

### General Management Plan Development Concept Plans Environmental Impact Statement

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# **JOSHUA TREE**

National Park • California



# Final General Management Plan Development Concept Plans Environmental Impact Statement

#### Joshua Tree National Park Riverside and San Bernardino Counties, California

On October 31, 1994, Public Law 103-433 added 234,000 acres to the Joshua Tree National Monument and changed its status from national monument to national park. The land that was added by the legislation is mainly adjacent to backcountry and wilderness areas. It is largely undeveloped and its management will be addressed in the wilderness and backcountry management plan currently being developed, which will serve as an amendment to this plan. This general management plan addresses only the land that was included prior to the 1994 legislation.

This General Management Plan / Development Concept Plans / Environmental Impact Statement was prepared in order to offer a proposal and two alternatives for the management, use, and development of Joshua Tree National Park. In this plan, which affects mainly the developed areas of the park, the proposal calls for a change of management and use to more adequately protect and interpret significant resources. The proposed action would result in an increased visitor awareness of opportunities and a broader range of visitor choices and experiences. Visitor contact facilities and services would be provided at each of the three main park entrances. Interpretive programs and the system of wayside exhibits would be expanded. Resource management programs would also be increased. Facilities in developed areas would be replaced or redesigned to increase effectiveness, reduce impacts on natural and cultural resources, and improve aesthetic quality. The capacity of some picnic areas and campgrounds would be expanded, but no new campgrounds would be developed. The National Park Service would encourage the provision of visitor facilities in the surrounding communities. Day use parking in the most heavily used areas of the park and along primary roads would be expanded, primarily in previously disturbed areas.

The alternatives included in addition to the proposal include no action (alternative B) and minimum requirements (alternative C). The no-action alternative describes the continuation of current management strategies. Under this alternative visitor and park support facilities would be maintained in their present locations. There would be no interpretive improvements. The main roads would continue to be reconstructed as funding became available. The minimum requirements alternative would primarily rehabilitate deteriorated or undersized facilities on their current sites. Individual camp and picnic sites and parking areas would be better delineated to reduce impacts on surrounding environment and improve their appearance. Capacity of campgrounds and picnic areas would not change. Day use parking would be restricted to the designated parking areas only. The main visitor center would remain at the Oasis of Mara, and exhibits would be replaced. The interpretive wayside system would be upgraded.

The environmental consequences of the proposed action and alternatives are fully documented. This document has been reviewed by the National Park Service, other agencies, and the public. Comments received and NPS responses are printed at the end of this document. For further information contact:

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#### **SUMMARY**

On October 31, 1994, Public Law 103-433 increased the size of the monument and changed its designation from national monument to national park. Most of the additional land is undeveloped and is adjacent to backcountry and wilderness, and its management will be addressed in the wilderness and backcountry management plan, which will amend this general management plan. Surveys, data gathering and analysis, scoping, and public involvement will be undertaken as part of the planning process for the additional land. The new plan will follow National Environmental Policy Act guidelines and will have an accompanying environmental impact statement. This general management plan and environmental impact statement deals mainly with developed areas of the park. Together with the wilderness and backcountry plan it would serve as a comprehensive management plan for the park.

An agreement has been reached within the Department of the Interior to approach planning and management of the 25-million acre California Desert region on an integrated ecosystem basis. The California Desert has been designated an official pilot project of the national performance review to demonstrate effective ecosystem management, planning, and agency reinvention efforts. Joshua Tree National Park will be an active partner in these multiagency, multispecies ecosystem management plans. Geographically, Joshua Tree National Park will be influenced by three proposed ecosystem plans — the northern and eastern Colorado Desert coordinated management plan, the west Mojave Desert coordinated management plan, and the Coachella Valley habitat conservation management plan. These plans will be consistent with direction offered in this general management plan as they affect management of the park.

This document includes a general management plan, development concept plans, and an environmental impact statement for Joshua Tree National Park. Two alternatives (a no-action alternative and a minimum requirements alternative) are also evaluated.

The proposed action is the National Park Service's general management plan for the park. It would minimize disturbance to resources and increase visitor activities and services. Day use capacity in the most heavily used areas of the park would be expanded, primarily in disturbed areas. Visitor awareness of the many opportunities and experiences would be increased. The opportunities for wilderness and trail experiences would be expanded.

Management of developed land and wilderness would be enhanced through an array of implementation plans that decrease threats to the wilderness by removing incompatible uses and development. The proposal would close off some of the illegal access to the park in order to decrease the vandalism, theft, and destruction now taking place in areas with uncontrolled access. Incompatible uses would be removed from the backcountry. Placement of new and replacement of existing expansion bolts for technical rock climbing in wilderness would continue to be prohibited until studies currently in progress have been completed. Cooperative planning and agreements with adjacent landowners and other agencies would be increased to preserve ecological units that extend across park boundaries. Inventory, monitoring, research, and patrol of park resources would be maximized.

Management of visitors and reduction of impacts would be addressed through the redesign of developed areas to separate user groups, reduce congestion, contain and direct uses, improve routes between visitor destinations, and provide additional day use parking. All major roads would be reconstructed. A network of clearly designated new and existing roads, trails, parking areas, and shuttle routes would improve circulation and distribution of visitors in the most heavily used areas.

Orientation, trip planning assistance, and introduction to the primary interpretive and educational themes would be provided at the three main entrances. A new visitor center near the west entrance would focus on the ecology of the Mojave Desert. The north entrance visitor center would be converted to a visitor information and cultural center. The south entrance visitor contact facility would be replaced with a larger facility and would focus on the resources of the Colorado Desert. Interpretive exhibits and services would be expanded along the major roads and developed areas.

Park support facilities would be upgraded or expanded in their current locations to provide an effective operation and minimize new disturbance. There would be no development or construction for concessions operations in the park.

This alternative would result in approximately 104 acres of disturbance; however, approximately 25 acres of this would be in areas where the vegetation and soil are already disturbed. Additionally, almost 6 acres would be returned to natural conditions through revegetation. An undetermined additional number of acres in the backcountry would be revegetated following removal of inappropriate development or use. Joshua trees would be impacted, and an attempt to salvage trees for revegetation would be necessary. There would be no significant impact on the desert tortoise or other wildlife, and the proposal would reduce the current impacts at Cottonwood Oasis. Cultural resources would be better protected, interpreted, and managed, and vandalism would be reduced. The visual intrusions from new development would be minimized and the scenic quality protected. Visitor experience, understanding, and appreciation would significantly improve.

The no-action alternative (alternative B) describes the continuation of current management strategies. Visitor and park support facilities would be maintained in their present locations. Planning would be internally focused; there would be limited cooperative planning with other agencies. Resource damage or visitor conflicts would be dealt with on a case-by-case basis. The main roads in the park would continue to be reconstructed as funding allowed. This alternative would have few additional impacts on resources except for road reconstruction that would impact about 91 acres adjacent to the main roads. Visitor safety would be improved.

The minimum requirements alternative (alternative C) outlines the limited management actions necessary to repair and clean up facilities and reduce impacts on natural and cultural resources. Day use parking would be restricted to designated parking areas, which would be clearly delineated. Existing visitor experiences and opportunities to enjoy the park would continue.

As under the proposal, management of the park would be enhanced through the development of an array of implementation plans to evaluate threats to the wilderness. Incompatible uses and developments would be removed. Some of the illegal access routes

would be closed. Cooperative planning and agreements with adjacent landowners and other agencies would be increased to preserve ecological units that extend across park boundaries. Incompatible uses would be removed from the backcountry. The placement of new, and replacement of existing, expansion bolts in wilderness for technical rock climbing would remain prohibited until studies currently in progress have been completed.

Inventory, monitoring, and research would be increased with the focus of areas of special expertise. Patrol of the boundaries would be increased.

Management of visitor use would reduce impacts on the resources by better delineating individual camping, picnicking, and parking sites and trails. No new parking areas would be provided.

The current visitor center at the north entrance would be the primary entrance — offering orientation, trip planning assistance, and interpretation. A fee collection station would continue to serve the west entrance. The south entrance visitor contact station would be expanded moderately to increase information and orientation functions. Interpretive exhibits along the major roads and developed areas would be updated. Interpretive services would be increased primarily at Keys Ranch.

Park support facilities would be upgraded to improve park operations and minimize new disturbance.

Implementation of the minimum requirements alternative would result in about 94 acres of disturbance; however, approximately 23 of these acres are in areas where vegetation and soil are already disturbed. Almost 6 acres of previously disturbed land would be returned to natural conditions. An undetermined number of acres in the backcountry would be revegetated following removal of inappropriate developments or uses. No impacts on wildlife would be expected. The minimum requirements alternative would reduce the current impacts on Cottonwood Oasis by reducing foot traffic damage. Cultural resources would be better protected and better interpreted. Vandalism would be reduced somewhat. Impacts on scenic quality would be minimal, and the designed appearance of the Oasis of Mara and headquarters would have a positive effect. Some restoration of natural features and closure of some roads would also have a positive impact. Visitor experience would be improved, although parking in the most heavily used areas of the park would not change.



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# PURPOSE OF AND NEED FOR THE PLAN





#### INTRODUCTION

The purpose of and need for federal action is to adopt a general management plan for Joshua Tree National Park. It will guide natural and cultural resource management, visitor use, general development, park administration, and operations for the next 10 to 15 years. The plan is needed to address problems and management concerns related to resource protection, visitor use, and park operations.

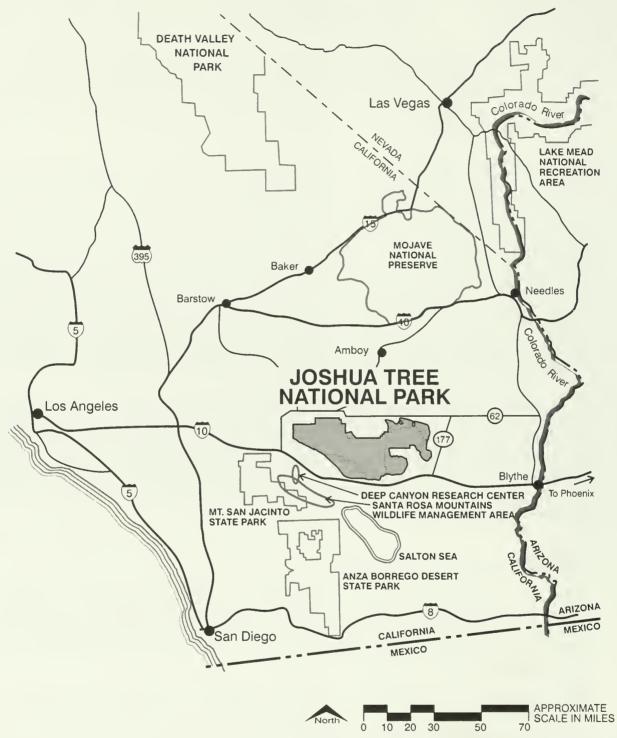
This *Draft General Management Plan / Development Concept Plans / Environmental Impact Statement* was prepared for Joshua Tree National Monument and had nearly completed the review process when legislation was passed that added 234,000 acres and changed the designation of the area from national monument to national park. Most of the additional land is undeveloped and adjacent to wilderness sections of the park. This plan mainly addresses the developed areas of the park. A management plan for the new areas will be included in the wilderness and backcountry management plan, which will include additional public involvement and an environmental impact statement. A number of surveys of the additional land, identification of public concerns, and a level of detail beyond the scope of this plan will be necessary to provide data needed to determine appropriate management of backcountry and wilderness. The new plan, together with this general management plan, are intended to fulfill the requirements of the 1994 legislation. The 1994 legislation called for the establishment of a commission that would advise the secretary of the interior on the plans.

This document presents a proposed action and two alternatives, including a no-action alternative, for the management of Joshua Tree National Park. It will serve as the guiding management plan for the park in conjunction with the wilderness and backcountry management plan and ecosystem plans. The proposal and alternatives in this document recommend actions that would better protect the resources and better serve the visitor. This document also analyzes the environmental consequences of implementing the proposed action and each of the alternatives.

#### **BRIEF DESCRIPTION OF THE PARK**

Joshua Tree National Park is located in the Mojave and Colorado Deserts of southern California (figure 1). It lies along the east-west transverse ranges of the Little San Bernardino Mountains. The south boundary follows the base of these mountains along the northern perimeter of the Coachella Valley; the north boundary is defined by the Morongo Basin. The park is in San Bernardino and Riverside Counties.

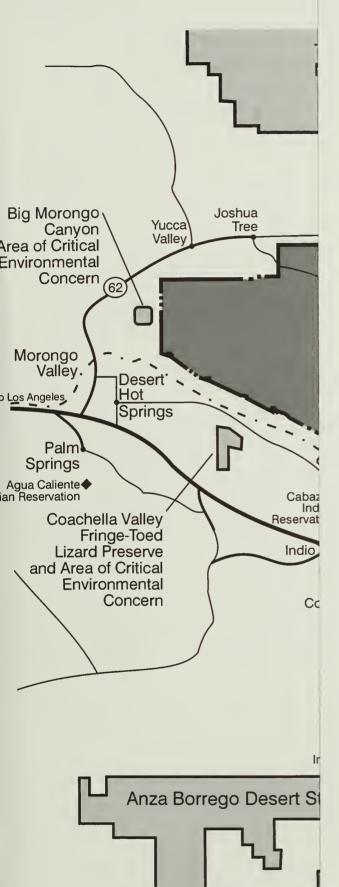
Of the park's 794,000 acres, 593,490 are legislated wilderness — set aside for the preservation of natural, cultural, historic, and scenic resources. The compressed transition zone between the Mojave and Colorado Deserts makes it possible to cross from one desert to the other within less than 65 miles. The park contains all or portions of numerous mountain ranges including the San Bernardino, Cottonwood, Hexie, Pinto, Coxcomb, and Eagle ranges. The eastern portion averages 2,000 feet above sea level while the western half is mostly above 4,000 feet. Extremes in elevation range from 1,000 feet at Pinto Well to 5,900 feet at Quail Mountain. Major valleys include the Pinto Basin, Juniper Flats, Covington Flats, Pleasant, Queen, and Lost Horse.



NOTE: Management of the land added to Joshua Tree National Monument by the park legislation will be addressed in the wilderness and backcountry management plan.

### **REGION**

JOSHUA TREE NATIONAL PARK UNITED STATES DEPARTMENT OF THE INTERIOR NATIONAL PARK SERVICE DSC/Dec. '94/156/20,043A

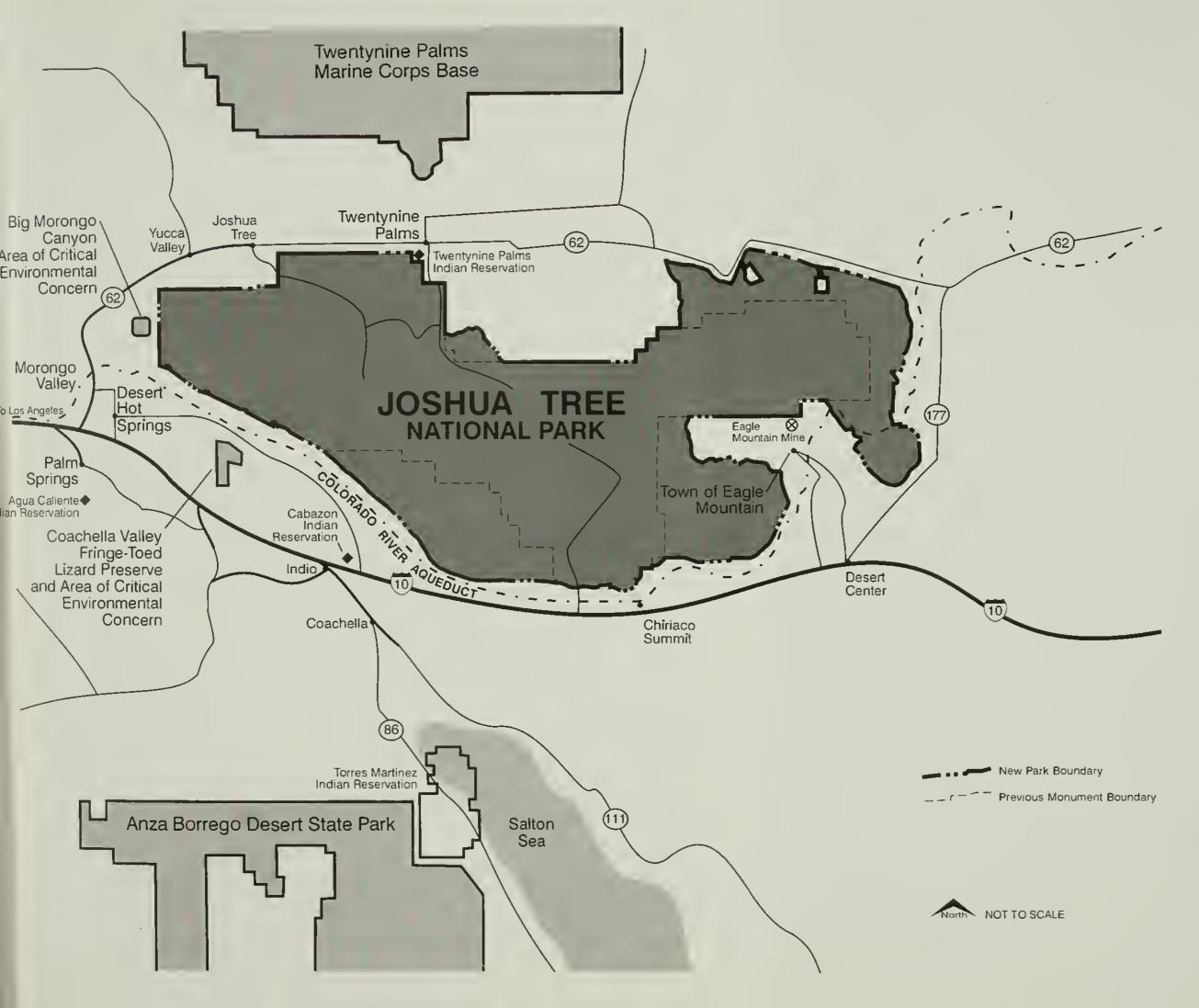




NOTE: Management of the land added to Joshua Tree National Monument by the national park legislation will be addressed in the wilderness and backcountry management plan.

### VICINITY MAP

JOSHUA TREE NATIONAL PARK
UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
DSC/Aug '93/156/20,014B





NOTE: Management of the land added to Joshua Tree National Monument by the national park legislation will be addressed in the wilderness and backcountry management plan.

### VICINITY MAP

JOSHUA TREE NATIONAL PARK UNITED STATES DEPARTMENT OF THE INTERIOR NATIONAL PARK SERVICE DSC/Aug '93/156/20,014B Unusual desert plants and animals and spectacular geological features are all important. Although the name Joshua Tree implies that the park has a natural history focus, the area also has a rich and varied cultural history. Humans, from prehistoric times to the present, have been an integral component of this desert environment.

#### PLANNING DIRECTION

Management goals were defined to guide the formulation of the proposed action and alternatives. These goals were based on the purposes of the park, protection of the significant resources, and communication of the primary interpretive themes to visitors. Planning issues and management concerns were also determined based on input from park staff and the public. Identifying each of these elements was a separate step in the planning process, and the results are briefly described in the following sections. They provide a context for the proposed action and alternatives as each describes a different management approach for achieving management goals and resolving issues.

#### PARK PURPOSE

Joshua Tree National Monument was established as a unit of the national park system by Presidential Proclamation No. 2193 on August 10, 1936 (50 Stat. 1760) because its "lands contain historic and prehistoric structures and have situated thereon various objects of historic and scientific interest . . . it appears that it would be in the public interest to reserve such lands as a national monument, to be known as the Joshua Tree National Monument" (see appendix D). While the language in the presidential proclamation indicates a strong cultural resource emphasis, the legislative history reveals that another major reason for the establishment of the monument was preservation of the natural resources of the Colorado and Mojave Deserts. The natural resource preservation emphasis was so strong that the original name contemplated for the monument was Desert Plants National Park.

Public Law 81-837, 64 Stat. 1033 reduced the size and revised the boundaries of Joshua Tree National Monument in 1950. Almost 300,000 acres that were known to contain significant mineral reserves were deleted, leaving the monument at approximately 560,000 acres. Public Law 103-433 added 234,000 acres to Joshua Tree National Monument and changed its status from national monument to national park.

Through the NPS organic act (1916), Congress set forth the purpose of the national park system, which is "to conserve the scenery and the natural and historic objects and wildlife therein and to provide for the enjoyment of the same in such manner and such means as will leave them unimpaired for the enjoyment of future generations" (16 USC Sec. 1). On October 20, 1976, Public Law 94-567 designated 429,690 acres as wilderness and 37,550 acres as potential wilderness in the monument. On October 31, 1994, Public Law 103-433 designated an additional 163,000 acres of wilderness. Wilderness is an area "where the earth and its community of life are untrammeled by man, where man himself is a visitor who does not remain," and "which is protected and managed so as to preserve its natural conditions." Management of the wilderness sections of the park must comply with the Wilderness Act of 1964 and NPS wilderness management policies. National Park Service *Management Policies* (NPS 1989) state that "Wherever a wilderness area is designated within a park, the

preservation of wilderness character and resources becomes an additional statutory purpose of the park."

In March 1984 the monument was established as part of a biosphere reserve system that includes Joshua Tree and Death Valley National Monuments, Anza Borrego Desert State Park, Santa Rosa Mountains Wildlife Management Area, and Deep Canyon Research Center. Biosphere reserves are set aside by the United Nations Educational, Scientific, and Cultural Organization under its Man and the Biosphere Program (MAB), which is an international program of scientific cooperation dealing with human-environmental interactions throughout all geographic and climatic areas in the world. There are 311 biosphere reserves in 81 countries; 47 are in the United States. The purpose of these biosphere reserves is to establish a network of protected samples of the world's major ecosystem types. Reserves are devoted to the conservation of natural areas that provide a standard against which human impact on the environment can be measured. The Center for Arid Lands Restoration was subsequently established to serve as an information center in support of the MAB program.

Based on the enabling and wilderness legislation, the legislation of October 1994, and biosphere reserve status, the purposes of Joshua Tree National Park are to:

protect and interpret areas, sites, structures, and various artifacts associated with occupations by prehistoric, historic, and contemporary Native American groups, historic miners, and subsistence cattle ranchers

protect and interpret the biologically diverse examples of the Mojave and Colorado desert ecosystems

serve as a natural laboratory for understanding and managing the Mojave and Colorado desert ecosystems

preserve the character and values of wilderness in the park

provide visitors with opportunities to experience and enjoy natural and cultural resources through compatible recreational activities

In summary, the purpose of Joshua Tree National Park is to preserve unimpaired the natural and cultural resources of the Mojave and Colorado Deserts so that they can be interpreted, understood, and enjoyed by present and future generations.

#### RESOURCE SIGNIFICANCE

#### Natural Resources

Joshua Tree National Monument was originally set aside to preserve an ecologically dynamic component of the California Desert — much more than just the Joshua trees. The east-west Transverse ranges support examples of Mojave and Colorado Desert ecosystems. The elevations range from 6,000 feet to near sea level, which creates an unusual compressed transition zone between the two deserts.

Early proponents envisioned a representative segment of the two deserts that would be large enough to embrace a self-sustaining natural system. This system contains the visible and invisible biotic and abiotic components that link the elements. Living elements influence each other and are influenced by climate, fire, earthquakes, and other natural phenomena.

#### **Cultural Resources**

The geological and biological diversity of the Joshua Tree area provided for early human subsistence. In the post Pleistocene, the climate was milder and wetter than it is now. The Pinto Basin was a shallow lake 5,000 to 7,000 years ago, narrowing to a river or stream. Along its banks lived the people of the Pinto Basin complex. Big game hunting was the predominant means of subsistence because the water and lush vegetation lured animals to the area. As the climate changed, the Pinto Basin slowly dried up and people left in search of water. They moved outside what is now the park to the palm canyons of the lower valleys and to the cooler mountains and only returned to the area seasonally to trade, hunt, and harvest.

The park contains the early Pinto culture sites and traces of other prehistoric and historic American Indian cultures, as well as those of Euro-American gold mining, homesteading, and subsistence cattle ranching. The park is archeologically, ethnographically, and historically diverse. It exhibits a continuum of cultural adaptations and includes a significant collection of prehistoric and historic American Indian artifacts and late 19th century and early 20th century non-Indian artifacts. These artifacts document the park's importance to east-west migrations from prehistoric times. The remnants of past human occupations illustrate the adaptations that different groups made to the arid desert environment.

#### Recreational Resources

The natural and cultural resources of the park provide outstanding recreational opportunities for the more than 1.2 million visitors that come to the area annually.

The wilderness provides an opportunity for solitude in nature and for primitive recreation such as hiking and backpacking. Clean air ensures an extensive visual range, and mountains, basins, canyons, massive boulders and rock outcrops, and desert plant life combine to make outstanding scenery.

Topographic relief and the associated change in air temperature encourage year-round visitor use. The park provides some of the most diverse desert wildflower displays in the southwestern United States. There is also a wide variety of wildlife, including coyotes, jackrabbits, desert tortoises, bighorn sheep, tarantulas, golden eagles, and roadrunners.

Opportunities to see, photograph, and study cultural resources also draw visitors. Old mines, ranches, and prehistoric rock art are all popular.

Massive boulders and rock outcrops provide some of the best rock climbing in the United States. Many families like to camp so they can scramble on the maze of boulders in the park. Skilled and novice technical rock climbers from around the world are attracted to the challenging climbing routes.

#### PRIMARY INTERPRETIVE THEMES

The following primary interpretive themes are the most important ideas for visitors to understand about the park:

- (1) Joshua Tree National Park is comprised of two biologically different desert environments, the Mojave and the Colorado, which merge within its boundaries to create an unusual ecological transition zone. Lush palm tree oases and historic springs draw attention to the importance of water in the desert environment.
- (2) The Joshua tree, with its unusual shape and adaptation, is a perfect vehicle for understanding the interdependence of organisms living in the desert.
- (3) Plants and animals have evolved to survive in the heat and drought. These adaptations produced an interesting array of life forms. Humans, from prehistoric times to present, also adapted to an environment with little water. People who have made this area their home have adapted and have provided a colorful and varied human history.
- (4) The picturesque landscape features, including the mountain ranges, desert basins, and rock piles, all contribute to the significance of the park. The dynamic processes that formed this area, including erosion and earthquakes, continue.
- (5) Deserts have suffered a great deal of human abuse. The arid landscapes are slow to heal, and tracks made by a single vehicle in desert soil can often be seen many years later. Fragile desert ecosystems survive in a delicate balance. They quickly manifest even the subtle environmental changes brought about by humans. Protection of the California Desert can only be accomplished from an ecosystemwide perspective that promotes harmonious relationships between people and the environment. The "leave no trace" ethic must be taught to visitors to the park.

There are a number of natural and cultural history interpretive themes present in the broader context of the national park system, including plains, plateaus, and mesas; cuestas and hogbacks; mountains; vulcanism; sculpture of the land; caves and springs; Triassic-Cretaceous periods; Paleocene-Eocene epochs; Oligocene-Recent epochs; deserts; streams; cultural development: Indigenous American populations; European colonial exploration and settlement; westward expansion of the British colonies and the United States 1763–1898; and science.

#### MANAGEMENT GOALS

The following management goals were developed to achieve the monument's (and now the park's) purpose, protect significant resources, and impart the primary interpretive themes:

Manage land and wilderness to preserve them unimpaired for future generations.

Participate cooperatively in the preservation of ecological units that extend beyond the park boundary.

Improve knowledge of natural and cultural resources.

Manage visitation more effectively and reduce impacts associated with dispersed and poorly defined visitor use facilities.

Educate park visitors regarding the NPS mission and the natural and cultural resources of the park.

Facilitate cooperative planning throughout the California Desert ecosystem with other public agencies and communities.

Improve park circulation; focus on safety, visual quality, and visitor experience.

Improve the effectiveness of park operations.

These eight goals would be accomplished in different ways and to varying degrees by the proposed action or the alternatives.

#### PLANNING ISSUES AND MANAGEMENT CONCERNS

The last master plan for Joshua Tree National Monument was completed in 1964. Since that time southern California has experienced tremendous growth. Over 18 million people reside within a four-hour drive of the park. As a result, visitation has increased significantly; there has been nearly a 50% increase over the past decade. This has resulted in a number of impacts on natural and cultural resources and has also brought changes in the type and quality of the visitor experience. The primary planning concern at Joshua Tree pertains to the effects of this increasing use.

Other related issues involve the effects of human use and development throughout the park and the escalating development around the boundary. Planning issues and concerns were identified through meetings with other interested government agencies and the public (see the "Consultation and Coordination" section).

#### **VISITOR USE**

Inadequate control over the actions of the increased numbers of visitors has resulted in a number of problems. There are conflicts among user groups (horseback riders, hikers, climbers, sightseers, campers) for some of the more popular resource areas in the park. Competition for popular use areas is decreasing the quality of the visitor experience for all users. Campsites, parking, trails, and picnic sites are not clearly defined, which causes confusion, damage to resources, and reduced visual quality from expanding eroded areas and social trails. Campgrounds operate at capacity during some weekends and during the spring, so some visitors attempt to camp illegally.

The location of the visitor center in Twentynine Palms greatly limits the park's ability to contact a large segment of park visitors. Most visitors enter the park from either the Joshua Tree/west entrance or the Cottonwood/south entrance. The small fee station kiosk at the Joshua Tree entrance and the Cottonwood information station are inadequate to serve the numbers of visitors passing through. Many of the visitors who enter through these stations never stop at the Twentynine Palms Visitor Center. Some facilities do not meet current standards for accessibility.

Interpretive media and facilities throughout the park are dated and inadequate and contribute little to the understanding or appreciation of the purpose and significance of the park. Desert environments have traditionally been viewed as wastelands where almost any human activity was acceptable. The park is being damaged and abused because many of the visitors are not aware of the significance of the area, the fragile nature of the resources, or the types of behavior appropriate to a national park.

#### LAND MANAGEMENT

Effective protection of park land, particularly wilderness, is hampered by the current zoning scheme that was adopted in 1978 and has not been reevaluated. Various developments such as roads, borrow pits, abandoned mines, artificial wildlife watering devices, buildings,

nonnative vegetation, and private inholdings exist throughout the park. They alter the natural and cultural landscapes, impact native plants and wildlife, and affect wilderness values.

The drilling of holes for expansion bolts for climbing aids in rocks has created an urgent need to evaluate this practice in the park. Since February 1993 the placement of new bolts and the replacement of existing bolts has been prohibited in wilderness until studies can be completed to examine impacts.

#### ADJACENT LAND USE

Developments and other land uses adjacent to the boundary threaten the integrity of the park's resources, views, and wilderness values. Surrounding land use has changed significantly since creation of the monument. Subdivisions, utility corridors, mining, military facilities, and agricultural interests are, in some cases, right along the boundary. Eagle Mountain landfill has been proposed near the southeast boundary. Concerns include impacts to the desert tortoise and other wildlife, trash blowing, leaks, and air quality degradation. Development would intrude on the scene and diminish the naturalness and solitude of the wilderness. Other concerns include effects from air and water pollutants, invasion of nonnative species from adjacent land, and noisy overflights that affect wilderness solitude. The park's resources are also seriously threatened by illegal activities and uncontrolled access along the boundaries, such as offroad vehicle use, theft of desert vegetation and archeological resources, wood cutting, and dumping of hazardous and domestic wastes.

Fulfillment of the biosphere reserve concept and long-term protection of ecological units that extend outside the boundary are also made more difficult by land use and development around the park. The boundaries were revised in the early 1950s to accommodate mineral extraction. The configuration that had been designed by biologists to protect the natural systems of the two deserts was destroyed in many areas. Consequently, wildlife and vegetation systems were fragmented by uses such as hunting and mining and other developments.

#### **RESOURCES MANAGEMENT**

Effective implementation of natural and cultural resources management programs has been hampered by lack of adequate inventories. This includes identification and determination of integrity and significance of cultural resources according to national register criteria. Due to limited staffing and funding, most projects have no critical inventory priority; immediate needs are addressed on a case-by-case basis.

#### **ROADS AND CIRCULATION**

Much of the road system is inadequate and in poor condition. The roads were originally built by miners to accommodate wagons and teams and have been improved through the years. The sequence of improvements has resulted in roads too narrow for present use, an inadequate base, alignment and drainage problems, an insufficient number of turnouts and parking areas, and safety hazards (especially for recreational vehicles along curves).

Magnificent large and old Joshua trees grow at the edge of the pavement where they are susceptible to impacts. Some roads have already been improved to meet national park road standards. Others, however, are deteriorating because they were not designed for current use.

The parking areas, like the roads, are no longer adequate to serve current visitation levels and patterns. As a result, visitors park in nearby lots (designated for other attractions or functions) or on the roadsides and walk cross-country to the sites they want to visit. This creates expanding bare spots at the edges of roads and parking areas, and social trails across fragile terrain. Damage to vegetation, soil, and visual quality results.

#### PARK OPERATIONS AND SUPPORT FACILITIES

Administrative offices, work space, storage, parking, and the native plant nursery are inadequate in size, location, and configuration. Many functions are scattered in trailers, quarters, and added-on rooms. Housing for most permanent and seasonal employees in the park is adequate, but many of the park residences require some rehabilitation (i.e., refinished cabinets, new counter tops, new floor coverings, new wall coverings, and new plumbing fixtures). Some of the utility systems are in poor condition.

The current staffing level is inadequate to provide increased levels of visitor assistance and resource protection. Large portions of the park are not patrolled on a regular basis. Many inappropriate and illegal activities are damaging the resources.

# INTERRELATIONSHIPS WITH OTHER PLANS, STUDIES, AND PROPOSALS

The general management plan provides the framework for developing and coordinating other more detailed plans and studies. Separate environmental compliance documents for these plans would tier from this general management plan / environmental impact statement.

#### Resources Management Plan

The 1993 Resources Management Plan, Joshua Tree National Monument outlines the programs necessary to address resource management issues and provide long-term protection of both cultural and natural resources. The National Park Service believes that the plan will adequately address the management of the land added in the 1994 act. Management of natural and cultural resources will be guided by the recommendations in the resources management plan, which is reviewed annually and updated as necessary.

#### Land Protection Plan

The general management plan, through management zoning, would determine land use in the park. That determination would establish land to be protected because of important resource values, land to be available for public use, and land where other uses would be compatible. The current *Land Protection Plan* (NPS 1986) identifies protection methods for

nonfederal land in the park and recommends the purchase of those tracts from willing sellers. It would be revised based on the management zoning proposals identified in the approved general management plan.

#### **Interpretive Prospectus**

An interpretive prospectus for the park is being developed based on the purpose, management goals, and interpretive themes that were developed during the general management plan process. The interpretive prospectus will provide guidance on the development of specific techniques to provide information and education to visitors.

#### Wilderness and Backcountry Management Plan

This plan is currently being developed to provide specific guidance for the management of the natural zone identified in the general management plan and the additional land added by the 1994 legislation. The natural zone includes designated and proposed wilderness. The wilderness and backcountry management plan will examine what types of uses and activities are appropriate and will determine the desired balance between uses in backcountry wilderness areas to allow for different types of recreation. Such uses must be consistent with the natural state of the areas and cannot undermine or alter them. The plan will also address rehabilitation of the backcountry.

#### Climbing Management Plan

The climbing management plan guides the regulation of rock climbing in the park. Joshua Tree has become one of the most popular rock climbing areas in the world. The popularity of climbing has soared in the park. The climbing management plan was released to the public in February 1993. It details several studies necessary to understand the effects of climbing on the resources and proposed guidelines for managing climbing until the studies are completed. The general management plan incorporates the recommendations for studies and interim guidelines identified in the climbing management plan. The climbing management plan will be a component of the wilderness and backcountry management plan.

#### **Abandoned Mine Inventories**

Abandoned mines exist in every management zone. Some are historically significant or have become important habitat for certain wildlife species such as bats. Some mines leach waste into the soil. The park inventories abandoned mines, determines public safety issues, and sets priorities for mitigating hazards as funds become available. Securing mine shafts and adits with steel mesh nets unobtrusively reduces hazards to visitors without significantly altering the historic character of the sites. The nets also allow bats access to the mines. This program will continue. The general management plan summarizes management recommendations from the resources management plan regarding those mines with historical and interpretive significance.

#### Trails Plan

Changes in visitor use patterns, the desire of local municipalities to connect regional trails to the park, and the parking areas proposed in the general management plan would require development of a regional trails plan to allow visitors convenient access to the park. A regional trails plan will be developed that will provide direction for the establishment of a trails system. Access to popular areas will be provided where the lack of defined trails is causing significant resource impacts.

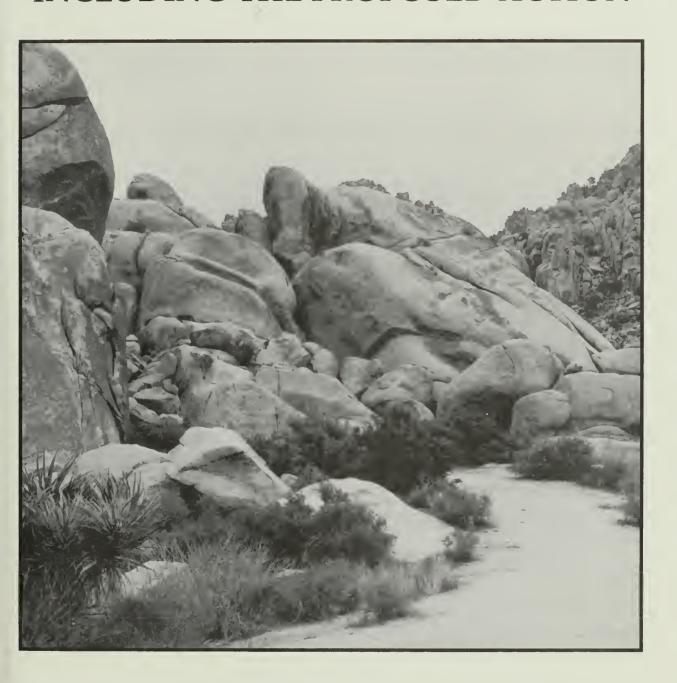
#### Accessibility Plan

An accessibility plan would be developed to ensure that all current and proposed facilities would comply with applicable laws, regulations, and NPS guidelines.

#### Transportation Study and 1991 Road Reconstruction Environmental Assessment

A transportation study was completed in 1984 that documented use levels throughout the monument and made recommendations for rehabilitating and upgrading deteriorating roads to solve specific safety and transportation problems. A separate environmental assessment for the reconstruction of Park Boulevard, Keys View Road, and Indian Cove Road and associated visitor use areas was completed in 1991. These documents were used to provide information and direction during the formulation of proposals for vehicle circulation and parking.

# ALTERNATIVES, INCLUDING THE PROPOSED ACTION





#### PARKWIDE ALTERNATIVES

Joshua Tree National Park contains an extraordinary cross section of the California Desert. It spans two major desert ecosystems and an unusual ecological transition zone. It has tremendous biological diversity, vast desert landscapes, and rich human history. The size of the park and the variety of its resources provide for a broad range of visitor experiences. To ensure that these values are preserved into the future, the park would be managed to protect the Mojave and Colorado Desert ecosystems and their biologically and culturally diverse resources.

