilderness potential. This tract consists of the upper altitude portions of the 16,000-acre Mineral King addition to Sequoia National Park. All lands above 8,000 feet within this area are unroaded and of apparent wilderness character, except for four concrete dams (also see pages 19 and 21-22). Included are half a dozen scenic alpine basins dotted with glacial lakes, marble caves, and a number of 12,000-foot peaks. The area has an extensive and popular trail system that is heavily used by both day hikers and overnight parties. A road that once entered the upper Mineral King Valley was closed by the Forest Service in the mid 1970s. The area below 8,000 feet that is free of development might also be eligible for wilderness designation. Mineral King is adjoined by NPS wilderness on the east, by the Golden Trout Wilderness on the south, and by the Hockett Meadow wilderness proposal on the west.

7. Should the National Park Service recommend additions to the existing Sequoia and Kings Canyon National Parks' wilderness?

(Choose all that you feel are appropriate)

- Hockett Meadow proposal
- North Fork Kaweah proposal (unmodified)
- North Fork Kaweah proposal (with the Colony Mill route excluded to allow bicycle use)
- Redwood Canyon
- Mineral King area (above 8,000 feet)
- Mineral King valley floor (undeveloped area south of the pack station)
- (a) Propose, repropose, or study some or all of these areas as wilderness.

Trade-offs: Wilderness areas are protected and managed so as to preserve natural conditions, providing an additional layer of protection for resources. Visitors would be assured of having opportunities for solitude or primitive, unconfined recreation. Wilderness designation would have no additional costs.

(b) Remove from consideration some or all of these areas as wilderness.

Trade-offs: Areas removed from consideration would not be managed as wilderness, allowing additional recreational use but deleting a level of resource protection. Visitors would not be assured of opportunities for solitude and primitive recreation. There would be no additional costs.

Should Access to Park Caves Be Increased?

Background: Sequoia and Kings Canyon have almost 200 superlative limestone caves, some of which contain over 40 known minerals. They possess stunning marble banding, beautiful formations, rare crystals, and waterfalls. The caves are also home to numerous salamanders, bats, other mammals, and 30 endemic species of invertebrates. At the same time they provide the basis for much scientific research and are historically significant, containing artifacts from hard rock mining days, cave explorations, and even human remains.

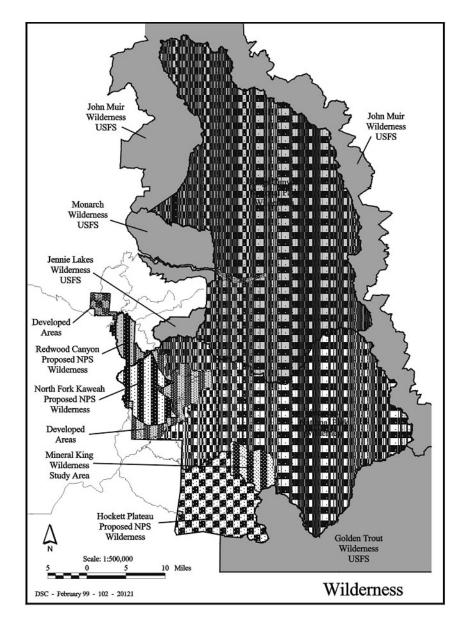
While a few caves are accessible to visitors, most are not because of delicate and sensitive resources, numerous tight passages, and vertical dropoffs. A 1997 Cave Management Plan guides cave use. Some larger caves are actively managed by requiring visitors and cavers

- to have permits and NPS guides to enter the caves
- not to remove cave features, not to camp in the caves, and not to leave human waste
- to minimize disturbance to cave animals

Approximately 1,000 people visit the caves for recreational reasons, and 500 visit them for scientific reasons. The general public can access Crystal Cave, which is open from May through September. Tours of this cave are provided by the Sequoia Natural History Association in partnership with the National Park Service. The tours have three types of visitor recreational experiences — the standard tour, a historic tour, and a wild or off-trail tour. Cave tour tickets must be purchased in advance, which limits the size of groups who enjoy the cave but also protects it from damage. The cave is accessed by a steep 0.5-mile trail with an elevation change of 320 feet.

Some people have requested expanded cave experiences, including wild cave trips. Others suggest that most park caves meet many of the criteria for wilderness designation. While there is no precedent for designating a cave as wilderness, some of the applicable wilderness criteria include:

- Humans are brief visitors to these untrammeled areas.
- The caves are primarily affected by the forces of nature.
- The caves provide great opportunities for solitude.
- The caves contain ecological, geological, or other features of scientific, educational, scenic, or historic value.
- Cave features are extremely fragile.



Wilderness proponents point out that fragile caves can be irreversibly changed as a result of even minimal use by careful, experienced explorers. They would like to pursue wilderness designation for caves in places where they are not already in wilderness. Most known significant caves in Sequoia and Kings Canyon are not in designated or proposed wilderness areas.

8. How should the parks manage caves to protect their fragile environments while providing an appropriate level of visitor enjoyment?

(a) Continue the existing cave management policy, allowing commercial tours of Crystal Cave and limited recreational use for experienced cavers in some additional park caves. Allow access for scientific purposes.

Trade-offs: Resources in some caves would continue to be affected by use. Most visitor experiences in the park would be limited to Crystal Cave. There would be no additional management costs.

(b) Add guided recreational wild cave tours; restrict tours to visitors who demonstrate the skills and abilities required for the challenges of cave environments; limit the number of visitors to reduce the likelihood of damage to cave geology/ecology; do not alter the caves; charge fees for tours.

Trade-offs: Limiting visitation would help reduce adverse effects on resources; however, resources would still be adversely affected by use. Visitors would have more variety of caves to see, but because of rigorous physical demands, the tours would not be available to many people. Charging fees for cave tours would reduce the impact on the park budget, but fees could be relatively high in order to cover costs.

(c) In addition to "a," seek federal wilderness designation for some of the parks' more significant caves that are currently outside wilderness.

Trade-offs: Wilderness protection would ensure the maximum protection of cave resources. Manage- ment costs for monitoring caves would be minimal.

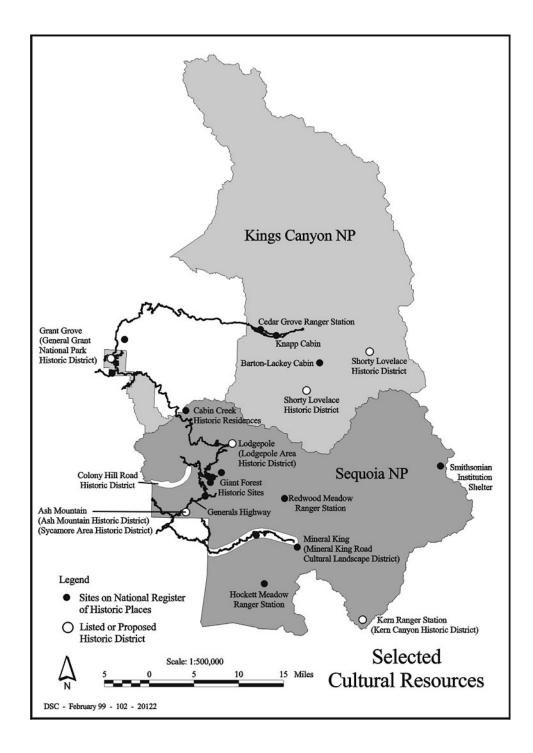
(d) In addition to "b," seek federal wilderness designation for some of the parks' more significant caves that are currently outside wilderness.

Trade-offs: Wilderness protection would ensure the maximum protection of cave resources. Manage- ment costs for monitoring caves would be minimal.

What Should the Management Emphasis Be for Cultural Resources?

Background: The parks contain a large variety of historic resources, including extensive manuscript and archive collections. The parks' historic sites and structures include post-1859 ranch-related sites, logging sites, mines, wagon roads, remnants of early park facilities predating NPS management, and numerous structures documenting the history of NPS development in the parks. There are over 260 known prehistoric sites and 110 historic sites within the 3% of the parks' 864,000 acres that have been inventoried for the presence of cultural resources. The list of recognized resources also contains two early 20th century recreation villages built for private use — Wilsonia and Mineral King.

Cultural resources are identified in terms of their eligibility for listing on the National Register of Historic Places. The national register, which was created by the National Historic Preservation Act of 1966, has criteria for listing properties; any listed property must be identified as possessing national, regional, or local significance. To date, 18 sites within the parks have been listed on the register (e.g., the Moro Rock staircase, the Generals Highway stone bridges, the Ash Mountain entrance sign, Tharp's Log, Hospital Rock, and a variety of ranger stations, shelters, cabins, residences, and comfort stations). Seven additional sites have been determined eligible for listing. The Shorty Lovelace Historic District in Kings Canyon National Park is listed on the national register, and six districts are proposed for listing. One proposed district, the entire Mineral King Road corridor, together with selected adjoining properties, has recently been determined to be eligible for listing as a cultural landscape; the proposal is under review by the State Historic Preservation Office. In addition, there are 93 entries on the parks' List of Classified Structures, which is an internal inventory document often referred to in planning stages of proposed projects.



Existing laws allow a range of preservation or mitigation techniques, including the removal of historic sites and buildings after consultation with the State Historic Preservation Office and documentation. In accordance with this process, several complexes of historic structures in Giant Forest, including the Giant Forest Lodge/Camp Kaweah and the Giant Forest Lodge Historic Districts have been documented and removed.