The range of alternatives was developed given certain guiding principles and key assumptions. Visitor use would remain focused at developed areas and along the main road corridor between the west and south entrances. Resource impacts and conflicts between visitors associated with the large numbers using these areas would be minimized. Visitors would be provided with a variety of opportunities to experience both desert environments and to learn about the varied human occupations and the role of adaptation in the arid environment. Visitors would be provided with parkwide information and presented with the primary interpretive and educational themes.

Most of the park would be managed to protect wilderness resources, character, and values. There would be opportunities to experience the wilderness in solitude in much of the park. Orienteering and discovery would be encouraged. Intermediate experiences between mainstream visitation and wilderness would also be available. There would be a sense of remoteness and solitude but not isolation from human activity.

All development and facilities would blend harmoniously with the environment and reflect sustainable design concepts. Roads would maintain a low profile and follow the contours of the land whenever possible, much like the original wagon routes. Major park support facilities would continue to be located on the periphery. All alternatives incorporate these principles.

Management goals were developed to achieve the park's purpose, protect significant resources, and impart the primary interpretive themes. The goals are to preserve the park unimpaired for future generations, coordinate the preservation of ecological units that extend beyond the park boundary, improve management and knowledge of natural and cultural resources, manage visitation more effectively, reduce impacts associated with dispersed and poorly defined visitor use facilities, educate visitors regarding the NPS mission and the natural and cultural resources of the park, facilitate cooperative planning throughout the California Desert ecosystem with other public agencies and communities, improve circulation focusing on safety, visual quality, and visitor experience, and improve the efficiency of park operations. Actions to fulfill these management goals are presented in the alternatives.

The alternatives are presented in two sections, covering parkwide alternative actions and alternative development concept plans. The "Parkwide Alternative Actions" section describes the general management direction for the entire park, with the exception of the recently added land, which will be addressed in the new wilderness and backcountry management plan. The "Alternative Development Concept Plans" section describes in further detail the actions proposed for eight separate planning units. The park was subdivided into eight planning units for ease of discussion. A brief description of each unit is included in the "Alternative Development Concept Plans" section.

#### ALTERNATIVE A — PROPOSED ACTION

#### GENERAL DESCRIPTION

The proposed action is the National Park Service's general management plan for the park. It would minimize disturbances to resources and maintain visitor activities and services. Day use capacity in the most heavily used areas would be expanded, primarily in disturbed areas. Visitor awareness of the many opportunities and experiences the park has to offer would be increased. The opportunities for wilderness and trail experiences would be expanded. This alternative is shown on the Proposed Action, by Planning Unit map.

Management of park land and wilderness would be enhanced through an array of implementation plans that would evaluate threats to the wilderness and remove incompatible uses and development. Cooperative planning and agreements with adjacent landowners and other agencies would be increased. Inventory, monitoring, research, and patrols would be maximized.

Management of visitors and reduction of impacts would be addressed through the redesign of developed areas and would separate user groups, reduce congestion, contain and direct use to reduce impacts on the environment, improve routes between visitor destinations, and provide additional day use parking. All major roads would be reconstructed. A network of clearly designated new and existing roads, trails, parking areas, and shuttle routes would improve circulation and distribution of visitors in the most heavily used areas.

Orientation, trip planning assistance, and introduction to the primary interpretive and educational themes would be provided at the three main entrances. A new visitor center near the west entrance would focus on the ecology of the Mojave Desert. The north entrance visitor center would be converted to a cultural center. The south entrance visitor contact facility would be replaced with a larger facility and would focus on the resources of the Colorado Desert. Interpretive exhibits and services would be expanded along the major roads and developed areas.

Park support facilities would be upgraded or expanded to provide an effective operation and minimize new disturbance.

#### MANAGEMENT ZONING

All land within the boundary before the 1994 legislation was evaluated and separated into management zones. Management zoning determines how specific lands are to be managed to protect resources and provide for visitor use. The National Park Service zones areas in parks into four classifications — natural, historic, developed, and special use. Within each of these zones, subzones may be designated to allow for particular management needs. The management emphasis for each zone and subzone at Joshua Tree is shown on the Management Zoning map. Land added by the 1994 legislation will be zoned in the wilderness and backcountry management plan.

Each area was evaluated to determine contributions to the preservation, understanding, or enjoyment of the natural, cultural, and wilderness resources of the Mojave and Colorado Deserts. Land was then assigned to the most appropriate management zone and subzone. Zones for land management and use would include:

#### Natural Zones

(557,364 acres) — Conservation of natural resources and processes are primary in natural zones and only uses that do not adversely affect these resources and processes are permitted. The wilderness and backcountry management plan will further define visitor experience and resource protection zones within this broader natural zone category.

Outstanding Natural Features. (53 acres) — These possess rare intrinsic value, and interpretation of unusual geological or ecological features could be provided. Interpretive trails and wayside exhibits are allowed. Twentynine Palms and Cottonwood oases and ocotillo and cholla patches are examples of outstanding natural features.

Wilderness. (467,210 acres) — Preservation of the character and resources in designated wilderness areas is legislated by Congress. Potential wilderness that has been authorized by Congress but not yet established (due to temporarily incompatible conditions) is treated as wilderness by the National Park Service. A large percentage of Joshua Tree land was designated as wilderness or potential wilderness by PL 94-567; 429,690 acres are designated as wilderness and 37,550 acres as potential wilderness.

**Natural Environment.** (90,101 acres) — Land zoned for conservation of natural and cultural resources but not protected under one of the other categories is zoned as "natural environment." Provisions for environmentally compatible recreational facilities (hiking and interpretive trails, wayside exhibits, primitive campsites without water, and temporary research facilities) are made.

#### **Cultural Zones**

(180 acres) — Preservation, protection, and interpretation of cultural resources and their settings are critical in these areas. They emphasize preservation and interpretation of archeological, ethnographic, and historical resources for their educational and aesthetic values. They include all properties on the National Register of Historic Places or formally determined eligible for listing on the national register. The park contains six listed properties and seven properties that have been determined eligible for listing.

The park contains approximately 250 recorded archeological sites, all of which have not been evaluated according to eligibility criteria for the National Register of Historic Places. Until they are evaluated, they will be treated as if they are eligible. Based on the site density of previous archeological studies, it is believed that the park contains many times the number of recorded sites.

#### Park Development Zone

(3,411 acres) — This zone provides for development and maintenance to serve visitors and accommodate management operations. It includes the headquarters area, administrative areas, campgrounds, picnic areas, and parking lots. It provides for circulation in the park (trails, paved and unpaved roads, and other transportation facilities).

#### BACKCOUNTRY / WILDERNESS MANAGEMENT

Various developments, such as old mines, borrow pits, and inholdings (including a few that are developed) exist in the natural zone. Threats to backcountry and wilderness values posed by these developments would be assessed through a number of related plans. The wilderness and backcountry management plan will include a comprehensive evaluation of all development and use in the backcountry. Development determined to be inappropriate would be removed and the land rehabilitated.

The climbing management plan currently prohibits use of expansion bolts in wilderness. Until studies recommended in the climbing management plan are completed, the ban on expansion bolts in designated wilderness will continue.

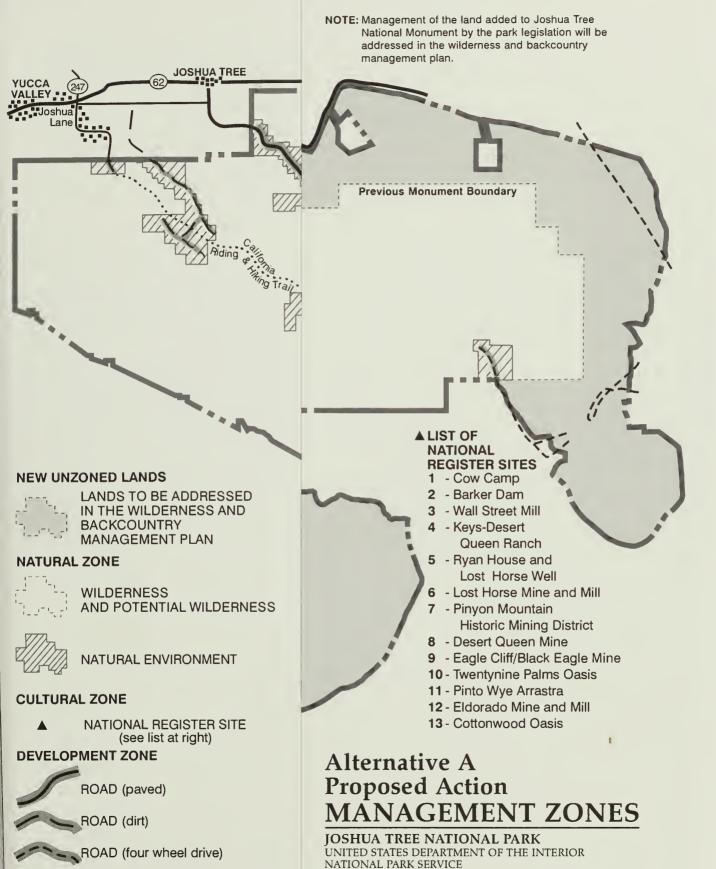
The 1986 Land Protection Plan would be revised to incorporate a proactive program for acquisition from willing sellers of all private inholdings in the natural zone. A hazardous waste survey would be completed prior to any acquisition in accordance with Secretarial Order No. 3127 and 602 DM 2. As parcels are acquired any development would be removed and the land rehabilitated.

Following removal of development and rehabilitation of the land identified in the wilderness and backcountry management plan and land protection plan, land not already in the wilderness zone would be evaluated for reclassification. New legislation would be proposed recommending inclusion of the land that qualifies as wilderness.

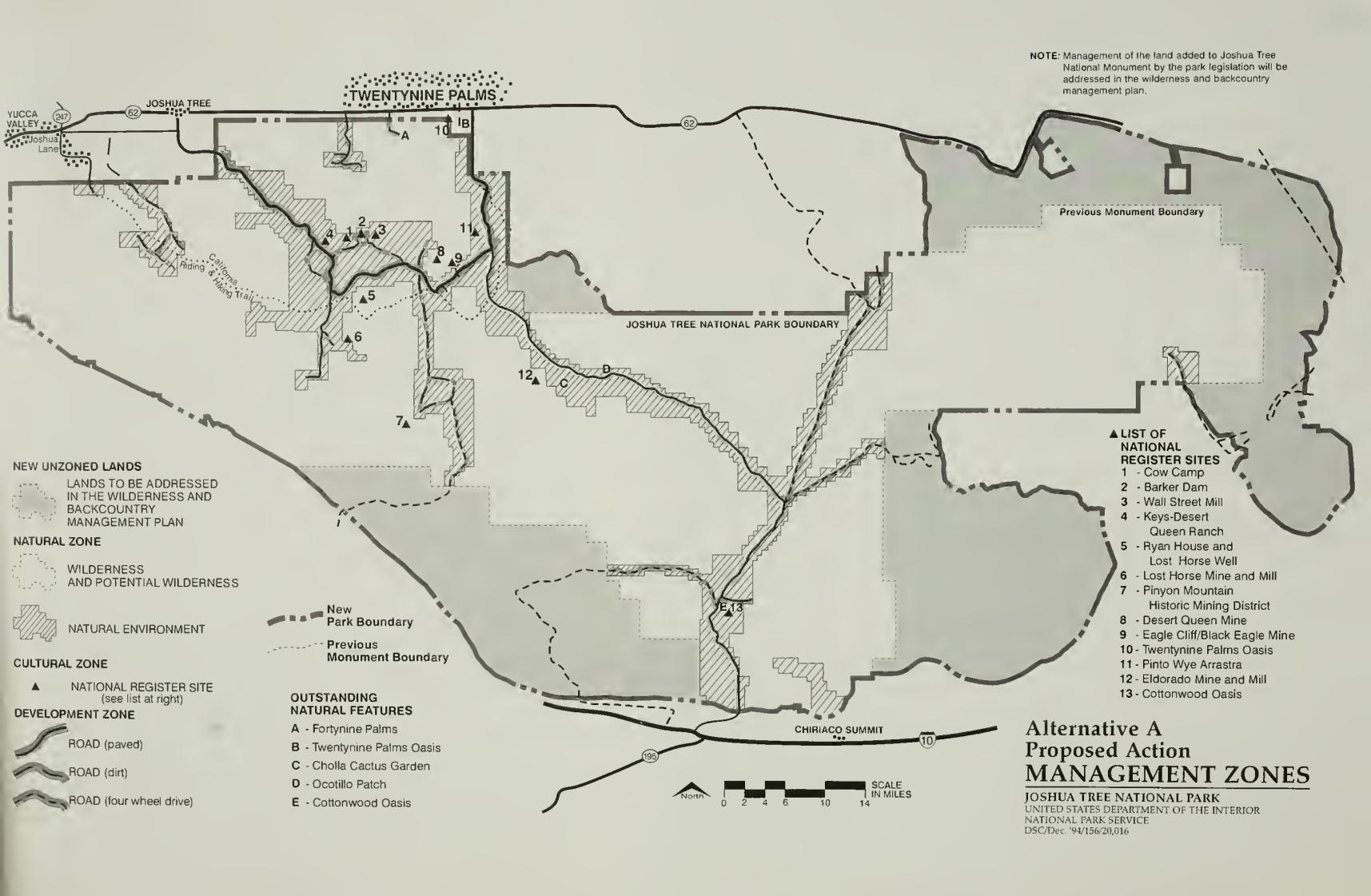
#### ADJACENT LAND USE

The Park Service would work with adjacent property owners and local, county, state, and federal officials to ensure protection of the park's natural, cultural, and wilderness values. The Park Service would review, evaluate, and make recommendations to local governments concerning all proposals or developments or activities that might affect park resources. Additional signs, fencing, and patrol of the boundary would be implemented to curtail illegal access and activities in the park.

The Park Service would actively pursue cooperative agreements with other agencies and landowners to protect ecological units that extend beyond the boundary and that still have natural integrity. Areas along the park's southern and western boundary include Big Morongo Canyon and Area of Critical Environmental Concern, the Coachella Valley Fringe-toed Lizard Preserve and Area of Critical Environmental Concern, and the Desert Lily Sanctuary. An



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agreement has been reached within the Department of the Interior to approach planning and management of the 25-million acre California Desert region on an integrated ecosystem basis. The California Desert has been designated an official pilot project of the national performance review to demonstrate effective ecosystem management, planning, and agency reinvention efforts. Joshua Tree National Park will be an active partner in these multiagency, multispecies ecosystem management plans. Geographically, Joshua Tree National Park will be influenced by three ecosystem plans — the northern and eastern Colorado Desert coordinated management plan, the west Mojave Desert coordinated management plan, and the Coachella Valley habitat conservation management plan. These plans will be consistent with direction offered in this general management plan.

#### **RESOURCES MANAGEMENT**

The natural and cultural resources would be managed to ensure their preservation as recommended in the 1993 Resources Management Plan. Specific issues and management strategies are described in that plan. The resources management plan would be updated as necessary to direct the implementation of the following resource management objectives:

Natural resource management would (1) develop a scientific basis for natural resource management decisions by performing or coordinating natural resources research, (2) protect all native plant and animal species in the park so that biological diversity can be maintained, (3) protect natural resources from human disturbance in order to preserve the diverse ecological systems (4) restore unnaturally altered resources through direct actions, and (5) promote ecosystem management through direct NPS action and through cooperation with local communities, regional, state, and federal agencies.

Cultural resource management would (1) protect, survey, inventory, and curate the archeological resources and artifacts in the park, (2) protect and document historic sites and associated artifacts in the park, (3) protect and document the prehistoric and historic water sources in the park, (4) identify, protect, and preserve (with the help of Indian consultations) ethnographic sites in the park, including any sites of importance to contemporary American Indians, and (5) develop a cultural resources research plan.

Management and interpretation of cultural and natural resources would be integrated. A more holistic approach would be taken to the interactions among geological, biological, and cultural variables. Their interplay, both past and present, would be emphasized in terms of relationships and fragility. Links would be investigated between nature and culture. Cultural adaptation would be studied, taking into account the opportunities and limitations of the environment. Human knowledge of the environment and alterations of the environment to suit human needs would then be better understood and interpreted. A full-time position would be created in the resources division for a cultural anthropologist. This employee would take the lead in implementing and coordinating the ethnographic program and promoting the concept of cultural ecology in resources management.

To ensure adequate protection for the water-related resources, the National Park Service would develop a strategy for protecting its water rights from injury or impairment from existing or proposed water development near the park, obtaining water rights for additional supplies needed for NPS purposes, and implementing and maintaining a monitoring program

to evaluate threats from offsite water uses. Ground and surface water conditions at the Oasis of Mara would be monitored and studies of the hydrogeology would be undertaken to understand the groundwater system that supports the oasis. The park would continue to provide supplemental water to maintain the oasis until such studies were completed.

The National Park Service would continue to survey areas of tortoise habitat and monitor road mortality, especially in areas of high density. This would help to establish baseline data for use in evaluating proposed construction projects.

#### Archeological, Ethnographic, and Historic Resources

Archeological resources would continue to be evaluated. Archeological sites potentially worthy would be recommended for formal determination for eligibility for listing on the National Register of Historic Places, including historic sites with the potential for historical archeology. Those sites determined eligible for listing on the national register and slated for preservation (Cottonwood Oasis, the Lost Horse Mine and Mill, Pinto Wye Arrastra, and the Twentynine Palms Oasis) should be assessed for their potential for the advancement of historical archeology as part of the nomination process. Those sites determined eligible for listing and slated for preservation of the historic scene (the Eagle Cliff [Black Eagle] Mine, the Eldorado Mine and Mill, and the Pinyon Mountain Historic Mining District) should be assessed for their historical archeological potential, which could be the basis for a national register nomination.

The resources management plan calls for ethnographic studies to be conducted. Traditional Native American cultural properties would be identified, regional Native American consultations held, and similar formal determinations sought for national register eligibility. To recommend formal determination for national register eligibility, the systematic evaluation of historic resources would continue.

Archeological resources would be patrolled by a ranger. This ranger position would be converted from part time to full time.

Surveying, inventorying, and evaluating archeological areas as well as data recovery, if needed, for the mitigation for any development projects would continue to be carried out by the Western Archeological and Conservation Center of the National Park Service or by contract.

There are 13 properties listed on or eligible for listing on the National Register of Historic Places that reflect historic human activity in the park. Each historic site or scene would be protected, interpreted, and preserved (see tables 1 and 2).

Preservation of structures means that the historic character of a property would be retained and the historic fabric repaired and stabilized as needed. Preservation would not restore historic structures, but would repair them using matching or similar materials for historical accuracy, according to the *Secretary of the Interior's Standards for Rehabilitation*. Preservation of the historic scene means the appearance of historic properties and natural surroundings.

The interpretation of cultural resources would educate visitors about the significance of the archeological, ethnographic, and historic resources; about the programs available concerning them; and about the laws that protect them, including penalties for violation.

Signs and brochures about archeological resources, such as sites with petroglyphs or pictographs, would be used under certain conditions. Visitor accessibility, the illustrative potential of a past culture, and the need to protect particular sites would be considered.

Interpretation of some preserved properties also would involve the display and demonstration of period artifacts and equipment. At Keys-Desert Queen Ranch, for example, visitors would not be permitted to walk inside the historic structures for safety reasons, but they could see period artifacts in the windows of the ranch house. Some machines, such as pumps, would be repaired and made operable. The equipment to be repaired would be operated by local volunteers and would provide more of the ambience of the place in its heyday.

Signs or brochures would be used to interpret some archeological resources such as sites with petroglyphs or pictographs. Visitor accessibility, the illustrative potential of a past culture, and resource protection would all be considered prior to interpretation of specific sites.

The main ranch house of Ryan House and Lost Horse Well was completely intact and occupied ca. 1932, four years before the monument was established. On June 5, 1975, the property was listed on the National Register of Historic Places. The ranch house "burned during the night of August 12, 1978. Arson was suspected. The main house was destroyed completely, except for the adobe walls" (Greene 1983). Some of the walls are still standing. Greene recommended that the site be allowed to naturally decay (with the adobe eroding). The park may treat the remaining walls to slow the deterioration and enable more visitors to view the site.

The park contains several concrete or concrete and masonry dams or dam complexes, including the listed properties — Barker Dam, Cow Camp, and Keys-Desert Queen Ranch. The National Park Service has the administrative and engineering responsibilities to inventory the dams within its jurisdiction and to maintain their structural integrity, according to *Special Directive 87-4*, *Dams and Appurtenant Works: Desk Reference Manual for Maintenance, Operation, and Safety* and *Dams and Appurtenant Works, Maintenance and Safety (NPS-40)*. The Bureau of Reclamation carries out inspections and makes safety recommendations to the National Park Service. Keys Dam consists of three separate dams (upper, middle, and lower Keys Ranch dams) northeast of the main ranch house that form a single reservoir. Along with the other two reservoirs in the park, this is an important water source for wildlife. The Park Service would prefer to continue this use and is seeking an acceptable, safe water level. The dam would be maintained and its historic fabric would be preserved to interpret strategic frontier water sources for homesteading, ranching, and mining.

#### **Native American Consultations**

A proactive Native American consultation plan would be developed to learn more about possible sacred and traditional-use sites in the park and to encourage cooperation and involvement of regional American Indian groups in park management. This effort would involve the following actions. Cahuilla, Chemehuevi, Mojave, Serrano, and other groups in

the region would be consulted concerning the identification and protection of important cultural sites in the park, including possible traditional cultural properties for nomination to the National Register of Historic Places. The park would share information on the management of natural and cultural resources, consult on possible finds of human remains and prehistoric and historic artifacts, and ask for guidance in the interpretation of natural and cultural resources. As a result of this ethnographic work, more would be learned and documented about sacred and other traditional-use sites of past and contemporary importance to the American Indians whose traditional territories or trade routes were part of what is now the park.

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r.		Table I: Listed on the National Register of Historical Laces	Lietification	Ties
Kesource	Significance	reament	Justilication	Coc
Barker Dam	Stone and concrete dam built across a natural tank to impound rainwater for cattle; begun in the early 20th century and expanded; became part of the homestead of William F. Keys and was an important permanent water hole	Preservation of historic site and scene	Historic fabric intact, contributes to interpretation of ranching and mining	Self-discovery site for interpretation on designated trail; combined sign for interpretation and education about protecting resources
Camp	Consists of ruins of buildings and a curved concrete dam built by William F. Keys in the late 1940s to water cattle; a well was dug in the late 19th century; important to livestock raising	Preservation of historic site and scene	Contributes to interpretation of subsistence ranching	Restricted area for wildlife management; special guided tours only for cultural and natural resources interpretation; combined sign for interpretation and education about protecting resources
Desert Queen Mine	A late 19th century gold mine; remains include tunnels, shafts, and adits, a stone building and some foundations; mine said to have produced several million dollars between 1895 and 1941	Preservation of historic scene	Already deteriorated, remote, does not contribute significantly to interpretation	Self-discovery site for interpretation on designated trail; combined sign for interpretation, education about resource protection and visitor safety; maintenance of safety barriers over mine shafts and adits
Keys- Desert Queen Ranch	Homestead of William F. and Frances Lawton Keys; includes ranch house, school house, several related structures, and a concrete dam that stored water; headquarters of horticultural, livestock, and mining operations; artifacts remain	Preservation of historic structures, site, and scene; stabilization of structural components	Intact, primary place for ranching and mining interpretation	Restricted area for historic preservation; scheduled guided tours only for cultural resources interpretation
Ryan House and Lost Horse Well	Cattle raising and mining complex of the late 19th and early 20th centuries, typical of the ranching and mining operations in the California desert; adobe ranch house c. 1896; important in the history of the park	Preservation of historic site and scene; stabilization of adobe walls of ranch house	Adobe walls would be stabilized; easy accessibility for interpretation of ranching and mining	Self-discovery site for interpretation on designated trail; combined sign for interpretation and education about protecting resources
Wall Street Mill	A cattle-watering and ore-milling site active from 1896 until 1943; two-stamp mill still in place	Preservation of historic structure, site, and scene; stabilization of historic structure	Intact; another place to interpret ranching and mining	Self-discovery site for interpretation on designated trail, combined sign for interpretation, education about protecting resources

TABLE 2: DETERMINED ELIGIBLE FOR LISTING ON THE NATIONAL REGISTER OF HISTORIC PLACES

Document	Cianificano	Troatmont	Instification	a) I
Cottonwood	An important natural water source known to Euro-Americans since the mid 1880s; served mines on the north and east side of the Pinto Basin as well as cattlemen and travelers	Preservation of historic site and scene with historic natural habitat restoration	Setting intact; place to interpret role of water in mining, ranching, travel	Self-discovery site for interpretation on designated trail; combined sign for interpretation and education about protecting resources
Eagle Cliff (Black Eagle) Mine	A gold mine with stone ruins, a roofed rocksheltered cabin, and other rock shelters, plus a blacksmith's site; peak use late 19th century through the first third of the 20th century	Preservation of historic scene	Already deteriorated, remote, not significant to mining interpretation	Remote self-discovery site for interpretation, not on designated trail; brochure for interpretation, resource protection and visitor safety; maintenance of safety barriers over mine shafts and adits
Eldorado Mine and Mill	Early 20th century gold mine; produced silver and molybdenite until World War II; includes shafts, mine workings, cast iron and concrete vats, machinery remnants, mill and mining campsites, stone foundations, ruins of three buildings	Preservation of historic scene	Already deteriorated, remote, not significant to mining interpretation	Remote self-discovery site for interpretation, not on designated trail; brochure for interpretation, resource protection, and visitor safety; maintenance of safety barriers over mine shafts and adits
Lost Horse Mine and Mill	Operated from the 1890s through the 1930s; water was piped from Lost Horse Spring and from wells near the spring site; much still intact	Preservation of historic structures, site, and scene; stabilization of historic structures	Intact, secondary mining interpretation	Self-discovery site for interpretation on designated trail; combined sign for interpretation, resource protection, and visitor safety; maintenance of safety barriers over mine shafts and adits
Pinto Wye Arrastra	Outstanding large wagon wheel arrastra; the only wagon wheel arrastra possessing integrity of location and construction; excellent condition; early to mid 20th century	Preservation of historic site and scene	Intact, self-discovery site for mining interpretation	Remote self-discovery site for interpretation, not on designated trail; brochure for interpretation resource protection
Pinyon Mountain Historic Mining District	Consists of several mines and mills that operated from the late 19th to mid 20th centuries; includes the Pinyon Mine of piñon log construction used prior to milled planks and beams	Preservation of historic scene	Already deteriorated, remote, not significant to mining interpretation	Remote self-discovery site for interpretation, not on designated trail; brochure for interpretation and education about resource protection and visitor safety; maintenance of safety barriers over mine shafts and adits
Twentynine Palms Oasis (Oasis of Mara)	Important natural water source and settlement, known to indigenous people such as the Serranos and Chemehuevis; served as reservation through the early 20th century. Reservation land remains; the Twentynine Palms Band of Mission Indians does not reside there but in the greater park area. Euro-American habitation began in the 1870s.	Preservation of historic site with natural habitat restoration	Intact, important to interpretation of water to settlement	Self-discovery site for interpretation on designated trail; combined sign for interpretation and education about the need to protect resources

#### **VISITOR USE**

#### Information and Interpretation

The roads that provide access to the Mojave Desert, the transition zone, and the Colorado Desert from Joshua Tree west entrance, the Twentynine Palms north entrance, and the Cottonwood south entrance would remain the primary routes for the majority of the visitors to the park. These roads provide the primary access to the park. A backcountry wilderness experience would remain available throughout most of the park. Visitor use is currently focused on frontcountry and backcountry experiences; in the future a greater range would be provided. These would include maintaining the Queen Valley and Covington Flats dirt roads for two-wheel drive, upgrading the Geology Tour Road to a two-wheel-drive route, designating four-wheel-drive routes (limited to existing mining and ranching roads in appropriately zoned areas), and a greater number of trails accessible to people with disabilities.

The desert has a wide variety of wildlife. It also has a great deal of physical evidence of past human occupation. It is also a place for peaceful enjoyment. The intent of this plan and the detailed interpretive prospectus is that the visitor would come to know this park at an individual pace and would find encouragement for exploration and discovery.

The interpretive program would be directed toward achieving the following objectives:

- (1) increase the number and quality of personal interpretive contacts with visitors
- (2) provide educational programs for school groups in the region, including efforts to reach Hispanic communities on the south boundary
- (3) develop more effective outreach programs
- (4) construct new and remodel current interpretive facilities to better educate visitors arriving at all entrances
- (5) update all nonpersonal interpretive services

Most interpretation at Joshua Tree would be onsite (waysides, publications, self-guided trails, personal services). Information and orientation, an introduction to the interpretive themes of the area, and trip planning assistance would be provided at entrance and contact facilities located at the three main entrances. Signs for these entrances would be improved. All visitor contact and fee collection facilities would be upgraded.

Cultural resources are scattered throughout the park. A more focused interpretive effort would be undertaken to interpret this aspect. Keys Ranch, Barker Dam, Desert Queen mine area, Wall Street Mill, and Ryan House and Lost Horse Well would all be better interpreted. Keys Ranch would be stabilized and used as the primary location in the interior of the park for ranching/homestead cultural history education. Public access to Keys Ranch would be by guided tours only and visitors would be prohibited from entering the structures. Interpretation would not be limited to the ranching story but could include the broader continuum of occupation and use from prehistoric times to the present. The ranch would lend itself to costumed interpretation, and tours would continue to be given by the Park Service.

The Black Rock Canyon nature center would be used as an environmental education and visitor contact facility. Specific educational materials would be developed. A series of

Colorado and Mojave Desert Biosphere Reserve seminars could be developed in cooperation with the other biosphere reserve areas.

An outreach information and education program would be expanded. With the addition of a full-time education specialist on the staff and two full-time education staff members, the potential to reach more of the 300,000 students within three hours of the park would be realized. Bilingual outreach and education efforts would be increased as well.

Since the majority of visitors are from southern California, a broad approach encompassing that area would be developed to meet their needs. Publications, roving interpretation, and involvement in local communities, schools, and organizations would be pursued.

The Park Service would pursue interagency initiatives such as information sharing, interpretive outreach, and joint visitor facilities. Various media, such as brochures and the park newspaper would be used to inform visitors about the desert tortoise, its endangered status, and the impacts of unauthorized tortoise releases in the park.

#### **Primary Visitor Information Facilities**

Joshua Tree West Entrance. A visitor center would be constructed near the west entrance, which is used by the majority of visitors (60% or more). The exact location has not been determined. A separate study and environmental analysis would be completed to evaluate possible alternative visitor center sites and analyze their environmental impacts. This study would evaluate sites in the park as well as locations on private land or on other public land outside the park. The Park Service would evaluate interagency options for the facility.

Orientation, trip planning, and a broad spectrum of interpretive themes and media would be available at this visitor center. The center would be large enough to handle 2,000 visitors per day (8,000–10,000 square feet). Most visitors would be expected to stay a maximum of 30 minutes. It would include:

- lobby, reception, information desk
- interpretive sales area
- restrooms and water
- orientation, information, trip planning, and audiovisual exhibits, with some outdoor elements available for visitors who arrive after hours
- information about desert safety and weather
- interpretive exhibits introducing the five interpretive themes
- audiovisual program that fosters appreciation of the desert
- theater space
- administrative space, offices and storage for interpreters, law enforcement rangers, and cooperating association, maintenance storage, break room and lunch area, small reference library, staff restrooms
- parking for visitors and employees

Twentynine Palms North Entrance. The complex that currently houses the park visitor center and headquarters would be extensively renovated to serve as a cultural and visitor contact center for the park. A new administrative facility would be constructed south of the cultural

and visitor contact center where the new collections storage facility has been built. The Oasis of Mara cultural and visitor contact center would focus on human groups over time and their adaptations to and impacts on the desert from the prehistoric past to the present. The major interpretive theme would employ the Man and the Biosphere model. Human occupation of the park would be interpreted and cultural sequences explained by displaying artifacts from the park's collection. Because this would continue to be an entrance used by some visitors, parkwide information and trip planning would also be provided.

An exhibit concept plan would be prepared to guide renovation. The cultural and visitor contact center would include:

- displays of objects from the Campbell collection and other local or regional American Indian collections
- · displays of objects relating to mining and ranching
- interpretation of resource management
- interpretation of arid lands landscaping and revegetation
- publication sales including items relating to cultural history
- the trail to the Oasis of Mara
- a multipurpose room for audiovisual programs, meetings, etc.
- restrooms (handicap accessibility improvements completed in 1994)
- parking for visitors and employees
- trail network to nearby community-managed cultural buildings

**Cottonwood South Entrance.** A new visitor facility would be constructed to replace the current building. Its exact location has not been decided, and many options have been suggested. A separate study and environmental analysis would be completed to evaluate alternative visitor center sites and analyze their environmental impacts. This study would evaluate sites in the park at Cottonwood as well as the development of an interagency facility between Interstate 10 and the park boundary.

The new center would have approximately 3,000 square feet of interior space and 800 square feet of sheltered exterior space. The center would include:

- a reception area for an information desk and interpretive sales
- audiovisual alcove(s) in the reception area for park orientation
- fee collection for the off season when the entrance station is not staffed
- · restrooms, water
- information, orientation, trip planning exhibit elements to assist the desk personnel
- outdoor sheltered information, orientation, trip planning, interpretive panels (parkwide and site-specific) in an adjacent ramada
- bulletin board for changing information
- space for informal talks
- office space for interpreters and rangers
- staff restrooms, park and cooperating association storage

Local features that would be addressed in orientation panels are Pinto Basin culture, Cottonwood spring, mill and mining sites in this end of the park, desert tortoise, Cahuilla culture, Colorado Desert, cholla cactus, and spring wildflowers.

Black Rock Canyon Nature and Visitor Contact Center. The center is located at Black Rock Canyon campground and would function as a nature center providing environmental education activities. It would also be a visitor contact center providing parkwide information. Exhibits and audiovisual programs would be provided. The building would be activity oriented and serve as a staging area. Consideration should be given to environmental education uses. Overnight visitors would be accommodated at the campground. It would be used for biosphere reserve seminars and might include weekend use by regular park visitors. The multipurpose room would be equipped to screen various audiovisual programs.

#### Interpretive Signs and Exhibits

To implement new directions defined in the proposed action, signs and exhibits would be replaced. Wayside exhibits not optimally located for relating the interpretive themes would be removed or relocated. New wayside exhibits would be added. A parkwide roads and trails guide would be developed. The direction for the interpretive program is defined in the five primary interpretive themes:

- (1) Joshua Tree National Park is comprised of two biologically diverse desert environments, the Mojave and the Colorado, which merge within its boundaries. Lush palm tree oases draw attention to the importance of water in the desert environment.
- (2) The Joshua tree and its adaptation is a perfect vehicle for understanding the interdependence of organisms living in the desert.
- (3) Plants and animals have evolved to survive in heat and drought. These adaptations produced an interesting array of life forms. Humans, from prehistoric times to the present, have adapted to an environment with little water. People who have made this area their home adapted culturally in the context of scarce water and have provided a colorful and varied human history.
- (4) The picturesque landscape features, including the mountain ranges, desert basins, and rock piles, all contribute to the significance of the park. The dynamic processes that formed this area, including erosion and earthquakes, continue.
- (5) The deserts have suffered a great deal of human abuse. The arid landscapes are slow to heal, and tracks made by a single vehicle in desert soil can often be seen many years later. Fragile desert ecosystems survive in a delicate balance. They manifest the more subtle environmental changes brought about by humans. Protection of the California Desert can only be accomplished from an ecosystemwide perspective that promotes harmonious relationships between people and the environment. The "leave no trace" ethic would be taught to visitors.

Detailed media, facilities, and program recommendations in the interpretive prospectus would address:

- interpretive signs and wayside exhibits
- museum exhibits
- publications

- audiovisual programs
- personal services programs
- visitor center and information station exhibits

#### Other Visitor Facilities

Campgrounds, picnic areas, and trails would be redesigned to protect surrounding vegetation, rock formations, drainages, and cultural resources and separate visitor activities, reduce congestion, direct users to designated areas, define the limits of facilities and individual sites, and mark designated trails. Facilities would be redesigned and upgraded primarily in their present locations, using disturbed areas to the extent feasible. Previously impacted sites and social trails would be restored. Native vegetation would be used to help define sites, provide screening, and improve visual quality. Campsites would be open to various types of users, but equestrian camping would be separated for safety reasons. Portable restroom facilities would be replaced with permanent structures.

The number of sites or capacity of the campgrounds and picnic areas would be dependent on the redesign of these facilities. Resultant capacities are not expected to vary greatly from current levels.

Time limits would be enforced to ensure fair allocation when sites are limited. Visitation may eventually exceed the capacity of facilities in busy seasons, so development of sites for camping and recreation outside the park would be encouraged on private and public land.

Reservations would be required at Black Rock Canyon, at all group sites, at Ryan horse sites, and possibly portions of other campgrounds. First-come, first-served camping would be retained at other individual family campgrounds.

#### PARK ROADS AND CIRCULATION

Circulation in the park would continue on a variety of paved and dirt roads for use by twoor four-wheel-drive vehicles and bicycles. Four-wheel-drive routes would be designated but
not maintained. Backcountry trailhead parking along secondary dirt roads would continue
to be provided. The wilderness and backcountry management plan would address these
parking areas including the need for expansion if necessary in areas accessed by trails. Some
roads, parking areas, and trails would be modified to improve protection of resources, visitor
experience, safety, circulation, and visual quality and to reduce maintenance requirements.
Most of the many dirt roads throughout the park would be reevaluated as to their
contribution to the purposes of the park. Roads that cannot be maintained to safe standards
or whose function does not serve the park's purpose would be closed and the areas restored
or evaluated for hiking or bicycling. This evaluation and recommendations for locations for
entry for hiking and backcountry use would be made in the wilderness and backcountry
management plan. The park would work with adjacent landowners to allow parking and
access in areas where vehicle use and parking in the park are not possible. A trail plan would
be developed to provide specific guidance for upgrading the trail system.

An integrated network of roads, trails, parking areas, and shuttle routes would be provided to serve the various visitor destinations in the most heavily used areas (see Parking and Pullouts graphic). A series of designated and clearly defined parking areas would be established. Marked trails would be built between the parking areas and other visitor facilities to provide alternative access to various destinations. A shuttle system would also be established in the areas of highest congestion. Visitors would be encouraged to use trails or a shuttle to travel between popular areas to alleviate automobile congestion and reduce competition for parking spaces. Trails would be open to bicycles where appropriate.

A study would be implemented to determine the most effective and economical shuttle system for Joshua Tree. The route from Quail Springs through Hidden Valley to Keys View and possibly east to Belle and White Tank campgrounds would be ideal for this service. Additionally, the feasibility of shuttle service to visitor facilities at the park entrances, less popular areas, and roads too narrow for RVs would be studied. Interpretive programs on the shuttles would also be considered. Many people could incorporate the sightseeing experience with an interpretive talk.

#### Park Road Guidelines

Major park roads would be reconstructed. Reconstruction improves the condition and extends the service life of a road. Reconstruction would consist of replacement of the road surface, base, and subgrade, all of which are extensively deteriorated. Guidelines have been developed for road reconstruction on all road projects in the park. All roads would be reconstructed on current alignments except when safety hazards would result or when resource protection opportunities are present. Exceptions would include correcting horizontal and vertical curves that severely limit sight distance and improving hazardous intersections. Sensitive resources would be avoided.