The parks' extensive cultural resources are crucial to the interpretation of important themes, such as prehistoric use, contemporary Native American use, the Euro-American settlement period, consumptive uses such as logging, mining, or hydroelectric development, national park history, the environmental movement, and recreation. As you can imagine, it is difficult to preserve and maintain, much less inventory, all the parks' cultural resources. Major factors limiting the parks' ability to better preserve and maintain resources are information gaps and limited funding. Neither of these situations is expected to change. While decisions are made within the law and policy parameters,

the general management plan will provide direction about the preservation, interpretation, and use of cultural resources.

The general management plan will develop a range of alternatives that explore different desired cultural resource conditions. Historic and cultural resources have innate value, but they can also be used for purposes such as interpretation, adaptive reuse, education, or administration. How we protect historic resources depends on what we are trying to achieve. For example, the old market building in Giant Forest, which is on the National Register of Historic Places, is being adaptively reused as a museum. This use is compatible with the desired future for the area as a center for day use activities. Upcoming alternative workshops are a good place to propose different desired cultural resource conditions.

9. What major emphasis should the parks place on the protection and preservation of cultural resources?

(a) Emphasize the protection and preservation of examples of cultural resources that represent all of the parks' cultural / historic themes.

Trade-offs: Not all resources could be preserved, and some would be lost. While protected and preserved resources would relate to a full range of the parks' themes, not all resources related to any given theme would be protected. Visitors would have a better sense of the diversity of resources but not the extent of resources related to a certain theme. Resource education and enjoyment opportunities could be found throughout the parks. The cost to protect and maintain a representative sample of resources would be moderate.

(b) Emphasize the protection and preservation of a larger number of resources for selected cultural / historic themes.

Trade-offs: Not all resources could be preserved, and some would be lost. Resources related to selected themes would be more protected and preserved than resources related to other themes. While visitors would be exposed to more resources representing a particular theme, they would probably not have a sense of the diversity of resources throughout the parks. Resource education and enjoyment opportunities could be found in concentrated areas of the parks. The cost to preserve and maintain selected resources would be moderate.

(c) Emphasize the interpretation of cultural resources as opposed to their protection and preservation.

Trade-offs: Because the interpretation of resources would be emphasized instead of their preservation and maintenance, many sites and structures would be removed or left to deteriorate. All resources would be documented. Visitors would lose opportunities to see preserved examples of resources, but resource education and interpretive opportunities could be found throughout the parks. The initial cost to document all resources would be higher, but long-term costs to maintain them would go down.

PROVIDING ENJOYMENT

People visit parks for many reasons, but most wish to experience nature to some degree. Some seek solitude, others wish to be challenged by new experiences, and still others want to see the superlative resources that the parks were set aside to protect. Some want to sightsee, while some are attracted to comfortable, character-filled surroundings. Catering to all these tastes is challenging.

To What Extent Should Visitor Experiences Be Managed?

Background: Parks such as Sequoia and Kings Canyon used to be managed more as resort destinations. In the last 40 years, management strategies have placed more emphasis on protecting resources. The challenge today is to

determine how to provide for a range of visitor experiences without unacceptable impacts on either the visitor experience or on natural and cultural resources.

There are opposing views about some activities. For some visitors ideal park management would allow them to freely enjoy the parks, with rules only where absolutely necessary to protect resources. Others feel that the parks should be treated as nature preserves, with limits on visitation and access, and rules enforced to prevent resource damage as a result of campfires, trail bike use, stock use, and high visitor densities in campgrounds. Sometimes there are disagreements between different park users. Uses that may intrude on the experiences of others include bright lights, loud music in campgrounds, or cell phones in wilderness.

10. How should the parks provide solitude and visitor freedom instead of managed visitor experiences?

(a) Limit the numbers of visitors who can visit a specific area or participate in a certain activity (for example, limit the number of hikers or horseback riders on a certain trail, or limit the numbers of RVs in a campground).

Trade-offs: Limiting visitor use would help protect resources. Visitors would have less freedom to choose what to do. Management costs to restrict the number of visitors pursuing a particular activity or visiting an area would increase.

(b) Separate users to provide the desired experiences (for example, construct separate trails for stock use, hiking, and biking; separate tent and RV campgrounds).

Trade-offs: Natural resources would be affected by additional construction. Experiences for certain users could be enhanced, but some visitors would be restricted from some areas or activities. Providing separate use areas or facilities would add to demands on current park budgets.

(c) Regulate behavior to ensure that resources are protected and that activities do not intrude on the experiences of other visitors (for example, prohibit loud noises in campgrounds or allow hiking or stock use on trails only at certain times).

Trade-offs: There would be no additional impacts on resources. Visitors would have less sense of freedom in the parks, but they would have more assurance of having a traditional park experience. Management costs to enforce regulations would increase.

(d) Rely primarily on education to control behavior (for example, discuss with visitors how loud noises could intrude on the experience of other visitors in campgrounds).

Trade-offs: No additional resource impacts would result. Visitor experiences in some areas could be degraded if visitors did not voluntarily comply with suggestions. Management costs to educate visitors would increase.

(e) Use all of the options above, but apply each option in specific park areas (for example, use voluntary measures in developed areas, actively regulate behavior in the backcountry, and provide separate facilities where problems cannot be solved by other means).

Trade-offs: The development of separate facilities would affect natural resources. Visitors could select what type of experience they wanted (for example, camping in an area that prohibits RVs with generators) and then go to the area providing that experience. There would be additional management costs to disperse visitors to the appropriate areas or to enforce regulations. Costs to construct additional facilities would be moderate.

What Are Appropriate Activities?

Background: Sequoia and Kings Canyon National Parks offer opportunities for recreational activities such as hiking, backpacking, cross-country skiing, snowshoeing, trail and pack rides, fishing, and scenic driving. Numerous rock outcrops offer superb vistas and rock climbing. Wild and scenic rivers offer late summer water play opportunities often enjoyed by regional residents. In addition, a number of cultural resources, including many examples of park rustic architecture and CCC work, provide interpretive opportunities.

Winter activities are increasingly popular. Some visitors want greater winter access to the foothills area and more winter use of campgrounds. Some want Generals Highway or the road to Cedar Grove kept open year-round. Others want more cross-country skiing, snowshoeing, and snowplay opportunities. Still others urge the return of downhill skiing and ice skating. In the next 20 years it is likely that there will be requests for activities that have not yet been thought of.

NPS Management Policies (1988) state:

Unless the activity is mandated by statute, the Park Service will not allow a recreational activity in a park or in certain locations within a park if it would involve or result in

- inconsistency with the park's enabling legislation or proclamation, or derogation of the values or purposes for which the park was established
- unacceptable impacts on visitor enjoyment due to interference or conflict with other visitor use activities
- consumptive use of park resources (does not apply to certain traditional activities specifically authorized by NPS general regulations)
- unacceptable impacts on park resources or natural processes
- unacceptable levels of danger to the welfare or safety of the public, including participants.

Remember the advice given by Superintendent John White in 1936. The park atmosphere that draws people to the parks is not made up of just the resources and facilities, but also the activities. The activities we permit or do not permit are an important part of any park experience.

II. To what extent should park managers allow additional recreational activities?

(a) Discourage new recreational activities.

Trade-offs: Resources would be protected from impacts that could be generated by new uses. No new activities would be allowed, helping to preserve the traditional character but potentially restricting public enjoyment of the parks. Some activities without resource impacts would be prohibited. Restrictions could lead to the need for increased regulation and enforcement costs.

(b) Follow the criteria in the NPS Management Policies when deciding which new activities are appropriate.

Trade-offs: Resource impacts would vary, depending on the activity. Adherence to NPS policies would provide some level of resource protection. New activities would be allowed as appropriate, adding to visitor enjoyment. New activities might not be traditional and could displace or conflict with other visitor activities. Administrative costs would result from assessing each new activity to determine whether it would be allowed. Liability, safety, enforcement, and maintenance costs could increase, depending on the activity.

(c) In addition to criteria contained in the Management Policies, add the following new criteria: "The parks will consider only those new activities that are related to natural features in the parks or that can only take place in the parks (as opposed to activities that could happen anywhere)."

Trade-offs: Resource impacts would vary, depending on the activity. This proposal would provide a higher level of protection for park resources. Some new activities would be allowed as appropriate. Traditional park activities would not be displaced by new recreational pursuits that could occur outside the parks. Administrative costs would result from assessing each new activity. Liability, safety, enforcement, and maintenance costs could increase, depending on the activity.

What Kind of Information and Education Programs Should Be Developed?

Background: Since the 1920s, park rangers have provided informational and educational services to park visitors by means of information stations or visitor centers, campfire programs, and ranger-guided walks. Over the decades wayside exhibits, self-guiding trails, and interpretive publications were developed to broaden the effectiveness of these educational efforts. Many visitors have come to perceive these services as part of the parks' traditional character. Budget constraints in recent years have significantly curtailed naturalist programs, resulting in greater reliance on exhibits and publications to fill the place of personal interpretation. New technologies for interpretive media, including interactive computers and Web sites, offer additional opportunities for electronic communication.

12. What form should the parks' orientation/educational efforts take in coming decades?

(a) Place primary emphasis on exhibits, publications, and electronic media; discontinue remaining naturalist activities.

Trade-offs: There would be no additional resource impacts. The tradition of ranger programs and in-depth information available through naturalist activities would be lost, lessening the quality of the experience for some visitors. Exhibits, publications, and electronic media would be a cost-effective means to provide basic information for most visitors. Costs would be moderate.