#### Environmental design criteria:

- All major paved roads (Park Boulevard, Pinto Basin Road, and Indian Cove Road) would have a 24-foot paved width similar to the reconstructed road at the west end of Park Boulevard.
- All paved spur roads (Barker Dam Road, Keys View Road, and access roads to campground and picnic areas) would have a 20- to 22-foot paved top width.
- Past road construction projects have shown that rounding slopes (cutting farther up slope to obtain sufficient angle of repose to lessen soil movement) results in greater impacts. Revegetation in areas where slopes have been rounded has proven marginally successful. Revegetation difficulty would be taken into consideration along with safety factors in determining use of slope rounding.
- No slope rounding would be used where the road passes through rock formations.
- Revegetation would be used to accelerate recovery of land disturbed during road construction and to minimize colonization of invasive plant species.

#### **HEADQUARTERS**

Main visitor center for monu interpretation

Major rehabilitation of all ext Redesign complex, provide visitors from administrative Connect NPS and city culture

COVING

#### INDIAN COVE

Upgrade road

Redesign campground to define sites and designate separate day use areas

Expand visitor contact/ranger station

Construct new entrance fee station

Provide permanent restrooms

#### LOST HORSE -

Provide visitor center near west entrance with interpretive focus on natural resources of the Mojave Desert

Improve and add new wayside exhibits

Reconstruct roads; minimum widths, slow speeds

Build hiking trails between popular climbing areas and parking, develop trails plan and handbook

Designate and expand parking

in concentrated areas

Redesign use areas and improve facilities

Provide permanent restrooms

#### COVINGTON -

Develop trails plan, mark trails with signs, and revegetate braided trails

Clearly define spaces in lots, improve signs

Provide parking for California Riding and Hiking trailhead

Redesign campground, improve drainage, increase space between sites

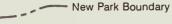
Expand picnic area

Rehabilitate exhibits and interpretive media at Black Rock nature center

Provide for permanent NPS interpreters at Black Rock nature center

The proposed action would preserve a would direct visitor use to existing devrange of visitor choices and experienc heavily used areas of the monument would be redesigned to increase effect resources, and improve aesthetic qual

NOTE: Management of the land added to Joshua Tree National Monument by the park legislation will be addressed in the wilderness and backcountry management plan.



Previous Monument Boundary

#### **TRANSITION**

Reconstruct road
Reclaim old roads and revegetate
Improve and add new wayside exhibits along

Evaluate depressed borrow pit for picnic area Add comfort station at Cholla Cactus Garden

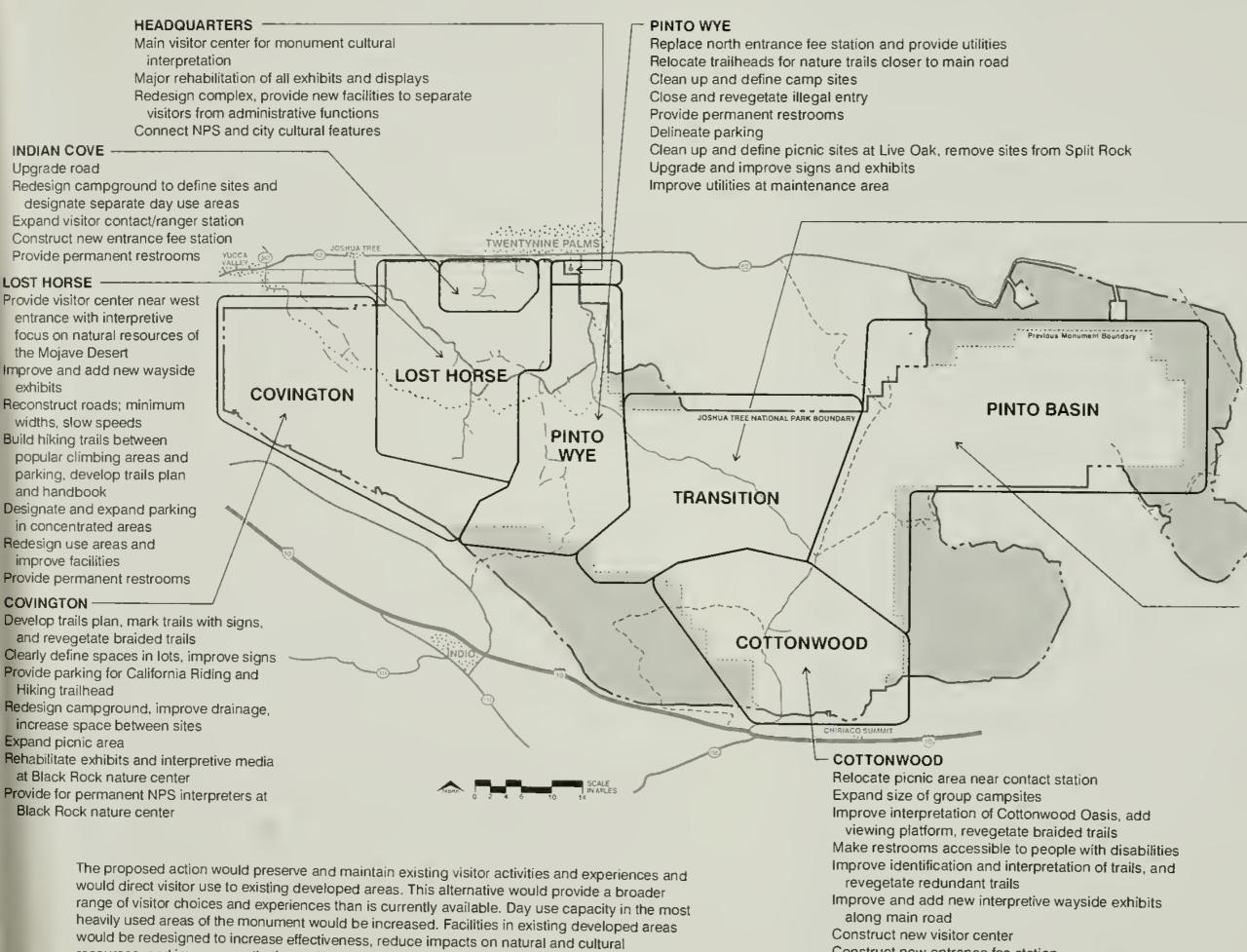
#### **PINTO BASIN**

Revegetate old road traces
Provide parking and back country boards at wilderness access points
Install entrance sign and exhibit at park boundary and Old Dale Road
Redesign and add sign/exhibit at Old Dale Road, Black Eagle Mine Road, and Cottonwood Road junction
Close illegal entrances

# Alternative A PROPOSED ACTION

By Planning Unit

JOSHUA TREE NATIONAL PARK UNITED STATES DEPARTMENT OF THE INTERIOR NATIONAL PARK SERVICE DSC/Dec. '94/156/20,022A



resources, and improve aesthetic quality.

Construct new entrance fee station

Add new accessible interpretive trail at existing pull out

NOTE: Management of the land added to Joshua Tree National Monument by the park legislation will be addressed in the wilderness and backcountry management plan.



#### **TRANSITION**

Reconstruct road
Reclaim old roads and revegetate
Improve and add new wayside exhibits along
main roads

Evaluate depressed borrow pit for picnic area Add comfort station at Cholla Cactus Garden

#### PINTO BASIN

Revegetate old road traces
Provide parking and back country boards at
wilderness access points
Install entrance sign and exhibit at park
boundary and Old Dale Road
Redesign and add sign/exhibit at Old Dale
Road, Black Eagle Mine Road, and
Cottonwood Road junction
Close illegal entrances

# Alternative A PROPOSED ACTION By Planning Unit

JOSHUA TREE NATIONAL PARK

UNITED STATES DEPARTMENT OF THE INTERIOR NATIONAL PARK SERVICE DSC/Dec. '94/156/20,022A

- Revegetation practices would include salvage and replacement of topsoil.
- The roads would follow natural contours more closely to emulate the original character of wagon road alignments.
- Curve widening would be used only where necessary and held to a maximum of 2 to 4 feet.
- The road profile should be kept as low as possible to blend in with the environment while maintaining adequate drainage.
- Parking areas and pullouts would be provided at popular visitor destinations. The edges of parking areas would be delineated by curbing, rock and vegetation barriers, fencing, etc.
- Drainage would be handled in almost all instances by low water crossings. The use
  of culverts would be minimal. Efforts to remove sand deposited from runoff in these
  crossings would be limited to the road. Occasional maintenance would be done on the
  downstream side of the low water crossings to prevent scouring and undermining of
  the roadway by floodwater.
- Roadside and shoulder parking would be controlled through curbing, barriers, signs, etc.

#### Traffic management and safety strategies:

- Determine design speeds and posted speeds on park roads with consideration for resource protection, visitor experience, and safety concerns.
- Post advised vehicle sizes on Keys View Road.
- Improve traffic and directional signs throughout the park.
- Design pullouts and stops to break momentum at points where the road width and design change (e.g., at the Geology Tour Road and west side of Hidden Valley).

#### Road Improvements

Protection of resources, visitor experience, and safety concerns would determine design speeds and posted speeds on park roads. The road system would continue to be improved through a multiyear phased program (see Proposed Road Improvements graphic). Further environmental impact analysis would be completed during the design stage of all road reconstruction. Roads in the new park areas will be evaluated in the wilderness and backcountry management plan.

**Phases I and II.** Park Boulevard (Route 12) from Jumbo Rocks to milepost 19.5 west of Hidden Valley (9.7 miles) and the entire 5.6 miles of the Keys View road (Route 13) are scheduled for reconstruction. These sections are associated with the seven visitor use areas

(see Parking and Pullouts graphic) of the west entrance: Wonderland of Rocks, Cap Rock, Keys View, Geology Tour Road, Ryan Mountain, and Split Rock/Live Oak.

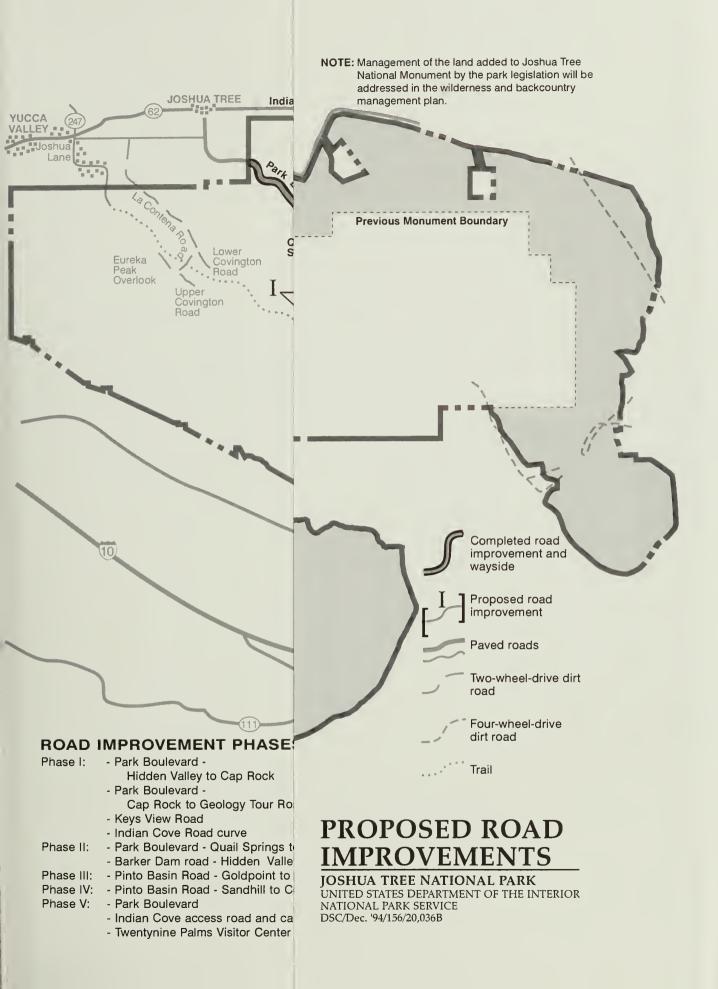
Park Boulevard is one of the two principal park access roads into and through Joshua Tree National Park. It begins at the north boundary near Twentynine Palms and follows a 25.65-mile path to the west entrance. As shown on the Road Project Summary map, the road would be reconstructed on the current road alignment with a 24-foot-wide paved surface. Roads affected in the Hidden Valley area are shown on the Hidden Valley and Barker Dam Area map. A major feature of the road project in this area would be relocation of the intersection at Intersection Rock to improve traffic flow, sight distance, and safety. To separate Hidden Valley campground and Barker Dam traffic, a new section of road to Barker Dam would be constructed along a previously disturbed road trace. Two entrances to the campground would be constructed off this road to eliminate through traffic. A new day use parking area would be constructed over the previous road disturbance south of Intersection Rock.

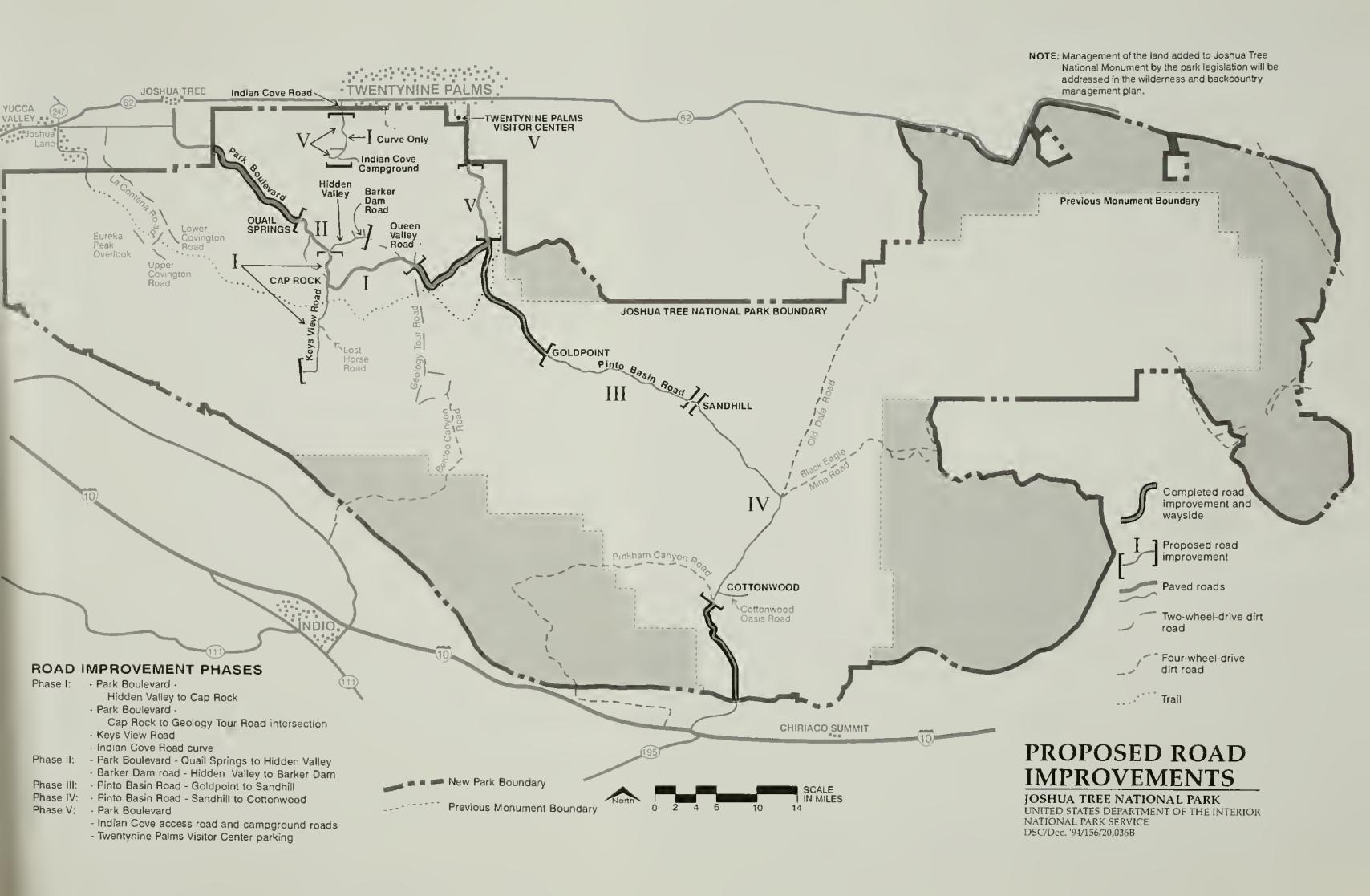
Keys View Road is a connector to the Salton Sea overlook at Keys View. This route would be reconstructed and would remain open to two-way traffic. Since widening this road would have the greatest impact on Joshua trees of all the roads in the project, it would be reconstructed at its present width of 20 feet (10-foot lanes, no shoulders). Because of safety concerns, advisories on vehicles size would be posted. Vehicles over 20 feet long or 7 feet wide would be advised not to proceed to Keys View overlook. A pullout with gauging station and RV turnaround would be provided near the parking area for the California Riding and Hiking Trail to allow for measuring large vehicles. Interpretation would be provided at the parking area to explain the need for the advisory and available activities at the Keys View overlook.

Indian Cove Road (Route 112) is the only access road into the Indian Cove area. Realignment of a 0.1 mile segment would eliminate one hazardous curve.

Phases III and IV. When the Hidden Valley road projects are completed, all the proposed road work in the west end of the park will be complete. The next phase of work is shown on the Proposed Road Improvements map. Work would be done on Pinto Basin Road from Gold Point to Sand Hill (11.0 miles) in Pinto Basin. Since this portion of the road crosses a large expanse of open desert, it is important to maintain a low profile and avoid long straight sections to reduce visual impacts. The most significant action being considered for this project is the possible realignment of the road around the Cholla Cactus Gardens. Currently the road passes directly through the gardens. Further evaluation and environmental impact analysis of alternative road alignments would be completed. New parking areas for the cactus gardens and interpretive trail would be included. Additional traffic control and interpretive pullouts would be provided along the route. The most hazardous curves would also be redesigned for improved safety.

The following phase would continue on Pinto Basin Road from Sand Hill to Cottonwood (11.5 miles). The most significant actions in this project are the large Porcupine and Smoke Tree wash crossings. The natural gradient of the washes at these low water crossings would be maintained wherever possible. Traffic control and interpretive pullouts would also be provided and the most hazardous curves redesigned to improve safety.





Phase V. Park Boulevard from Pinto Wye to the north boundary would be finished. The most hazardous curves have already been redesigned. Reconstruction would include interpretive pullout improvements, additional traffic control pullouts, road realignment at Pinto Wash to cross at a right angle, and improvements of the entrance station area. This project would also include repaving of the Indian Cove access and campground roads, 49 Palms Canyon road, and the Black Rock Canyon road. Erosion control measures to maintain road character would be done on Covington Flats, Geology Tour, and Queen Valley Roads. Finally, the roads and parking at the Twentynine Palms visitor center and headquarters and the Indian Cove ranger station would be paved.

#### Parking Area Improvements

Parking lots would be linked to visitor destinations. Each lot would be sized to service the nearest feature and would have overflow spaces for adjacent features. All parking areas would be designed to prevent uncontrolled expansion and for more efficient use of space. Information, orientation, interpretation, and backcountry registration would be provided as appropriate at parking areas. Unneeded or undesirable parking areas (primarily turnouts) would be obliterated and access blocked. Parking would be allowed in designated paved parking areas only and would be strictly enforced.

The following design criteria would be implemented for all parking areas:

- Pave, stripe, and provide edge definition (rock barriers, curbings, etc.) to parking areas and harden connections to trails.
- Designate and mark approved trails to prevent social trails.
- Minimize disturbance to resources (specifically Joshua trees, rock outcrops, drainages, cultural resources) from new construction.
- Use disturbed areas where feasible.
- Restore previously impacted sites.
- Provide designs for rock barriers, curbs, comfort stations, fencing, etc., that are compatible with the natural environment.
- Simplify parking and roadway turns.

Parking and Pullouts: West Entrance to Quail Springs. A new Joshua Tree visitor center and associated parking would be constructed near the west entrance area. The interpretive pullout would be expanded at site 1. Other trailhead pullouts would be retained and paved. Conceptual designs and specific numbers, sizes, and locations would be determined during design for the remaining road reconstruction.

**Parking and Pullouts** — **Quail Springs to Pinto Wye.** Conceptual parking designs for the seven visitor use areas (see Parking and Pullouts graphic) — Wonderland of Rocks, Cap Rock, Keys View, Geology Tour Road, Ryan Mountain, and Split Rock/Live Oak have been

developed (NPS 1991). Parking proposals based on these designs are described below for each of the visitor use areas. Numbered sites, keyed to the Parking and Pullouts graphic, are listed in parentheses following the area name. Parking capacity would be increased through substantial expansion of four sites (Wonderland of Rocks backcountry staging area, Barker Dam/Wall Street Mill, Hall of Horrors, and Ryan Mountain trailhead), more efficient use of space at the remaining sites, and the addition of seven new parking areas for interpretation and trailhead access. Capacity of each parking area is approximate and was rounded to the nearest five cars. Additional pullouts would be located approximately every .25 mile for traffic control and for scenic or photo opportunities. The pullouts would be constructed in previously impacted areas.

In the Wonderland of Rocks area (sites 2-10, 25, 26, 28) day use parking would accommodate 416 cars and 39 RVs in 15 areas. The parking area in the Hidden Valley campground would be converted back to a campground loop. All campground roads and parking spaces would be paved, and vehicle use would be confined to the pavement. The Park Boulevard and Barker Dam Road intersection would be relocated to the west side of Intersection Rock and designed to include left turn lanes on north and south approaches. Barker Dam Road would be reconstructed and paved to a combined Barker Dam/Wall Street Mill parking area. The existing Barker Dam parking area would be retained and expanded to accommodate about 50 cares and 5 RVs. The Wall Street Mill parking area would be eliminated, the area revegetated, and a trail would be designated from the expanded Barker Dam parking area to the Wall Street Mill area.

In the Cap Rock area (sites 12-14) a 15 car/6 RV paved parking area at Cap Rock (site 13) would accommodate day users. A 10 car/2 RV parking area would be constructed at site 12 for a Mojave plants interpretive exhibit and access to nearby climbing areas. A 10 car lot would be provided 0.5 mile south of Cap Rock at site 14.

On Keys View Road (sites 15-19) parking areas would be improved at site 15 for 20 cars to provide access to the California Riding and Hiking Trail and at site 16 for 25 cars to provide access to the backcountry and Lost Horse mine. The Keys View overlook at site 19 would provide parking for 45 cars. Parking would be improved adjacent to the new restrooms. A barrier-free viewing platform and associated retaining wall would replace the sidewalk and wall. Curb cuts would be recessed in the sidewalk rather than extended into the parking area. New parking areas for 5 cars each would be added at sites 17 and 18 to provide views of the Wonderland of Rocks and black brush hillsides.

At Ryan Mountain (sites 20–23) parking would be provided for 40 cars and 6 RVs at site 23, the Ryan Mountain trailhead, and Indian Cave exhibit. A larger parking area for 45 cars and 2 RVs would be provided for site 22, the Hall of Horrors rock climbing area on the north side of Park Boulevard. Parking for 5 cars and 2 RVs would be provided at site 20, Ryan Ranch. The Ryan/Oyster Bar turnout at site 21 for 16 cars and 3 RVs would be retained. All campground roads and parking spaces would be paved and vehicles confined to the pavement in both Sheep Pass and Ryan campgrounds to reduce resource damage.

At Geology Tour Road (sites 23, 24) two parking areas with a total of 35 spaces for cars and 6 for RVs would provide parking for orientation, interpretation, and backcountry access. A restroom would also be provided.

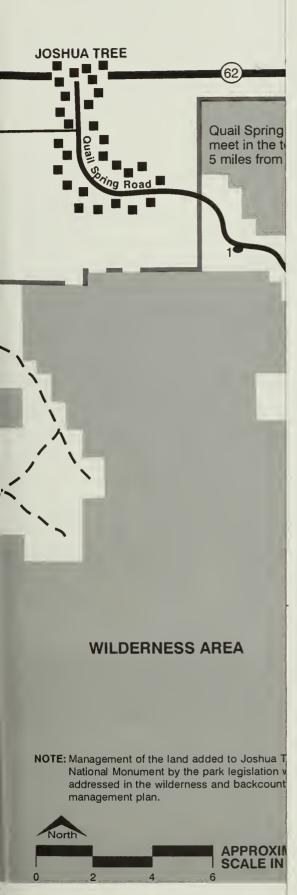
At Split Rock/Live Oak (sites 29–32) the turnaround parking area at Split Rock would be redesigned to provide parking for 15 cars and 4 RVs. Live Oak would be expanded to parking for 15 cars. There would be parking for 5 cars at Skull Rock.

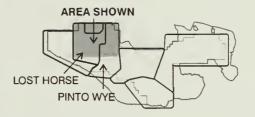
A final wayside exhibit plan would be completed to determine exact interpretive objectives and themes for the various parking areas and pullouts.

Parking and Pullouts — Pinto Wye to North/South Boundaries. Additional interpretive and trailhead pullouts would be provided along Park Boulevard between Pinto Wye and the north boundary and along Pinto Basin Road from Pinto Wye to the south boundary. Interpretive pullouts that are not optimally located for conveying the interpretive themes would be replaced by new pullouts that would accommodate approximately 5 cars. Other pullouts would be retained and paved. Larger parking areas for 10–15 cars and 2–3 RVs would be provided at the Cholla Cactus Garden, south entrance orientation parking area, south entrance sign photo parking, and near the north entrance fee station. Conceptual designs and specific numbers, sizes, and locations of pullouts and parking areas would be determined during design for the road reconstruction project.

TABLE 3: VISITOR USE AREAS — DESIGNATED PARKING, LOST HORSE AND PINTO WYE PLANNING UNITS, PROPOSED ACTION

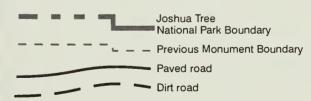
1. Desert environments       15       3         2. Rock climbing exhibit       30       4         3A. Wait lot, Keys Ranch       6       0         3B. Boy Scout hiking trailhead       30       3         3C. Rock piles, Wonderland of Rocks—orientation west       15       3         4A. Lost Horse ranger station access road       20       0         4B. Hemingway       15       1         5. Comic Book area       15       0         6. Hidden Valley, north lot       15       1         7. Hidden Valley trailhead       25       4         8. Hidden Valley picnic area       30       4         9A. Hidden Valley day use lot       0       0         9B. Intersection Rock       50       6         10. Echo "Y"       25       0         11. Rock Pile exhibit       0       0         12. Mojave plants exhibit, Love Nest       10       2         13. Cap Rock       15       6         14. Cap Rock south       10       0         15. Juniper Flats backcountry trailhead       20       0         16. Lost Horse Mine       25       0         17. Black brush hillsides       5       0         18. Wonderla	Function
3A. Wait lot, Keys Ranch       6       0         3B. Boy Scout hiking trailhead       30       3         3C. Rock piles, Wonderland of Rocks—orientation west       15       3         4A. Lost Horse ranger station access road       20       0         4B. Hemingway       15       1         5. Comic Book area       15       0         6. Hidden Valley, north lot       15       1         7. Hidden Valley trailhead       25       4         8. Hidden Valley picnic area       30       4         9A. Hidden Valley day use lot       0       0         9B. Intersection Rock       50       6         10. Echo "Y"       25       0         11. Rock Pile exhibit       0       0         12. Mojave plants exhibit, Love Nest       10       2         13. Cap Rock       15       6         14. Cap Rock south       10       0         15. Juniper Flats backcountry trailhead       20       0         16. Lost Horse Mine       25       0         17. Black brush hillsides       5       0         18. Wonderland of Rocks overlook       5       0         19. Keys View       45       0         20. Ryan Ranch	Interpretation, orientation
3B. Boy Scout hiking trailhead       30       3         3C. Rock piles, Wonderland of Rocks—orientation west       15       3         4A. Lost Horse ranger station access road       20       0         4B. Hemingway       15       1         5. Comic Book area       15       0         6. Hidden Valley, north lot       15       1         7. Hidden Valley trailhead       25       4         8. Hidden Valley picnic area       30       4         9A. Hidden Valley day use lot       0       0         9B. Intersection Rock       50       6         10. Echo "Y"       25       0         11. Rock Pile exhibit       0       0         12. Mojave plants exhibit, Love Nest       10       2         13. Cap Rock       15       6         14. Cap Rock south       10       0         15. Juniper Flats backcountry trailhead       20       0         16. Lost Horse Mine       25       0         17. Black brush hillsides       5       0         18. Wonderland of Rocks overlook       5       0         19. Keys View       45       0         20. Ryan Ranch       5       2         21. Ryan turnout, Oyster	Interpretation, climbing
3C. Rock piles, Wonderland of Rocks—orientation west       15       3         4A. Lost Horse ranger station access road       20       0         4B. Hemingway       15       1         5. Comic Book area       15       0         6. Hidden Valley, north lot       15       1         7. Hidden Valley trailhead       25       4         8. Hidden Valley picnic area       30       4         9A. Hidden Valley day use lot       0       0         9B. Intersection Rock       50       6         10. Echo "Y"       25       0         11. Rock Pile exhibit       0       0         12. Mojave plants exhibit, Love Nest       10       2         13. Cap Rock       15       6         14. Cap Rock south       10       0         15. Juniper Flats backcountry trailhead       20       0         16. Lost Horse Mine       25       0         17. Black brush hillsides       5       0         18. Wonderland of Rocks overlook       5       0         19. Keys View       45       0         20. Ryan Ranch       5       2         21. Ryan turnout, Oyster Bar       16       3         22. Hall of Horrors	Trailhead
west       20       0         4A. Lost Horse ranger station access road       20       0         4B. Hemingway       15       1         5. Comic Book area       15       0         6. Hidden Valley, north lot       15       1         7. Hidden Valley trailhead       25       4         8. Hidden Valley picnic area       30       4         9A. Hidden Valley day use lot       0       0         9B. Intersection Rock       50       6         10. Echo "Y"       25       0         11. Rock Pile exhibit       0       0         12. Mojave plants exhibit, Love Nest       10       2         13. Cap Rock       15       6         14. Cap Rock south       10       0         15. Juniper Flats backcountry trailhead       20       0         16. Lost Horse Mine       25       0         17. Black brush hillsides       5       0         18. Wonderland of Rocks overlook       5       0         19. Keys View       45       0         20. Ryan Ranch       5       2         21. Ryan turnout, Oyster Bar       16       3         22. Hall of Horrors       45       2	Trailhead
4B. Hemingway  5. Comic Book area  6. Hidden Valley, north lot  7. Hidden Valley trailhead  8. Hidden Valley picnic area  9A. Hidden Valley day use lot  9B. Intersection Rock  10. Echo "Y"  11. Rock Pile exhibit  12. Mojave plants exhibit, Love Nest  13. Cap Rock  14. Cap Rock south  15. Juniper Flats backcountry trailhead  16. Lost Horse Mine  17. Black brush hillsides  18. Wonderland of Rocks overlook  19. Keys View  20. Ryan Ranch  21. Ryan turnout, Oyster Bar  22. Hall of Horrors  23. Ryan Mountain trailhead, Indian Cave exhibit  24. Geology Tour Road; Desert Queen backcountry trailhead  25. Wonderland of Rocks, orientation east  26. Wall Street Mill, Barker Dam  27. Wonderland of Rocks backcountry staging area  29. Split Rock  15. 0  15. 0  16. Wonderland of Rocks backcountry trailhead  26. Wall Street Mill, Barker Dam  17. Split Rock  18. Wonderland of Rocks backcountry trailhead  29. Split Rock  15. 0  15. 0  16. Wonderland of Rocks backcountry trailhead  29. Split Rock  20. Tybe Total Split Rock  20. Tybe Total Split Rock  20. Tybe Total Split Rock  21. Tybe Total Split Rock  22. Hall of Rocks backcountry staging area  23. Split Rock  24. Split Rock  25. Wonderland of Rocks backcountry staging area  26. Split Rock  27. Wonderland of Rocks backcountry staging area  28. Wonderland of Rocks backcountry staging area	Interpretation, orientation
5. Comic Book area       15       0         6. Hidden Valley, north lot       15       1         7. Hidden Valley trailhead       25       4         8. Hidden Valley picnic area       30       4         9A. Hidden Valley day use lot       0       0         9B. Intersection Rock       50       6         10. Echo "Y"       25       0         11. Rock Pile exhibit       0       0         12. Mojave plants exhibit, Love Nest       10       2         13. Cap Rock       15       6         14. Cap Rock south       10       0         15. Juniper Flats backcountry trailhead       20       0         16. Lost Horse Mine       25       0         17. Black brush hillsides       5       0         18. Wonderland of Rocks overlook       5       0         19. Keys View       45       0         20. Ryan Ranch       5       2         21. Ryan turnout, Oyster Bar       16       3         22. Hall of Horrors       45       2         23. Ryan Mountain trailhead, Indian Cave exhibit       40       6         24. Geology Tour Road; Desert Queen backcountry trailhead       15       3         25. Wond	Rock climbing, trailhead
6. Hidden Valley, north lot       15       1         7. Hidden Valley trailhead       25       4         8. Hidden Valley picnic area       30       4         9A. Hidden Valley day use lot       0       0         9B. Intersection Rock       50       6         10. Echo "Y"       25       0         11. Rock Pile exhibit       0       0         12. Mojave plants exhibit, Love Nest       10       2         13. Cap Rock       15       6         14. Cap Rock south       10       0         15. Juniper Flats backcountry trailhead       20       0         16. Lost Horse Mine       25       0         17. Black brush hillsides       5       0         18. Wonderland of Rocks overlook       5       0         19. Keys View       45       0         20. Ryan Ranch       5       2         21. Ryan turnout, Oyster Bar       16       3         22. Hall of Horrors       45       2         23. Ryan Mountain trailhead, Indian Cave exhibit       40       6         24. Geology Tour Road; Desert Queen backcountry trailhead       15       3         25. Wonderland of Rocks, orientation east       15       3	Rock climbing, trailhead
7. Hidden Valley trailhead       25       4         8. Hidden Valley picnic area       30       4         9A. Hidden Valley day use lot       0       0         9B. Intersection Rock       50       6         10. Echo "Y"       25       0         11. Rock Pile exhibit       0       0         12. Mojave plants exhibit, Love Nest       10       2         13. Cap Rock       15       6         14. Cap Rock south       10       0         15. Juniper Flats backcountry trailhead       20       0         16. Lost Horse Mine       25       0         17. Black brush hillsides       5       0         18. Wonderland of Rocks overlook       5       0         19. Keys View       45       0         20. Ryan Ranch       5       2         21. Ryan turnout, Oyster Bar       16       3         22. Hall of Horrors       45       2         23. Ryan Mountain trailhead, Indian Cave exhibit       40       6         24. Geology Tour Road; Desert Queen backcountry trailhead       20       3         25. Wonderland of Rocks, orientation east       15       3         26. Wall Street Mill, Barker Dam       50       5	Rock climbing
8. Hidden Valley picnic area       30       4         9A. Hidden Valley day use lot       0       0         9B. Intersection Rock       50       6         10. Echo "Y"       25       0         11. Rock Pile exhibit       0       0         12. Mojave plants exhibit, Love Nest       10       2         13. Cap Rock       15       6         14. Cap Rock south       10       0         15. Juniper Flats backcountry trailhead       20       0         16. Lost Horse Mine       25       0         17. Black brush hillsides       5       0         18. Wonderland of Rocks overlook       5       0         19. Keys View       45       0         20. Ryan Ranch       5       2         21. Ryan turnout, Oyster Bar       16       3         22. Hall of Horrors       45       2         23. Ryan Mountain trailhead, Indian Cave exhibit       40       6         24. Geology Tour Road; Desert Queen backcountry trailhead       20       3         25. Wonderland of Rocks, orientation east       15       3         26. Wall Street Mill, Barker Dam       50       5         27. Wonderland of Rocks backcountry staging area       75	Trailhead
9A. Hidden Valley day use lot  9B. Intersection Rock  50  6  10. Echo "Y"  25  0  11. Rock Pile exhibit  0  12. Mojave plants exhibit, Love Nest  10  13. Cap Rock  15  6  14. Cap Rock south  10  15. Juniper Flats backcountry trailhead  20  16. Lost Horse Mine  25  0  17. Black brush hillsides  5  0  18. Wonderland of Rocks overlook  19. Keys View  45  20. Ryan Ranch  5  21. Ryan turnout, Oyster Bar  22. Hall of Horrors  23. Ryan Mountain trailhead, Indian Cave exhibit  24. Geology Tour Road; Desert Queen backcountry trailhead  25. Wonderland of Rocks, orientation east  26. Wall Street Mill, Barker Dam  27. Wonderland of Rocks backcountry staging area  29. Split Rock  15  4  30. Live Oak  15  0	Trailhead, orientation
9B. Intersection Rock       50       6         10. Echo "Y"       25       0         11. Rock Pile exhibit       0       0         12. Mojave plants exhibit, Love Nest       10       2         13. Cap Rock       15       6         14. Cap Rock south       10       0         15. Juniper Flats backcountry trailhead       20       0         16. Lost Horse Mine       25       0         17. Black brush hillsides       5       0         18. Wonderland of Rocks overlook       5       0         19. Keys View       45       0         20. Ryan Ranch       5       2         21. Ryan turnout, Oyster Bar       16       3         22. Hall of Horrors       45       2         23. Ryan Mountain trailhead, Indian Cave exhibit       40       6         24. Geology Tour Road; Desert Queen backcountry trailhead       20       3         25. Wonderland of Rocks, orientation east       15       3         26. Wall Street Mill, Barker Dam       50       5         27. Wonderland of Rocks interpretive exhibit       5       2         28. Wonderland of Rocks backcountry staging area       75       5         29. Split Rock       15	Picnicking, rock climbing
10. Echo "Y"       25       0         11. Rock Pile exhibit       0       0         12. Mojave plants exhibit, Love Nest       10       2         13. Cap Rock       15       6         14. Cap Rock south       10       0         15. Juniper Flats backcountry trailhead       20       0         16. Lost Horse Mine       25       0         17. Black brush hillsides       5       0         18. Wonderland of Rocks overlook       5       0         19. Keys View       45       0         20. Ryan Ranch       5       2         21. Ryan turnout, Oyster Bar       16       3         22. Hall of Horrors       45       2         23. Ryan Mountain trailhead, Indian Cave exhibit       40       6         24. Geology Tour Road; Desert Queen backcountry trailhead       20       3         25. Wonderland of Rocks, orientation east       15       3         26. Wall Street Mill, Barker Dam       50       5         27. Wonderland of Rocks interpretive exhibit       5       2         28. Wonderland of Rocks backcountry staging area       75       5         29. Split Rock       15       4         30. Live Oak       15       0<	Camping, picnicking
11. Rock Pile exhibit       0       0         12. Mojave plants exhibit, Love Nest       10       2         13. Cap Rock       15       6         14. Cap Rock south       10       0         15. Juniper Flats backcountry trailhead       20       0         16. Lost Horse Mine       25       0         17. Black brush hillsides       5       0         18. Wonderland of Rocks overlook       5       0         19. Keys View       45       0         20. Ryan Ranch       5       2         21. Ryan turnout, Oyster Bar       16       3         22. Hall of Horrors       45       2         23. Ryan Mountain trailhead, Indian Cave exhibit       40       6         24. Geology Tour Road; Desert Queen backcountry trailhead       20       3         25. Wonderland of Rocks, orientation east       15       3         26. Wall Street Mill, Barker Dam       50       5         27. Wonderland of Rocks interpretive exhibit       5       2         28. Wonderland of Rocks backcountry staging area       75       5         29. Split Rock       15       4         30. Live Oak       15       0	Rock climbing
12. Mojave plants exhibit, Love Nest       10       2         13. Cap Rock       15       6         14. Cap Rock south       10       0         15. Juniper Flats backcountry trailhead       20       0         16. Lost Horse Mine       25       0         17. Black brush hillsides       5       0         18. Wonderland of Rocks overlook       5       0         19. Keys View       45       0         20. Ryan Ranch       5       2         21. Ryan turnout, Oyster Bar       16       3         22. Hall of Horrors       45       2         23. Ryan Mountain trailhead, Indian Cave exhibit       40       6         24. Geology Tour Road; Desert Queen backcountry trailhead       20       3         25. Wonderland of Rocks, orientation east       15       3         26. Wall Street Mill, Barker Dam       50       5         27. Wonderland of Rocks interpretive exhibit       5       2         28. Wonderland of Rocks backcountry staging area       75       5         29. Split Rock       15       4         30. Live Oak       15       0	Trailhead, rock climbing, walk-in camping
13. Cap Rock       15       6         14. Cap Rock south       10       0         15. Juniper Flats backcountry trailhead       20       0         16. Lost Horse Mine       25       0         17. Black brush hillsides       5       0         18. Wonderland of Rocks overlook       5       0         19. Keys View       45       0         20. Ryan Ranch       5       2         21. Ryan turnout, Oyster Bar       16       3         22. Hall of Horrors       45       2         23. Ryan Mountain trailhead, Indian Cave exhibit       40       6         24. Geology Tour Road; Desert Queen backcountry trailhead       20       3         25. Wonderland of Rocks, orientation east       15       3         26. Wall Street Mill, Barker Dam       50       5         27. Wonderland of Rocks interpretive exhibit       5       2         28. Wonderland of Rocks backcountry staging area       75       5         29. Split Rock       15       4         30. Live Oak       15       0	Eliminate
14. Cap Rock south       10       0         15. Juniper Flats backcountry trailhead       20       0         16. Lost Horse Mine       25       0         17. Black brush hillsides       5       0         18. Wonderland of Rocks overlook       5       0         19. Keys View       45       0         20. Ryan Ranch       5       2         21. Ryan turnout, Oyster Bar       16       3         22. Hall of Horrors       45       2         23. Ryan Mountain trailhead, Indian Cave exhibit       40       6         24. Geology Tour Road; Desert Queen backcountry trailhead       20       3         25. Wonderland of Rocks, orientation east       15       3         26. Wall Street Mill, Barker Dam       50       5         27. Wonderland of Rocks interpretive exhibit       5       2         28. Wonderland of Rocks backcountry staging area       75       5         29. Split Rock       15       4         30. Live Oak       15       0	Interpretation
15. Juniper Flats backcountry trailhead       20       0         16. Lost Horse Mine       25       0         17. Black brush hillsides       5       0         18. Wonderland of Rocks overlook       5       0         19. Keys View       45       0         20. Ryan Ranch       5       2         21. Ryan turnout, Oyster Bar       16       3         22. Hall of Horrors       45       2         23. Ryan Mountain trailhead, Indian Cave exhibit       40       6         24. Geology Tour Road; Desert Queen backcountry trailhead       20       3         25. Wonderland of Rocks, orientation east       15       3         26. Wall Street Mill, Barker Dam       50       5         27. Wonderland of Rocks interpretive exhibit       5       2         28. Wonderland of Rocks backcountry staging area       75       5         29. Split Rock       15       4         30. Live Oak       15       0	Picnicking, interpretation, rock climbing
16. Lost Horse Mine       25       0         17. Black brush hillsides       5       0         18. Wonderland of Rocks overlook       5       0         19. Keys View       45       0         20. Ryan Ranch       5       2         21. Ryan turnout, Oyster Bar       16       3         22. Hall of Horrors       45       2         23. Ryan Mountain trailhead, Indian Cave exhibit       40       6         24. Geology Tour Road; Desert Queen backcountry trailhead       20       3         25. Wonderland of Rocks, orientation east       15       3         26. Wall Street Mill, Barker Dam       50       5         27. Wonderland of Rocks interpretive exhibit       5       2         28. Wonderland of Rocks backcountry staging area       75       5         29. Split Rock       15       4         30. Live Oak       15       0	Cap Rock overflow
17. Black brush hillsides       5       0         18. Wonderland of Rocks overlook       5       0         19. Keys View       45       0         20. Ryan Ranch       5       2         21. Ryan turnout, Oyster Bar       16       3         22. Hall of Horrors       45       2         23. Ryan Mountain trailhead, Indian Cave exhibit       40       6         24. Geology Tour Road; Desert Queen backcountry trailhead       20       3         25. Wonderland of Rocks, orientation east       15       3         26. Wall Street Mill, Barker Dam       50       5         27. Wonderland of Rocks interpretive exhibit       5       2         28. Wonderland of Rocks backcountry staging area       75       5         29. Split Rock       15       4         30. Live Oak       15       0	Trailhead, interpretation, orientation
18. Wonderland of Rocks overlook       5       0         19. Keys View       45       0         20. Ryan Ranch       5       2         21. Ryan turnout, Oyster Bar       16       3         22. Hall of Horrors       45       2         23. Ryan Mountain trailhead, Indian Cave exhibit       40       6         24. Geology Tour Road; Desert Queen backcountry trailhead       20       3         25. Wonderland of Rocks, orientation east       15       3         26. Wall Street Mill, Barker Dam       50       5         27. Wonderland of Rocks interpretive exhibit       5       2         28. Wonderland of Rocks backcountry staging area       75       5         29. Split Rock       15       4         30. Live Oak       15       0	Trailhead
19. Keys View       45       0         20. Ryan Ranch       5       2         21. Ryan turnout, Oyster Bar       16       3         22. Hall of Horrors       45       2         23. Ryan Mountain trailhead, Indian Cave exhibit       40       6         24. Geology Tour Road; Desert Queen backcountry trailhead       20       3         25. Wonderland of Rocks, orientation east       15       3         26. Wall Street Mill, Barker Dam       50       5         27. Wonderland of Rocks interpretive exhibit       5       2         28. Wonderland of Rocks backcountry staging area       75       5         29. Split Rock       15       4         30. Live Oak       15       0	Interpretation
20. Ryan Ranch       5       2         21. Ryan turnout, Oyster Bar       16       3         22. Hall of Horrors       45       2         23. Ryan Mountain trailhead, Indian Cave exhibit       40       6         24. Geology Tour Road; Desert Queen backcountry trailhead       20       3         25. Wonderland of Rocks, orientation east       15       3         26. Wall Street Mill, Barker Dam       50       5         27. Wonderland of Rocks interpretive exhibit       5       2         28. Wonderland of Rocks backcountry staging area       75       5         29. Split Rock       15       4         30. Live Oak       15       0	Interpretation
21. Ryan turnout, Oyster Bar  22. Hall of Horrors  45  23. Ryan Mountain trailhead, Indian Cave exhibit  40  40  45  40  40  40  40  40  40  40	Interpretation, trailhead
22. Hall of Horrors  23. Ryan Mountain trailhead, Indian Cave exhibit  24. Geology Tour Road; Desert Queen backcountry trailhead  25. Wonderland of Rocks, orientation east  26. Wall Street Mill, Barker Dam  27. Wonderland of Rocks interpretive exhibit  28. Wonderland of Rocks backcountry staging area  29. Split Rock  30. Live Oak  20  3  45  20  3  3  3  40  40  6  6  6  6  7  3  5  5  6  7  7  7  7  7  7  8  8  8  9  8  9  9  9  9  9  9  9  9	Trailhead, interpretation
23. Ryan Mountain trailhead, Indian Cave exhibit  24. Geology Tour Road; Desert Queen backcountry trailhead  25. Wonderland of Rocks, orientation east  26. Wall Street Mill, Barker Dam  27. Wonderland of Rocks interpretive exhibit  28. Wonderland of Rocks backcountry staging area  29. Split Rock  10. Live Oak  20. 3  30. Live Oak  40. 6  40. 6  40. 6  40. 6  40. 6  40. 6  40. 6  40. 50. 5  40. 30. Live Oak  40. 6  40.	Trailhead, interpretation
24. Geology Tour Road; Desert Queen backcountry trailhead  25. Wonderland of Rocks, orientation east  15 3  26. Wall Street Mill, Barker Dam  50 5  27. Wonderland of Rocks interpretive exhibit  28. Wonderland of Rocks backcountry staging area  75 5  29. Split Rock  15 4  30. Live Oak  15 0	Rock climbing, trailhead
trailhead       25. Wonderland of Rocks, orientation east       15       3         26. Wall Street Mill, Barker Dam       50       5         27. Wonderland of Rocks interpretive exhibit       5       2         28. Wonderland of Rocks backcountry staging area       75       5         29. Split Rock       15       4         30. Live Oak       15       0	Trailhead, interpretation, rock climbing
26. Wall Street Mill, Barker Dam50527. Wonderland of Rocks interpretive exhibit5228. Wonderland of Rocks backcountry staging area75529. Split Rock15430. Live Oak150	Trailhead, interpretation, rock climbing
27. Wonderland of Rocks interpretive exhibit5228. Wonderland of Rocks backcountry staging area75529. Split Rock15430. Live Oak150	Interpretation, orientation
28. Wonderland of Rocks backcountry staging area 75 5 29. Split Rock 15 4 30. Live Oak 15 0	Rock climbing, trailhead
29. Split Rock     15     4       30. Live Oak     15     0	Interpretation
30. Live Oak 15 0	Trailhead, rock climbing
30. Live Oak 15 0	Rock climbing, trailhead
31. Desert nomads exhibit 0 0	Picnicking, rock climbing
	Eliminate interpretive exhibit; maintain parking for traffic control
32. Skull Rock 5 0	Photo opportunity
TOTALS 732 72	





#### PARKING/PULLOUTS

- 1 Desert environment
- 2 Rock climbing exhibit
- 3A Wait lot/Keys Ranch
- 3B Boy Scout hiking trailhead
- 3C Rock piles/Wonderland of Rocks orientation-west
- 4A Lost Horse ranger station access road
- 4B Hemingway
- 5 Comic Book area
- 6 Hidden Valley north lot
- 7 Hidden Valley trailhead
- 8 Hidden Valley picnic area
- 9A Hidden Valley day use area
- 9B Intersection Rock
- 10 Echo "Y"
- 11 Rock Pile exhibit
- 12 Mojave plants exhibit/Love Nest
- 13 Cap Rock
- 14 Cap Rock South
- 15 Juniper Flats backcountry trailhead
- 16 Lost Horse Mine
- 17 Black Brush hillsides
- 18 Wonderland of Rocks overlook
- 19 Keys View
- 20 Ryan Ranch
- 21 Ryan turnout/Oyster Bar
- 22 Hall of Horrors
- 23 Ryan Mountain trailhead/Indian Cave exhibit
- 24 Geology Tour Road/Desert Queen backcountry
- 25 Wonderland of Rocks orientation-east
- 26 Wall Street Mill/Barker Dam
- 27 Wonderland of Rocks interpretive exhibit
- 28 Wonderland of Rocks backcountry staging area
- 29 Split Rock
- 30 Live Oak
- 31 Desert Nomads exhibit
- 32 Skull Rock pullout

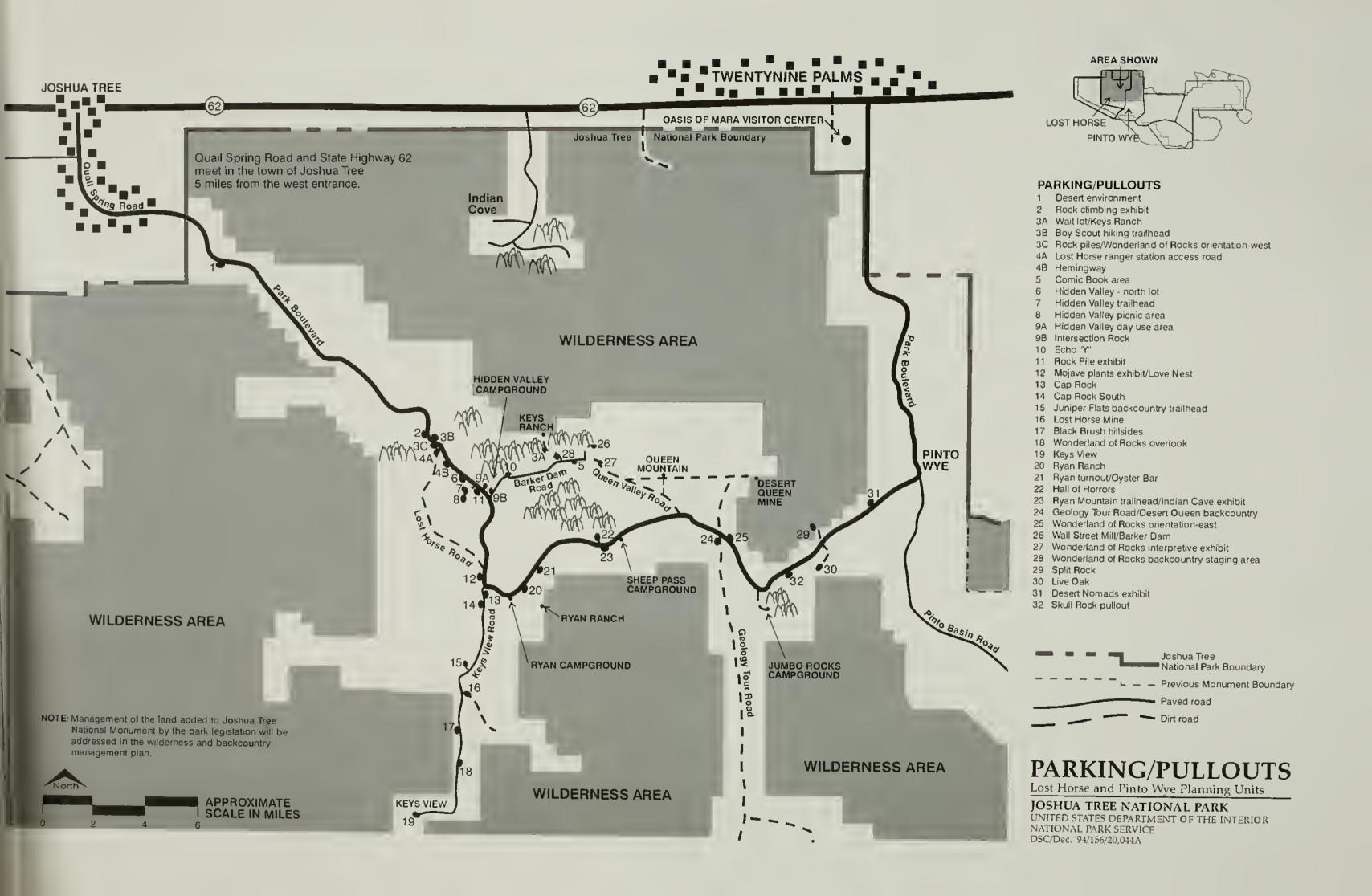


### PARKING/PULLOUTS

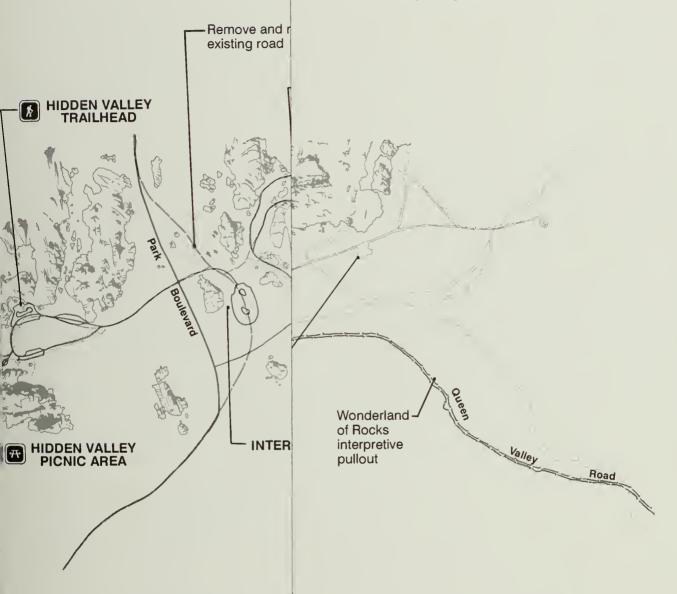
Lost Horse and Pinto Wye Planning Units

#### JOSHUA TREE NATIONAL PARK

UNITED STATES DEPARTMENT OF THE INTERIOR NATIONAL PARK SERVICE DSC/Dec. '94/156/20.044A



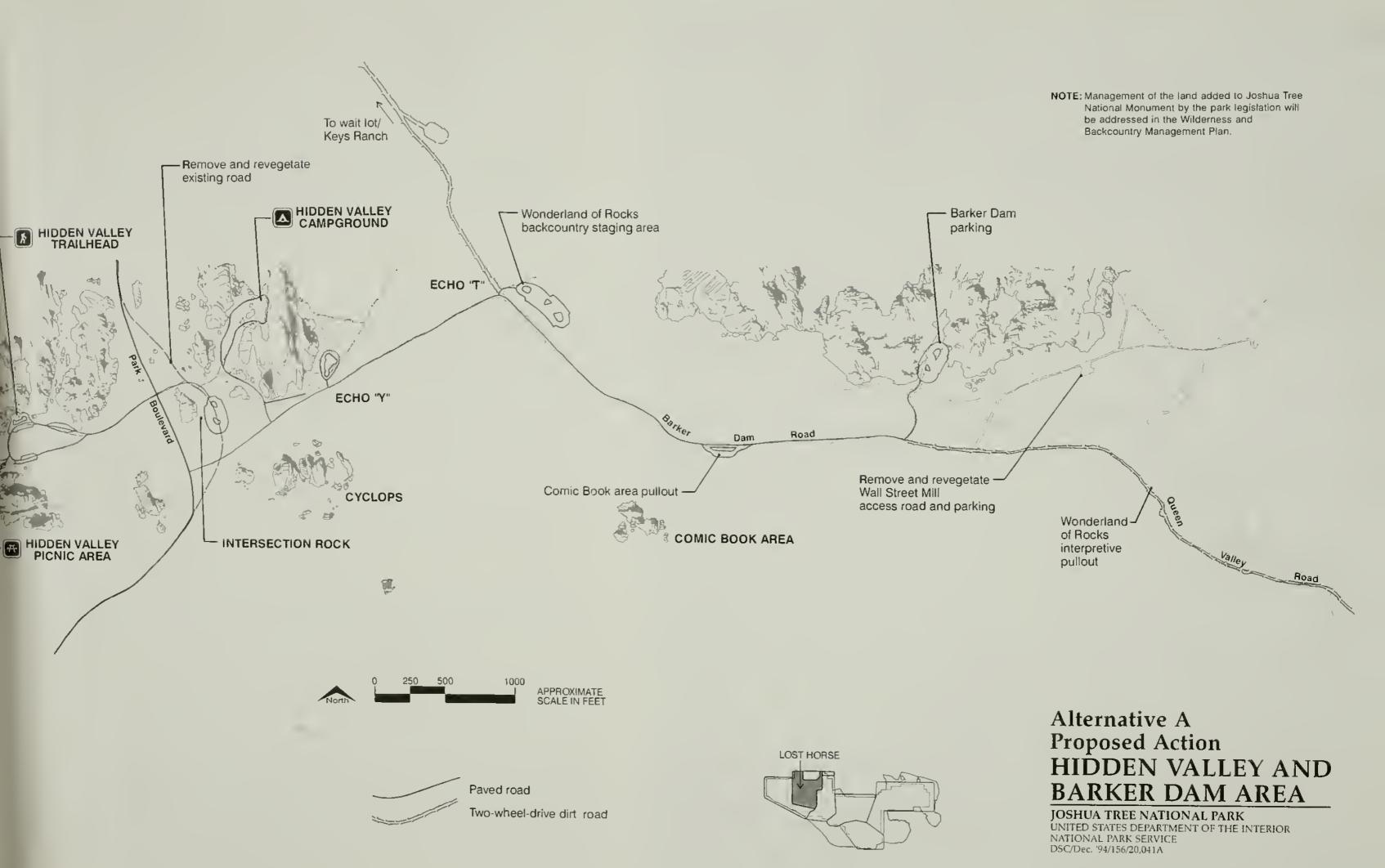
NOTE: Management of the land added to Joshua Tree National Monument by the park legislation will be addressed in the Wilderness and Backcountry Management Plan.



## Alternative A Proposed Action HIDDEN VALLEY AND BARKER DAM AREA

**JOSHUA TREE NATIONAL PARK** 

UNITED STATES DEPARTMENT OF THE INTERIOR NATIONAL PARK SERVICE DSC/Dec. '94/156/20,041A



#### **OPERATIONS**

#### Housing

Most employees would continue to live in local communities. Housing in the park would continue to be provided at current locations, except for the Lost Horse ranger station, where trailer pads for volunteers have been developed. A duplex would be added at Cottonwood to support the expansion of visitor services. A dormitory would also replace the volunteer housing trailer at headquarters. The Black Rock Interagency Fire Center dorm would be redesigned for expanded use by seasonal fire personnel.

#### Administration and Maintenance

Administrative and maintenance facilities would be retained at all existing sites. The Twentynine Palms entrance would continue as the primary location for NPS operations. The headquarters area would be redesigned to separate administrative and visitor use functions. Administrative, maintenance, museum storage, and plant nursery functions would be consolidated in new buildings in an area south of the visitor center. Administrative, storage, parking facilities, telephone, security system, water, and power would be upgraded or added at Cottonwood. The Indian Cove ranger station would be expanded. Telephone service, a security system, water storage, and covered storage would be provided at the Pinto Wye maintenance area. The outdated communications system (radios, telephones, and computers) would be upgraded to incorporate newer and more efficient technology. The recycling program would be retained and would address recycling issues throughout the park.

Most borrow pits and associated access roads would be closed. These areas would be rehabilitated except for possible use of two borrow sites for maintenance or visitor use purposes (see development concept plans for Pinto Wye planning unit and Transition Zone planning unit). Sand, gravel, and borrow material would be obtained from sources outside of the park in accordance with NPS *Management Policies*.

To the degree feasible the actions proposed under this alternative would be accomplished using water rights currently held by the United States. If additional water is needed, rights would be obtained in accordance with applicable federal or state laws. All rights to water diverted or used on park lands for permitted activities would be perfected in the name of the United States.

The park would actively encourage a volunteer program and involve the cooperating association (Joshua Tree National Park Association) in addressing operational needs.

#### Design Character Guidelines and Sustainable Design

Design character guidelines would be developed that would incorporate sustainable designs such as use of passive solar technology and of materials native to the desert environment. Plantings and site design would use native vegetation. All new and modified facilities would adhere to these guidelines to create a unified visual identity for the park that would harmonize with the surrounding environment. Water and energy conservation technology as

well as recycling would be incorporated into the design of these facilities according to NPS guidelines on sustainable design practices.

#### Access for People with Disabilities

To the greatest extent possible, commensurate with their abilities, visitors with disabilities would be able to enjoy the park and participate in recreational activities using the same facilities and programs as other visitors; sensitive planning and design would facilitate accessibility. Consultation concerning accessibility considerations would take place with local clubs and organizations with disabled members.

Accessibility of Joshua Tree National Park facilities would continue to be provided in conformance with applicable laws, regulations, and NPS guidelines. The degree of accessibility would be proportional to the degree of development. New and remodeled visitor and employee facilities in developed areas would be built or rehabilitated to be fully accessible. Backcountry areas would be accessible to the extent feasible without major modification of the sites. A range of accessibility levels for trails would be established. An accessibility plan would be prepared to identify where barriers exist and what actions would be necessary to remove them.

#### PLAN IMPLEMENTATION

This General Management Plan / Development Concept Plans / Environmental Impact Statement is the first to be completed for Joshua Tree National Park. The management plan for the monument had not been updated since 1964. The actions proposed in the plan would take at least 15 years to implement. Because it is a long-term plan, individual actions proposed have been divided into five priorities to show the order in which the actions would be funded and implemented. Priorities for implementation follow.

First priority: \$6,721,000 would be needed for actions at the west and north entrances, the NPS administrative complex, all entrance signs, and highway signs.

Second priority: \$5,946,000 would cover actions to redesign campgrounds and develop the Cottonwood contact station.

Third priority: \$555,000 would cover backcountry trails, trailheads, and the rehabilitation of interpretive exhibits in the headquarters areas.

Fourth priority: \$3,860,000 would cover Indian Cove, Hidden Valley, and parkwide interpretive signs.

Fifth priority: \$2,178,000 would cover maintenance facility improvements, boundary fencing, and additional interpretive signs.

Road project costs for road project phases I-IV: \$22,750,000

Appendix A summarizes the NPS development costs by planning unit and priority number.

The proposed action would affect NPS staffing as summarized in table 4.

TABLE 4: RECOMMENDED STAFFING

Division	Current Full Time Equivalents (FTE)	Recommended Increase in FTEs	Total
Administration	8	4	12
Interpretation	9	15	24
Protection/Fee Collection	19.5	23	43
Maintenance	17	16	33
Resource Management	12	11	23
Fire Management	4	3	7
Totals	69.5	72	142



#### ALTERNATIVE B — NO ACTION

#### **GENERAL DESCRIPTION**

Management strategies and conditions would continue. Planning would be internally focused, with limited cooperative planning with other agencies. Resource damage or visitor conflicts would be dealt with on a case-by-case basis. Most facilities would remain basically as they are, but minor improvements would be accomplished through routine maintenance when money and staff were available. The no-action alternative documents existing conditions and provides a basis for comparing the impacts of the other alternatives.

#### MANAGEMENT ZONING

Present management zoning for park land, which was developed in 1978, would continue in use. Zoning would be subject to modification through such planning documents as the resources management plan and wilderness and backcountry management plan. However, neither of these documents would serve as a comprehensive means for reevaluation of all zoning issues.

#### **BACKCOUNTRY AND WILDERNESS MANAGEMENT**

Threats to the backcountry, including designated and proposed wilderness units, would be addressed on a case-by-case basis. The ban on expansion bolts used in technical rock climbing in designated wilderness would continue until studies called for in the climbing management plan are completed. Inholdings would continue to be acquired from willing sellers as identified in the land protection plan.

The National Park Service would continue to work with other agencies and landowners to facilitate cooperative efforts as the opportunities arose. Current programs that provide coordination between the Park Service and Bureau of Land Management (whose land borders the park boundary) include the Western Mojave Desert Coordinated Management Plan, the Northern and Eastern Colorado Desert Coordinated Management Plan, the Coachella Valley Habitat Conservation Management Plan, and Desert Tortoise Recovery Plan. Limited patrol and placement of barriers and closure signs to curtail illegal access and activities in the park would continue.

#### **RESOURCES MANAGEMENT**

Management of the park's natural and cultural resources would be guided by the resources management plan. In this alternative the resources management program would be maintained at its current level in function, staffing, and funding. Project priorities would continue to be set based on existing personnel levels and available project funding. This typically results in priority setting on an opportunistic basis, addressing only short-term objectives. Provisions for long-term monitoring or retreatment to ensure project success would be affected by staffing and funding limitations.

# Archeological, Ethnographic, and Historic Resources

Evaluations of archeological, ethnographic, and historic resources for national register eligibility would continue to be opportunistic and unsystematic. Historic structures on or eligible for listing on the National Register of Historic Places would continue to be stabilized as funds become available. There would be no preservation to support interpretation of the resources.

Archeological resources would continue to be patrolled and monitored by the protection division staff. Surveying, inventorying, and evaluating archeological areas, as well as data recovery, if needed for the mitigation for any development projects, would continue to be carried out by the NPS Western Archeological and Conservation Center or by contract.

#### Native American Consultations

Consultation with Native American groups would continue on an as-needed basis for various projects and plans. There would be no systematic Native American consultation plan to guide consultation, or research and documentation of ethnographic resources or traditional use areas and sites. Pertinent regulations and guidelines would be followed under all alternatives.

#### VISITOR USE

# Information and Interpretation

Interpretive facilities would not be redesigned or upgraded. Personal interpretive contact numbers would remain low. Few programs would be offered and would be limited to the busiest seasons. Formal evening programs would continue to be presented at Cottonwood, Indian Cove, and Jumbo Rocks campgrounds. Informal programs would be periodically presented at Black Rock Canyon campgrounds. There would be little or no roving interpretation. Upgrade and development of interpretive services would continue at a slow rate. Many publications would continue to be out of date.

Limited educational programs for school groups would be offered. However, the demand for these programs would exceed the available staff by a wide margin. Development of an outreach program would be a low priority and restricted to the local area.

# **Primary Visitor Information Facilities**

The Oasis of Mara Visitor Center would continue to be the primary information, orientation, and interpretation facility. Minimal orientation and information would be provided at the west and south entrances. The west entrance would have only a fee collection station.

# Interpretive Signs and Exhibits

All nature trail signs and exhibits, campground wayside, and Keys View wayside upgrades would be completed. Other waysides would be improved or replaced at the current rate.

#### Other Visitor Facilities

Visitor facilities such as campsites, picnic areas, and trails would be maintained. These facilities would continue to be poorly delineated and signed. The network of braided trails and denuded and eroded areas encompassing camp and picnic sites would persist and probably continue to expand. Spot placement of barriers such as rocks would continue as a means to contain use and reduce impacts. The camping reservation and registration system would not be modified. There would be no change in time limitations for camping.

#### PARK ROADS AND CIRCULATION

Paved roads would be reconstructed as funds became available. This would also be accomplished through a multiyear phased program. The many dirt roads throughout the park would be evaluated on a case-by-case basis. Dirt roads found to be unnecessary or inappropriate would be closed, but extensive revegetation efforts would not be undertaken. Signs on designated trails and revegetation of social trails would remain minimal. Restriction of visitors to designated roads and trails would continue to be difficult and inadequate based on existing staff capabilities.

Minor improvements to parking areas would be made as routine repair and rehabilitation funding allows. There would be no additional parking areas. Most lots would remain unsurfaced and poorly delineated. Vehicles would continue to sprawl out over the borders of the parking areas, resulting in incremental expansion of bare spots. Continual visitor-created expansion of parking areas would persist as would creation of pullout parking areas along the roads. Placement of rock barriers by park staff to limit parking outside of designated areas would continue.

#### **OPERATIONS**

NPS offices, maintenance facilities, and housing would be retained. There would be no expansion, relocation, or systematic replacement of these facilities. Routine maintenance would take place. There would be no design character guidelines in effect. Communications would be hampered by inadequate equipment. Curb cuts, ramps, reserved parking spaces, and other accessibility improvements to visitor facilities and Park Service support facilities for people with disabilities would continue to be made in the course of routine maintenance.

#### PLAN IMPLEMENTATION

Reconstruction of the major roads, phases I–V: 19,588,000.

Table 5: Visitor Use Areas — Designated Parking, Lost Horse and Pinto Wye Planning Units, Alternative B

Parking Areas	Cars	RVs	Function
1. Desert environments	5	1	Interpretation, orientation
2. Rock climbing exhibit	6	0	Interpretation, climbing
3A. Wait lot, Keys Ranch	6	0	Trailhead
3B. Boy Scout hiking trailhead	8	0	Trailhead
3C. Rock piles, Wonderland of Rocks—orientation west	0	0	
4A. Lost Horse ranger station access road	10	0	Rock climbing, trailhead
4B. Hemingway	15	0	Rock climbing, trailhead
5. Comic Book area	10	0	Rock climbing
6. Hidden Valley, north lot	5	0	Trailhead
7. Hidden Valley trailhead	17	2	Trailhead, orientation
8. Hidden Valley picnic area	20	2	Picnicking, rock climbing
9A. Hidden Valley day use lot	25	0	Camping, picnicking
9B. Intersection Rock	40	4	Rock climbing
10. Echo "Y"	0	0	
11. Rock Pile exhibit	3	0	Interpretation
12. Mojave plants exhibit, Love Nest	0	0	Interpretation
13. Cap Rock	15	2	Picnicking, interpretation, rock climbing
14. Cap Rock south	0	0	
15. Juniper Flats backcountry trailhead	10	0	Trailhead, interpretation, orientation
16. Lost Horse Mine	8	0	Trailhead
17. Black brush hillsides	0	0	
18. Wonderland of Rocks overlook	1	0	Interpretation
19. Keys View	45	2	Interpretation, trailhead
20. Ryan Ranch	1	0	Trailhead, interpretation
21. Ryan turnout, Oyster Bar	16	3	Interpretation
22. Hall of Horrors	10	0	Rock climbing, trailhead
23. Ryan Mountain trailhead, Indian Cave exhibit	11	3	Trailhead, interpretation, rock climbing
24. Geology Tour Road; Desert Queen backcountry trailhead	5	2	Trailhead, interpretation, rock climbing
25. Wonderland of Rocks, orientation east	0	0	
26. Wall Street Mill, Barker Dam	25	0	Rock climbing, trailhead
27. Wonderland of Rocks interpretive exhibit	0	0	
28. Wonderland of Rocks backcountry staging area	15	0	Trailhead, rock climbing
29. Split Rock	6	0	Rock climbing, trailhead
30. Live Oak	6	0	Picnicking, rock climbing
31. Desert nomads exhibit	2	0	Interpretation
22 Clauli Dani.	5	0	Photo opportunity
32. Skull Rock		0	Thoto opportunity

Parking area numbers correspond to the Parking and Pullouts graphic. Numbers of cars and RVs are approximate. Totals do not include parking in undesignated areas along edges of roads and parking areas

Main Exhib Visito with NPS a

Picnic

COVIN

NOTE: Management of the land added to Joshua Tree National Monument by the park legislation will be addressed in the wilderness and backcountry management plan.

New Park Boundary

Previous Monument Boundary

#### INDIAN COVE

Upgrade road

Campground layout remains confusing, confliday use and camping would continue
Signs on highway at Fortynine Palms Oasis w

igns on highway at Fortynine Palms Oasis w inadequate

Restrooms would be inadequate

#### LOST HORSE

Roads would be reconstructed Visitors would continue to choose parking locations and create pullouts Group site picnicking would be

Group site picnicking would be inadequate

Visitor contact would remain inadequate at the west entrance



Horse users would continue to create loops on unmarked trails Parking and highway directional signs would remain inadequate Visitor contact center would contain outdated exhibits Black Rock visitor center would continue to be staffed by VIPs



Road traces would remain unvegetated Parking, signs, and exhibits would remain inadequate Trespassing would continue

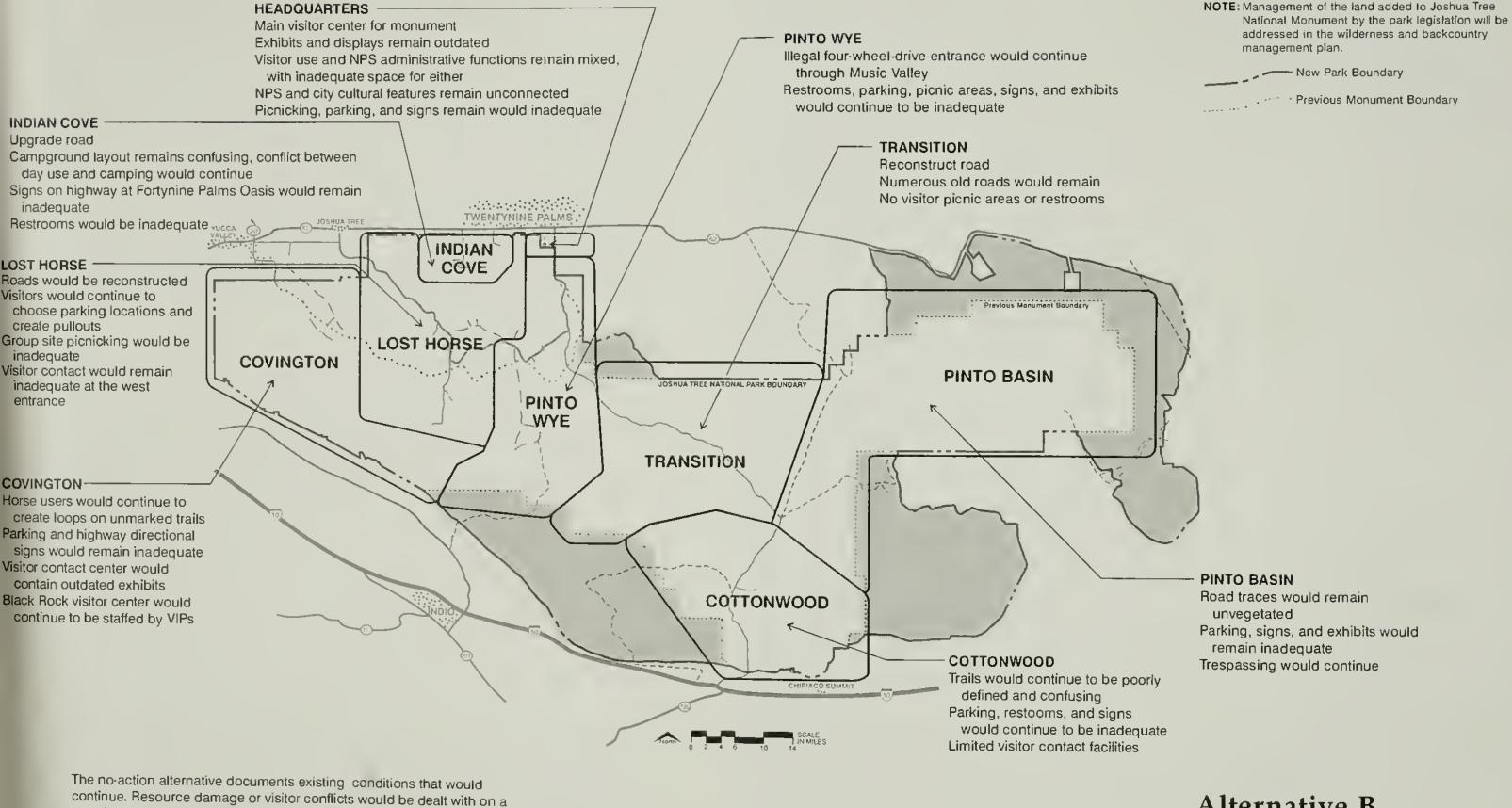
The no-action alternative documents continue. Resource damage or visite case-by-case basis. Facilities would improvements would be accomplish money and manpower became avai

# Alternative B NO ACTION

By Planning Unit

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case-by-case basis. Facilities would remain basically as they are, but minor improvements would be accomplished through routine maintenance as

money and manpower became available.

# Alternative B NO ACTION

By Planning Unit

# JOSHUA TREE NATIONAL PARK

UNITED STATES DEPARTMENT OF THE INTERIOR NATIONAL PARK SERVICE DSC/Dec. '94/156/20,015A

# **ALTERNATIVE C — MINIMUM REQUIREMENTS**

#### GENERAL DESCRIPTION

The minimum requirements alternative outlines the limited management actions necessary to repair and clean up facilities and reduce impacts on natural and cultural resources. Day use parking would be restricted to existing designated parking areas, which would be clearly delineated. Visitor experiences and opportunities to enjoy the park would continue, largely unchanged.

As under the proposal, management would be enhanced through development of an array of implementation plans to evaluate threats to the wilderness. Appropriate uses would be identified. Cooperative planning and agreements with adjacent landowners and other agencies would be increased to preserve ecological units that extend across park boundaries. Inventory, monitoring, and research would be increased with the focus of areas of special expertise. Patrol of the boundaries would be increased.