(b) Maintain a small program of naturalist activities while augmenting wayside exhibits, publications, and electronic media.

Trade-offs: Additional wayside exhibits could have minor resource impacts. Most park users would obtain information from exhibits, publications, and electronic media. The tradition of naturalist programs would be preserved, but there would be too few personnel to make the program available to most visitors. Some visitors would find that nonpersonal interpretive programs were inadequate to meet their needs. Costs for nonpersonal media would be modest to moderate.

(c) Increase naturalist-guided activities, wayside exhibits, publications, and electronic media.

Trade-offs: There would be no additional resource impacts. The level of educational/informational services would be significantly improved; the ranger-naturalist tradition would be preserved. Additional funds would be required, likely resulting in reductions to other park programs.

(d) Maintain the NPS role in wayside exhibits, publications, and electronic media; encourage the perpetuation of guided activities through the use of volunteers or commercial operators.

Trade-offs: There would be no additional resource impacts. The level of educational/informational services would be significantly improved, but the NPS ranger-naturalist tradition would be lost. Some visitors might find pay-for-service educational activities a financial burden.

PARK USERS

Should Winter Recreational Opportunities Be Expanded?

Background: Winter recreational use of the parks is increasingly popular to the expanding regional population. Winter visitation is lower and the parks are not crowded except on a few holiday weekends. There are two

distinctly different environments and types of recreational opportunities offered in the foothills and the snow-covered mountain areas.

Snow Areas. The parks offer two designated sledding and snowplay areas — at Grant Grove Village and at Wolverton near Giant Forest. Additionally, trails are marked for skiing and snowshoeing. Lodging is open at Grant Grove Village and will be open at Wuksachi Village, which will increase overnight winter stays in the parks. Concession facilities rent cross-country skis and snowshoes. Food service is available, and visitors also often use picnic areas. Winter camping is provided at Lodgepole and Grant Grove. Additionally, both Hume Lake and Montecito- Sequoia (within Sequoia National Forest) are open year-round and provide many recreational opportunities. Snowmobile riding is allowed on national forest land. The condition of park roads affects winter visitation; CA 180 to Cedar Grove in Kings Canyon National Park is closed in winter, the Generals Highway between the parks is intermittently closed by snow, and several roads to park features are closed in the winter.

Past Winter Activities. Downhill skiing at Wolverton was a popular activity, but the small operation was not economically sustainable and the related facilities had negative impacts on natural resources. Downhill skiing is no longer seen as appro-priate, and the Park Service has removed such facilities in many parks that once provided them. The ice rink at Lodgepole, while popular, required a high level of maintenance for the level of demand, and it was not cost-effective to continue.

Foothills Winter Recreation. The pleasant temperatures and snow-free foothills offer hiking and camping opportunities during fall, winter, and spring. Additionally mountain biking has been proposed (also see question 15).

13. What level of winter recreational opportunities should the parks provide?

(a) Retain the current level and mix of winter recreational and overnight activities.

Trade-offs: Natural resource impacts from winter use in snow areas would be minimal. In snow areas future demand could exceed capacity, and visitors might not like crowding. Visitors could be frustrated by roads closed by snow until park road crews clear them. Heavy snowfall years strain park road budgets.

(b) Promote winter use of the parks as a way of providing a less crowded experience.

Trade-offs: Natural resource impacts from winter use in snow areas would be minimal. In snow areas education about low use times might help keep demand and capacity to acceptable levels, but demand could exceed capacity, and visitors might not like more crowded conditions. Visitors could be frustrated by roads closed by snow until park road crews clear them. Heavy snowfall years strain park road budgets.

(c) Expand winter snow area recreational opportunities to meet growing regional recreation demands.

Trade-offs: Natural resource impacts from winter use in snow areas would be minimal, but more or larger winter recreation areas would increase the extent of these impacts. In snow areas additional parking areas, as well as facilities and services, would need to be kept open to meet potential demand. Greater visitor numbers would either have to be concentrated at a few areas or, to avoid crowding, dispersed among several areas. More road clearing would be required to meet demand. Costs to keep park roads open would increase.

(d) Expand foothills recreational opportunities to meet growing regional recreation demands (also see questions 26 and 27).

Trade-offs: More foothills recreational opportunities could impact natural resources, which could withstand more use. Visitors could have access to more recreational opportunities, both trails and activities such as horseback riding, bicycling, and hiking. The foothills trail system would be expanded, and some additional visitor services (such as stables) could be provided. Costs to maintain the foothills recreation area would increase.

How Should We Meet the Needs of Changing Types of Users?

Background: Sequoia and Kings Canyon have traditionally catered to the needs and recreational preferences of individuals and small groups who stayed in the parks for several days in campgrounds and low-key cabins / motel-type units or who made horseback trips or backpacked. Many were repeat visitors. Historically, many international visitors have come, drawn by superlative hiking.

Recently, however, there are different types of visitors as a result of rapid population growth in California's Central Valley and the changing cultural makeup of the population. For example, larger and extended family groups who come to the parks may find that current campground limits (generally one vehicle and six users per campsite) do not accommodate their needs. Recent influxes of immigrant populations may mean that many regional visitors do not speak English, making it more difficult to communicate resource values and regulations. Also, visitors with disabilities and senior citizens have special access needs.

14. To what extent should traditional park activities and facilities be modified to accommodate the needs of changing user groups?

(a) Continue current facilities and programs for park users with modifications only as required by law (for example, to meet the needs of visitors with disabilities).

Trade-offs: Present resource impacts would continue. Uses by some user groups would be favored. The needs of different user groups, such as senior citizens who benefit from different types of facilities to enjoy the park or large family groups who want to camp as a group, would not be fully met. Park facilities and opportunities would continue to focus on traditional types of frontcountry and backcountry users. Costs would be minimal to moderate.

(b) Redesign frontcountry facilities to meet the needs of visitors with disabilities, seniors, young children, families, and larger groups.

Trade-offs: If facilities were redesigned, natural resources would be minimally affected. Opportunities to enjoy the parks would be available to a broader variety of visitors. Frontcountry areas could become more crowded. Additional signs and information for visitors could alter the character of certain areas. Implementation plans for facility redesigns and new signs would be needed. Costs would be moderate.

(c) Be proactive in identifying and meeting the cultural needs of diverse user groups.

Trade-offs: Developing new facilities or redesigning existing facilities could affect natural resources. The needs of a broad cross section of the American population would be met. Costs could be moderate to high, depending on the proposals.

To What Extent Should Frontcountry Trails Be Maintained?

Background: Studies have shown that most visitors to the parks today limit their visits to a few main attractions located within a short distance of the road. Relatively few visitors use the many trails in the foothills and midelevation forests that offer opportunities to explore these areas for an hour or up to a day. Some shorter trails are also available in winter as cross-country ski routes, while trails at lower elevations offer opportunities for hiking in the fall through spring when higher elevations are under snow. Budget limitations have prevented park staff from maintaining these trails to adequate standards, and many of them have become unusable. Volunteers have played a large role in building and maintaining backcountry trails; it is possible, but less likely, that a volunteer system could help maintain day hiking trails in the frontcountry.

15. How important are day hiking trails in the frontcountry to recreation in the parks?

(a) Restore a large variety of opportunities for day hiking, nature viewing, and solitude offered by an extensive trail system, including a range of physical challenges from an easy stroll to trekking through steep and difficult terrain.

Trade-offs: Visitors would enjoy a traditional park activity that could include personal risks and physical challenges while offering a highly individualized park experience. Restoration would be expensive and would require redirecting park financial resources from other activities.

(b) Restore and retain only the most popular and easily maintained portion of the frontcountry trail network; improve trailheads and parking facilities; provide more extensive information, such as signing.

Trade-offs: Some trail corridors would be restored to more natural conditions. Visitors would retain a sampling of traditional park experiences; improvements to the system would increase users' comfort level and safety. However, while the remaining trail network would provide access to the most popular areas of the giant sequoia forest, it would no longer provide access to many locations, especially the foothills, those farther from the road, and those more challenging to attain. Solitude would be reduced but would still be a significant value. Long-term maintenance costs would be similar to what they have been recently, although short-term costs either to obliterate or to restore some existing trails would represent a moderate additional cost.

(c) Retain only a limited trail system, offering short paved trails for larger numbers of people in the most popular locations.

Trade-offs: More natural conditions could be restored in trail corridors. Visitors who do not use the trail system would be largely unaffected. For the remainder, park experiences would change to ones that are more urban, more crowded, less challenging, and safer. Opportunities for solitude would be lost. The initial removal of trails and restoration would be expensive; thereafter, park maintenance costs would be reduced.

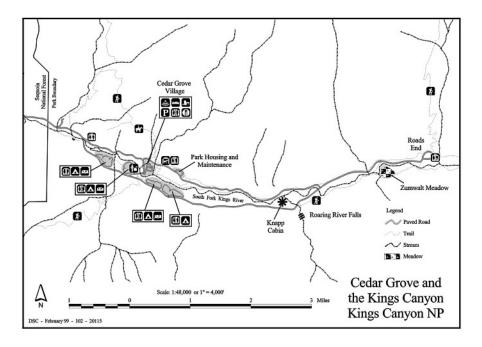
Developed Areas

The parks have five primary developed areas — Cedar Grove in the Kings Canyon, Grant Grove, Giant Forest/Lodgepole, Ash Mountain, and Mineral King. Facilities and access points for some of these developed areas are characterized by crowding, traffic congestion, safety issues, and a mix of incompatible activities (for example, having to pass through a lodging area, campground, or maintenance area to get to a trailhead). In addition, some services are occasionally viewed as less than adequate by visitors (e.g., showers at Lodgepole, inadequate restrooms). Some visitors say that available lodging must be updated, while others express regret over the loss of older structures such as the store at Cedar Grove and the old Giant Forest Lodge. Others voice the need for services such as gasoline stations to be returned in the parks.