Management of visitors primarily for the purpose of reducing impacts to the resources would be addressed by better delineating individual camping, picnicking, and parking sites and trails. No new parking areas would be provided.

The visitor center at the north entrance would be the primary entrance — offering orientation, trip planning assistance, and interpretation. A fee collection station would continue to serve the west entrance. The south entrance visitor contact station would be moderately expanded to increase information and orientation functions. Interpretive exhibits along the major roads and developed areas would be updated. Interpretive services would be increased primarily at Keys Ranch.

Park support facilities would be upgraded in their current locations to improve park operations and minimize new disturbance.

#### MANAGEMENT ZONING

All park land would be rezoned as under the proposed action.

#### **BACKCOUNTRY AND WILDERNESS MANAGEMENT**

Management of backcountry and wilderness would be the same as for the proposed action. Threats and impacts to backcountry and wilderness values posed by various uses and development would be addressed in the backcountry management plan and land protection plan. Inappropriate development would be removed, the land rehabilitated, and the land reevaluated for placement in the wilderness zone. The ban on placement of expansion bolts in designated wilderness would remain in effect until recommended studies were completed. A proactive program of acquisition of inholdings from willing sellers would be implemented through the land protection plan. As parcels were acquired, development would be removed and the area rehabilitated and reevaluated for inclusion in the wilderness zone.

The Park Service would work with adjacent property owners and local, county, state, and other federal officials to ensure protection of the park's natural, cultural, and wilderness values. The Park Service would review, evaluate, and make recommendations to local governments concerning all proposals involving major development or activities that might affect resources. Signs, fencing, placement of barriers, and patrol of the boundary would curtail illegal access and activities.

The Park Service would actively pursue cooperative agreements with other agencies and landowners to protect ecological units that extend beyond the boundary and that still have natural integrity. These areas are along the southern and eastern boundaries and include Big Morongo Canyon Area of Critical Environmental Concern, the Coachella Valley Fringed-toed Lizard Preserve and Area of Critical Environmental Concern, and the Desert Lily Sanctuary.

#### **RESOURCES MANAGEMENT**

This alternative would require that noncritical program elements be maintained at current levels of funding and staffing. In areas of special expertise such as arid lands restoration and museum curation, levels of funding and staffing would be increased. Overall, program priorities for the park would continue to respond to agency mandates and critical legal issues.

This alternative would also allow the resource management division be proactive in resolving resources management issues of a multipark or regional nature in areas of special expertise. For example, Joshua Tree National Park staff are now recognized as authorities in arid plant propagation and site restoration. This program would be expected to make more advancements in this field. The programmatic approach taken by the division would remain project orientated, with priorities determined largely by national or regional needs. There would be additional program support to expand the native plant nursery, grow plant materials for other desert areas, experiment with propagation and restoration techniques, or disseminate information regarding new nursery and restoration technologies.

# Archeological, Ethnographic, and Historic Resources

Evaluations of properties for national register eligibility would be pursued gradually as funding allowed and as outlined on a priority basis in the resources management plan. Other historic structures on or eligible for listing on the National Register of Historic Places would be stabilized according to a priority listing.

Archeological resources would continue to be patrolled by protection division staff. The part-time ranger position would be converted to full time and other cultural resource duties would be added. Surveying, inventorying, and evaluating archeological areas as well as data recovery, if needed for the mitigation for any development projects, would continue to be carried out by the Western Archeological and Conservation Center of the National Park Service or by contract.

#### Native American Consultations

A Native American consultation plan would be developed to promote ongoing communication.

#### **VISITOR USE**

# Information and Interpretation

The interpretive themes would be the same as in the proposed action. All waysides would be replaced as necessary to better interpret the resources on site. Visitor experiences would remain focused on the frontcountry and backcountry opportunities. However, the Geology Tour Road would be upgraded for use by two-wheel-drive vehicles to serve as the primary dirt road interpretive experience.

Information, orientation, and trip planning assistance would be available primarily at the Oasis of Mara visitor center. Limited capabilities would be maintained at the facilities at the west entrance and Cottonwood.

Keys Ranch would be stabilized and developed as the primary location for onsite services dealing with the cultural history of the Joshua Tree area. Interpretation would involve the continuum of occupation and use from prehistoric times to the present. The ranch would lend itself to costumed interpretation, and tours provided by the National Park Service would continue.

An outreach program would be developed similar to the proposed action, but would cover a smaller geographic area. The emphasis would be on local programs, with less effort directed toward southern California.

# **Primary Visitor Information Facilities**

The major interpretation, information, and orientation functions for the park would be maintained at the visitor center at the Oasis of Mara or Twentynine Palms entrance. Administrative offices would be relocated from the visitor center building to a new building near the park support facilities immediately to the south. The current building would serve solely as a visitor center. Exhibits would be updated and expanded. Visitor contact and fee collection stations at the west and south entrances would be retained. Orientation materials would be provided at waysides adjacent to each of these facilities. Black Rock Canyon Nature Center, located at Black Rock Canyon campground, would be oriented to nature center and environmental education activities.

## **Interpretive Signs and Exhibits**

Upgrading of all nature trail signs and exhibits, campground waysides, and Keys View waysides would be completed. Other waysides would also be improved or replaced as needed.

### Other Visitor Facilities

Campgrounds, picnic areas, and trails would be improved by clearly defining sites and trails through use of barriers and revegetation. Social trails would be revegetated. Associated restrooms would be replaced with permanent facilities. The number of sites or capacity of campgrounds and picnic areas would not change. Time limitations would be established, and some sites would be maintained on a first-come, first-served basis.

#### PARK ROADS AND CIRCULATION

Roads, parking areas, and trails would be modified primarily to improve protection of resources and correct the highly deteriorated condition of the roads. The many dirt roads throughout the park would be evaluated as to their contribution to achieving the purposes of the park. Roads that cannot be maintained to safe standards or whose function does not serve the park's purpose would be closed. This evaluation would be made in the backcountry management plan. A trail plan would be developed to provide specific guidance for upgrading the trail system.

A more integrated network of roads, trails, and parking areas would be provided to serve the various visitor destinations similar to the proposed action. However, there would be no expansion or addition of parking areas. Clearly marked trails would be built between parking areas and other visitor facilities to provide an alternative means of access to various destinations. Visitors would be encouraged to use trails between popular areas to alleviate automobile congestion and reduce competition for parking spaces at any one area. Trails would be open to bicycles where appropriate to encourage trail use as opposed to driving between destinations.

# Road Improvements

Paved roads would be reconstructed using the road guidelines outlined in the proposed action. This would also be accomplished through the same multiyear phased program.

# Parking Area Improvements

Parking areas, including wayside parking areas, would be redesigned in the disturbed areas. This would prevent the uncontrolled expansion that damages resources and would provide for more efficient use of space. Design criteria would be the same as for the proposed action, except there would be no new construction. Information, orientation, interpretation, and backcountry registration would be provided at parking areas as appropriate at each lot. All unneeded or undesirable parking areas would be obliterated and access blocked. Parking in designated paved parking areas only would be strictly enforced.

Parking capacities for the seven visitor use areas of the west entrance, Wonderland of Rocks, Cap Rock, Keys View, Geology Tour Road, Ryan Mountain, and Split Rock/Live Oak are shown in the following table. Other interpretive and trailhead parking would be retained and paved along Pinto Basin Road between Pinto Wye and the south boundary.

#### **OPERATIONS**

# Housing

Most employees would continue to live in nearby communities. Housing in the park would be retained and rehabilitated as necessary, except for housing at the Lost Horse ranger station and the volunteer trailer at headquarters. Permanent housing would no longer be provided at Lost Horse, but trailer pads for volunteers would be developed there. A duplex would replace the trailer at headquarters. A duplex would also be provided at Cottonwood.

#### Administration and Maintenance

Administrative and maintenance facilities would be retained at existing locations. The Twentynine Palms entrance would continue as the primary location for NPS operations. Administrative offices would be relocated to a new building to be constructed in an area south of the visitor center with the other support facilities that would be retained. There would be a minimal expansion of office space at Indian Cove. Covered maintenance storage, parking, telephone, security systems, water, and power would be improved or added at Cottonwood. Utilities at the north entrance maintenance area and Lost Horse ranger station would be improved.

The communication system would be upgraded to incorporate newer, more efficient technology.

Most borrow pits and associated access roads in the park would be closed. These areas would be rehabilitated except for possible use of two borrow sites for maintenance or visitor use purposes (see development concept plans for Pinto Wye Planning Unit and Transition Zone Planning Unit). Sand, gravel, and other borrow material would be obtained from available sources outside of the park in accordance with NPS *Management Policies*.

# Design Character Guidelines and Sustainable Design

Design character guidelines would be developed that would incorporate sustainable designs, such as earth sheltering and use of passive solar technologies and materials native to the desert environment. Native vegetation would be used for landscaping. All new and modified facilities would adhere to these guidelines to create a unified visual identity and enable the developments to harmonize with the environment. Water and energy conservation technology and materials recycling would be incorporated into the design of these facilities according to NPS sustainable design guidelines.

# Access for People with Disabilities

Accessibility to Joshua Tree National Park facilities by visitors with disabilities would continue to be provided in conformance with applicable laws and regulations. The degree of accessibility would be proportional to the degree of development. New and remodeled visitor and employee facilities in developed areas would be built or rehabilitated to fully accessible

standards. Backcountry areas would be accessible to the extent feasible without major modifications of the sites. Although trails to and in these areas would be formalized, they would retain their basic unimproved nature and topographic variations. New facilities and remodeled facilities would be accessible.

#### PLAN IMPLEMENTATION PRIORITIES

First priority: \$1,122,000 would be needed for actions at the west and north entrances, the NPS administrative complex, all entrance signs, and highway signs.

Second priority: \$2,868,000 would cover actions to clean up all campgrounds and to develop the Cottonwood contact station.

Third priority: \$1,238,000 would cover backcountry trails, trailheads, and the rehabilitation of interpretive/exhibits in the headquarters areas.

Fourth priority: \$2,763,000 would cover Indian Cove, Hidden Valley and parkwide interpretive signs.

Fifth priority: \$1,877,000 would cover the boundary fencing, and additional interpretive signs.

Road improvement costs for phases I-V: \$21,645,000.

Appendix A summarizes the NPS development costs by planning unit and priority number.

This alternative would affect NPS staffing as summarized in table 6 below.

TABLE 6: RECOMMENDED STAFFING

Division	Current Full Time Equivalents (FTE)	Recommended Increase in FTEs	Total
Administration	7.5	1.0	8.5
Interpretation	8.5	7.0	15.5
Protection/Fee Collection	20.0	7.5	31.0
Maintenance	17.5	7.0	24.5
Resource Management	12.0	2.0	14.0
Fire Management	4.0	0.0	4.0
Totals	69.5	24.5	97.5

#### INDIAN COVE -

Upgrade road
Define camp sites and separate
Improve signs at Fortynine Palr
and on highway
Provide permanent restrooms

COVIN

#### LOST HORSE -

Reconstruct roads;
minimum widths, slow
speeds
Build hiking trails between
popular climbing areas
and parking, develop
trails plan and handbook
Designate parking in
existing areas
Delineate use areas and
improve facilities
Add orientation wayside at
west entrance fee station

# COVINGTON -

signs, and revegetate braided trails
Clearly define spaces in lots, and
improve signs
Provide parking for California Riding and
Hiking Trail
Clearly define existing campsites and
improve drainage
Jpgrade exhibits in visitor contact center
Provide for permanent NPS interpreters

Develop trails plan; mark trails with

at Black Rock visitor center

The minimum requirements alternation to achieve the purpose of the monul existing facilities, reduce impacts on and provide for a safe and improved

NOTE: Management of the land added to Joshua Tree National Monument by the park legislation will be addressed in the wilderness and backcountry management plan.



Previous Monument Boundary

#### **TRANSITION**

Reconstruct road
Reclaim old roads and revegetate
Improve existing wayside exhibits
Install roadside picnic tables
Add comfort station at Cholla Cactus Garden

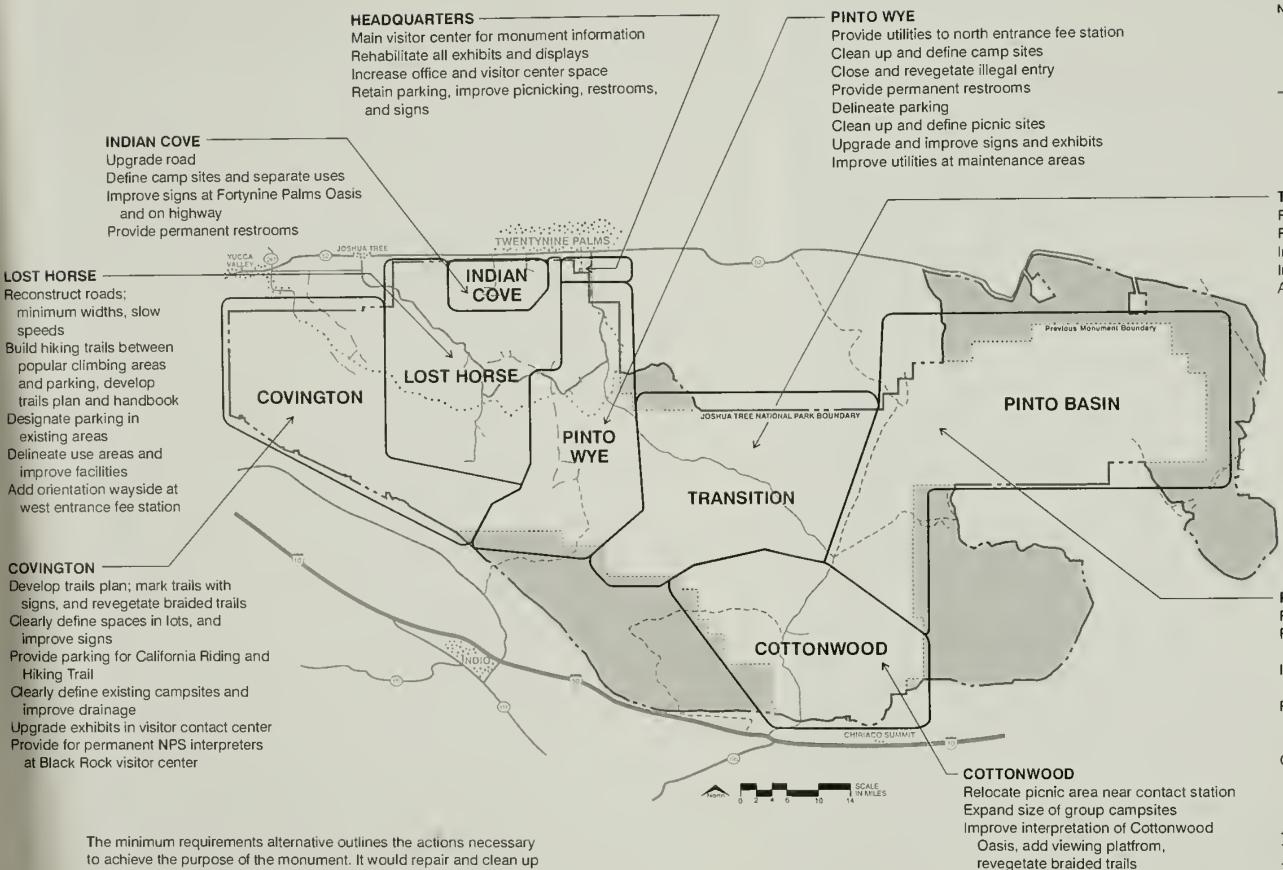
#### **PINTO BASIN**

Revegetate old road traces
Provide parking and backcountry boards at
wilderness access points
Install entrance sign and exhibit at park
boundary and Old Dale Road
Redesign and add sign/exhibit at Old Dale
Road, Black Eagle Mine Road, and
Cottonwood Road junction
Close illegal entrances

# Alternative C MINIMUM REQUIREMENTS

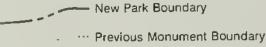
By Planning Unit

JOSHUA TREE NATIONAL PARK UNITED STATES DEPARTMENT OF THE INTERIOR NATIONAL PARK SERVICE DSC/Dec. '94/156/20,033A



to achieve the purpose of the monument. It would repair and clean up existing facilities, reduce impacts on natural and cultural resources, and provide for a safe and improved park operation.

NOTE: Management of the land added to Joshua Tree National Monument by the park legislation will be addressed in the wilderness and backcountry management plan.



#### TRANSITION

Reconstruct road Reclaim old roads and revegetate Improve existing wayside exhibits Install roadside picnic tables Add comfort station at Cholla Cactus Garden

#### PINTO BASIN

Revegetate old road traces Provide parking and backcountry boards at wilderness access points Install entrance sign and exhibit at park boundary and Old Dale Road Redesign and add sign/exhibit at Old Dale Road, Black Eagle Mine Road, and Cottonwood Road junction Close illegal entrances

# Alternative C **MINIMUM REQUIREMENTS**

By Planning Unit

Make restrooms accessible to people

Develop trails plan and improve signs

Add new accessible interpretive trail at

with disabilities

existing pullout

Rehabilitate contact station

**JOSHUA TREE NATIONAL PARK** 

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TABLE 7: VISITOR USE AREAS — DESIGNATED PARKING, LOST HORSE AND PINTO WYE PLANNING UNITS, ALTERNATIVE C

Parking Areas	Cars	RVs	Function
1. Desert environments	4	1	Interpretation, orientation
2. Rock climbing exhibit	6	0	Interpretation, climbing
3A. Wait lot, Keys Ranch	8	2	Trailhead
3B. Boy Scout hiking trailhead	8	0	Trailhead
3C. Rock piles, Wonderland of Rocks — orientation west	0	0	
4A. Lost Horse ranger station access road	10	0	Rock climbing, trailhead
4B. Hemingway	15	0	Rock climbing, trailhead
5. Comic Book area	10	0	Rock climbing
6. Hidden Valley, north lot	5	0	Trailhead
7. Hidden Valley trailhead	22	3	Trailhead, orientation
8. Hidden Valley picnic area	20	2	Picnicking, rock climbing
9A. Hidden Valley day use lot	0	0	Eliminate
9B. Intersection Rock	50	0	Rock climbing
10. Echo "Y"	0	0	
11. Rock Pile exhibit	0	0	Eliminate
12. Mojave plants exhibit, Love Nest	0	0	
13. Cap Rock	15	2	Picnicking, interpretation, rock climbing
14. Cap Rock south	0	0	
15. Juniper Flats backcountry trailhead	10	0	Trailhead, interpretation, orientation
16. Lost Horse Mine	8	0	Trailhead
17. Black brush hillsides	0	0	
18. Wonderland of Rocks overlook	1	0	Interpretation
19. Keys View	45	0	Interpretation, trailhead
20. Ryan Ranch	1	0	Trailhead, interpretation
21. Ryan turnout, Oyster Bar	16	3	Trailhead, interpretation
22. Hall of Horrors	10	0	Rock climbing, trailhead
23. Ryan Mountain trailhead, Indian Cave exhibit	15	3	Trailhead, interpretation, rock climbing
24. Geology Tour Road; Desert Queen backcountry trailhead	5	2	Trailhead, interpretation, rock climbing
25. Wonderland of Rocks, orientation east	0	0	
26. Wall Street Mill, Barker Dam	25	0	Rock climbing, trailhead
27. Wonderland of Rocks interpretive exhibit	0	0	
28. Wonderland of Rocks backcountry staging area	15	0	Trailhead, rock climbing
29. Split Rock	6	0	Rock climbing, trailhead
30. Live Oak	6	0	Picnicking, rock climbing
31. Desert nomads exhibit	0	0	Eliminate exhibit; maintain parking for traffic control and photo opportunities
32. Skull Rock	5	0	Photo opportunity
TOTALS	341	24	

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Actions	Alternative A Proposed Action	Alternative B — No Action	Alternative C — Minimum Requirements
Management Zoning	Rezone all park land: natural zone, 557,364 acres, cultural zone, 180 acres; development zone, 3,411 acres. Land added by the 1994 legislation will be addressed in the wilderness and backcountry management plan	Zoning designations would remain: general outdoor recreation, 3,000 acres; natural recreation, 3,000 acres; outstanding natural area, 35,000 acres; primitive area, 489,884 acres; cultural area, 300 acres	Same as proposed action.
Backcountry and Wilderness Management	Backcountry management plan would evaluate use and development in backcountry wilderness areas. Inappropriate development would be removed and the land revegetated.	Threats to backcountry and wilderness values addressed on a case-by-case basis	Same as proposed action.
	Land protection plan would institute proactive program for acquisition from willing sellers of private inholdings in the natural zone. Development would be removed and the land revegetated.	Private inholdings acquired from willing sellers	Same as proposed action.
	Expansion bolts would continue to be banned from designated wilderness until studies identified in climbing management plan are completed.	Same as proposed action.	Same as proposed action.
	Land identified would be evaluated for inclusion into the wilderness zone after removal of development and revegetation. New wilderness legislation would be proposed recommending inclusion of those lands qualifying for wilderness.	There would be no reevaluation of lands for inclusion in the wilderness zone.	Land would be evaluated for inclusion into the wilderness zone after removal of developments and revegetation.
	The Park Service would actively pursue cooperative agreements with other agencies and landowners to protect ecological units that extend beyond the boundary.	The Park Service would develop cooperative management efforts as opportunities arise.	Same as the proposed action.
	Additional signs, fencing, placement of barriers, and patrol of the boundary would be implemented	Patrols and closure of illegal access would be limited.	Same as the proposed action.
Resources Management	Inventory, monitoring, and research of natural and cultural resources would be increased.	Resources management activities would continue at existing levels.	Same as proposed action, but focus on areas of special expertise such as arid lands restoration.
	Historic sites and scenes would be protected, interpreted, and preserved. An archeological and historic resource inventory would be done.  Native American consultation plan would be developed and ethnographic studies done.	Historic structures would continue to receive minimal stabilization. The national register program and inventory of archeological sites would progress slowly.  Native American consultation would continue on an as-needed basis.	Same as proposed action. Native American consultation plan would be developed.

Actions	•		
Visitor Use	Improvements in roads and trails and improved availability of information would better distribute visitors and improve opportunities to experience a variety of environments and features.	Opportunities to experience the resources would be limited to the existing roads and trails system.	Orientation and interpretation would be minimally improved for visitors entering through the north entrance.
	Information, orientation, introduction to the interpretive themes, and trip planning information would be available at the three major entrances. A visitor center would be added near the west entrance; the Oasis of Mara visitor center would be converted to a cultural center; and the visitor contact station at the south entrance would be replaced by a larger facility. Environmental education would be the focus of the Black Rock Canyon nature center.	Information, orientation, interpretation, and trip planning information would continue to primarily available at only one park entrance, the Oasis of Mara visitor center. The fee collection station would be maintained at the west entrance and the small visitor contact station would be maintained at the south entrance. The Black Rock Canyon visitor center would be retained.	Information, orientation, interpretation, and trip planning would be available at only the Oasis of Mara visitor center, which would be expanded. The fee collection station would be at the west entrance and a orientation wayside added. South entrance visitor station expanded. Nature and environmental education would be at the Black Rock Canyon nature center.
	Wayside exhibits and interpretation along roads and trails would be updated and wayside exhibits would be added. Personal services interpretive programs would be increased throughout the park, with cultural focus at Keys ranch. Publications would be updated and a trail guide developed.	Wayside exhibits and interpretation along roads and trails would be retained. Personal services interpretive programs would be minimal. Existing publications would be continue to be used.	Wayside exhibits and interpretation along roads and trails would be updated. Personal services interpretive programs would be increased primarily at Keys ranch. Publications would be updated and a trail guide developed.
	Information and interpretation boards and exhibits would be provided at dirt road and trailhead entry points into the backcountry.	Limited information and interpretation boards and exhibits would be provided at dirt road and trailhead entry points into the backcountry.	Same as proposed action.
	The layout of campgrounds and picnic areas as well as individual sites would be redesigned. Time limits would be enforced.	Camping, picnic, and restroom facilities would be retained. The camping registration system would remain.	Camping and picnic sites would be improved by better defining sites through use of barriers and revegetation. Camping time limits would be enforced.
	Outreach education provided for region — publications, roving interpreters, use of Black Rock Canyon nature center. NPS would pursue interagency initiatives for interpretive programs.	Outreach education program would remain minimal.	Same as proposed action, but with focus on more local area.

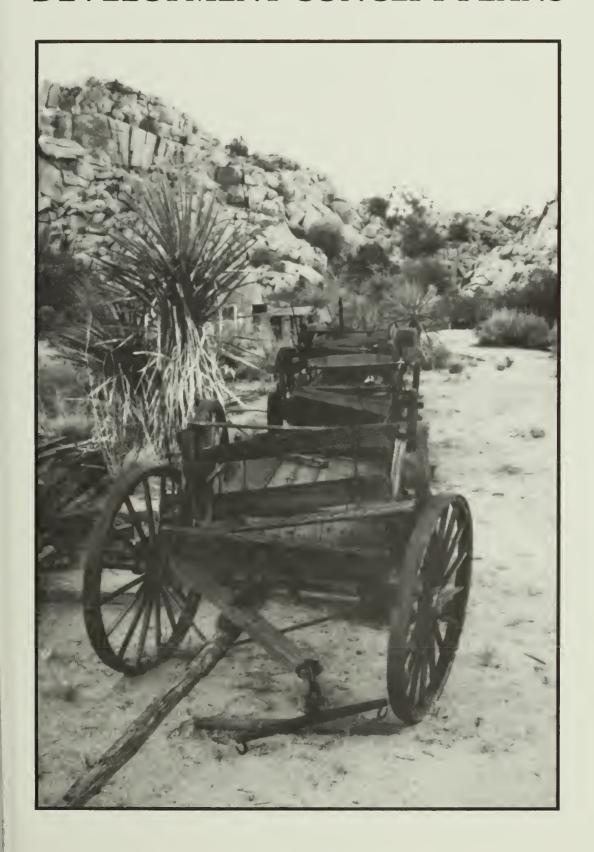
Actions	Alternative A — Proposed Action	Alternative B — No Action	Alternative C — Minimum Requirements
Roads and Circulation	Existing road system would continue to be improved following road guidelines. About 43 miles of road would be constructed.	The road system would continue to be improved following NPS road guidelines; no road guidelines specific to the park. About 43 miles of road would be constructed.	Same as proposed action.
	Existing parking would be expanded, and parking would be added in most heavily used areas. Edges would be paved, striped, and defined; Parking in designated areas only would be enforced. Total: 732 cars, 72 RVs.	Day use dirt parking areas would be retained. Additional parking along edges of the road and parking areas would continue. Total: 351 cars, 21 RVs.	Edges of parking areas would be paved, striped, and clearly defined. Parking in designated areas only would be enforced. Total: 336 cars, 24 RVs.
	Queen Valley, Covington Flat roads maintained as 2-wheel drive; Geology Tour, Lost Horse Mine Roads improved to 2-wheel drive; Old Dale Mine Road as 4-wheel drive. Some dirt roads would be designated 4-wheel drive; others would be evaluated, uses identified, and areas restored.	Dirt roads would be evaluated on a case-by-case basis as issues arose, and closed if inappropriate or unnecessary. Visitor use opportunities would remain unknown.	Same as proposed action.
	A trails plan would be developed linking parking and visitor use areas. Social and redundant trails would be revegetated. Trails would be clearly signed and included in a trails guide.	Trails would be maintained. Revegetation of social trails would continue at a slow rate.	Same as proposed action.
	Shuttle system implemented in the heaviest use areas and possibly other areas; include interpretive tours.	No shuttle system would be implemented.	Same as no action
Operations	Housing would continue to be primarily provided in local communities. Housing would be retained at Indian Cove and Black Rock. A new dorm would be provided at headquarters and Cottonwood. Trailer pads would be added at Lost Horse ranger station for volunteers, and permanent housing there would be eliminated.	Housing would continue to be primarily provided in local communities. Housing would be retained.	Same as proposed action.
	Administrative and maintenance facilities would be retained at all current sites. A new park operations complex would be provided at headquarters. Administrative space would be expanded at Cottonwood, Indian Cove, and west entrance. Drive-through fee collection facilities would be provided.	Administrative and maintenance facilities would be retained at present sites.	Administrative and maintenance facilities would be retained at all sites. Offices would be relocated to a new building at headquarters. Other support facilities would be retained. Administrative space would be minimally expanded at Cottonwood and Indian Cove.

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	Same as proposed action.	Borrow pits would be revegetated except for possible use of one site for maintenance storage.	Same as proposed action.	Same as proposed action.	Same as proposed action.
		Borrow pits would remain closed.	Volunteers would be used on a case-by-case basis.	There would be no overall design guidelines for development. Accessibility improvements would be done during routine maintenance.	The radio communications system would remain in use.
	Operations (cont.) Maintenance storage, covered parking, telephone, security system, water, and power would be provided at Cottonwood. Telephone service, security system, and covered storage would be provided at the north entrance maintenance area. All utility systems would be upgraded as necessary.	Borrow pits would be revegetated except for possible use of two sites for maintenance storage and small picnic area.	A volunteer program/cooperating agency would be encouraged in addressing operational needs	An overall design theme would be developed that emphasizes sustainable design and provides accessibility.	The communications systems would be improved.
	Operations (cont.)				

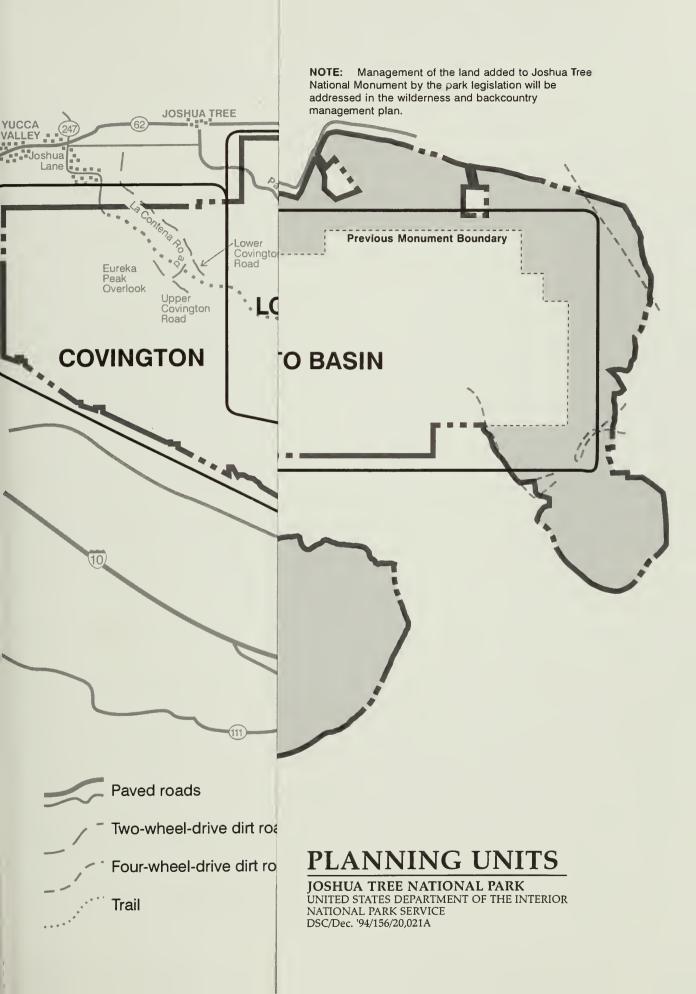
Table 9: Summary of the Impacts of the Proposed Action and the Alternatives

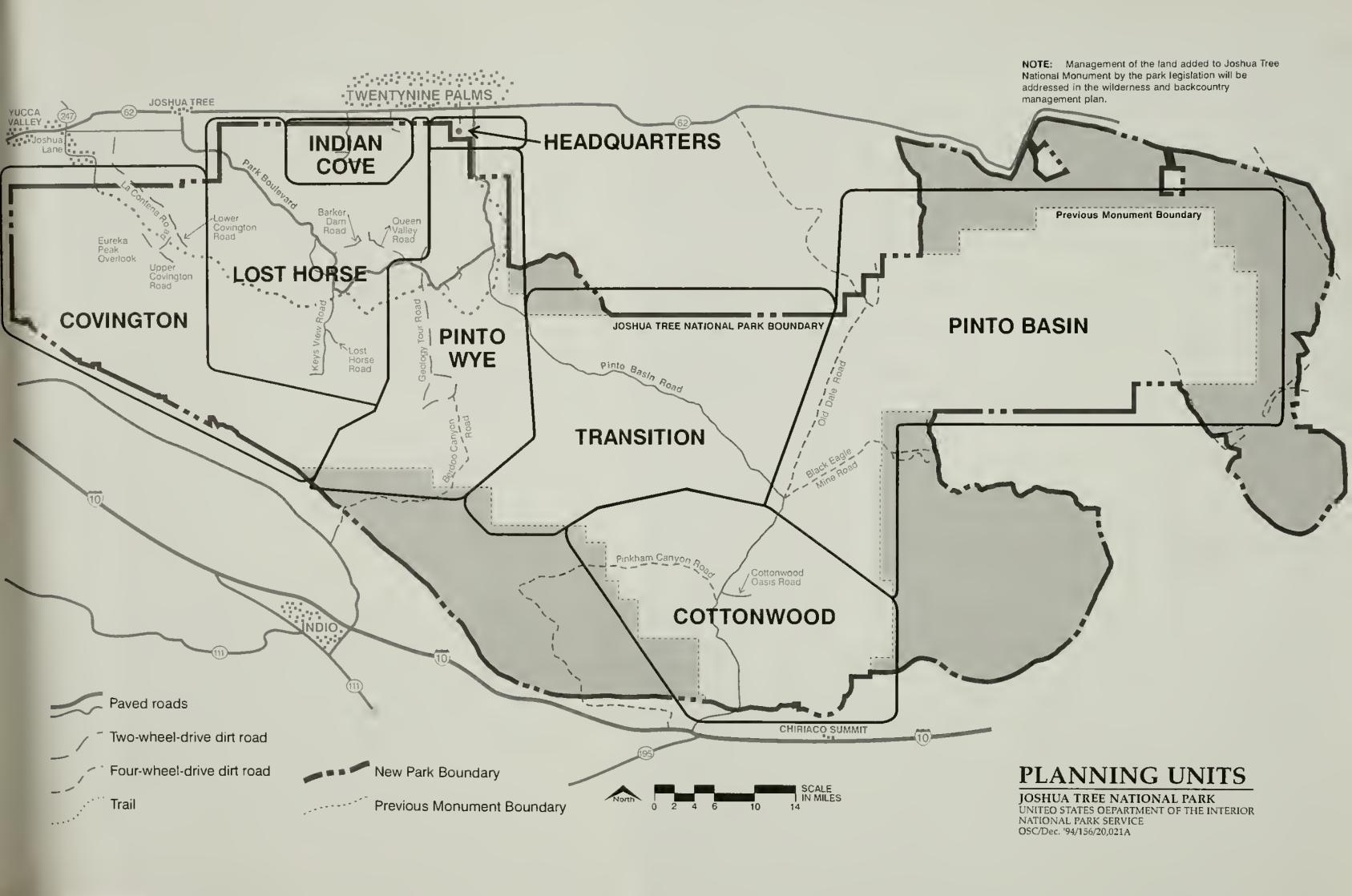
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Altomotive Designation	Construction would impact 94 acres previously undisturbed land and 5.6 acres would be rehabilitated.	Construction would impact approximately 150–200 Joshua trees; this number would be reduced by adjustment of the road alignment during preliminary design and salvage of trees during construction.	Same as proposed action.	Same as proposed action.	No ongoing programs would be established, but priorities would be set to better manage the resources. Increased staffing would improve all aspects of cultural resource management.	Same as proposed action.	Visitor understanding and appreciation of the park, orientation, and information would be improved; minimal improvement in distribution of visitors in Lost Horse unit and throughout the park with reduction in congestion; expanded opportunities outside developed areas, improved quality of experience with improvements to individual camp and picnic sites.	Same as proposed action.
A literature of the Action	Road reconstruction would impact 91 acres of primarily previously undisturbed land adjacent to the roads; impacts from social trails and roadside parking would continue.	Construction would impact approximately 100–200 Joshua trees; this number would be reduced by adjustment of the road alignment during preliminary design and salvage of trees during construction.	Same as proposed action.	Impacts from foot traffic would continue at Cottonwood Oasis.	Cultural resources management would remain opportunistic and unsystematic.	No new impacts on scenic vistas; Unattractive appearance of many facilities and visitor use areas would remain.	Orientation, information, interpretation would remain insufficient to convey interpretive themes and availability of visitor opportunities and facilities; condition of visitor facilities and impacts on surrounding area would continue to detract from visitor experience.	Same as proposed action.
A 14. months A December of Actions		Construction would impact approximately 250–300 Joshua trees; this number would be reduced by adjustment of the road alignment during preliminary design and salvage of trees during construction.	Construction would probably not effect the desert tortoise. Additional surveys and consultation with Fish and Wildlife Service would be completed during preliminary design of projects.	Impacts at Cottonwood Oasis would be reduced.	Cultural resources would be positively impacted by the proposal. Management, interpretation, and stabilization would be improved. Baseline data would be gathered and priorities set.	Minimal impacts on scenic vistas; Appearance of facilities and visitor use areas would improve.	Visitor understanding and appreciation of the park, orientation, and information would be greatly improved at each entrance and onsite; greater distribution of visitors in Lost Horse unit and throughout park with reduction in congestion; expanded opportunities outside developed areas, greatly improved quality of experience with redesign of campground and picnic layouts and individual sites.	Resources and scenic vistas would probably be adversely affected by continued incompatible land use and development near and adjacent to the
	Native Vegetation and Soils	Species of Special Concern (Joshua trees, desert tortoise)		Wetlands and Riparian Habitat	Cultural Resources	Visual Resources	Visitor Use and Experiences	Cumulative Impacts

# ALTERNATIVE DEVELOPMENT CONCEPT PLANS



This section includes alternative development concept plans that specify actions necessary to resolve problems in each of the eight planning units. The eight planning units are shown on the following graphic. These plans are proposed in order to correct problems in developed areas and define and expand these areas where necessary. Final sizes and details for facilities in these various plans would be determined during design along with additional environmental analysis.





# HEADQUARTERS PLANNING UNIT

#### **BACKGROUND**

The headquarters unit is in the city of Twentynine Palms at the Oasis of Mara. Visitor facilities include the visitor center, six picnic sites, and a short self-guided interpretive trail to the oasis. The Camping Womens' Trail leads from the Oasis of Mara to the Twentynine Palms art gallery. Most of the exhibits and displays are outdated. Parking is used by both visitors and employees and is insufficient during the busy season. The wall surrounding the oasis is in disrepair. This area is the primary location for Park Service operations. Administrative offices are located in the same building as the visitor center. The building is too small to accommodate both administrative and visitor functions. Other operational facilities include ranger offices, vehicle storage, recyclable materials storage, museum storage, research center, helipad, a trailer and two additional trailer pads, resources office, and the Center for Arid Lands Restoration, which was established as an information center in support of the MAB program and includes a nursery for the propagation of native vegetation.

Utilities include water provided from the Twentynine Palms water district, power from southern California Edison, and a septic system. Restrooms at the visitor center were recently made accessible to people with disabilities.

#### ALTERNATIVE A — PROPOSED ACTION

This area would become the primary location for cultural interpretation for the park. The area would be redesigned to separate visitor services and administrative functions. Administration would be relocated to a new facility and the visitor center would be renovated to serve as the Oasis of Mara cultural center. Park Service support functions would be consolidated in a new building complex south of the public use area.