Cedar Grove in the Kings Canyon: What Should This Place Be Like?

Background: Cedar Grove is in Kings Canyon National Park at an elevation of 4,600 feet. The Kings Canyon is a deep glaciated valley, with towering granite cliffs, tumbling waterfalls, and the powerful wild and scenic Kings River — "a rival to Yosemite," according to John Muir.

Highlights of this area include trails along the river, Roaring River Falls, a self-guided walk at the lush Zumwalt Meadow set below high granite walls adjacent to the Kings River, Knapp's cabin (a small fishing cabin), and numerous trailheads for hiking and stock use, often leading to wilderness areas. Fishing is popular in the Kings River. Late in the summer, when the water flows decrease, visitors play and swim in the river. Grizzly Falls and Boyden Cavern, on nearby national forest land, are also popular destinations.



The area offers motel lodging and four campgrounds with 351 sites, all operated on a first-come/first-served basis. One campground is for tents only. Nearby are an amphitheater, flush toilets, a pay phone, dump stations, a small visitor center, a wilderness permit station, a restaurant, a gift shop / market, a pack station with day and pack horseback riding, and coin-operated showers and laundry.

The Kings Canyon has relatively low visitor use levels and wide, easily graded roadways, offering opportunities for bicycle use that are unparalleled at any of the other developed areas of the parks. This is true for both the main highway leading east from the Cedar Grove developed area to Zumwalt Meadow and Roads End, and the "River Road," a primitive dirt road leading along the north bank of the river near Roaring River downstream to Cedar Grove.

Seasonal park and concession services include park maintenance, a new sewage treatment plant, housing, and administration.

16. Which character and visitor experiences are important in Cedar Grove and the Kings Canyon?

(a) Reduce facilities and services to create a less developed experience.

Trade-offs: Resource protection would be improved with the removal of facilities. Visitors would be able to enjoy a more natural experience but would be inconvenienced by fewer services. Costs to remove facilities would be high.

(b) Maintain the Kings Canyon as a summer-only, low-key destination to preserve its character.

Trade-offs: A low-key and pleasant area with little snow would remain unavailable to visitors during the winter. No additional maintenance costs would be incurred by the Park Service or the California Department of Transportation.

(c) Retain a low-key atmosphere and limited visitor amenities to preserve the character, but extend the season.

Trade-offs: Visitors would not have access to a full range of facilities and services. Providing winter access would be expensive for the California Department of Transportation, which has

responsibility for maintaining California Highway 180. Rockfalls during the winter create dangerous driving conditions. Existing facilities are not adequate for a long visitor season. Infrastructure improvements to support year-round use would be very expensive

(d) Increase the level of facilities and services; continue a summer-only operating season.

Trade-offs: Resources would be affected by the development of additional facilities. More visitors could be served, and more services would be provided. Development costs could be high.

(e) Increase the level of service and provide year-round access.

Trade-offs: Resources would be affected by additional development. More services would be provided, and visitors could be served on a year-round basis. The present low-key atmosphere could be lost if facilities were expanded (for example, lodging, food service, stores, and a gasoline station). Maintenance costs for year-round access would be expensive for the California Department of Transportation. Rockfalls during the winter create dangerous driving conditions. Infrastructure improvements to support year-round use would be very expensive.

17. To what degree should the Kings Canyon be managed to encourage the use of bicycles for scenic touring?

(a) Continue the current policy of making no special accommodations for bicycles, with bicyclists continuing to mix with traffic on all roads in the area.

Trade-offs: There would be no additional resource impacts. Use would remain unchanged from the recent past; bicyclists would continue to mix with vehicles, resulting in some safety problems. No existing uses would be displaced. There would be no additional costs.

(b) Manage the Kings Canyon east of Cedar Grove to maximize the use of bicycles on existing roadways (for example, add bicycle lanes where possible, or close park roads during certain times to facilitate bicycle use).

Trade-offs: There would be no additional resource impacts. Visitors would have opportunities to have a quality bicycle experience in one of the parks' major feature areas, and they would be able to experience features away from their cars. Visitors intending to tour the area using motor vehicles would be denied the opportunity during bicycle use periods. There would be additional management costs to institute and regulate bicycle use periods.

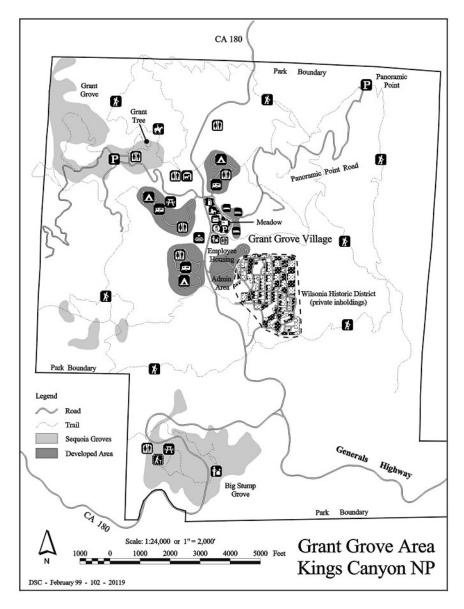
(c) Seek opportunities to develop separate rights-of-way for bicycles (for example, close the River Road to motorized traffic and designate it as a bicycle route, or construct a dedicated bicycle route).

Trade-offs: The construction of a new bicycle trail could affect natural resources, depending on its location. Visitors would have the opportunity to have a quality bicycle experience in one of the parks' major feature areas. More visitors would be able to experience park features away from motorized vehicles. Current uses of the River Road would be displaced, but other roadways would remain undisturbed. Additional construction and maintenance costs to the park could be substantial.

18. Describe your vision for Cedar Grove in the Kings Canyon, including desired natural and cultural resource conditions, visitor experiences, and acceptable levels of crowding.

Grant Grove: What Should This Place Be Like?

Background: Grant Grove, at an elevation of 6,600 feet, is the core of the original park established in 1890. Grant Grove Village surrounds a small wet meadow; nearby is the Grant Tree area with many named sequoia trees and two 1½-mile loop trails nearby. Big Stump Basin (and picnic area) was once a logging camp, as evidenced by huge stumps of sequoia trees. A self-guided trail within the regenerating forest provides excellent birdwatching opportunities and wildflowers. Snowplay, cross-country skiing, and snowshoeing areas are available, with related rental services in the village. Panoramic Point offers spectacular views of the high Sierra. Redwood Canyon has the world's largest sequoia grove, with access by a 2-mile narrow, winding, and rough dirt road.



Grant Grove Village is the most concentrated development in the parks. Within approximately 4 square miles are three types of lodging (rustic cabins with bath, housekeeping cabins, and a new hotel) and three campgrounds with 299 sites, one amphitheater, flush toilets, pay phones, and dump stations. (Campsites are available on a first-come/first-served basis.) There are also a visitor center, two picnic areas, a post office, a restaurant, a gift shop, a market, showers, and stables for day horseback rides. Park facilities include administrative offices, maintenance, fire, sewage treatment, and housing. Increasing numbers of tour buses enter the park at Big Stump and visit Grant Grove, contributing to

parking congestion. In dry years the current water supply is inadequate to support uses, and water must be rationed.

Adjacent to Grant Grove is Wilsonia, a private inholding within the national park (see page 16 for a detailed description).

Popular areas in the neighboring Sequoia National Forest (within a 10-mile radius) include Stony Creek Lodge (lodging, restaurant, and market); Montecito-Sequoia Lodge (cabins, lodge, meals, and summer/winter activities), Kings Canyon Lodge (cabins, meals, and a gas station), Hume Lake Christian Camp (fishing, boat rental, swimming, plus a gas station), and a pack station at Big Meadow (horseback riding and pack trips).

Traffic studies show the Big Stump entrance and the Grant Village area have become major obstacles to through-traffic access to the Hume Lake and Cedar Grove areas. The same studies project that the situation will intensify by 2010. The Hume Lake road is currently being assessed for upgrades. The heaviest traffic use both to the camps at Hume Lake and the Grant Grove area are on weekends, accentuating the problem. New concession park lodging will also contribute to congestion.

19. What character and visitor experiences are important at Grant Grove Village?

(a) Remove facilities and services from Grant Grove Village to restore natural conditions.

Trade-offs: Resource conditions would be im- proved. Visitors would experience a largely natural sequoia grove. Visitor convenience would be greatly reduced. Costs of buying possessory interests, removing development, and restoring natural conditions would be very high.

(b) Maintain the current range of recreational opportunities (summer and winter) and visitor services (including lodging, campgrounds, food services).

Trade-offs: Concentrated development has compromised the condition of the natural resources; however, impacts are concentrated within a relatively small area. An urban character would remain, along with some use conflicts, and congestion problems would not be addressed. There would be no additional development costs.

(c) Increase day use parking and picnic areas to meet present demand by converting a campground.

Trade-offs: Resource conditions would remain about the same. Fewer camping opportunities would be provided. Day users would benefit from additional picnic areas. Costs would be modest to convert a campground to day use.

(d) Increase overnight accommodations to meet demand.

Trade-offs: More facilities would cause additional impacts on natural resources. Increasing overnight facilities would allow more visitors opportunities to stay in Kings Canyon National Park. Costs to develop new facilities would be high.