#### Information and Interpretation

The Oasis of Mara cultural center would be located in the current visitor center with interpretive offices, natural history association offices and storage, work, and utility areas relocated to the old administration office space. The center would be the primary location for archeological and historic interpretation. The major interpretive theme would employ the Man and the Biosphere model. The Man and the Biosphere Program was launched in 1971 to provide the knowledge, skills, and human values to support harmonious relationships between people and their environments throughout the world. The biosphere reserves provide a global network of sites for resource protection, sustainable development, research, and education. Interpretive exhibits and displays would be replaced to support this emphasis. Parkwide information and trip planning would be available. The desert landscaping demonstration area would be expanded around the center. Directional signs from State Route 62 and entrance signs would be improved.

The oasis interpretive trail, exhibits, and site furnishings would be upgraded. The wall surrounding the oasis would be repaired. Trails would be provided in cooperation with the

city of Twentynine Palms to adjacent cultural facilities. The Oasis of Mara cultural center and associated trails would complement the proposal by the city of Twentynine Palms to develop the area adjacent to the oasis as a cultural district.

#### **Visitor Facilities**

Picnic facilities would be retained, expanded to 8–10 sites, and ramadas added.

#### Roads and Circulation

Access to the area would continue via city streets. Employee and visitor parking would be separated, with access on a common drive. Visitors would continue to use the 50-car lot on the east side of the cultural center. New parking would be added for buses. New employee and government vehicle parking areas would be constructed as part of the new administrative complex.

# **Operations**

Administrative offices would be relocated to a new 5,200-square-foot building complex that would also house ranger, resources management, artifact storage, research center, and maintenance offices. The largest administrative space requirements are for the Center for Arid Lands Restoration's desert plant propagation. The complex would be expanded south of the present facilities. This would increase efficiency and improve vehicle access. A separate secure NPS parking area would be provided adjacent to the administration building. The trailer presently used by nonagency research personnel who assist the staff would be replaced by an architecturally compatible dormitory.

Water and power systems would be retained. The wastewater system would be improved.

The Park Service would work with the city of Twentynine Palms to provide trail connections from the oasis visitor center to adjacent cultural features.

#### ALTERNATIVE B — NO ACTION

The park's primary visitor center and support facilities would remain at this site. There would be no change in the functions or facilities.

# Information and Interpretation

The headquarters visitor center building would be used for both visitor contact and administration purposes. Parkwide interpretation and information would be provided and exhibits and displays would be retained. The desert landscaping demonstration area would be retained. Directional signs from State Route 62 and entrance signs would be minimal. The self-guided interpretive trail from the visitor center to the oasis would be maintained.

#### Visitor Facilities

Six picnic sites would be retained. Restrooms at the visitor center would be enlarged.

#### Roads and Circulation

Access to the area would continue via city streets. Employees and visitors would use a common parking area adjacent to the visitor center.

#### **Operations**

Administrative offices would be located in the headquarters visitor center building. Other NPS support facilities would continue to be located in separate buildings and trailers. The wastewater system would be improved.

#### ALTERNATIVE C — MINIMUM REQUIREMENTS

The primary visitor center and support facilities would remain at the current site. Administration would be relocated and the visitor center would be renovated and used for visitor contact. NPS support functions would be consolidated in the area south of the public use area.

#### Information and Interpretation

Administrative offices would be relocated to a new building and the headquarters visitor center would be used solely for visitor contact. The offices in the visitor center would be relocated to the old administration building, including the interpretive offices, natural history association office and storage, and other work and utility space. Removal of these functions would allow greater exhibit space in the visitor center. Parkwide interpretation and information would be provided. There would be a minor changes in exhibits and displays to continue to support a parkwide perspective. Some trip planning assistance would be available. The desert landscaping demonstration area would be retained. Directional signs from State Route 62 and entrance signs would be improved. The self-guided interpretive trail from the visitor center to the oasis would be maintained.

#### **Visitor Facilities**

Six picnic sites would be retained.

#### Roads and Circulation

Access to the area would continue via city streets. Employees and visitors would use a common parking area adjacent to the visitor center.

# **Operations**

Administrative offices would be relocated to a new office building near the other Park Service support facilities. These facilities would continue to be located in separate buildings and office trailers. The volunteer trailer housing would remain.

The Park Service would work with the city of Twentynine Palms to establish a walking tour of cultural sites and the oasis.



Headquarters Planning Unit, Twentynine Palms Oasis

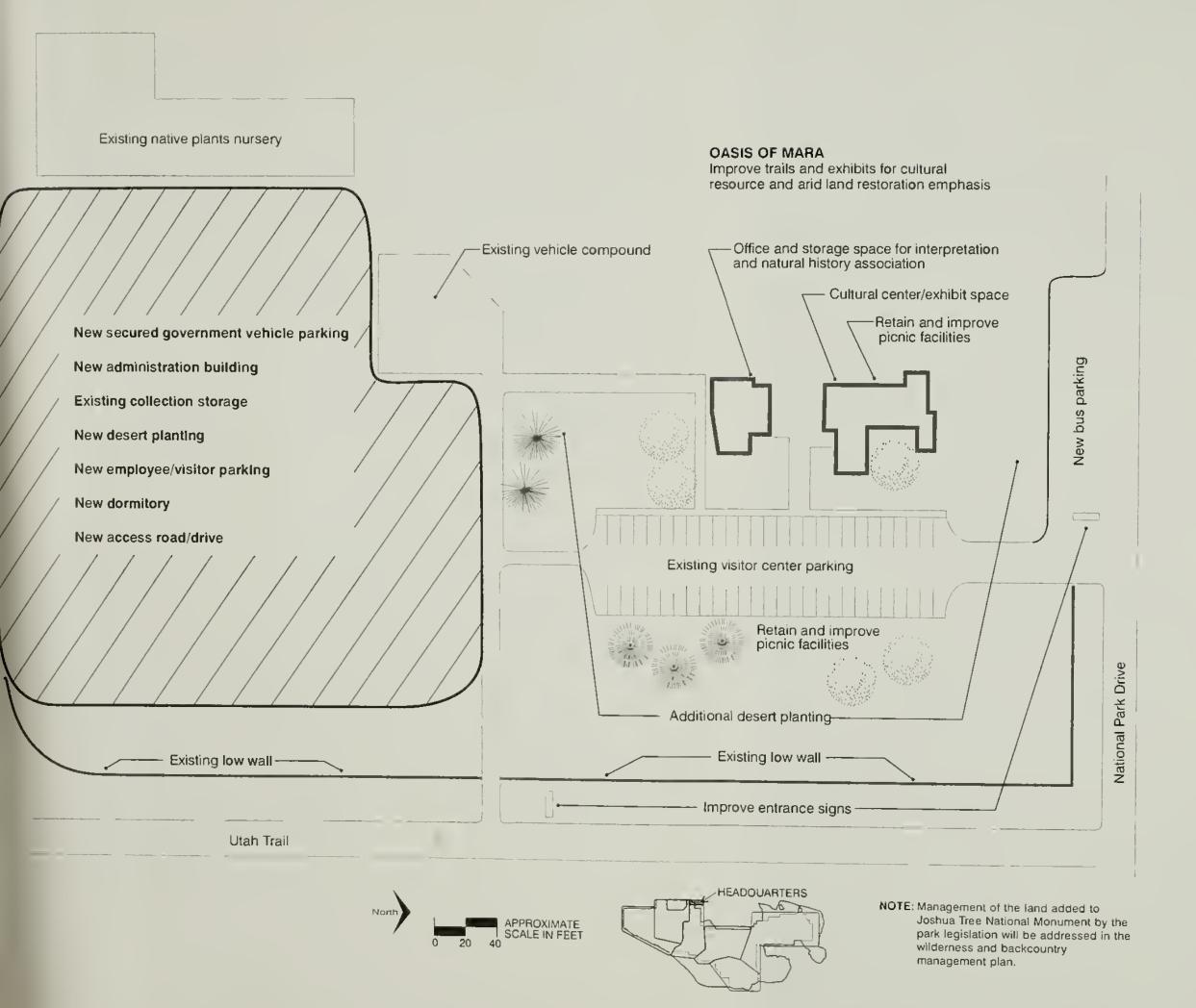
New secured government vehicl New administration building **Existing collection storage New desert planting** New employee/visitor parking **New dormitory** New access road/drive Existing low wall-

Utah Trail

Existing native plants nursery

# Alternative A Proposed Action HEADQUARTERS

JOSHUA TREE NATIONAL PARK UNITED STATES DEPARTMENT OF THE INTERIOR NATIONAL PARK SERVICE DSC/Dec. '94/156/20,023A



# Alternative A Proposed Action HEADQUARTERS

JOSHUA TREE NATIONAL PARK
UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
DSC/Dec. '94/156/20,023A

TABLE 10: ALTERNATIVE ACTIONS — HEADQUARTERS, OASIS OF MARA

	TABLE 10: ALTERNATIVE ACTIONS		1	
tion Category	Alternative A Proposed Action	Alternative B No Action	Alternative C Minimum Requirements	
ITOR FACILITI	IES			
pgrounds	N/A	N/A	N/A	
ic Areas	Expand to 8–10 sites	Maintain six sites	Same as proposed action	
trooms	Maintain restrooms in visitor center	Same as proposed action	Same as proposed action	
ORMATION A	ND INTERPRETATION			
เร	Improve directional signs	Retain directional signs	Same as proposed action	
ibits	Major rehabilitation and redesign of all exhibits and interpretive media at visitor center and oasis  Remodel visitor center for use as cultural center only, remodel old administrative building for	Retain and periodically change visitor center exhibits and displays  Provide parkwide orientation and some trip planning capabilities	Minor rehabilitation of exhibits at visitor center  Remodel visitor center; remodel old administrative building for interpretive and	
	interpretive and history association offices, storage, and work space that would be removed from visitor center, main park location to provide cultural interpretation and MAB program information; improve orientation and trip planning		history association offices, storage, and work space that would be removed from visitor center; provide orientation, space for book sales, and trip planning capabilities	
	Retain and expand desert landscaping demonstration area	Retain desert landscaping demonstration area	Retain desert landscaping demonstration area	
Station	N/A	N/A	N/A	
tor Contact	Provide at expanded visitor center	Provide at visitor center	Same as proposed action	
ADS AND CIRC	CULATION			
ed Roads	Resurface roads, add parking and access road	Resurface parking lot and access road	Same as proposed action	
Roads	N/A	N/A	N/A	
ls	Improve oasis trail wall and exhibits	Maintain self-guided one- half-mile trail to oasis	Improve oasis trail and retain exhibits	
	Provide trail connections to nearby non-NPS cultural features	Maintain trail between NPS and city cultural features	Establish walking tour, include oasis interpretive trail with city cooperation	
ing	Increase parking capacity; provide separate visitor and employee parking; add secure NPS parking	Retain parking	Same as no action	

Action Category	Alternative A Proposed Action	Alternative B No Action	Alternative C Minimum Requirem
OPERATIONS			
Housing	Provide new dorm for volunteers	Retain trailer and two trailer pads for volunteers	Same as alternative B
Maintenance	Incorporate support shops into new administrative complex; add space in the vehicle compound	Retain support shops	Same as proposed action
Administration	Consolidate and expand administrative functions in new building complex	Maintain NPS support facilities	Relocate administrative offices to new building retain other support facilities
Utilities	Upgrade wastewater system	Retain utilities	Same as proposed actic
Patrol	N/A	N/A	N/A

#### INDIAN COVE PLANNING UNIT

#### BACKGROUND

The Indian Cove planning unit is on the north boundary of the park. Indian Cove is the only developed area in this unit and includes camping and day use facilities. It is also a primary backcountry and climbing staging area for day use access into the Wonderland of Rocks wilderness area.

Indian Cove access is from State Route 62. A small visitor contact station is located along the Indian Cove access road. Visitors must park and enter the station to pay the entrance fee. This station also serves as a subdistrict ranger station, but space is inadequate for both functions. A Park Service residence is located next to the visitor contact and ranger station. The trailhead for the Boy Scout Trail into the Wonderland of Rocks is near these buildings. A service road to an old borrow pit exists along the boundary.

Indian Cove includes the second largest campground in the park, with 101 individual sites and 13 group sites. The present campground layout and access roads are very confusing and sites are not clearly defined. Conflicts between user groups arise because campsites abut rock outcrops that are popular with rock climbers. There is a short nature trail at the western edge of the campground. A picnic area with six individual and three group sites is located east of the campground. The picnic sites and associated parking are not clearly delineated, and the group picnic sites are heavily used, which has damaged surrounding vegetation and soil.

Water is supplied to the Park Service residence from the Twentynine Palms water district. Water is not available in the campground. Public restrooms include vault toilets near the visitor contact station and in the campground.

The Fortynine Palms Oasis, trail, and 36-space parking area is also in this planning unit. This trailhead is accessed from State Route 62. The trail to the oasis is about 1.5 miles long. An unmaintained trail to the oasis is available up the canyon wash from Fortynine Palms parking area. There is a concern that visitor use at the oasis during the summer may be inhibiting bighorn use of the spring.

This planning unit is located adjacent to Twentynine Palms. Illegal vehicle access occurs up the washes into the park.

#### ALTERNATIVE A — PROPOSED ACTION

The Indian Cove developed area would continue to serve campers, day users, and hikers entering the Wonderland of Rocks backcountry area. Facilities would be redesigned to separate campers and day users, clearly define camp and picnic sites, increase contact with park staff, and enhance information and orientation.

# Information and Interpretation

The visitor contact and ranger station would be expanded by approximately 200 square feet to provide additional space for fee collection, camping and day use information, orientation to Indian Cove and the rest of the park, and office space. The visitor contact station would be redesigned to include a drive-through fee collection window. Interpretation would continue to be provided primarily through wayside exhibits and self-guiding interpretive trails, which would be updated. Wayside exhibits would be added at the Boy Scout trailhead and in the campground.

#### **Visitor Facilities**

Campground registration would be provided at the contact station. The campground would be redesigned to clearly delineate sites and improve aesthetics. Popular climbing areas in the campground would be designated for day use only and parking would be added in these areas. The amphitheater would be redesigned to improve audiovisual capabilities and accessibility. Picnic sites and parking would also be redesigned and six sites would be built near the nature trail.

The public restroom facilities would be upgraded. The temporary structures now in use in the campground would be replaced with more permanent structures. The restroom at the visitor contact station would be upgraded to include flush toilets and water.

#### Roads and Circulation

The entrance road would be split to direct entering vehicles past a drive-through fee collection window at the visitor contact station, where a small parking area would be provided. Exiting vehicles would follow a one-way single lane to the gate. All roads and parking would be paved except the dirt road to the old borrow pit. The road and pit would be revegetated. A 0.1-mile portion of the Indian Cove access road would be realigned to correct a hazardous curve. Parking for about five cars would be added near three popular climbing areas in the campground that would be designated for day use only.

The trail to Fortynine Palms Oasis would be maintained. Closure of the access road to Fortynine Palms Oasis in the summer during bighorn sheep watering would be evaluated to mitigate impacts of visitor use on the sheep.

# **Operations**

Additional office space for ranger operations would be provided by expanding the visitor contact and ranger station. The NPS residence would be retained. The borrow pit and access road would be revegetated.

The north boundary would be clearly marked and fenced, and patrol of the boundary would be increased to prevent illegal vehicle access.

## **ALTERNATIVE B — NO ACTION**

Camping and day use facilities would be maintained. There would be no redesign of facilities.

# Information and Interpretation

The visitor contact and ranger station would be maintained for both functions. Information and orientation would be minimal because of the limited space for displays and literature. The self-guided nature trail and waysides on the west end of the campground would be maintained.

#### Other Visitor Facilities

The campground and picnic sites would be retained. Day use parking at popular climbing sites would not be available. The Fortynine Palms trail would be maintained.

#### Roads and Circulation

Roads would be maintained and the entrance road curve realigned.

# **Operations**

Ranger offices would continue to be provided in the visitor contact and ranger station. The Park Service residence would be retained. The borrow pit and access road would remain closed.

The Park Service would maintain patrols along the boundary to discourage illegal vehicle access.

#### **ALTERNATIVE C — MINIMUM REQUIREMENTS**

Camping and day use facilities would be maintained. However, camp and picnic sites would be better delineated and popular climbing areas in the campground would be converted to day use. Information and orientation facilities would be improved and updated.

# Information and Interpretation

The visitor contact and ranger station would be expanded by approximately 200 square feet to provide additional space for fee collection, camping and day use information, orientation to Indian Cove and the rest of the park, and office space. The interpretive exhibits and nature trail waysides would be updated.

#### **Visitor Facilities**

Campsites would be further delineated through use of barriers, vegetation, and paved parking for each site. Campsites at popular day use climbing areas would be converted to day use only, with parking provided. The picnic sites and parking would be retained and better delineated to minimize impacts on the surrounding vegetation and soils. Permanent restrooms would be constructed.

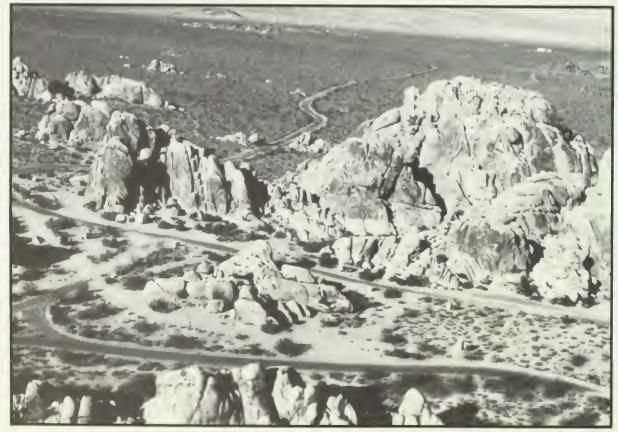
#### Roads and Circulation

Roads would be paved and the entrance road curve realigned. Parking for about five cars would be added near three popular climbing areas in the campground that would be designated for day use only.

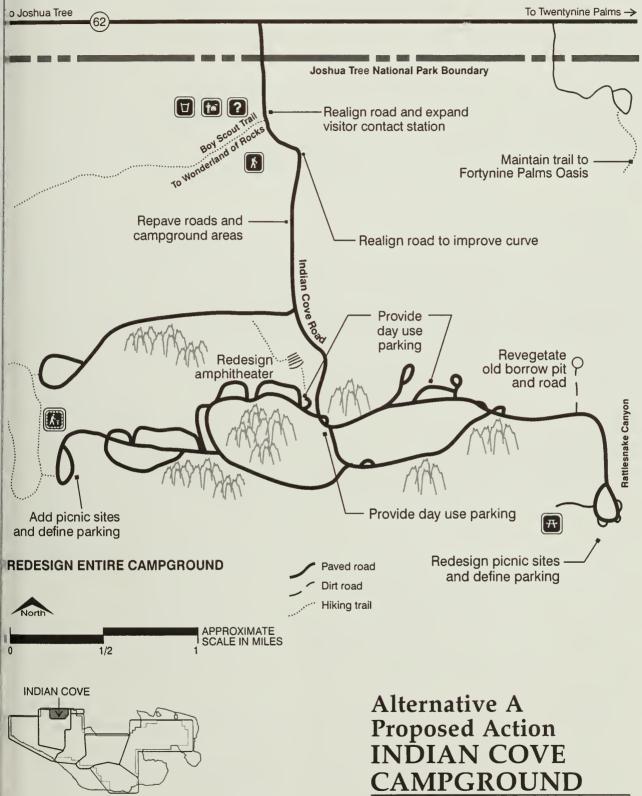
# **Operations**

Additional office space for ranger operations would be provided by expanding the visitor contact and ranger station. The NPS residence would be retained.

The Park Service would increase patrols along the boundary, which would be clearly marked and fenced to discourage illegal vehicle access.



Indian Cove Planning Unit



NOTE: Management of the land added to Joshua Tree

management plan.

National Monument by the park legislation will be

addressed in the wilderness and backcountry

JOSHUA TREE NATIONAL PARK
UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
DSC/Dec. '94/156/20,024A

TABLE 11: ALTERNATIVE ACTIONS — INDIAN COVE

Action Category	Alternative A Proposed Action	Alternative B No Action	Alternative C Minimum Require
VISITOR FACILITIES			
Campgrounds	Redesign campground and designate popular climbing areas for day use; provide registration at visitor contact station	Maintain 101 individual sites and 13 group sites	Define campsites and designate popular cli areas for day use; pr registration at visitor contact station
Picnic Areas	Redesign picnic area; add 6 sites near nature trail	Maintain 6 individual and 3 group sites	Define current sites
Restrooms	Provide permanent restrooms at the campground; provide water and flush toilets at restroom near visitor contact station	Maintain 53 vault toilets with temporary structures	Provide permanent restrooms at the campground
INFORMATION AND	INTERPRETATION		
Signs	Maintain directional signs	Same as proposed action	Same as proposed ac
Exhibits	Upgrade waysides exhibits and nature trail; add wayside exhibits at Boy Scout trailhead and campground	Maintain waysides and nature trail	Upgrade waysides at nature trail exhibits
Fee Station	Redesign contact station, realign road to provide drive-through fee collection window	Park and pay fee at visitor contact station	Same as no action
Visitor Contact	Expand contact station to provide additional space for information, orientation, and office functions; redesign amphitheater	Maintain contact station; retain amphitheater	Expand contact static provide additional sp for information, orier and office functions; amphitheater
ROADS AND CIRCULA	ATION		
Paved Roads	Pave campground roads, realign curve on entrance road; evaluate summer road closure to Fortynine Palms trailhead	Maintain dirt campground roads; realign curve in entrance road	Same as proposed ac
Dirt Roads	Revegetate service road to borrow pit	Maintain closure of borrow pit	Same as proposed ac
Trails	Maintain Fortynine Palms trail, Indian Cove nature trail, and Boy Scout trail; evaluate closure of Fortynine Palms trail during bighorn watering	Maintain trails	Same as proposed an
Parking	Pave parking at picnic area, convert campsites near climbing to day use and provide parking	Maintain dirt parking at picnic area	Same as proposed act
OPERATIONS			
Housing	Maintain 3-bedroom house	Same as proposed action	Same as proposed act
Maintenance	Revegetate borrow pit and access road	Borrow pit and road remain closed	Same as proposed act
Administration	Add ranger office space at visitor contact station	Retain ranger office space in visitor contact station	Same as proposed ad
Patrol	Increase patrols, clearly mark boundary, and fence	Maintain infrequent boundary patrols	Same as proposed act

## **COVINGTON PLANNING UNIT**

# **BACKGROUND**

The Covington planning unit includes Covington Flats, Black Rock Canyon campground, and a major section of the Little San Bernardino Mountains. The unit has two major entrances — one for Covington Flats and one for the Black Rock Canyon campground. Covington Flats is in a more natural state with dirt road access; Black Rock is a developed area adjacent to community housing and the town of Yucca Valley. Black Rock is a major staging area for hiking and equestrian access to the California Hiking and Riding Trail.

## Covington Flats

Access to Covington Flats is along the nine-mile two-wheel-drive La Contenta dirt road that is only partially maintained and is inadequate for RV use. This area of the park contains some of the most extensive Joshua tree forest in the park. The California Riding and Hiking Trail traverses the area. A small picnic area is located at the end of the lower Covington Flats road. Eureka Peak is at the west end of La Contenta Road. Upper Covington Flats Road is a spur off of La Contenta Road.

## Black Rock Canyon

Black Rock Canyon contains a 100-space campground, a horse camp, ranger station, interagency fire station, environmental education center, BLM ranger office, and small visitor center. The area has trailheads for day use hiking and for the California Hiking and Riding Trail. Parking for the trailheads is inadequate and not clearly delineated. This area is supplied with water, power, and telephone service.

# Little San Bernardino Mountains

The Little San Bernardino Mountains are in one of the most remote areas in the park. There is no development, and there are only dirt roads in this rugged area. The elevation ranges from about 5,300 feet to roughly 1,700 feet.

Illegal wood cutting, poaching, offroad vehicle use, and theft of cactus and archeological artifacts are all problems in this unit.

#### ALTERNATIVE A — PROPOSED ACTION

Camping and day use facilities would be redesigned to improve aesthetics, increase privacy, and delineate sites and associated parking. The visitor center would be converted to a nature center available to visitors, school groups, and public environmental education programs.

## Information and Interpretation

Onsite interpretation would be through personal interpretation, wayside exhibits, and self-guiding interpretive publications and trails. The Black Rock Canyon nature center would provide educational activities. Backcountry and fire management interpretation exhibits would be added. The visitor center would be redeveloped to function as a nature center and environmental education center. The exhibits and interpretive materials would be replaced to support this function. It would have parkwide information and orientation. The center could also be used as a setting for seminars and educational programs. Interpretive programs would be given by a Park Service seasonal ranger.

#### Other Visitor Facilities

Where closely spaced sites exist in Black Rock Canyon Campground, some sites would be removed to improve the visitor experience and provide privacy. Additional redesign would improve drainage and visual quality. The horse camp would be redesigned and restrooms added. Also, paved trailhead parking for 10 cars would be designated with a backcountry board for the California Riding and Hiking Trail on the east end of the horse camp. Remnants of the old courts would be removed. Covington Flat Road would remain a two-wheel-drive dirt road.

The Black Rock picnic area would be expanded by six sites and improved with ramadas (shade structures). A restroom would be provided near the upper Covington Flat backcountry registration board.

## Roads and Circulation

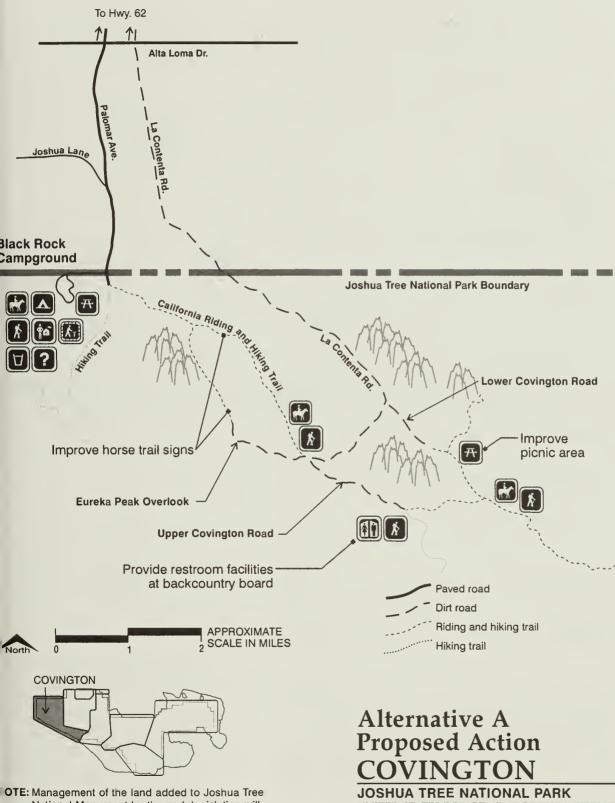
Roads would be maintained. The campground roads and parking areas would be repaved.

Barriers would be placed to more clearly define parking at trailheads and picnic areas at Covington Flat. The barbed wire along the boundary near the Covington Flat entrance road would be removed. Covington Flat Road would remain a two-wheel-drive dirt road.

Designated trails such as the California Riding and Hiking Trail would be marked and a trails plan would be completed for inclusion in a handbook. Horse trails would be better defined with the assistance of local equestrians. Braided trails would be revegetated.

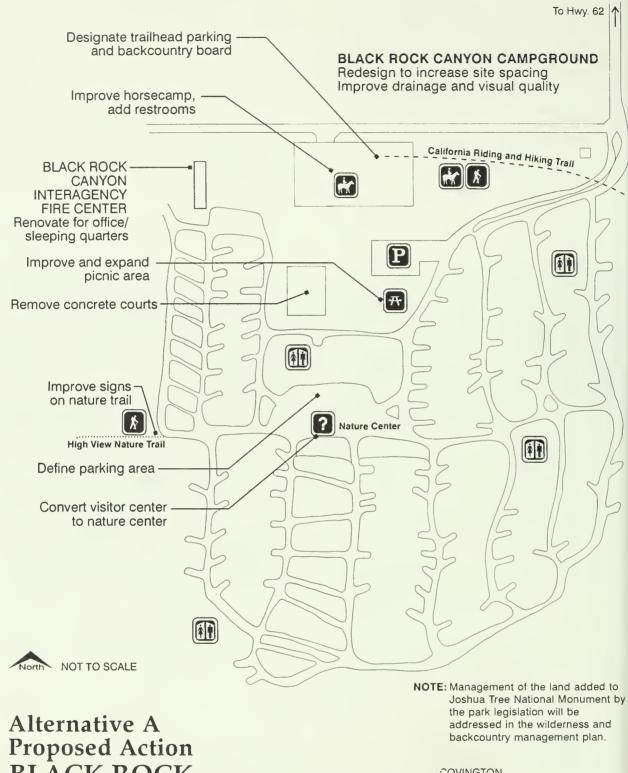
The park would work with adjacent landowners to allow parking at wilderness access points where vehicle use inside the park would not be possible.

The park is working with the city of Desert Hot Springs and the Bureau of Land Management to prepare a regional trails plan. Trail access into the park from Desert Hot Springs has been proposed as part of that plan. The regional trail would continue as a designated trail in the park. Siting would be addressed in the trails plan.



TE: Management of the land added to Joshua Tree National Monument by the park legislation will be addressed in the wilderness and backcountry management plan.

UNITED STATES DEPARTMENT OF THE INTERIOR NATIONAL PARK SERVICE DSC/Dec. '94/156/20,025A



# Proposed Action BLACK ROCK **CANYON CAMPGROUND**

**JOSHUA TREE NATIONAL PARK** UNITED STATES DEPARTMENT OF THE INTERIOR NATIONAL PARK SERVICE DSC/Dec. '94/156/20,026A



## **Operations**

A maintenance position would be added to provide a full-time maintenance presence at Black Rock Canyon. Uniformed personnel would also be added for increased patrol of the backcountry to deter illegal activities. Park Service housing and utility systems would be maintained.

The interagency fire center would be renovated to accommodate office and sleeping quarters.

## **ALTERNATIVE B — NO ACTION**

Camping and day use facilities would be maintained. There would be no redesign of facilities.

## Information and Interpretation

The visitor center and exhibits would be maintained and the center would be staffed by volunteers.

#### **Visitor Facilities**

The campground and picnic sites would be retained. The horse camp and California Hiking and Riding Trail trailhead and staging area would continue to share space.

#### Roads and Circulation

Paved and dirt roads would be maintained.

## **Operations**

Maintenance would continue on a limited basis, done by staff assigned to other developed areas. The NPS residences would be maintained.

The Park Service would maintain patrols along the boundary to discourage illegal activities.

### **ALTERNATIVE C — MINIMUM REQUIREMENTS**

Camping and day use facilities would be maintained. However, campsites would be better delineated by barriers such as vegetation or rocks. The visitor center would be converted to a nature center that would be available to visitors and school groups and for public environmental education programs.

# Information and Interpretation

Educational experiences for visitors would be similar to those in the proposed action. Onsite interpretation would be presented by uniformed personnel, on wayside exhibits, and through self-guiding publications and trails. Backcountry and fire management exhibits would be added. The visitor center would be redeveloped to function as a nature center and environmental education center. The exhibits and interpretive material would be replaced to support this function. It would have minimal parkwide information and orientation.

The center could also be used as a setting for seminars and educational programs. Interpretive programs would be given by NPS staff supplemented by volunteers.

#### Visitor Facilities

Campsites would be better delineated by rock barriers and vegetation. The picnic sites and parking would be retained and better delineated to minimize impacts to the surrounding vegetation and soil. Trailhead parking would be designated with a backcountry board for the California Riding and Hiking Trail on the east end of the horse camp. Remnants of the old private campground facility would be removed.

#### Roads and Circulation

Paved and dirt roads would be maintained. Barriers would be placed to more clearly define parking at trailheads and picnic areas at Covington Flat. The barbed wire along the boundary near the Covington Flat entrance road would be removed.

Significant trails such as the California Riding and Hiking Trail would be marked and a trails plan would be completed for inclusion in a handbook. Horse trails would be better defined with the assistance of local equestrians.

## **Operations**

A maintenance position would be added to provide a full-time maintenance presence at Black Rock Canyon. A seasonal ranger position would also be added to allow more patrols of the backcountry to deter illegal activities.

Housing and utility systems would be maintained.



Table 12: Alternative Actions — Covington

Action Category	Alternative A Proposed Action	Alternative B No Action	Alternative C Minimum Require
VISITOR FACILITIES			
Campgrounds	Redesign campground to improve drainage, visual quality, and provide more space between campsites; remove concrete court remnants; improve horse camp layout and add one restroom	Retain Black Rock Canyon campground with 100 sites; retain private campground facilities; Maintain group horse trailer area, no restrooms	Clearly define camps improve drainage; ma group horse trailer ar
Picnic Areas	Define sites and add 4–6 sites at Black Rock Canyon picnic area, provide ramadas	Retain 4 sites at Black Rock Canyon picnic area	Define sites and prov ramadas at Black Roc Canyon picnic area
Restrooms	Retain four comfort stations at Black Rock Canyon; provide toilets at backcountry trailhead	Retain four comfort stations at Black Rock Canyon	Same as no action
INFORMATION AND I	NTERPRETATION		
Signs	Maintain directional signs	Same as proposed action	Same as proposed act
Exhibits	Major rehabilitation of exhibits and interpretive media in visitor center, which would function primarily as a nature center and environmental education facility	Maintain exhibits at visitor center	Same as proposed act
Visitor Contact	Provide for NPS interpreters at Black Rock Canyon nature center	Volunteers staff nature center and give programs	Same as proposed act
ROADS AND CIRCULA	TION		
Paved Roads	Maintain roads	Maintain roads	Same as no action
Dirt Roads	Maintain Covington Flat roads as 2-wheel drive	Same as proposed action	Same as proposed ac
Trails	Sign designated trails; revegetate braided trails; establish a trail crew; install backcountry board and parking at California Riding and Hiking Trail access at Black Rock Canyon	Maintain trails	Same as proposed act
Parking	Clearly define spaces in Black Rock Canyon picnic parking lot; add new trailhead parking for the California Riding and Hiking Trail at Black Rock Canyon	Maintain parking areas	Same as proposed act
OPERATIONS			
Housing	Retain 3-bedroom house, one apartment at Black Rock Canyon	Same as proposed action	Same as proposed act
Maintenance	Retain small maintenance facility and add maintenance position at Black Rock Canyon	Retain small maintenance facility at Black Rock Canyon	Same as proposed act
Patrol	Increase backcountry patrols; add seasonal ranger	Maintain backcountry patrol	Same as proposed act

#### LOST HORSE PLANNING UNIT

#### **BACKGROUND**

The Lost Horse planning unit includes the most popular use areas in the park and is where most visitors experience the Mojave Desert. Desert scenery, Joshua trees, many conveniently accessed rock formations, and historic sites are all to be found in this unit. The monzogranite rock piles throughout Hidden Valley and Wonderland of Rocks have made the park one of the premiere rock climbing areas in the world.

The Joshua Tree west entrance is the most convenient for visitors arriving from the west and is used by the majority of visitors. The fee collection station is inadequate for the large number of visitors who enter here. Development has expanded along the northern boundary in this area. Illegal vehicle access takes place up washes into the park.

The main access road into the interior of the park (Park Boulevard) traverses this unit. This paved road, along with the Barker Dam, Queen Valley dirt road, and Keys View paved roads provide the primary access to the visitor use facilities, climbing areas, and trailheads. The network of dirt roads throughout Queen Valley provides redundant access routes to visitor destinations in the valley. Keys View Road accesses the crest of the Little San Bernardino Mountains, which provides a dramatic view across the Coachella Valley to 11,000-foot San Jacinto and, on a clear day, the Salton Sea. It also provides access to the dirt road to the Lost Horse Mine trailhead parking. This mine access road is narrow and subject to washouts, often making access by two-wheel-drive vehicles impossible. Poor sight distance along one crest in the road is a safety hazard to oncoming vehicles.

There are 21 designated day use parking areas. However, with annual increases in visitation, the demand for access has resulted in overflowing parking areas, shoulder parking, and visitor-created parking areas.

The visitor use facilities have been developed throughout the road corridors in response to the dispersed visitor attractions. Directional signs to many of the facilities are ineffective. There are three campgrounds (Hidden Valley, Ryan, and Sheep Pass) with a total of 94 individual sites and six group sites. The Hidden Valley campground is enclosed by granite rock faces that are popular with campers and day use climbers. Ryan Campground is near the California Hiking and Riding Trail and is used by horse campers. Sheep Pass Campground accommodates group camping. Campgrounds are heavily used year-round and operate at capacity during most weekends and over the entire spring season. To the north of Hidden Valley Campground lies Desert Queen Ranch, also known as Keys Ranch, which is only open to guided groups. There are two picnic areas, one at Quail Springs and one at Hidden Valley. Restrooms consist of portable vault toilets. There is no power, water, or telephone service. As with other visitor facilities in the park, continuing impacts to vegetation, soil, and visual quality are a problem.

Two well-defined and very popular nature trails exist in this unit — the Hidden Valley and Barker Dam Trails. The Cap Rock Trail is the only trail accessible to people with disabilities in this unit, and the asphalt surface must be improved to make this trail fully accessible. Generally, the Lost Horse unit has suffered in terms of impacts on the resource and visitor

experience because of an inadequate hiking and horse trail systems. Without a well defined system, numerous braided trails have developed in many different areas of the Lost Horse unit. As more and more trails have been created, the problem for hikers and riders has compounded and resulted in confusion. Besides the hiking trails, numerous access trails from parking areas to rock climbing sites have appeared, resulting in impacts to the resources.

Lost Horse ranger station and weather station are located off an administrative road to the southwest of the Hidden Valley area. A well, septic system, and solar array service this development. Camping near this area is permitted for special uses such as search and rescue and training. The park has insufficient staff to adequately patrol this heavily used unit.

## ALTERNATIVE A — PROPOSED ACTION

The primary visitor center would be constructed near the west entrance and would be the principal site for interpretation of the natural resources. All campgrounds, picnic areas, and parking in this unit would be redesigned to reduce impacts to resources and visual quality and to enhance visitor experience. Campground roads and campsite parking would be paved, camp and picnic sites clearly defined, and site furnishings replaced. All day use parking areas would be paved and edges delineated to clearly indicate where parking is allowed. Parking capacity would be increased to about 675 cars and 60 RVs — primarily through expansion of current areas, but also with the addition of some small parking areas.

# Information and Interpretation

A new 8,000-10,000-square-foot visitor center would be constructed near the west entrance. The major functions would be visitor orientation, information, natural history interpretation, publication sales, office space, and restrooms. The extension of nearby municipal utilities to this site would be evaluated. A separate study and environmental analysis would be completed to evaluate possible alternative visitor center sites and analyze their environmental impacts. This study would evaluate sites within the park as well as private and other public land outside the park. The center could be operated jointly with the Bureau of Land Management.

This unit would be the primary location interpretation of the park by uniformed personnel and for office and work space. Guided trips on the extensive trail system and costumed interpretation at Keys Ranch and other historic sites would be offered throughout the unit. Wayside exhibits would all be upgraded and new ones would be added as necessary. Self-guiding publications and signs would be developed for many of the trails and other resources in the area. Keys Ranch, Lost Horse Mine, Barker Dam, Ryan House and Lost Horse Well, and Wall Street Mill would be interpreted. Keys Ranch would be the major interpretive resource. Cap Rock Trail would be improved to be fully accessible. An interpretive trail would be developed for the Desert Queen Mine.