(e) Expand or redesign services and facilities at Grant Grove Village.

Trade-offs: Resources would be further compromised. Incompatible functions could be better separated. More visitors could enjoy additional amenities, but the experience would be more urban in nature. Development costs would be relatively high.

20. What should the parks do about increasing traffic congestion through Grant Grove?

(a) Accept increasing congestion and attendant safety concerns.

Trade-offs: Existing resource impacts (development, air pollution, and use) would continue. Grant Grove would retain its traditional look, but visitor experiences would be affected by increased congestion. Gridlock conditions would become more common during the summer season, and the traditional atmosphere of Grant Village would become more urban. There would be no additional costs.

(b) Facilitate traffic flow by means of road and parking area improvements and a shuttle system to reduce parking shortages and the number of private vehicles in a destination area.

Trade-offs: There would be modest additional resource impacts. Pulloffs, additional parking, and road upgrades could improve safety and facilitate traffic flow, but they would not eliminate through-traffic. Summer public shuttles for day users as well as campers and overnight lodgers could reduce through-traffic congestion within Grant Grove. Visitors would have less freedom with a shuttle but would not have to deal with congestion or hunting for a parking space. Infrastructure costs for parking and staging in what are now natural areas would be moderate to high.

(c) Remove through-traffic by constructing a California Highway 180 bypass around the area and redesign Grant Grove as a park feature/destination instead of a pass-through area.

Trade-offs: Resources outside the park would be affected by road construction. Traffic funneling through Grant Grove would be removed, making the area a more pleasant destination. A bypass could also improve access to Cedar Grove as well as Hume Lake. Grant Grove Village concessions could lose some economic benefit as a result of through-traffic being routed around the park. The expense of constructing a bypass would be extremely high.

21. What character and visitor experiences are important in Redwood Canyon?

(a) Keep Redwood Canyon as a low-density visitor area; discourage access by keeping an unimproved dirt road.

Trade-offs: Low use levels would minimize impacts on resources. Relatively few visitors access this area, so the low-key atmosphere would be maintained. There would be no additional cost.

(b) Improve access to provide an additional area for more visitors to see.

Trade-offs: Increased visitor use as a result of easier access could affect natural resources along the road corridor and in the grove. Visitor use could be dispersed, helping maintain a higher quality experience at sequoia groves currently accessible to the public, but the present low-key atmosphere at this particular site would be lost. Costs to improve access would be moderate to high.

What Should Be the Future of Wilsonia?

Background: Wilsonia, a privately owned community near Grant Grove Village, occupies about 56 acres and contains 190 private tracts with about 150 dwellings. It also contains 92 tracts with 9 dwellings that have been acquired by the National Park Service.

NPS policy for private lands within parks ("inholdings") is defined in land protection plans, which are prepared by the park and which clarify the future of the lands in question. The parks' current "Land Protection Plan," completed with public input in 1986, establishes a long-term goal to buy out all remaining inholdings in Wilsonia and return the land to a natural state. Wilsonia has been nominated to the National Register of Historic Places since the "Land Protection Plan" was done. As a result, the Park Service has neither purchased additional private property in Wilsonia nor removed any NPS-owned structures that have been determined to contribute to that listing.

The goal of removing Wilsonia reflected both a systemwide policy for the Park Service to eliminate inholdings and a recognition that Wilsonia, with its very small lots and lack of community water and sewer systems, represents a potential threat to groundwater and other natural resources in the vicinity of the village.

A revised "Land Protection Plan" that recognizes the historical significance of the village and addresses its future is needed. Before this can happen, the following fundamental question must be resolved.

22. What is the desired future for the inholding of Wilsonia and the desired condition of the historic resources there?

(a) Seek to preserve Wilsonia in ways that are compatible with the surrounding park; preserve NPS-owned historic buildings by adaptively using them for park administration or implementing historic leasing arrangements.

Trade-offs: Natural resource impacts resulting from the presence of the village would continue. Cultural resources contained within the Wilsonia Historic District would be preserved. The area would remain a mix of historic and nonhistoric structures, as well as restored natural areas. The current "Land Protection Plan" would need to be revised; costs to adaptively use historic buildings for park purposes would be moderate.

(b) Acquire and remove buildings that do not contribute to the historic district; maintain NPS-owned historic buildings and adaptively use them if they contribute to the historic district.

Trade-offs: Natural resource impacts would remain but would be reduced as noncontributing structures were removed. The area would become a mix of historic buildings and restored areas. The "Land Protection Plan" would need to be revised. Costs to remove nonhistoric structures and restore natural conditions would be moderate.

(c) Continue to gradually acquire and remove all properties in Wilsonia, as called for in the "Land Protection Plan." Document NPS-owned historic buildings before their removal; restore sites to natural conditions.

Trade-offs: Natural resource impacts caused by the village's presence would be phased out as natural conditions were reestablished. Cultural resources and private uses within the Wilsonia Historic District would be gradually removed. Costs to document and remove structures and to restore natural conditions could be moderate to high.

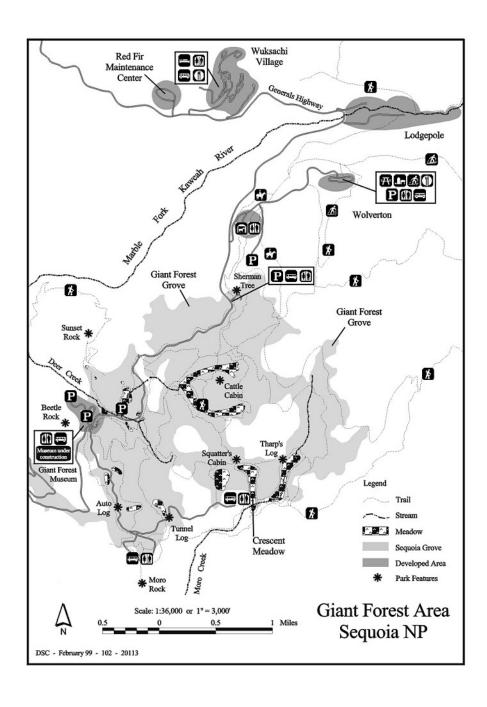
(d) Acquire Wilsonia, remove structures, and use for administrative functions.

Trade-offs: Natural resource conditions would not be restored, and impacts associated with development would remain. However, redeveloping this area for park purposes would confine impacts to already disturbed areas, thus preventing any new disturbance as a result of new construction in other park areas. Wilsonia's historic district status would be lost. Providing recreational uses in this area would make them easily accessible to visitors to Grant Grove Village. Documenting historic structures before their removal could result in high costs over a long time before the area could be redeveloped.

23. Describe your vision for Grant Grove, including desired natual and cultural resource conditions, visitor experiences, and acceptable levels of crowding.

Giant Forest

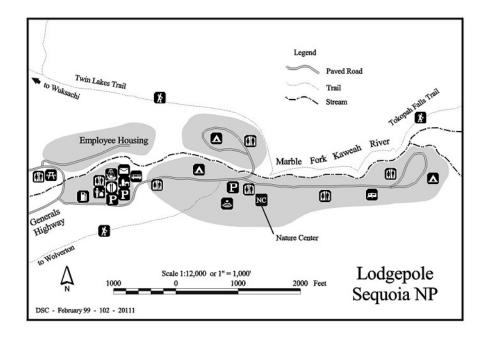
Long-term visions are now being realized for parts of the Giant Forest area with its development as a day use area that includes a museum, trails, offsite parking at Wolverton, and a summer transit system. Wolverton will con-tinue to be a winter play area and will also serve as a day parking area for summer visitors using the Giant Forest shuttle. Lodging has been relocated to Wuksachi, and park operations are centered at the nearby Red Fir maintenance area. The desired futures for these areas (with the exception of Lodgepole) have been decided in recent public planning efforts.



Lodgepole: What Should This Place Be Like?

Background: Lodgepole, an intensely developed site within the glacial canyon of the Marble Fork of the Kaweah River, contains a wide range of facilities. Major facilities include a visitor center, a large campground, a market complex, a post office, a nature center, and a government employee housing area. The gas station at Lodgepole was closed several years ago due to underground leakage, and the site is currently being cleaned up.

With the closure of Giant Forest, it is expected that much of the commercial activity that previously took place at Giant Forest Village will shift to Lodgepole. When this occurs, there could be serious summer congestion. Lodgepole Village has already been suffering from peak season parking shortages. Because the Lodgepole valley is confined by steep canyon walls, expansion space is limited.



Past planning assumed that Lodgepole would be the primary site for providing services to day visitors and that Wuksachi would be designed to support overnight users. There are concerns as to whether the site is large enough to support this intended use along with other current uses.

24. What character and visitor experiences are important for the Lodgepole developed area.

(a) Retain Lodgepole's dual function as both a major commercial site for day visitors and as Sequoia's most popular campground location.

Trade-offs: There would be no additional resource impacts. No existing users would be displaced. Congestion could be expected to worsen, and some intended users of the visitor center and commercial facilities might not be able to park and use the facilities. There would be no additional development costs.

(b) Maximize services for day visitors by reducing camping and facilitating activities such as picnicking. Increase commercial facilities and parking.

Trade-offs: Because redevelopment would occur within existing disturbed areas, there would be no additional resource impacts. The growing demand for day services would be met, and

parking congestion would be reduced. Reducing camping opportunities at the most popular campground in Sequoia would mean that fewer people could enjoy this type of experience. Costs for redesigning areas would be moderate.