## **Visitor Facilities**

Campground circulation roads and site parking would be paved to clearly define vehicle use areas. The campgrounds and picnic areas would be redesigned to clearly delineate sites and improve aesthetics. Quail Springs picnic area would be expanded to provide a place for visitors to watch rock climbing. Sites on the northern perimeter of the Hidden Valley campground would be walk-in sites. The Hidden Valley day use parking area would be removed and converted to a camp loop. Opportunities for day use would continue in the immediate area, with parking available at the Hidden Valley nature trail, Hidden Valley picnic area, and Intersection Rock parking area. At Ryan Campground, some of the campsites would be converted to tent and RV camping and one loop would be designated for horse users only to ensure the safety of visitors. A reservation system would be instituted for the horse campsites. Sheep Pass campground would continue to be used by groups and would be by reservation.

### Roads and Circulation

Park Boulevard would be reconstructed and a section relocated from the east side of Intersection Rock to the west side. The Barker Dam road would then "T" off to the east of the relocated boulevard on the south side of Intersection Rock. This new portion of the Barker Dam road would rejoin the present alignment slightly to the east of Hidden Valley campground. The campground loops would then be accessible from the Barker Dam road, and the present access to Park Boulevard would be removed, allowing for separate day use parking on the old roadbed of the parkway adjacent to Intersection Rock (see Hidden Valley Area graphic).

Barker Dam Road would be paved to a consolidated parking area for Barker Dam and Wall Street Mill trailheads. A two-wheel-drive, two-way dirt road connection would be maintained from this point through Queen Valley and to the Desert Queen mine trailhead. The remaining network of dirt roads in the area would be evaluated in the wilderness and backcountry management plan to determine which should be revegetated or retained for hiking, biking, or vehicle use.

Keys View Road would be reconstructed at its present width of 20 feet and vehicles over 20 feet long would be advised not to proceed past the parking area for the California Riding and Hiking Trail. A pullout with gauging station would be provided near the parking area to allow large vehicles to be measured.

A study would be implemented to determine the most effective and economical shuttle system for Joshua Tree. The route from Quail Springs through Hidden Valley to Keys View and possibly east to Belle and White Tank campgrounds would be ideal for this service. Shuttle service to visitor facilities at the park entrances, less popular areas, and roads too narrow for RVs would also be considered. Additionally, the feasibility of interpretive shuttle routes would be studied. Many people could incorporate the sightseeing experience with an interpretive talk.

It would be preferable to maintain the Lost Horse Mine dirt road for two-wheel-drive vehicles. The trailhead should be relocated and expanded as close to the trailhead parking

area as possible. A final decision on the length of this road and location of trailhead parking would be determined following a more detailed design analysis and environmental assessment. Impacts of alternatives ranging from maintaining the current length of the road and correcting the drainage and sight distance problems to placing the trailhead near Keys View Road (doubling the hiking distance to the mine) would be considered.

The old road to Stubbe Springs bisects two wilderness units. This road is closed and would be revegetated. The two-way portion of the dirt road to the Lost Horse ranger station would be maintained for administrative use only and the one-way portion is closed and would be revegetated.

Day use parking would be paved, striped, and expanded at 18 locations. There would be a major expansion of the Wonderland of Rocks backcountry staging area and Hall of Horrors. Parking for Barker Dam and Wall Street Mill would be consolidated into one large lot. Five parking areas would be removed. The trailhead lot at Wall Street Mill would be removed and revegetated. The Keys wait lot and dirt access road would be retained. Options to improve two-way traffic flow on this road, such as pullouts, signs, or limited widening, would be evaluated and impacts assessed during preliminary design. Visitors on the Park Service tour would then drive to the ranch. The Hidden Valley day use lot would be converted to a camp loop with more day use parking than provided at an expanded Intersection Rock parking area. The Rock Pile exhibit pullout area would also be removed. Seven new pullouts would be added primarily in currently disturbed areas for interpretation and climbing access. Parking would total approximately 665 cars and 75 RVs (see Parking and Pullouts graphic and table).

All designated trails would be signed, redundant trails would be revegetated, and new loop trails would be created. Designated routes between parking areas and rock climbing sites would be signed and the social trails would be revegetated. Trails open to horse use and mountain bike use would be determined and clearly designated.

## **Operations**

Water, sewage, and power systems would continue to be provided at the Lost Horse ranger station for administrative use. Camping near this area would continue to be permitted for special uses such as search and rescue and training.

Staff would be increased to provide additional patrols throughout this unit. Fence along the open desert and rock barriers in washes would be placed to discourage illegal vehicle access along the northern boundary of the park.

The Sheep Pass borrow pit on the north side of Park Boulevard would be revegetated.

#### ALTERNATIVE B — NO ACTION

The heavily used west entrance would continue to have a fee collection station. All campgrounds, picnic areas, and parking in this unit would be retained. Unsurfaced parking areas for approximately 320 cars and 20 RVs would continue to be provided.

## Information and Interpretation

The west entrance fee collection station would be maintained. Brief contact with park staff on entry and limited information and orientation materials would continue to be available. The exhibits, interpretive pullouts, publications, and directional signs for this unit would be maintained and upgraded at the current slow rate. Personal interpretive contacts would be minimal. Keys Ranch guided tours would continue.

#### Visitor Facilities

Campgrounds, picnic areas, and restroom facilities would be maintained. Hidden Valley Campground would be maintained. Ryan Campground would accommodate horse campers and Sheep Pass Campground would be retained for groups. Portable toilet facilities would remain in use.

#### Roads and Circulation

Paved roads would be reconstructed. Dirt roads would be retained. Maintenance would focus on maintaining a two-wheel-drive, two-way connection between Barker Dam and Queen Valley. Periodic repairs would be made to Lost Horse Mine dirt road to maintain it as a two-wheel-drive road, open seasonally. The dirt road to the Lost Horse ranger station would be maintained for administrative use only. Dirt parking areas would be maintained at the 24 current locations that accommodate approximately 300 cars and 20 RVs. Additional random parking by visitors along road shoulders would continue.

The insufficiently signed historic, recreational, and social trails would remain. There would be multiple hiking trails to climbing rocks from parking areas and riding trails.

## **Operations**

The Lost Horse ranger station and utilities would be maintained. Camping near this area would continue to be permitted for special uses such as search and rescue and training.

Park staff presence and patrol of this heavily used unit would remain low.

# ALTERNATIVE C — MINIMUM REQUIREMENTS

Camping and day use facilities would be maintained. However, campsites and picnic sites would be better delineated through placement of barriers and revegetation. All other parking areas would be paved and striped to clearly delineate parking areas and make more efficient use of the space. Parking capacity would be approximately 315 cars and 20 RVs.

# Information and Interpretation

The fee collection station at the west entrance would be maintained. An orientation wayside would be added at this location.

Wayside exhibits would be upgraded throughout the unit. Self-guiding brochures and signs would be developed for many of the trails and resources in the area. Keys Ranch and Lost Horse Mine would be used as major interpretive resources. Guided tours of Keys Ranch would continue.

# **Visitor Facilities**

Camp and picnic sites would be better defined through the use of barriers and revegetation. The Hidden Valley day use parking area would be converted to a camp loop. Horse campsites would be retained at Ryan Campground. Sheep Pass Campground would be used by groups.

#### Roads and Circulation

Roads and trails would be improved as under the proposed action. Park Boulevard would be reconstructed and a section relocated from the east side of Intersection Rock to the west side. Barker Dam Road would then "T" off to the east of the relocated parkway on the south side of Intersection Rock. This new portion of Barker Dam Road would rejoin the present alignment slightly to the east of Hidden Valley Campground. The campground loops would then be accessible from Barker Dam Road and the present access to Park Boulevard would be removed, allowing for separate day use parking on the old roadbed of the parkway adjacent to Intersection Rock.

Barker Dam Road would be paved to a new consolidated parking area for the Barker Dam and Wall Street Mill trailheads. A two-wheel-drive, two-way dirt road connection would be maintained from this point through Queen Valley and to the Desert Queen mine trailhead. The remaining network of dirt roads in this area would be evaluated in the wilderness and backcountry management plan to determine which should be revegetated or retained for hiking, biking, or vehicle use.

Keys View Road would be reconstructed at its present width of 20 feet and vehicles over 20 feet long would be advised not to proceed to the Keys View overlook. A pullout and gauging station would be provided south of Cap Rock to allow large vehicles to be measured.

It would be preferable to maintain the Lost Horse Mine road for two-wheel-drive vehicle access. The trailhead should be relocated and expanded as close to the trailhead parking area as possible. A final decision on the length of this road and location of trailhead parking would be determined following a more detailed design analysis and environmental assessment. The impacts of alternatives range from maintaining the current length of road and correcting the drainage and sight distance problems to placing the trailhead near Keys View Road, which would double the hiking distance to the mine.

The road to Stubbe Springs bisects two wilderness units. This road is closed and would be revegetated. The two-way portion of the dirt road to the Lost Horse ranger station would be maintained for administrative use only. The one-way portion is closed and would be revegetated.

Nineteen parking areas would be paved and striped; four would slightly expanded. Hidden Valley day use parking area would be converted to a campground loop. The Rock Pile parking area serves an outdated interpretive exhibit and would be removed.

Trails would be marked, redundant trails would be revegetated, and new loop trails would be created. Designated routes between parking areas and rock climbing sites would be signed and the numerous other social trails would be revegetated. Trails open to horse use and mountain bike use would be determined and clearly designated.

# **Operations**

Park operations improvements would be the same as under the proposed action. The Lost Horse ranger station and utilities would be maintained. Patrol of this unit would be increased, the northern boundary fenced along the open desert, and rock barriers placed in washes where there is illegal vehicle access.



Lost Horse Planning Unit

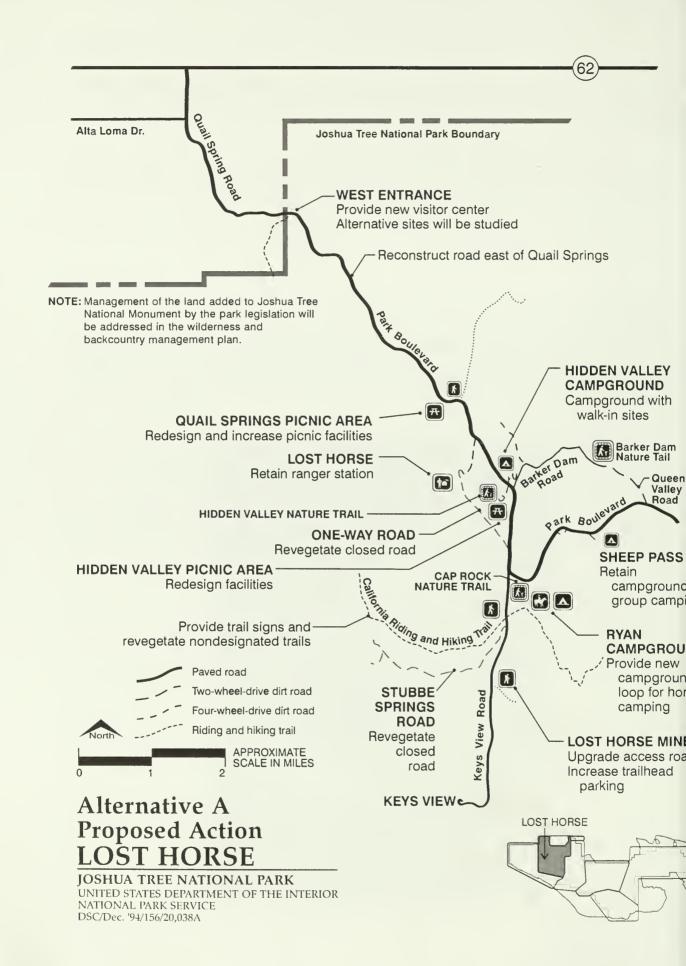


TABLE 13: ALTERNATIVE ACTIONS — LOST HORSE

Alternative A			
Category	Alternative A Proposed Action	Alternative B No Action	Alternative C Minimum Requirements
FACILIT	TIES		
unds	Redesign campgrounds; pave associated roads, parking. Hidden Valley campground — day use parking converted to camp loop, walk-in sites designated; Ryan campground — separate loop for horses; Sheep Pass campground — groups	Retain 6 group sites, 94 individual sites in three areas; Hidden Valley — Ryan — maintain present design; Sheep Pass — same as proposed action	Better define campsites; Hidden Valley, Ryan, and Sheep Pass campgrounds same as the proposed action
'eas	Improve and expand	Maintain 21 individual sites	Improve sites
ıs	Replace with permanent facilities	Maintain portable vault toilets; one accessible to people with disabilities	Same as no action
ATION A	AND INTERPRETATION		
	Upgrade directional signs	Maintain directional signs	Same as proposed action
	Upgrade exhibits, displays, waysides; add interpretive pullouts with exhibits; develop self-guiding signs and publications for more trails; stabilize Keys Ranch and protect, interpret, and preserve Wall Street Mill, Ryan House, Lost Horse Mine; develop Desert Queen Mine interpretive trail	Maintain exhibits, displays, and waysides; stabilize and maintain Keys Ranch and preserve historic scene at other sites	Upgrade exhibits; provide orientation wayside near entrance station; develop self-guiding signs and publications for more trails; historic properties treated as in proposed action
on	Collect fees at west entrance	Same as proposed action	Same as proposed action
ontact	Construct primary visitor center at west entrance; provide information, ranger office space, orientation, interpretation. Increase personal services and guided tours	Continue limited NPS contact at west entrance or throughout unit; Continue Keys ranch guided tours	Continue limited visitor contact at west entrance; Continue Keys ranch guided tours
AND CIR	CULATION		
ads	Reconstruct paved roads; no RVs advised on Keys View Road; establish shuttle system	Reconstruct paved roads	Same as proposed action, but no shuttle system

Action Category	Alternative A Proposed Action	Alternative B No Action	Alternative ( Minimum Require
Dirt Roads	Maintain 2-wheel drive road connection between Barker Dam and Queen Valley and to Desert Queen mine; upgrade Lost Horse Mine road to 2-wheel drive and increase trailhead parking; revegetate Stubbe Springs road; evaluate other dirt roads and classify acceptable uses in the wilderness and backcountry management plan; road to ranger station administrative access only	Maintain and spot repair Lost Horse Mine road to maintain as 2-wheel drive to trailhead; retain other dirt roads; mountain bikes would continue on roads only; road to ranger station same as proposed action	Same as proposed a
Trails	Establish designated routes between popular climbing routes and parking areas, revegetate braided trail routes; sign all trails; establish trail crew	Retain array of insufficiently signed trail system; multiple trails to popular climbing areas	Same as proposed a
Parking	Pave, stripe, and expand parking areas at 18 locations, with major expansion of Wonderland of Rocks backcountry staging area, Hall of Horrors, and Ryan Mountain trailhead parking; consolidate Wall Street Mill and Barker dam parking into one larger area; remove Hidden Valley day use, Rock Pile exhibit, and trailhead lot at Wall Street Mill; add 7 parking areas in disturbed areas	Maintain designated dirt parking areas at 24 locations. Additional random parking by visitors along road shoulder.	Pave and stripe designarking areas at 19 locations; remove pa Hidden Valley day to Rock Pile
	Capacity: 675 cars/60 RVs	Capacity: 320 cars/20 RVs	Capacity: 315 cars/20 RVs
OPERATIONS		0-0 (410)	010 010, 20 1110
Housing	N/A	N/A	N/A
Maintenance	West entrance: provide water, power, electricity, and phone to new visitor center	West entrance: maintain power and phone service	Same as no action
	Lost Horse ranger station: maintain utilities and weather station	Same as proposed action	Same as proposed ac
Administration	Retain ranger station; volunteer campground would be reserved for special group uses (training, search and rescue)	Same as proposed action	Same as proposed ac
Patrol	Increase NPS presence; provide emergency phones at Lost Horse	Limited NPS presence and poor radio communication would continue	Same as proposed ac

### PINTO WYE PLANNING UNIT

The Pinto Wye planning unit is a principal overnight use area in the park, with a total of 170 campsites in three campgrounds. It is also a major picnicking area. The unit contains the Belle, White Tank, and Jumbo Rocks campgrounds and Live Oak and Split Rock picnic areas. Campsites at White Tank are poorly defined, and impacts from vehicle use around the sites is increasing. At Belle campground, conflicts between tent and recreational vehicle campers are often due to generator noise. Parking is inadequate for picnickers and hikers at Split Rock.

Administrative areas include the north entrance station and Pinto Wye maintenance facilities. The north entrance is approximately 3 miles directly south of the headquarters visitor center at the Oasis of Mara, and is where approximately 35–40% of the visitors enter. The fee collection station has a number of shortcomings, including inadequate drainage, ventilation, power, and restrooms. Water for the maintenance area is trucked in to a storage tank.

The Geology Tour Road accesses an area that provides excellent interpretation of geology and desert ecology. Sufficient maintenance funding has not been available to maintain this road for two-wheel-drive vehicles, which limits its public use. It is a four-wheel-drive road because it has moderately steep grades and a soft, sandy roadbed.

The California Hiking and Riding Trail leads north through this unit to the city of Twentynine Palms. The section of the trail north of White Tank receives little use.

#### ALTERNATIVE A — PROPOSED ACTION

## Information and Interpretation

Information would be provided at a new north entrance fee collection station. A parking area with an orientation exhibit would be added as part of the entrance facility. Personal services interpretation would be increased. The Geology Tour Road would be the major dirt road experience for most visitors. Interpretive pullout exhibits would be upgraded or relocated to more appropriate locations and new pullouts and exhibits would be added along the main road. Jumbo Rocks amphitheater would be redesigned. Directional signs would be improved.

#### **Visitor Facilities**

Belle, Jumbo Rocks, and White Tank campgrounds would be for both tent and RV camping. Campsites and picnic sites would be better defined through revegetation, use of barriers, and paving of roads and associated parking. Portable toilets at campgrounds and picnic areas would be replaced. Formerly used for picnicking, Split Rock would be designated for trailhead parking. Some visitors may still picnic in the area, but there would be no facilities. Four or five additional sites would be added at Live Oak picnic area.

## Roads and Circulation

Paved roads would be reconstructed. The Geology Tour Road would be upgraded and maintained as a year-round, two-wheel-drive dirt road to increase the accessibility of this valuable interpretive area. Pullouts would be added on the narrow dirt road to Stirrup Tank. Pushawalla Canyon Road would remain a designated trail closed to vehicles. Berdoo Canyon Road would continue to be designated for four-wheel-drive vehicles. All other dirt roads would be evaluated for appropriate use or revegetation.

Trailhead and picnic parking areas at Split Rock, Live Oak, and the Geology Tour Road/Desert Queen trailhead would be paved, striped, and expanded (see Parking and Pullouts graphic and table). Parking across the road from Skull Rock would be designed for a smaller, more efficient parking arrangement. Day use parking for 5–10 cars would be added at the Arch Rock trailhead, which would be relocated closer to Pinto Basin Road. New interpretive five-car pullouts would be added along the main roads north and east of the Pinto Wye intersection. A larger 8–10 car/2–3 RV parking area for orientation would be added near the north entrance station.

Arch Rock and Skull Rock nature trailheads would be relocated closer to the road to increase their availability. The White Tank pickup and parking area for horse users on the California Riding and Hiking Trail would be maintained.

# **Operations**

The fee collection station would be replaced. The new facility design would consider the need for security and protection from vandalism. Power, water, and telephone service would be extended to the site and a restroom would be provided.

Maintenance facilities would be retained. Water would continue to be hauled in by truck. The water system would be upgraded, including replacement or relocation of the water storage tank to minimize its visibility from the nearby road and trails. Telephone service and covered storage would also be provided. The security system would be upgraded.

Interpretive and law enforcement personnel would be added to increase interpretive contacts and patrols.

### ALTERNATIVE B — NO ACTION

# Information and Interpretation

Information would continue to be provided at the north entrance fee collection station. Personal services interpretation would remain limited in this unit. The Geology Tour Road would be a major dirt road experience for visitors with four-wheel-drive vehicles. Interpretive trails, waysides, and other self-guiding interpretive media would continue to be available.

#### **Visitor Facilities**

Campgrounds would be maintained. Live Oak would continue as a picnic area. Portable restrooms would be available at the campgrounds and picnic areas.

## Roads and Circulation

Paved roads would be reconstructed. The Geology Tour Road would be maintained as a four-wheel-drive road. Other dirt roads would remain. Arch Rock and Skull Rock nature trails would be maintained in their present locations.

## **Operations**

The north entrance fee station would continue in use with no utilities. Maintenance facilities would also be retained and water would continue to be hauled in to the maintenance area.

# **ALTERNATIVE C — MINIMUM REQUIREMENTS**

## Information and Interpretation

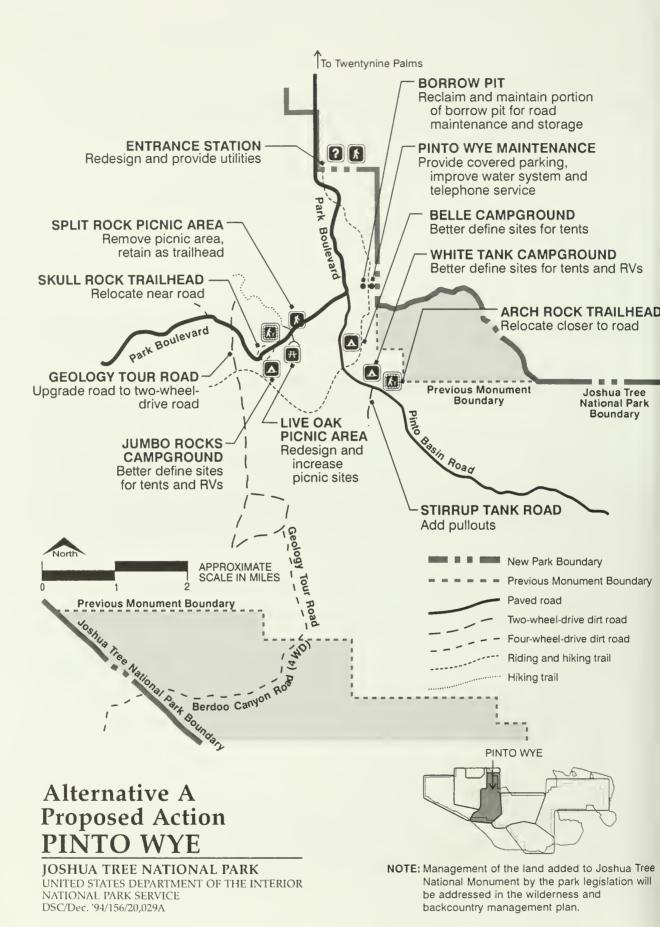
Information would continue to be provided at the north entrance fee collection station. Personal services interpretation would be increased in this unit. The Geology Tour Road would be the major dirt road experience for most visitors. Interpretive trails, waysides, and other self-guiding interpretive media would be upgraded and added throughout the area. Jumbo Rocks amphitheater would be redesigned. Directional signs would be improved.

## **Visitor Facilities**

Visitor facilities would be improved as under the proposed action. At Jumbo Rocks Campground the smaller loops would be designated for tent camping only. The remainder of the campground would be open to all types of camping. Belle and White Tank campgrounds would be for both RV and tent camping. Campsites and picnic sites would be better defined through revegetation, use of barriers, and paving of circulation roads and associated parking. Portable toilets at campgrounds and picnic areas would be replaced. Split Rock would be designated for trailhead parking. Four or five additional sites would be added at Live Oak picnic area.

#### Roads and Circulation

Roads would be improved as under the proposed action. Paved roads would be reconstructed. The Geology Tour Road would be upgraded and maintained as a year-round, two-wheel-drive dirt road. Pullouts would be added on the narrow dirt road to Stirrup Tank.



Pushawalla Canyon Road would remain closed. All other dirt roads would be evaluated for appropriate use or revegetation in the backcountry management plan. Parking areas would be paved and striped.

The California Riding and Hiking Trail pickup and parking area at White Tank would be maintained. Arch Rock and Skull Rock nature trailheads would be maintained in their present locations.

## **Operations**

The fee collection station would be improved with the extension of power, water, and telephone service to the site and the addition of a restroom. Maintenance facilities would be retained. Water would continue to be hauled in by truck. The water system would be upgraded, including replacement or relocation of the water storage tank. Telephone service and covered storage would also be provided. The security system would be upgraded.

Interpretive and law enforcement personnel would be added to increase contacts and patrols.



Pinto Wye Planning Unit

TABLE 14: ALTERNATIVE ACTIONS — PINTO WYE

	Y		
Action Category	Alternative A Proposed Action	Alternative B No Action	Alternative C Minimum Requireme
VISITOR FACILITIES	S		
Campgrounds	Define sites with vegetation, barriers, and paving of roads and parking.	Maintain 170 sites in three areas	Same as proposed action
Picnic Areas	Define sites at Live Oak and add 4–5 sites; remove picnicking at Split Rock	Retain four individual sites at Live Oak	Same as proposed action
Restrooms	Replace portable toilets with permanent restrooms, add restrooms at Live Oak picnic area and Stirrup Tank trailhead	Retain portable toilets	Same as proposed action
INFORMATION ANI	D INTERPRETATION		
Signs	Improve directional signs	Retain signs	Same as proposed action
Exhibits	Update all exhibits and add new interpretive pullouts with exhibits	Maintain six wayside exhibits	Upgrade exhibits; place information board at entrance fee station with map
Fee Station	Replace fee station, include water, power, telephone, restroom, security system	Maintain fee station, no restroom, power, or telephone	Provide fee station with water, power, telephone, restroom, security system
Visitor Contact	Contact at new north entrance fee station; redesign Jumbo Rocks amphitheater; increase interpretive contacts	Contact at current north entrance fee station	Redesign Jumbo Rocks amphitheater, increase interpretive contacts
ROADS AND CIRCU	JLATION		
Paved Roads	Reconstruct road	Same as proposed action	Same as proposed action
Dirt Roads	Close and revegetate illegal entry through Hidden Valley; create pullouts on road to Stirrup Tank; improve Geology Tour Road for 2-wheel drive vehicles; Pushawalla Canyon road would remain closed; evaluate all other dirt road use in backcountry management plan	Illegal 4-wheel drive entrance through Hidden Valley continues, maintain road to Stirrup Tank (no pullouts), Geology tour road 4-wheel drive only, other dirt roads remain	Same as proposed action
Trails	Relocate Arch Rock and Skull Rock trailheads closer to road; add signs to trailheads	Maintain Skull Rock and Arch Rock trails; not all trailheads signed	Maintain Skull Rock and Arch Rock trails; add sig to trailheads
Parking	Pave, stripe, and expand day use parking areas; add parking areas at Arch Rock trailhead and Wonderland of Rocks orientation pullout	Maintain dirt parking areas	Pave and stripe parking areas

Category	Alternative A Proposed Action	Alternative B No Action	Alternative C Minimum Requirements
ONS			
	N/A	N/A	N/A
ice	Retain maintenance facilities and provide covered storage	Retain maintenance facilities	Same as proposed action
ation	N/A	N/A	N/A
	Provide utilities at north entrance station; At maintenance facilities—continue to truck in water; improve water and fire system and security system; provide telephone service	Continue to truck in water and maintain other utilities to maintenance facilities	Same as proposed action
	Increase patrols	Maintain patrols	Same as proposed action

#### TRANSITION PLANNING UNIT

This unit straddles the high Mojave and the lower Colorado Deserts. The Transition planning unit has no major development. The only paved road in this unit, Pinto Basin Road, is deteriorating due to drainage problems and flash flooding in wash areas. This road bisects the Cholla Cactus Garden, an area with an unusually high concentration of cacti. Several small parking areas and pullouts with interpretive exhibits exist along the road. Designated trails include the Cholla Cactus Nature Trail. There are backcountry registration sites at Turkey Flats and Porcupine Wash.

## ALTERNATIVE A — PROPOSED ACTION

This unit would be the major interpretive area for the transition from the higher Mojave to the low Colorado Desert portion of the park. Transition between the two deserts and the specialized vegetation that grows there would be interpreted through a variety of interpretive trails, personal services, and exhibits. Development would remain limited primarily to interpretation and orientation functions, which would be improved and expanded. Interpretive contacts would be increased. One small picnic area would be added along the main road.

## Information and Interpretation

Interpretive exhibits would be replaced or moved to more appropriate locations and new pullouts and exhibits would be added along the main road. The self-guiding nature trail at the Cholla Cactus Garden would be maintained and accessibility would be improved for people with disabilities. Trailhead parking and pullouts would be coordinated during the future phases of the road reconstruction project.

#### Visitor Facilities

No campgrounds exist or are proposed for the Transition unit. The combination of limited screening ability, visibility from higher elevations, distance from utilities, availability of water, and extreme climatic conditions would make camping inappropriate for this area. There are no picnic areas in the Transition unit, but a small 4- to 6-site picnic area with shade structures would be developed. The location would be determined based on further evaluations; the site should have minimal effect on the vista across Pinto Basin. The old borrow pits near Porcupine Wash or Turkey Flats have depressions suitable for a low profile shade structure. Restrooms would be added at the Cholla Cactus Garden parking area.

### Roads and Circulation

The paved road through the Transition unit would be reconstructed, which would resolve drainage problems while retaining slow speeds and minimum widths through the desert vegetation. Adequate site distances along the road for the entrances to parking areas would

be provided. The section of road through the Cholla Cactus Garden could be routed around the concentration of cholla cactus. Relocating the road would allow for revegetation of the disturbed cholla plant community and improved interpretation. A separate environmental analysis of alternative road alignments would be completed during preliminary design for road reconstruction.

A new 8–10 car/2 RV parking area would be constructed for the Cholla Cactus Garden if the road is relocated, and this and all other parking areas and pullouts would be paved. Existing and new interpretive five-car pullouts would be provided along the Pinto Basin road. Parking at the Turkey Flats trailhead pullout would be increased to accommodate 8–10 cars. Parking would be provided at all designated backcountry trailheads.

Closed dirt roads being illegally used by four-wheel-drive vehicles in the Gold Park area would be marked as closed and barriers added. The park would work with adjacent landowners to allow parking at wilderness access points where vehicle use inside the park would not be possible.

# **Operations**

The old borrow pits in this unit would be revegetated. One borrow area near the main road could be rehabilitated to accommodate a picnic area. Patrols would be increased in this unit.

#### **ALTERNATIVE B — NO ACTION**

Interpretation and orientation exhibits and trails along the main road would be maintained.

#### Information and Interpretation

The four interpretive exhibits and pullouts and the Cholla Cactus Garden Nature Trail would be maintained. The Turkey Flats and Porcupine Wash trailheads would also be retained, although signs are inadequate.

#### **Visitor Facilities**

There would be no camping, picnicking, or restroom facilities provided.

#### Roads and Circulation

The paved road through the Transition unit would be reconstructed. Adequate site distances along the road for the entrances to parking areas would be provided. All parking areas would remain unpaved.

## **Operations**

The borrow pits in this unit would remain closed.

## ALTERNATIVE C — MINIMUM REQUIREMENTS

The transition between the two deserts would be interpreted through existing trails and exhibits and through increased interpretive contacts. Interpretive pullouts and nature trails would be retained and exhibits upgraded. One small picnic area would be added along the main road.

# Information and Interpretation

Interpretive exhibits would be replaced along the main road. The self-guiding nature trail at Cholla Cactus Garden Nature Trail would be maintained, and accessibility for people with disabilities would be improved.

#### **Visitor Facilities**

No campgrounds would be provided in this unit. A small 4- to 6-site roadside picnic area with shade structures would be developed. Restrooms would be added at the Cholla Cactus Garden parking area.

#### Roads and Circulation

The paved road through the Transition unit would be reconstructed and adequate sight distances along the road for the entrances to parking areas would be provided. The section of the road through the Cholla Cactus Garden could be routed around the concentration of cholla cactus. Further environmental analysis of alternative alignments would be completed. A parking area would be constructed for the Cholla Cactus Garden if the road is relocated, and this and all other parking areas and pullouts would be paved.

Closed dirt roads being illegally used by four-wheel-drive vehicles in the Gold Park area would be marked closed and barriers would be added.

## **Operations**

The old borrow pits in this unit would be revegetated. Patrols would be increased.

TABLE 15: ALTERNATIVE ACTIONS — TRANSITION

Category	Alternative A Proposed Action	Alternative B No Action	Alternative C Minimum Requirements
R FACILIT	IES		
ounds	N/A	N/A	N/A
reas	Rehabilitate borrow pit and add 4-6 picnic sites with shade structures	None	Add 4-6 roadside picnic tables and a parking area
ns	Add restroom at Cholla Cactus Garden	None	Same as proposed action
IATION A	ND INTERPRETATION		
	Upgrade boundary and road signs	Maintain signs	Same as proposed action
	Improve interpretive exhibits and provide additional interpretive pullouts along the road; add interpretive exhibits and signs at cholla garden	Maintain pullout exhibits, trailheads, and self-guided Cholla Cactus Garden Nature Trail	Same as proposed action
on	N/A	N/A	N/A
Contact	Increase interpretive programs	Little interpretive contact would continue	Same as proposed action
AND CIRC	CULATION		
oads	Reconstruct road	Same as proposed action	Same as proposed action
	Evaluate realigning road around Cholla Cactus Garden	Highway would continue to bisect Cholla Cactus Garden	Same as proposed action
ds	Dirt roads would be evaluated in the backcountry management plan; add signs & barriers to closed roads in Gold Park	Dirt roads would remain confusing, closures would not be signed	Same as proposed action
	Improve Cholla Cactus Garden trailhead and maintain as self-guiding trail and add interpretive signs and exhibits	Maintain Cholla Cactus Garden Nature Trail	Same as proposed action
	Relocate and pave parking at cholla and ocotillo areas during road realignment	Maintain parking at cholla and ocotillo for a total of 14 cars	Same as proposed action
IONS			
	N/A	N/A	N/A
ance	Rehabilitate borrow pits	Borrow pits would remain closed	Same as proposed action
tration	N/A	N/A	N/A
	N/A	N/A	N/A
	Increase patrols	Maintain patrols	Same as proposed action



Transition Planning Unit

#### PINTO BASIN PLANNING UNIT

Located in the Colorado Desert, the Pinto Basin has the Pinto Mountains to the north, the Eagle Mountains to the south, and the remote Coxcomb Mountains to east. The Pinto Basin planning unit is remote and undeveloped; the majority of the unit is wilderness. The three four-wheel-drive roads are not in wilderness areas. Black Eagle Mine Road provides access to Bureau of Land Management property and active mines. Old Dale Road runs between the north boundary and Pinto Basin Road. The intersections of these two roads with Pinto Basin Road is confusing and some visitors inadvertently turn off of the main park road onto one of the other two. A third dirt road leads to Pinto Wells, which is open to the wells and closed along the portion leading north across Pinto Basin to Highway 62 north of the park.

There are no campgrounds, picnic areas, parking, or structures in Pinto Basin. There are few interpretive exhibits and limited roving interpretation by park staff. The Coxcomb and Pinto mountains are popular backpacking destinations. The entire unit is an important winter hiking and backpacking area.

The world's largest landfill is proposed within 1 mile of the boundary. The landfill would use abandoned open mining pits in the Eagle Mountains. Its proximity poses some obvious threats to the adjacent wilderness. Blowing trash, dust, noise, and odors could destroy the fragile setting, and the proximity of this operation presents many less obvious threats to the natural ecosystem. The landfill would accommodate 20,000 tons of refuse each day for more than 100 years. Household trash attracts scavengers such as ravens and coyotes, which can flourish in such a setting. Ravens are known to eat young tortoises; the largest known population of tortoises in the park is within 6 miles of the proposed landfill.

#### ALTERNATIVE A — PROPOSED ACTION

This area would provide an unstructured backcountry and wilderness experience for visitors. Facilities such as campgrounds and picnic areas would not be provided; signs, wayside exhibits, and roads would be kept to a minimum. Management would emphasize protection and restoration of wilderness. Signs, small exhibits, and backcountry boards at entry points into the backcountry and wilderness would be used to inform visitors of regulations and resources that govern use in these areas. Vehicles would be limited to the Old Dale, Black Eagle Mine, and Pinto Wells roads. Old roads into the wilderness would be marked closed and would be barricaded at the wilderness boundary and revegetated.

# Information and Interpretation

Parking and an orientation and interpretation exhibit would be added at the Old Dale Road, Black Eagle Mine Road, and Pinto Basin Road intersection. These roads provide the major vehicle access into the Pinto Basin. An entrance sign and exhibit would be provided on Old Dale Road near the north boundary. The regulations and importance of the resources would be listed. Visitors would receive regulatory information at backcountry registration boards at the other wilderness entry points. Interpretive waysides would also be added along Old Dale Road and backcountry areas as appropriate.

#### **Visitor Facilities**

There would be no campgrounds, picnic facilities, or other visitor use facilities.

#### Roads and Circulation

Old Dale and Black Eagle Mine Roads would remain four-wheel-drive dirt roads. Directional signs would be improved and the intersection of these two roads with Pinto Basin Road would be redesigned to clearly differentiate the three roads. The road to Pinto Wells would remain closed beyond the wells. Dirt roads leading to the wilderness boundary would be marked with signs and barricaded to restrict entry. Old road scars in the wilderness would be revegetated. The park would work with adjacent landowners to allow parking at wilderness access points where vehicle use inside the park would not be possible.

There are currently no designated trails in this unit. The wilderness and backcountry management plan would evaluate possible trails in this unit, including points of entry for hiking and backcountry use and where backcountry registration boards would be provided.

# **Operations**

There would be no housing, maintenance, or administrative facilities in this unit. The radio communication system would be upgraded.

#### ALTERNATIVE B — NO ACTION

This alternative would primarily provide an unstructured backcountry and wilderness experience for visitors. Vehicles would be limited to the Old Dale, Black Eagle Mine, and Pinto Wells roads. The many old dirt roads leading to the wilderness boundary would probably still be used for illegal vehicle operation in the wilderness.

# Information and Interpretation

The signs and interpretive exhibits along the roads would be maintained.

#### Visitor Facilities

There would be no campgrounds, picnic facilities, or other visitor use facilities.

#### Roads and Circulation

Old Dale, Black Eagle Mine, and Pinto Wells roads would remain four-wheel-drive dirt roads. The road to Pinto Wells would remain closed beyond the wells. Dirt roads leading to the

wilderness boundary would remain and continue to allow illegal vehicle access to the wilderness. There would be no designated trails.

## **Operations**

There would be no housing, maintenance, or administrative facilities in this unit. The radio communication system would continue in use.

# ALTERNATIVE C — MINIMUM REQUIREMENTS

This alternative would be similar to the proposed action. However, the road to Pinto Wells would remain open to the wells. Other actions that would provide for minimal interpretation and development and increased protection of resources would be the same as for the proposed action.

# Information and Interpretation

Parking and an orientation and interpretation exhibit would be added at the Old Dale, Black Eagle Mine, and Pinto Basin roads intersection. An entrance sign and exhibit would be provided on Old Dale Road near the north boundary.

#### **Visitor Facilities**

There would be no campgrounds, picnic facilities, or other visitor use facilities.

## Roads and Circulation

Old Dale, Black Eagle Mine, and Pinto Wells roads would remain four-wheel-drive dirt roads. Directional signs would be improved and the intersection of Old Dale, Black Eagle Mine, and Pinto Basin roads would be redesigned to clearly differentiate between the three roads. The road to Pinto Wells would remain closed beyond the wells. Dirt roads leading to the wilderness boundary would be marked with signs and barricaded to restrict entry. Old road scars in the wilderness would be revegetated.