(c) Manage Lodgepole to maximize services for campers; construct additional commercial facilities for day visitors at Wuksachi.

Trade-offs: Providing additional facilities for day visitors at Wuksachi would probably cause the same impacts to natural resources as would additional lodging development. Because redevelopment at Lodgepole would occur within existing disturbed areas, there would be no additional resource impacts. Camping experiences would be preserved and enhanced. Moving facilities for day visitors to Wuksachi would prevent some future phases of lodging development at that site, reducing the parks' overnight capacity and preventing some visitors from enjoying the experience at Wuksachi. Costs for providing day visitor facilities at Wuksachi could be high.

(d) Manage Lodgepole to maximize services for campers; continue to develop Wuksachi for lodging; and construct additional commercial facilities for day visitors at Wolverton.

Trade-offs: Providing additional visitor services at Wolverton could affect natural resources. Because redevelopment at Lodgepole would occur within existing disturbed areas, there would be no additional resource impacts. Camping experiences would be preserved and enhanced, and lodging at Wuksachi could be provided as planned. Moving facilities for day visitors to Wolverton would concentrate day activities at this site, along with parking for the Giant Forest shuttle. Costs for providing day visitor facilities at Wolverton, as well as lodging at Wuksachi, could be substantial.

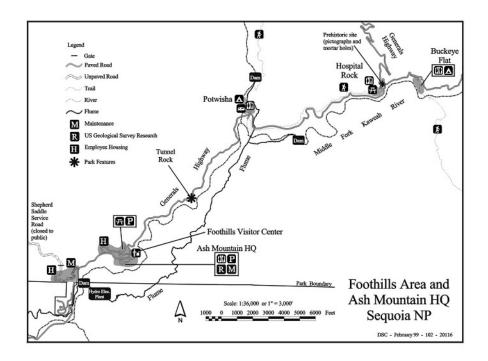
25. Describe your vision for the Lodgepole valley and the Giant Forest area, including desired natural and cultural resource conditions, visitor experiences, and acceptable levels of crowding.

Ash Mountain/Foothills: What Should This Area Be Like?

Background: The Foothills area of Sequoia National Park, which includes the North, Middle, and South Forks of the Kaweah River, contains resources and opportunities not found elsewhere in the parks. Most visitor use in this area is focused along the Middle Fork, from the Ash Mountain entrance to the Buckeye Flat campground. Facilities along this corridor, which is tied together by the Generals Highway, include the Foothills visitor center (also the site of the Ash Mountain park headquarters), the Potwisha campground, the Hospital Rock picnic area and wayside interpretive exhibits, and the Buckeye Flat campground. Opportunities include not only sightseeing, picnicking, and camping, but also swimming, rock climbing, and non-summer day hiking and backpacking.

No overall plan or management direction has ever been developed for this cluster of park facilities and features. With most similar lands outside the parks now closed to the public, visitor opportunities could be provided in this area similar to activities offered at other park developed sites. A very limited system of public trails remains in the area, but a much larger network has been abandoned due to funding shortages.

The foothills area has been developed extensively over the years as the location for the parks' administrative functions. The parks' headquarters complex also includes maintenance shops, warehouses, and employee housing. Other areas are set aside for use as material storage areas, heliports, and construction staging areas.



Natural resource disturbance in this area is some of the most intense in the two parks. Significant acreages have been subjected to grazing by park-owned stock, and some intense grazing for administrative purposes continues. Plant communities have been subject to massive invasions of understory nonnative species, and aquatic systems are also suffering from nonnative intrusions. Significantly, the foothills resources affected are some of the rarest by type in the parks and are, in fact, severely under-represented within the preserved lands of California.

26. What character and visitor experiences are important for the lands along Sequoia's Middle Fork of the Kaweah River development corridor?

(a) Continue to manage the Middle Fork corridor for both administrative and recreational uses (administrative uses would dominate areas near the Ash Mountain headquarters, while limited recreational uses would continue at Potwisha, Hospital Rock, and Buckeye Flat).

Trade-offs: Natural resource conditions would continue unimproved. The ability of the parks to provide appropriate recreation in a foothills environment would be unchanged. Administrative activities would not be displaced.

(b) Emphasize recreational activities; seek to increase opportunities for appropriate activities in the parks (including hiking, swimming, picnicking, and camping).

Trade-offs: Natural resources could suffer as a result of increased recreational pressure. The ability of the parks to provide appropriate recreation in a foothills environment would be significantly enhanced. Additional costs to develop and manage these activities could be moderate to high. Some administrative activities might be displaced.

(c) Emphasize natural resource management in the Middle Fork corridor; reduce or end grazing; carry out active programs of terrestrial and aquatic biological restoration.

Trade-offs: Natural resource conditions would improve significantly. The ability of the parks to provide appropriate recreation in a foothills environment would be limited. Some administrative activities might be displaced. Resource management costs could be moderate.

(d) Expand day and overnight recreational uses; develop more day hiking/biking trails and campgrounds.

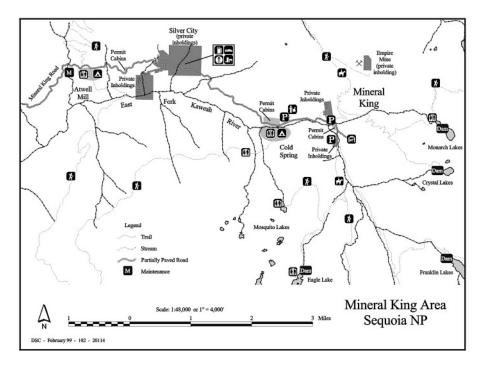
Trade-offs: Additional development could affect natural resources, but probably not to the extent that they were previously affected. Visitor use opportunities would be expanded, particularly during the fall, winter, and spring. Development costs could be moderate to high.

27. Describe your vision for the Ash Mountain/Foothills area, including desired natural and cultural resource conditions, visitor experiences, and acceptable levels of crowding.

Mineral King: What Should This Area Be Like?

Background: Mineral King is a beautiful subalpine valley at the end of a steep, narrow, difficult road. The area provides access to numerous trails leading to the high country. The road is closed during the snow season, and because of its condition, it is not recommended for use by RVs or cars with trailers.

There are two campgrounds with 61 spaces and pit toilets, a ranger station/visitor center where backcountry permits are issued, a picnic area with pit toilets, a small amphitheater, and a concession pack station for horseback trips. Silver City, an inholding, includes privately owned cabins, a privately owned resort with cabins, a store, a restaurant, and showers. Park administrative facilities throughout the Mineral King valley include an entrance station, seven seasonal park staff housing units, three other structures, and a maintenance area.



In three areas are 66 permitted cabins whose occupants were issued special use permits when the Mineral King area was transferred from the Forest Service to the National Park Service in 1978. These permits allow individuals access privileges that are not available to the general public. The legislation allowed five-year extensions, at the discretion of the Park Service, to the 1978 permittees of record and did not allow permits to be transferred. Upon the death of the permittee of record, the cabin was to be removed and the land returned to its natural condition. This is consistent with the National Park Service's policy to phase out all special use permits. (This issue was discussed in Newsletter 2, which is

still available on the Internet at http://www.nps.gov/planning/seki/allplans.htm and http://www.nps.gov/seki).

The Park Service has complied with the spirit of the law by regularly renewing permits. However, with the increasing age (and sometimes death) of the permittees of record, there has been political pressure to change the law. As a result, there is a temporary moratorium on permit expirations, and the park has not insisted on the removal of any cabins, pending the outcome of this general management plan. The entire issue is complicated by several factors. First, national parks are special places set aside by Congress to ensure the continued preservation of nationally significant resources and to allow for public enjoyment. Some people see private uses as inherently conflicting with why Congress set aside national park areas. Furthermore, permit cabins occupy a substantial portion of the land that could be available for recreational development. Policy and law set clear goals to eventually eliminate special use permits in the national park system.

Second, many of the cabins have been identified as contributing to a proposed Mineral King Road cultural landscape district, which is deemed to be locally significant (see Newsletter 3).

Third, some permittees and their families would like to change the law to allow the transfer of permits to their heirs, which would in essence permanently transfer privileges for the use of public lands to the permittees. Alternatively, they have proposed that all families be allowed to retain permit use until the death of the last permittee of record from 1978. According to projections, this could be up to 50 additional years. Both of these proposals would require congressional action.

Other groups and individuals oppose any changes to the law regarding special use permits. They view the cabins and the permits as the privatization of public land. They also claim that the cabins intrude on the natural landscape. Many feel the area should be returned to public uses, as required by the legislation.

28. What character and visitor experiences are important in the Mineral King valley?

(a) Emphasize preservation of the cultural landscape. Manage Mineral King to preserve and retain the existing cultural landscape setting, elements contributing to it, and the visual character of the valley.

Trade-offs: Cultural resource conditions could remain visually unchanged, although all facilities would comply with federal and state surface water and wastewater treatment regulations. Natural resource conditions would remain unchanged, and additional habitat would not be restored. Use levels might remain the same, but users could change. Cabin permits might continue, or cabins could be adaptively reused by the general public. Costs to preserve the cultural landscape could be low to high.

(b) Emphasize and increase recreational activities. Manage the Mineral King valley to emphasize recreational uses consistent with the national parks' character — hiking, fishing, trail / pack trips, increased historical interpretation, and public overnight use, including camping.

Trade-offs: Additional habitat would not be restored. All facilities would comply with federal and state surface water and wastewater treatment regulations. Public access to the Mineral King valley would be increased, and recreational opportunities would be provided to a more diverse public. Private cabin permit privileges would end. Adaptive reuse or interpretation of historic elements contributing to the Mineral King Road cultural landscape would provide a new form for public enjoyment of the area's resources. Some contributing elements of the cultural landscape could be lost. Costs to develop additional recreational facilities could be moderate to high.

(c) Emphasize the restoration and preservation of natural resources. Reduce development and recreational uses while restoring the valley to a more natural state. Relocate trailhead parking and the pack station into wooded areas below the ranger station.

Trade-offs: Removing development would enhance habitat, natural resources, and the natural character of the valley. All remaining facilities would comply with federal and state surface water and wastewater treatment regulations. Many or all cabins would be removed after they had been recorded, resulting in a loss of elements contributing to the cultural landscape. Recreational experiences would be provided for fewer visitors. Costs to reduce development and relocate facilities could be moderate.

29. To what extent should special use permits within Mineral King be continued?

(a) Comply with existing law and phase out each permit upon the death of the permittee of record (no congressional action needed).

Trade-offs: Cabins would be removed as required by permit conditions, and the area would gradually be returned to natural conditions and made available for public use. Contributing elements of the cultural landscape would be lost. Costs to provide facilities for public use would be minimal to moderate, depending on the level of development.

(b) Recommend that the law be changed to allow continued use by permittees until the death of the last permittee of record.

Trade-offs: This action, which would require congressional approval, could delay any proposed public use of the Mineral King area, with cabins remaining for up to 50 years. The historical character of the cabin tracts as part of the cultural landscape would be preserved.

(c) Recommend that Congress amend the public law to allow the transfer of permits indefinitely and to accommodate the desires of long-term permittees.

Trade-offs: This action, which would require congressional approval, would permanently limit public use of the Mineral King area. Special permits could continue indefinitely, restricting public use of national park lands and ecological restoration. The historical character of the cabin tracts as part of the cultural landscape would be preserved.

30. Describe your vision for Mineral King, including desired natural and cultural resource conditions, visitor exeriences, and acceptable levels of crowding?

TRANSPORTATION

How Should Parkwide Traffic Congestion Be Handled?

Background: Traffic studies in 1997 and 1998 report that major sections of the Generals Highway and California Highway 180 west of Grant Grove are at or near an acceptable driving condition during the peak summer season, and additional traffic will lead to more congestion. Motorists experience occasional traffic delays and gridlock in some areas, or they may be caught behind slower moving vehicles. These conditions may make the scenic drives less pleasant. The same studies also document chronic summer parking capacity shortages at Giant Forest, Lodgepole, and Grant Grove. Gridlock situations have begun to appear in parking areas, particularly at Big Stump and the General Sherman tree. Tour bus parking is inadequate at Grant Grove, and similar problems could occur at Wuksachi. In

addition, illegal parking occurs, and slow-moving vehicles in parking lots cause air pollution. Projections show parking shortages will intensify. (Also see the background discussions for questions 3-5.)

31. How should the parks approach the problem that road and parking capacity are inadequate for demand?

(a) Make no changes; continue to allow the system to self-regulate.

Trade-offs: There would be no additional resource impacts. Freedom to travel to or within the parks would remain, but visitor satisfaction would decline and frustration increase as congestion worsened. Some visitors would choose not to visit. A public information system could alleviate visitor frustration by suggesting optimal times to travel and alternative places to visit. There would be no additional development, and management costs would be minimized.

(b) Preserve a less congested experience for private vehicles by developing use limits and a reservation system.

Trade-offs: Traffic congestion would be kept to acceptable levels. Visitors would have to plan in advance to visit parks during the summer season. Some people desiring to visit would be denied entry. There would be no additional development costs, although management costs associated with a reservation system would increase.

(c) Preserve private vehicle use by increasing parking capacity and adding destinations.

Trade-offs: Additional parking development would affect natural resources along the travel corridor. Freedom to visit spontaneously would be preserved, but crowding would be more likely at prime destinations. Additional destinations could be developed to mitigate crowding through dispersal. Construction costs would be substantial.

(d) Move to implement supplemental or mandatory transit systems in congested areas (also see question 32).

Trade-offs: Because visitors would need to stay longer to see park resources, additional parking areas would be needed, affecting natural resources. An efficient shuttle system would reduce visitor frustration associated with driving in heavy summer traffic. Personal choices could be limited if the system was mandatory. Infrastructure costs for shuttle staging and visitor parking lot development would be substantial.

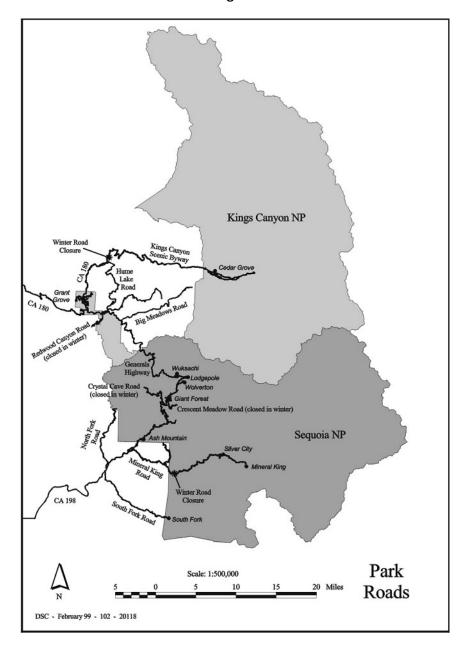
Should Public Transit Systems Be Established?

Background: Many visitors suggest that a public transit system is needed within the parks to relieve congestion and promote better traffic circulation. Some suggest a seasonal system, others a system that could be used by certain types of visitors (such as day visitors and nonbackpackers). Still others recommend a voluntary shuttle system combined with the continued use of private vehicles and commercial buses.

The opposite view is that there should be no public transit system. However, decisions to remove development in Giant Forest hinged on an internal summer transit system to reduce resource damage in the grove. Transit studies have indicated that during the summer two additional public transportation systems are feasible — within Grant Grove, and between Grant Grove and Giant Forest.

A public transit system could be used to accomplish several objectives. It could improve access in areas with existing and expected parking shortages. Similarly, transit could be used to provide access when parking would be restricted during peak use times. Lastly, a transit system could also be used to reduce

or eliminate parking areas adjacent to visitor destinations, allowing natural resources to be restored. Shuttles would connect designated parking areas with visitor destinations. Lodging and campground areas could be connected as well. The result would be that parking demand at visitor destinations could be reduced, and more visitors would be assured of being able to visit destinations.



If a transit system was expanded, possibly two types of shuttles could be used (for example, enclosed vehicles for longer trips and open trams for local area circulation). In addition, the use of local shuttles could be made more desirable by

- providing unrestricted views and access to park sights, sounds, and smells
- alleviating urban-like crowds by using smaller shuttles and individual entry points
- ensuring that shuttles operate quietly and are nonpolluting
- providing shuttles that are not fully enclosed since summer temperatures are reliably temperate and rain is rare
- creating a more desirable park shuttle experience by interpreting park themes, resources, and history along the routes

32. To what extent should public transportation systems be used to improve vehicular circulation and resolve parking problems?

(a) Limit public transportation to the summer shuttle system that is being developed for Giant Forest.

Trade-offs: Developing larger parking lots to meet transit needs would affect natural resources in local areas. The visitor experience would change in the Giant Forest, as more visitors used public transit. Some Giant Forest features would only be accessible by means of the shuttle system. Traffic congestion would continue during the summer and would likely become worse in other areas, affecting the overall quality of the visitor experience. Some visitors might not see crowded park features if parking was not available. Moderate park expenditures would be required to operate and maintain transit systems.

(b) Expand a voluntary public transit system to other park destinations during the summer and make shuttles the easiest way to get around by providing visitor parking at more convenient locations.

Trade-offs: The construction of larger parking areas for shuttle visitors could affect natural resources in local areas. Visitors could see all of the parks' major features, but some features would only be accessible on a shuttle. Shuttle rides would be informative, but users could have the feeling of an urban transit system on longer routes. Depending on the popularity of the shuttle, road congestion would be reduced during the summer. Visitor experiences at other times of the year would not change. Shuttle development and expansion costs could be substantial.

(c) Implement a mandatory public transit system to park features during the summer.

Trade-offs: Transit parking and staging would affect natural resources in local areas. Traffic congestion along Generals Highway would be reduced during the summer. Visitors would be able to see the parks' major resources, but they would have limited freedom to choose how to sightsee during the peak visitor season. Summer transit systems would create a more urban experience in the parks. At other times of the year there would be no change in the type of experience. Shuttle expansion and development costs would be substantial, and probably higher than under "b."

PARK CONTEXT

Sequoia and Kings Canyon National Parks are not as insular as they once were. Often, outside influences are beyond the control of the parks (e.g., pollution, urbanization, an older visiting population, and larger vehicles). While the parks cannot directly respond to or change many of these outside forces, neither can they ignore them. Solutions to problems affecting natural resources may require looking at what is happening to an entire ecosystem. Solutions relating to changing use patterns or an older visitor population may require different types of activities and facilities than those that have been traditionally offered.

Also, early in the 20th century Congress allowed the construction of hydroelectric facilities in Sequoia National Park; the permit for these aging facilities is due to expire in 2005, causing questions about the future of these facilities.

What Should Happen with Hydroelectric Utilities in Sequoia National Park?

Background: Southern California Edison has four storage and two diversion dams, about 6 miles of concrete and wood flume, and several minor support facilities for hydroelectric generation in the parks.

The Kaweah No. 3 hydroelectric generating facility is on the Middle Fork just outside the park. It began operating in 1907 and generates about 23,000 megawatt-hours annually, depending on annual precipitation (most power is generated in the winter and spring). Water is drawn from the Middle and Marble Forks of the Kaweah River by means of a diversion dam on each fork and flumes, diverting up to 100 cubic feet per second (the average is 30 cfs) from the river; river flow at the driest point in the year is reduced to as little as 10% of the natural flow. In addition to the dams and flumes, there are four gaging stations, a siphon crossing the Middle Fork, and a cable river crossing with concrete abutments. The Kaweah No. I generating facility, which dates from 1899, draws its water below the park, but uses four storage dams above Mineral King. These dams store a total of 500 acre-feet and are used to generate 304,000 kilowatts per hour. The dams are designed to produce a more even flow in the East Fork of the Kaweah.

These facilities continue to provide power serving about 3,000 households. The National Park Service receives a discount on electricity worth about \$50,000 annually, as well as about \$5,000 per year for a special use permit.

The federal permits for operating these facilities are up for renewal in 2005. Congress no longer permits new power generation facilities in national parks, but continues to allow some existing facilities. Most of the buildings and structures are over 50 years old, and many are listed on the National Register of Historic Places, individually or as a district. Some structures, such as the concrete dams in the Mineral King area, contribute to the historical significance of the area. However, the flumes interfere with the fire management program as wooden flumes could be destroyed by fire, making them unusable.

The removal of these facilities also raises concerns. Some individuals are concerned that removing dams could have long-term negative environmental consequences. Others feel that the flumes and dams compromise the parks' natural setting because they are artificial and they divert water.

33. What should be the future of hydroelectric How should the parks approach the problem that road and parking capacity are inadequate for demand?

(a) Congress should extend the permit.

Trade-offs: The status quo would continue, with inexpensive power generated locally. Reduced flows to natural streams would persist. Historic structures would remain. Some visitors would find the presence of dams and flumes unaesthetic. The parks would continue to receive a discount on electricity.

(b) Congress should not extend the permit; close utilities but preserve historic structures.

Trade-offs: Dams would be breached, returning natural stream flows. Some visitors would find the presence of dams and flumes unaesthetic. Historic structures would remain and would need to be maintained, resulting in an additional NPS cost. Inexpensive power would no longer be generated locally, and NPS electric costs would increase.

(c) Require the owner to remove all buildings and flumes; allow dams to deteriorate naturally.

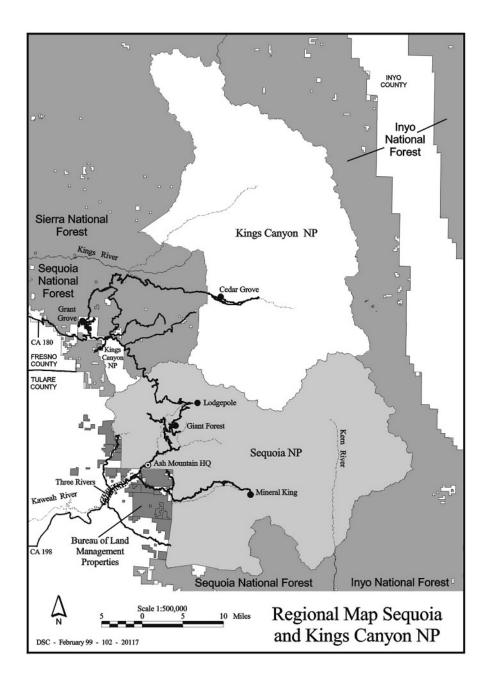
Trade-offs: Removing facilities would allow areas to be restored to natural conditions. Severe impacts associated with removing dams would not occur. Some visitors would dislike the continued presence of concrete dams in natural areas while they were deteriorating. NPS costs would be minimized, but NPS electric costs would increase.

(d) Require the owner to remove all traces of hydroelectric facilities, including dams, buildings, and flumes, and restore areas to a natural condition.

Trade-offs: While the National Park Service would not have the responsibility for dismantling dams, the removal of facilities could affect natural resources within the parks. Historic resources would be lost in addition to an inexpensive but small power-generating source, and NPS electric costs would increase.

Adjacent Federal Land Management

The parks share borders with the U.S. Forest Service (USFS) and the Bureau of Land Management (BLM). These lands have been managed separately and according to the different missions of each agency.



U.S. Forest Service: The Forest Service manages lands under its jurisdiction for multiple uses, including mining, logging, grazing, hydro-power, hunting, snowmobiling, and all-terrain vehicle recreation, as well as hiking, camping, and nature enjoyment. To access some of the most popular Sequoia National Forest

areas, visitors must pass through the parks. The parks have recently begun charging Forest Service visitors entrance fees at Big Stump entrance station near Grant Grove and sharing these fees with the Forest Service; in turn USFS employees have staffed the Grant Grove visitor center and the Big Stump entrance station.

Scheduled activities at some Forest Service concessions (e.g., Hume Lake) bring in large numbers of people during peak visitation periods to the parks. This prolongs delays at the Big Stump entrance station and aggravates congestion on park roads, especially in the vicinity of Grant Grove.

Many visitors find the difference between the Forest Service's multiple-use management philosophy and the Park Service's preserve-for-future-enjoyment mission confusing. They do not see why activities such as cattle grazing or snowmobiling are permitted in one area and not in the other. Visitors are generally unaware that the two agencies have different missions and manage public lands under different authorities. The differences provide for a broader selection of visitor opportunities in the region. The national forests and national parks increasingly are cooperating in the management of natural and cultural resources in such areas as prescribed fire and giant sequoia grove management. Staff specialists often provide consultation to the other agency. A common thread of ecosystem management is bringing land management by the two agencies closer together. The Forest Service sometimes modifies its practices (such as timber harvest) adjacent to park lands to produce a less jarring visual effect for visitors.

Some commenters suggested that the portion of Sequoia National Forest lying between Grant Grove and Cedar Grove should be transferred to the Park Service to make management of this area more consistent.

Bureau of Land Management: The Bureau of Land Management administers 21,000 acres of land in the foothills and on Case Mountain near Sequoia National Park (along parts of the southern and western boundaries). These areas include land adjacent to rivers, groves of giant sequoias, some historic areas, and grazing lands, all of which are managed from the BLM Bakersfield office as the South Sierra Management Area of the Caliente Resource Area. The bureau recently completed a Caliente Resource Management Plan that lists four principal objectives for the South Sierra:

- I. Assist in the maintenance of rural lifestyles and economies of local communities by providing for livestock grazing, community infrastructure needs, and a range of dispersed recreational opportunities.
- 2. Maintain an increasingly active management presence to resolve private/public land use issues, and respond to fire suppression needs that threaten private property.
- 3. Integrate management objectives with those of other federal and state agencies and local and county governments.
- 4. Actively participate in regional conservation plans and proactively manage for the conservation of rare species and habitats, cultural resources, and Native American traditional values.

Of particular interest to the management of Sequoia National Park is the proposal to manage the 4,870 acres along the North Fork of the Kaweah River adjacent to the park "for riparian resources, cultural resources, and sensitive vegetation, while improving recreational opportunities." Some of this area is identified for land exchanges with private parties to consolidate resource protection and meet management objectives.

Wild and scenic river designation has been recommended in the plan for 2.4 miles of the East Fork of the Kaweah, 0.2 mile of the Middle Fork, and 4 miles of the North Fork. The bureau is carefully examining the management of sequoia groves on Case Mountain and conducting scientific studies to ensure their long-term health. Also, parts of the Case Mountain area are being studied for wilderness designation.

The Bureau of Land Management has approached the National Park Service about more active cooperation in the management of adjacent lands, such as common patrols of the North Fork area.

WHERE DO WE GO FROM HERE?

Working through these issues, choices, and competing values may have led you to two conclusions:

- Retaining the parks' traditional character may not be possible.
- The parks cannot be everything to everyone some trade-offs are inevitable.

The next step is to develop a range of alternatives. The alternatives will all look at what resource conditions and visitor experiences should exist in the parks, where opportunities should be provided, and what levels of visitor use, management, and development are appropriate to achieve these desired conditions. Your input on this workbook, as well as your attendance at public meetings, will help ensure that the general management plan considers a full range of alternatives.

WORKSHOPS

San Francisco — April 17, 1999, 9 a.m. to 12 noon
Golden Gate National Recreation Area
Upper Fort Mason (at Bay and Franklin Streets), Building 201, First Floor Conference Room

Sacramento — April 17, 1999, 6 p.m. to 9 p.m. Hiram Johnson High School 6878 14th Street

Bishop — April 18, 1999, 1 p.m. to 4 p.m. Catholic Church Hall 849 Home Street

Los Angeles — April 19, 1999, 6 p.m. to 9 p.m.
University High School
11800 Texas Avenue at Barrington (between Wilshire and Santa Monica Blvds.)

Three Rivers — April 20, 1999, 6 p.m. to 9 p.m.
Three Rivers Union School
41932 Highway 198

Visalia — April 21, 1999, 6 p.m. to 9 p.m. Mt. Whitney High School 900 South Conyer

Fresno/Clovis — April 22, 1999, 6 p.m. to 9 p.m. Clovis High School 1055 Fowler Avenue

Internet Address: http://www.nps.gov/seki or http://www.nps.gov/planning/seki/allplans/sekiplans.htm