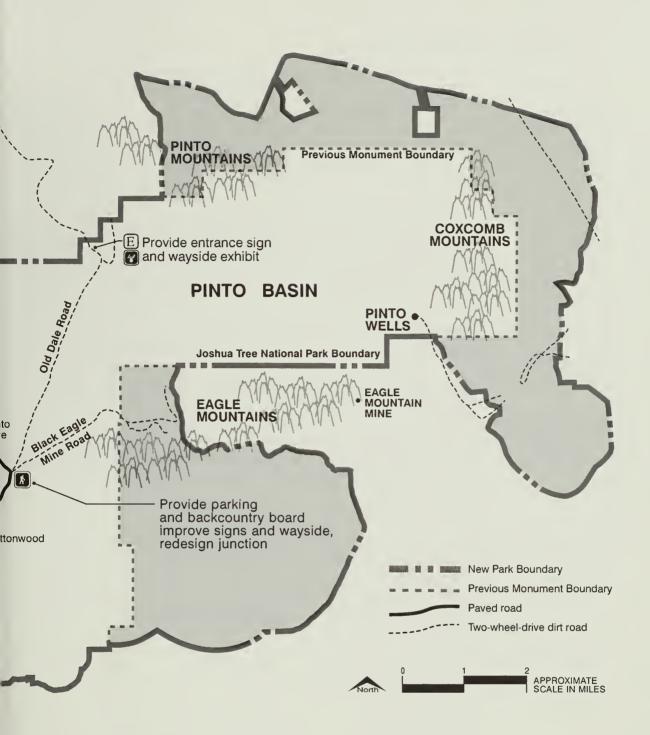
No trails are designated, but this unit might have trails in the future if they are needed to protect sensitive cultural sites. These trails would be included in the trail plan and in the handbook. The points of entry for hiking and backcountry use would remain with improved backcountry boards for user registration.

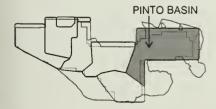
## **Operations**

There would be no housing, maintenance, or administrative facilities in this unit. The radio communication system would be upgraded.



Pinto Basin Planning Unit





E: Management of the land added to Joshua Tree National Monument by the park legislation will be addressed in the wilderness and backcountry management plan.

## Alternative A Proposed Action PINTO BASIN

JOSHUA TREE NATIONAL PARK UNITED STATES DEPARTMENT OF THE INTERIOR NATIONAL PARK SERVICE DSC/Dec. '94/156/20,031A

TABLE 16: ALTERNATIVE ACTIONS — PINTO BASIN

Action Category	Alternative A Proposed Action	Alternative B No Action	Alternative C Minimum Requires
VISITOR FACILITI	ES		
Campgrounds	N/A	N/A	N/A
Picnic Areas	N/A	N/A	N/A
Restrooms	N/A	N/A	N/A
INFORMATION A	ND INTERPRETATION		
Signs	Upgrade directional signs	Maintain signs	Same as proposed action
Exhibits	Add orientation and interpretive exhibits at Old Dale Road, Black Eagle Mine Road, and Pinto Basin Road intersection; Add entrance and interpretive signs on Old Dale road at north boundary	Maintain few exhibits	Same as proposed action
Fee Station	N/A	N/A	N/A
Visitor Contact	Maintain roving contacts; schedule historic mining tours	Maintain roving contacts	Same as proposed action
ROADS AND CIRC	CULATION		
Paved Roads	N/A	N/A	N/A
Dirt Roads	Old Dale and Black Eagle Mine roads would remain 4- wheel drive; improve signs and realign intersection of Old Dale, Black Eagle Mine, Pinto Basin roads	Same as proposed action	Same as proposed action
	Road to Pinto Wells would be open to wells	Same as proposed action	Same as proposed action
	All dirt roads leading into the wilderness would be signed and barricaded at the boundary and old road scars revegetated	Dirt roads would lead to the wilderness boundary and road scars would remain	Same as proposed action
Trails	Consider trail development in backcountry management plan	No designated trails	Same as proposed action
Parking	Add parking and backcountry registration boards at wilderness access points	No designated parking, dirt pullouts on Old Dale and Eagle Mine roads	Same as proposed action
OPERATIONS			
Housing	N/A	N/A	N/A
Maintenance	N/A	N/A	N/A
Administration	N/A	N/A	N/A
Patrol	Improve radio communications	Radios would not be upgraded	Same as proposed action

#### COTTONWOOD PLANNING UNIT

This unit has one of the three primary entrances to the park and is the primary area for experiencing the Colorado Desert. Cottonwood Oasis is easily accessible and provides visitors an opportunity to experience this important desert community type. Cottonwood is the focal point for visitor and park support facilities for the eastern portion of the park.

The main south access to the park on Cottonwood Road has an entrance gate at the boundary. Inside the gate is a large parking area and a general information and orientation wayside exhibit. At the Cottonwood developed area visitors can obtain more detailed information and pay the entrance fee at the contact station. Visitors are currently directed off of the main road into this station through traffic cones. The contact station is only large enough for a small information counter with outside map board. Other development at Cottonwood includes a campground, picnic area, ranger station, park housing, small maintenance facility, and trailhead parking with a short trail to Cottonwood Oasis and backcountry trail to other areas. Heavy visitor use at the oasis has resulted in numerous braided trails and severe damage to the soil and vegetation. Limited orientation and interpretation is also provided at Cottonwood Oasis and four roadside pullouts.

Utilities serving this development include water from Smoke Tree well, septic systems, and a diesel-powered generator. There is no telephone service. The generators are noisy, the water system leaks, and the radio communication system is inadequate.

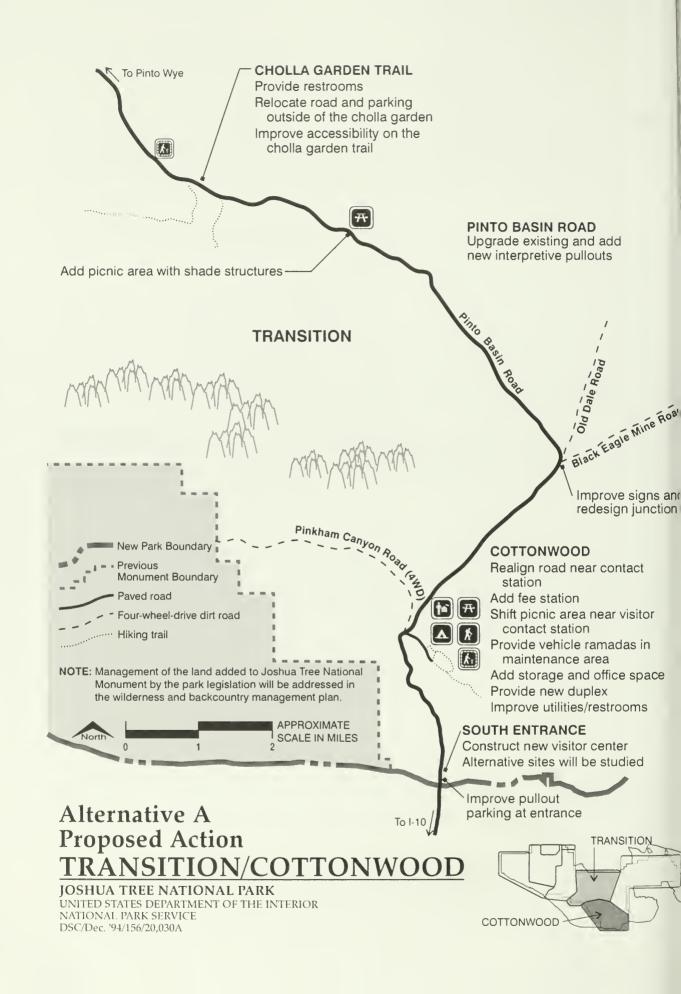
#### ALTERNATIVE A — PROPOSED ACTION

Cottonwood would continue as the focus for visitor and administrative facilities in the eastern portion of the park. This alternative would improve the entrance, the condition of the oasis and designated trails, and visitor awareness of the two desert environments, with emphasis on the Colorado Desert. Cottonwood entrance would be redesigned and a new enlarged visitor contact and fee collection station would be provided. Impacts on the oasis and along trails would be reduced through revegetation of disturbed areas, placement of signs to direct visitors along the trails, and addition of a new viewing platform for the oasis. Exhibits would be upgraded and expanded at Cottonwood and along the road corridor. Park support facilities would be improved for adequate and efficient operation.

## Information and Interpretation

Improvements would be made near the entrance to allow for a pullout. Visitors would be able to park and take photographs. Exhibits would ensure that the visitors are aware of the difference between National Park Service and Bureau of Land Management land, missions, and regulations.

A new visitor contact station would be built. Its location has not yet been decided. It would be approximately 3,000 square feet to accommodate an information and orientation counter, exhibits and displays, administrative offices, and restrooms. Approximately 800 square feet of sheltered outdoor space for informal talks, exhibits, and information boards would be



added. A fee station would be constructed that would allow for drive-through payment of fees. A separate study and environmental analysis would be completed to evaluate alternative visitor center sites and analyze their environmental impacts. This study would evaluate sites in the park at Cottonwood as well as the development of an interagency facility between Interstate 10 and the park boundary.

Orientation and interpretation parking and pullouts would be retained, exhibits upgraded, and new pullouts added as necessary. A new accessible trail to interpret the Colorado Desert environment would be added south of Cottonwood Canyon at an existing pullout. Interpretation of Cottonwood Oasis would be upgraded. Due to the steep grades surrounding the oasis, it would be very difficult to provide an accessible trail to the oasis. Consequently, a fully accessible viewing platform with interpretive information would be constructed overlooking the oasis. A boardwalk would be constructed at the oasis to reduce foot traffic impacts. Increased interpretation would be provided for other trails in this unit.

#### **Visitor Facilities**

The campsites at Cottonwood would be maintained. The sites are well defined and have good separation and screening. Group camping would continue but would shift to the north and occupy currently designated picnic sites to accommodate larger groups. The picnic area would be moved near the visitor contact station where it would be more visible and accessible. Restrooms would be accessible to people with disabilities.

#### Roads and Circulation

Pinto Basin Road would be reconstructed north of Cottonwood. The road would be realigned and parking redesigned to better serve the new contact facility and provide for drive-through fee collection. The junction of Pinkham Canyon and Pinto Basin roads would be north of the new fee station. Five-car pullouts would be maintained along Pinto Basin Road, with larger parking areas at the south entrance parking area (15 cars/3 RVs) and south entrance sign parking (5–8 cars/2 RVs). Dirt roads would be evaluated in the wilderness and backcountry management plan. Unauthorized vehicle access points would be closed. Signs would be placed on designated trails, and braided social trails would be revegetated.

#### **Operations**

Administrative office space would be added as part of the new visitor contact station. Covered maintenance storage (approximately 2,000 square feet) and covered vehicle parking would be provided. The houses would be retained and a new duplex added. The water system would be repaired and fire protection capabilities improved. Telephone service would be provided for administrative and maintenance facilities. Alternative forms of energy would be evaluated to take advantage of sustainable design options.

The communications system would be evaluated. New technology in this field could provide solutions to problems with remote communications systems that have unreliable power

sources. The present use of radios is limited and transmissions are not private. Patrols would be increased to provide improved protection of resources.

#### ALTERNATIVE B — NO ACTION

There would be no modification of facilities that would enhance the visitor experience or improve protection of the resources, particularly at the oasis. Park support facilities would be maintained.

## Information and Interpretation

Information and interpretation exhibits would be retained at Cottonwood and along the road. The contact station at Cottonwood would continue to provide limited information and fee collection.

#### **Visitor Facilities**

The campground and picnic area at Cottonwood would be maintained. Restrooms would be made accessible to people with disabilities.

#### Roads and Circulation

Pinto Basin Road would be reconstructed north of Cottonwood. Pullouts and parking areas would be maintained. Dirt roads would remain. Unauthorized vehicle access into the park would probably continue.

#### **Operations**

There would be no change to park housing, maintenance, administrative facilities, or utility systems. Structures and the water system would continue to be repaired as necessary. No telephone service would be provided.

## ALTERNATIVE C — MINIMUM REQUIREMENTS

Cottonwood would continue as the focus for visitor and administrative facilities in the eastern portion of the park. This alternative would improve the condition of the oasis and the visitor experience there and along designated trails. It would improve visitor awareness of the two desert environments, with emphasis on the Colorado Desert. Impacts to the oasis and along other trails would be reduced through revegetation of disturbed areas and the use of the designated trail and the new viewing platform. Interpretive exhibits would be upgraded at

Cottonwood and along the road corridor. Park support facilities would be improved for adequate and efficient operation.

## Information and Interpretation

Improvements would be made near the entrance gate to allow for a pullout. Visitors would be able to park and take photographs.

The visitor contact station would be remodeled and enlarged by about 450 square feet to accommodate an expanded information/orientation/fee collection counter and restrooms.

Orientation and interpretation parking and pullouts would be retained and exhibits upgraded. Interpretation of Cottonwood oasis would be upgraded and visitor impacts to the oasis reduced by clearly marking the designated trail, revegetating social trails, and adding a viewing platform. A backcountry board would be established on trails leading into the park from Chiriaco Summit. A new accessible trail interpreting the Colorado Desert would be added at an existing pullout.

#### **Visitor Facilities**

The campsites at Cottonwood would be maintained. Group camping would continue but would shift to the north and occupy current picnic sites to accommodate larger groups. The picnic area would be near the visitor contact station where it would be more visible and accessible. Restrooms would be made accessible to people with disabilities.

#### Roads and Circulation

Pinto Basin Road would be reconstructed north of Cottonwood. Dirt roads would be evaluated in the wilderness and backcountry management plan. Unauthorized vehicle access points into the park would be closed. Designated trails would be marked and braided social trails would be revegetated.

#### **Operations**

Covered maintenance storage (approximately 2,000 square feet) and covered vehicle parking would be provided. Housing would be retained and a new duplex added. The water system would be upgraded and fire protection capabilities improved. Telephone service would be provided for administrative and maintenance facilities. The radio communication system would be improved. Alternative forms of energy would be evaluated to take advantage of sustainable design options.

Patrols would be increased to provide improved protection of resources.

TABLE 17: ALTERNATIVE ACTIONS — COTTONWOOD

Action Category	Alternative A Proposed Action	Alternative B No Action	Alternative C Minimum Requirer
VISITOR FACILITIE	ES		
Campgrounds	Retain sites and expand size of group sites	Retain 62 individual sites and 3 group sites	Same as proposed acti
Picnic Areas	Relocate new picnic area closer to the visitor contact station	Retain 6 individual sites	Same as proposed action
Restrooms	Expand and make accessible to people with disabilities	Retain 3 comfort stations; make visitor center facilities accessible to people with disabilities	Same as proposed actic
INFORMATION AN	ND INTERPRETATION		
Signs	Add entrance sign near south boundary	Minimal maintenance of trails and signs	Same as proposed actic
Exhibits	Expand interpretation for oasis and add viewing platform; increase trails interpretation in this unit	Maintain limited interpretation at oasis	Expand interpretation f oasis and add viewing platform; increase trails interpretation
Fee Station	Build new fee station	Entrance fees collected at contact station	Relocate to middle of re
Visitor Contact	Construct new 3,800 sq. ft. visitor contact station with office space and restrooms	Maintain small contact station	Rehabilitate contact stat
ROADS AND CIRC	ULATION		
Paved Roads	Reconstruct roads	Same as proposed action	Same as proposed actio
Dirt Roads	Evaluate all dirt roads in the backcountry management plan	All canyon access points remain open	Same as proposed action
Trails	Improve identification of trails and revegetate redundant ones	Retain confusing, poorly identified trail network	Same as proposed action
Parking	Redesign, expand visitor center; pave other parking and pullouts; add new interpretive pullouts	Maintain parking areas and pullouts	Same as no action
OPERATIONS			
Housing	Retain housing and provide duplex	Retain all housing	Same as proposed actio
Maintenance	Add storage and provide covered parking for maintenance vehicles; investigate alternative energy sources; upgrade water system and improve fire protection capabilities; provide telephone service	Retain buildings and storage yard; retain generators; retain utility systems; repair as needed	Same as proposed action
Administration	Add office space	No office space	Same as no action
Patrol	Upgrade communications system; increase patrols	Maintain cellular phones; maintain patrol levels	Same as proposed action



Cottonwood Planning Unit

## ALTERNATIVES CONSIDERED BUT REJECTED

An alternative discussed and rejected would have added new campground and picnic areas. Based on the park's strong resource protection orientation and purpose and its significant resources, new facility developments and their associated impacts were considered and rejected. Alternative methods of managing visitor use in the park, such as an improved camping reservation system, enforcement of time limits, better trip planning capabilities, and encouragement of visitor facilities outside of the park were found preferable.

A visitor center in the Transition zone with a view into the Pinto Basin was considered but rejected; it would have emphasized cultural resources by constructing a state-of-the-art museum for the Campbell Collection and other collections. This facility would have been a center for research in California Desert archeology, ethnohistory, and ethnography. There would have been provisions for botanical, ecological, and zoological research as well. This idea was rejected because of the anticipated expense — more costly than any other possibility — and because it would have compromised wilderness values. It could have been built within a road corridor, but construction of a major facility was regarded as too much of a disturbance to the wilderness character.

Three other alternatives for road projects were considered and evaluated in an environmental assessment that was released to the public in August 1991. They included a partial one—way loop, a total one—way loop, and a widened two—way road. The partial one—way loop alternative was to channel all westbound traffic on Queen Valley Road. The traffic on Park Boulevard (Route 12) between Ryan Campground and Queen Valley Road would be limited to eastbound traffic. The objective was to decrease impacts on Joshua trees, diversify the visitor experience, increase safety, and avoid impacts on known cultural resources. This alternative was rejected after public review because it changed the character of visitation and the quiet areas.

The total one-way loop alternative would have created a closed one-way loop using Queen Valley Road and the section of Park Boulevard that connects the east and west ends of Queen Valley Road. The objectives were the same as the partial one-way and rejection was for the same reason.

The last rejected alternative would have widened the road to 26 feet. The objective was to provide for visitor safety and convenient access to features of interest and to reduce maintenance expenses. This alternative was rejected because of the excessive impact on Joshua trees and native vegetation.

# THE AFFECTED ENVIRONMENT





#### THE NATURAL ENVIRONMENT

#### **CLIMATE**

The park has an arid upland desert climate. Annual extreme temperatures are influenced by altitude. Eastern lowlands frequently have temperatures above 115°F in the summer. Western higher elevations have snow in winter and extended periods with nighttime lows well below freezing. The summer months typically have high temperatures, low humidity, and clear sunny days.

Summer storms from July through September can be very dramatic. Thunderstorms from the southwest or southeast bring high winds, lightning, and sometimes heavy rain. Typical summer humidity runs below 20%. When storms approach, humidity can climb to above 40%. Unless a large amount of rain falls, the humidity usually drops to normal within 12 hours. Summer storms tend to be localized. They can cause flash floods, but the majority of the annual precipitation, one to seven inches, is from winter rain.

#### **GEOLOGY AND SOILS**

The picturesque landscape found in Joshua Tree National Park — the mountain ranges and desert basins, the rock piles that seem to float in the desert air — are all part of the mystique of the park. The park has low, generally east—west trending mountains interspersed with valleys, a setting characteristic of much of the western Mojave region. It is dominated by a crystalline rock terrain, although the valleys are largely mantled by unconsolidated or poorly consolidated Quaternary surface deposits. Rocks in the park are metamorphic assemblages that include Paleozoic and Precambrian rocks, widespread Mesozoic plutonic rocks that range from gabbro to quartz monzonite and some local Cenozoic basalt. Some Precambrian rocks are about 800 million years old. In some places aplite and pegmatite dikes are associated with the granitic plutons.

Millions of years ago the landscape had rolling hills covered with a soil mantle that had developed in a hot, semiarid to humid climate, with 80% more precipitation and 30% less evaporation than is typical today. Changes in climate have resulted in present day erosion rates that exceed rates of soil formation, removing the soil and vegetation from steeper hillsides and creating the huge subangular and spheroidal granitic boulders and boulder piles evident at Hidden Valley, Cap Rock, Jumbo Rocks, and along the Geology Tour Road.

A comprehensive mineral survey has yet to be done. Mines in the park have produced approximately 12,000 troy ounces of gold, 16,000 troy ounces of silver, 33,000 troy ounces of by–product lead, and over 20 tons of bismuth ore. Areas near the park with similar geology contain significant deposits of tungsten, manganese, uranium, and thorium–bearing minerals.

Most soils in the park are poorly developed. The eastern half is mostly alluvial with no true soil structure. This granitic fill ranges from boulders to gravel and coarse sand. These are modern deposits consisting of fan gravel and other alluvium being deposited by drainage systems. There are no known rare or unique soils in the park.

The prevailing winds of the Mojave Desert are from the west. Much of the wind-blown sand, picked up in the open expanses, is carried eastward and deposited in a few well-developed dune systems. Pinto Basin has extensive sand deposits but few well-developed dune systems. The only real soil formation is in the valleys of Covington Flats.

The desert soil surface is very sensitive and took hundreds of years to form. A single vehicle crossing can cause damage that can take hundreds of years to heal.

#### NATURAL HAZARDS

The high level of seismic activity in the park is because of the many fault zones in the vicinity, including the San Andreas to the west. The trace of this fault zone is clearly visible from Keys View, marked by the Indio Hills and numerous springs and palm oases. The oasis at Cottonwood Springs was formed as a result of fault activity, as was the Oasis of Mara, which marks the Pinto Mountain fault, extending from Twentynine Palms into the Morongo Valley. The Blue Cut fault runs from east to west through the Little San Bernardino Mountains, about 0.5 mile south of Keys View, extending into the park at Pinto Basin. Two large earthquakes (magnitude 6.4 and 7.5) were recorded in 1992 along the Mojave-Landers line, a north-south trending fault perpendicular to the Pinto Mountain fault.

#### **VEGETATION**

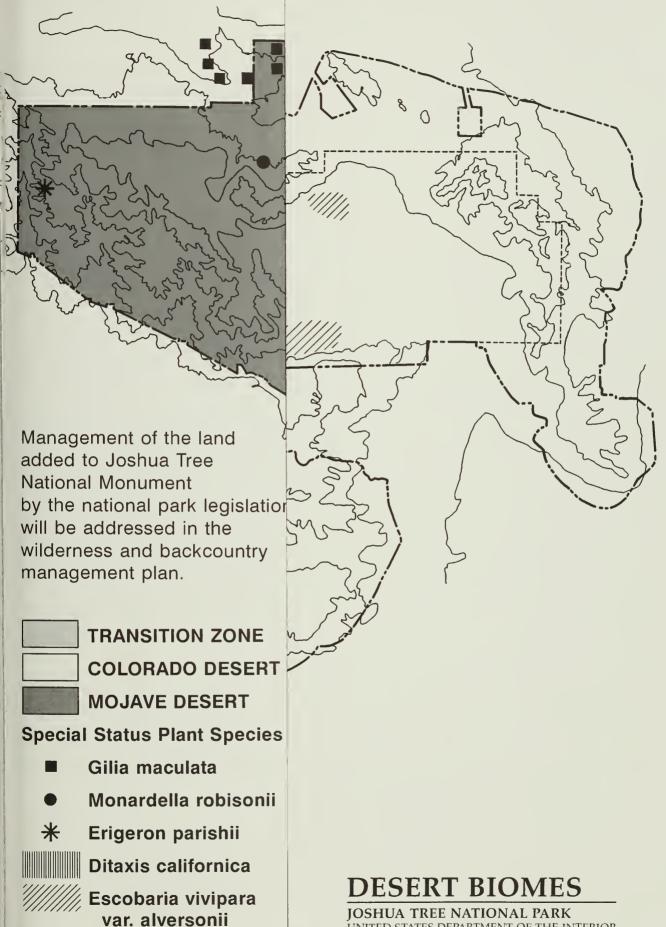
The variety of vegetation in the area is because of the differences in topography, elevation, and gradient. It is estimated that more than 850 plant species live in the park (Adams 1957).

Below 3,000 feet, the Colorado Desert (or low desert as it is sometimes called) is dominated by creosote bush, mesquite, yucca, ocotillo, and other species of cactus. Whenever moisture conditions are favorable, cat's claw, palo verde, and desert willow may also appear. In Pinto Basin, creosote bush, white burroweed, several species of grass, and many species of cactus grow. Occasional sand dunes or basins of loose sand provide a rare habitat in this desert, most often dominated by annual grasses following spring rains.

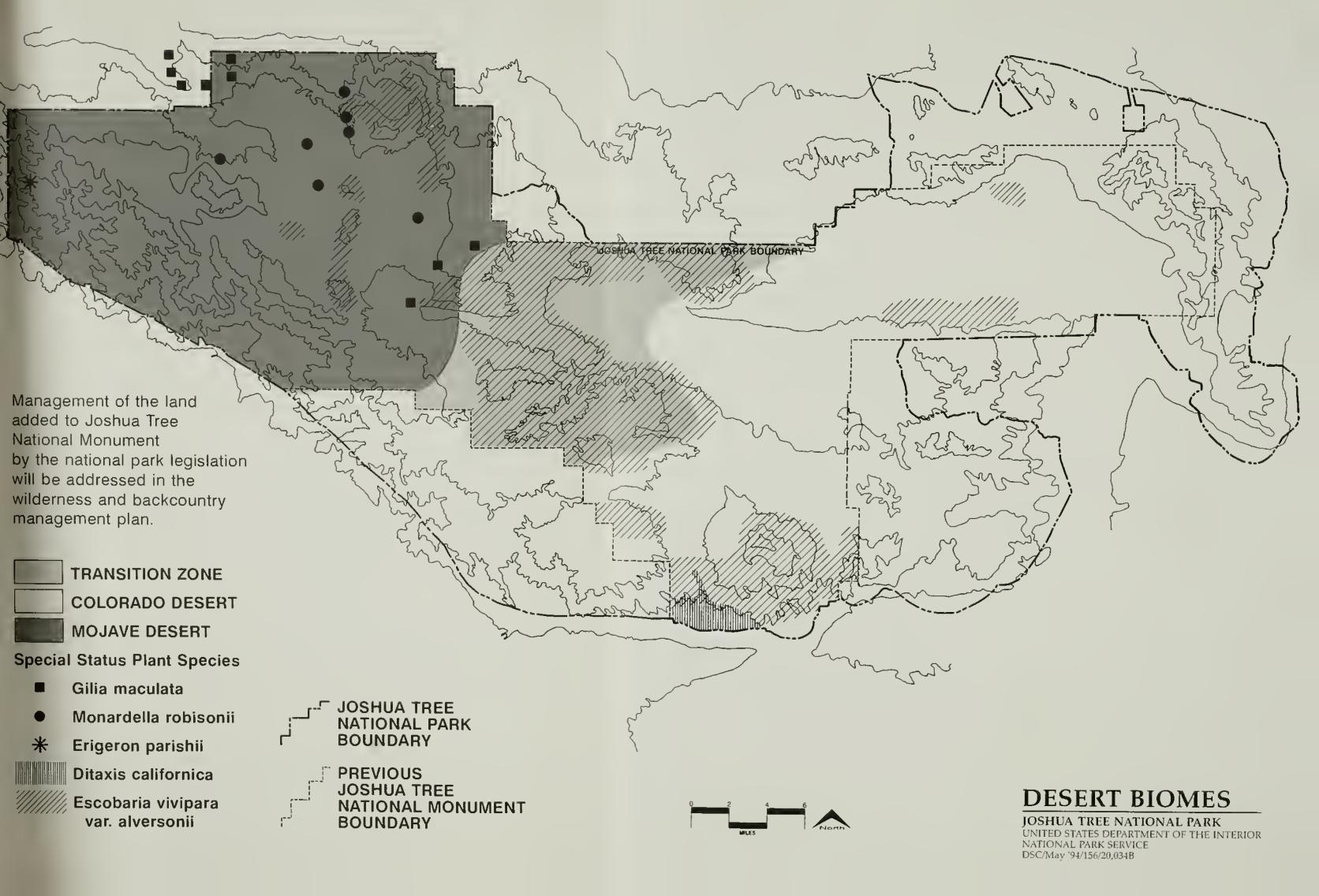
Above 3,000 feet three basic vegetation associations have been classified (Holland 1986) — *Mojave Mixed Steppe*, Joshua trees, galleta grass, needle grass; *Blackbrush Scrub*, blackbrush, Mojave yucca, Joshua tree, California juniper; and *Mojavean Pinyon/Juniper Woodland*, piñon pine, scrub oak, California juniper.

The Mojave Desert is more biologically diverse than the Colorado Desert, probably due to greater amounts of precipitation. In the Mojave mixed steppe, densities of Joshua trees vary dramatically. The thickest forests are in the Covington Flats, Lost Horse, and Queen Valley planning units.

The transition zones between the two deserts provide for increased biodiversity. They are typically dominated by common shrubs such as desert senna, bladder pod, jojoba, desert mallow, paper bag bush, encelia, vigueria, white ratany, and four-o'clock. Other shrubs found in these areas include jimsonweed and coyote melon. After adequate rainfall the deserts can be transformed by colorful wildflower displays — including extensive areas of Bigelow



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coreopsis, sand verbena, phacelia, evening primrose, blazing star, pincushion, chia, and others. Fan palm oases also appear in the park, primarily in the Colorado Desert portion in the Cottonwood planning unit. A few groves are in the southwest portion of the Mojave, close to Indian Cove and the headquarters at Twentynine Palms.

#### WILDLIFE

Large mammals in the park include the desert bighorn sheep, mule deer, and mountain lion. Bobcats are common in the western portion. Many small mammals also live in the park. It is estimated that approximately 350 vertebrate species inhabit the park. The most common are mouse and wood rat species, white-tailed antelope ground squirrel, chipmunk, coyote, black-tailed rabbit, and two species of fox. Approximately a dozen species of bats inhabit the park. Invertebrates are also common, but little has been done to systematically inventory them. Two poisonous species of invertebrates are found — the black widow and brown recluse spiders. Another common spider is the nonpoisonous tarantula. Scorpions in the park range up to four inches long and are among the less toxic varieties. Various centipedes, millipedes, and ticks can be found along with a multitude of other insects, including ants, dragonflies, beetles, and wasps.

Although several amphibians are known regionally, only the red spotted toad and the California tree frog have been reported. Of many small lizards present, the side-blotched is the most common. Additionally, there are two horned lizards and 12 other species. There are 19 known species of snakes in the park.

Large numbers and varieties of birds (more than 270 different species) live in or fly through the park, which is adjacent to a major migratory flyway in the Coachella Valley. During stormy weather many areas are critical stopover sites for species such as loons, herons, egrets, grebes, and avocets. Birds most commonly seen in the unit are the Gambels quail, black throated sparrow, scrub jay, common raven, road runners, and several wrens. Additionally, the park hosts both summer and winter migratory species. The oases seem to be important stopping places on the western flyway and have semiannual visits of large numbers of turkey vultures.

#### SPECIES OF SPECIAL CONCERN

Appendix C includes a list from the U.S. Fish and Wildlife Service of endangered, threatened, and candidate species that may exist in Joshua Tree National Park. The species listed below are known to occur. Additional listed species are included below that are not on the U.S. Fish and Wildlife Service list but are known to exist in the park.

#### Vegetation

The Joshua tree (*Yucca brevifolia*) is fairly common at elevations ranging from 2,000 to 5,000 feet in the Mojave Desert. Its distribution is so closely associated with the Mojave that it has been used to define the boundaries of that desert. Although common throughout the Mojave, environmental conditions for the optimum development of Joshua trees seem to be best in

the park, where they reach their greatest size. The largest Joshua trees are estimated to be 500 to 700 years old. There are about 5.5 million Joshua trees in the park. Although not listed, this species is of special concern since the Joshua trees are a major part of the park experience.

One plant species is listed as category 1 and is being considered for listing as a threatened or endangered species by the U.S. Fish and Wildlife Service. One species is proposed as endangered. Two plant species are currently listed as category 2, waiting for more data before a determination is made whether to list them or not. These species are:

- Little San Bernardino Mountain Gilia, *Gilia maculata*, category 1, found in washes (Quail and Panorama Heights washes)
- California ditaxis, *Ditaxis californica*, category 2, found on alluvial fans south of the Eagle and Cottonwood Mountains
- Rock pennyroyal (Robison's monardella), *Monardella robisonii*, category 2, found in quartz monzonite outcrops in Wonderland of Rocks
- Parish's daisy, *Erigeron parishii*, proposed endangered, found on rocky outcrops, often in limestone

There are eight known state-listed plant species and subspecies in the park. None of the plants, federally or state listed, are known to be in any developed areas. Complete surveys for sensitive species would be completed prior to any design or construction.

Oases contain fan palm species unique to the California Desert. Although small, the fan palm oases contain large numbers of plants that are found nowhere else in the park.

#### Wildlife

Threatened, endangered, rare, and sensitive species in Joshua Tree National Park are listed below. They are listed with their classifications: FT — federally listed "threatened," FPT — federally proposed threatened; FSS — federal sensitive species; Category 2 — proposed by U.S. Fish and Wildlife Service for listing but needs more information; or CSC — California Species of Special Concern

- Desert tortoise (Mojave Desert population), *Gopherus (=Xerobates Scaptochelys) agassizii*, FT, FSS, ST
- Chuckwalla, Sauromalus obesus, category 2
- Colorado Desert fringe-toed lizard, Uma notata notata, category 2, CSC
- Flat-tailed horned lizard (known to exist within 5 miles of the park), *Phrynosoma mcallii*, FPT, FSS
- Prairie falcon, Falco mexicanus, CSC
- California horned lark, Eremophila alpestris actia, category 2, CSC
- Eagle Mountain scrub jay, Aphelocoma coerulescens cana, category 2, CSC
- Loggerhead shrike, Lanius Indovicianus, category 2, CSC
- Palm Springs little pocket mouse, Perognathus longimembris bangsi, category 2, CSC
- American badger, Taxidea taxus, CSC
- California leaf-nosed bat, Macrotus californicus, category 2, CSC
- Pallid bat, Antrozous pallidus, CSC
- Townsend's western big-eared bat, Plecotus townsendii townsendii, category 2, CSC

- Greater western mastiff bat, Eumops perotis californicus, category 2, CSC
- Mountain quail, Oreotyx pictus, category 2

Of the species listed, the Mojave Desert tortoise is known to be in areas of proposed development. Surveys for all listed species would be completed prior to design or construction.

The Mojave Desert population of the desert tortoise (*Gopherus agassizii*) was federally listed as threatened by the U.S. Fish and Wildlife Service in April 1990. It is estimated that more than 50% of the park is desert tortoise habitat. The park's population is estimated at approximately 12,700 animals (Karl 1988).

Prior to the listing of the tortoise in 1990, two surveys were completed to determine tortoise locations and densities throughout the park. Recent surveys by park staff have found that the tortoise is more widespread and densities in some areas are higher than previously thought.

In 1991 the staff established four permanent trend plots, each one kilometer square. A fifth was established in 1994. Each site is visited at least 10 times per season (one day per week). More than 400 tortoises have been marked and their age, sex, weight, and location have been recorded.

In 1992 a desert tortoise survey along the road corridor from the Quail Springs intersection to the Geology Tour Road intersection was completed. This study entailed tortoise populations that might be affected by road reconstruction and other projects. Results indicated that few tortoises live in the surveyed area. Of the 80 transect lines walked, 62 had no tortoise sign. Very little sign was found in the remaining 18 transects, indicating low densities. Two of the locations showed fresh tortoise sign. The study failed to prove an effect from road use. The study concluded that the area was not very densely populated by tortoises and that road reconstruction could proceed. A more intense study in 1993 of a 500-square-meter area west of Hidden Valley confirmed low tortoise density.

Tortoise densities range from zero in rugged mountain areas to 240 per square mile in the Pinto Basin. Most areas in the park do contain tortoises.

#### WATER RESOURCES

Groundwater follows zones of least resistance along deeply fractured rock masses and deep loose gravel. There are very few known water tables near the surface. Rainfall is inadequate to recharge underground water. Surface water flows off without percolating back into the aquifer. By far the largest amount of groundwater is in Pinto Basin, one of the extensively alluvial valleys underlying the eastern portion of the park; it has been estimated by the U.S. Geological Survey that this basin could yield 300,000 acre feet of water from the upper 100 feet of the saturated zone.

Naturally occurring water is rare in the park. There are over 120 known water sources in the park, including springs, wells, seeps, and one short perennial stream. Flows from springs and seeps range from seasonal dampness to about seven gallons per minute. The majority of the springs flow from fractures and joints in the igneous and metamorphic basement complex,

and appear to be supported by local aquifers. Past monitoring indicates that discharge at some springs is decreasing, and compared to historic accounts surface water has decreased significantly from 50 years ago. The cause is uncertain and may be attributable to climate changes, changes in vegetation, sampling error, water pumping and use, or natural variation.

Several oases, encircled by California fan palms, are found in the park and provide a dramatic contrast to their surroundings. They symbolize the importance of water in shaping the landscape and sustaining life in the desert.

Three artificial impoundments — Barker Dam, Cow Camp, and Keys Lake — contain significant amounts of water most years. These are considered historic features that were constructed to supply water for ranching. Barker reservoir is drained periodically in order to get rid of goldfish introduced by visitors. Populations of native and introduced waterfowl and other wildlife have developed around the reservoirs.

## **Floodplains**

Floods and flash floods occur in all of the drainages in the park. Surface flows in most drainages only result from heavy precipitation and last only a few hours or days. Though most visitor facilities (with the exception of headquarters) appear to be outside major floodplains, no formal studies have been conducted. Numerous flood-prone drainages cross park roads. Future road designs must consider the drainages and must not disrupt the natural water and sediment transport capabilities of these channels. Flow is so infrequent that interruptions of traffic are rare.

Headquarters and the Oasis of Mara are on an alluvial floodplain with numerous scattered channels. The flood hazard has not been formally evaluated. It is assumed to be somewhat mitigated by surrounding roads and other development that disrupt surface flow patterns.

## Wetlands and Riparian Habitats

The park has very few wetlands. The wetland habitats are associated with the five oases. Lack of defined trails and heavy visitor use around the Cottonwood Oasis have resulted in damage to vegetation, soils, and the spring. There are riparian areas in Smithwater Canyon and near the historic dams at Keys Ranch, Cow Camp and Barker Reservoir. Some springs support prolific vegetation but with little or no surface water.

## Water Rights

California recognizes surface rights based on the doctrine of prior appropriation and the riparian doctrine. For groundwater, California recognizes both correlative and appropriative rights. In addition, the federal reserved right doctrine applies to federal reservations. These rights potentially apply to any or all of the 120 known water sources in the park.

Under the doctrine of prior appropriation, the entity that first diverts water for beneficial use has the prior right to use the water. As of December 19, 1914, exclusive means of making an

appropriation was by permit from the California Water Resources Control Board. The requirement for a permit is applied to surface waters of subterranean streams flowing in known or definite channels. Under the riparian doctrine, riparian rights were subject to the doctrine of reasonable use, which limits all rights to that quantity reasonably required for beneficial use. Water must be used on the land bordering the stream and may not be diverted out of the watershed.

The federal government may also hold reserved rights, which arise from the purposes for which the land is withdrawn. When the federal government reserves land for a specific purpose, it also reserves, by implication, enough water unappropriated at the time of the reservation as is necessary to accomplish the purposes for which Congress or the president authorized the land to be reserved, without regard to the limitations of state law.

Percolating groundwater is not under the jurisdiction of the California State Water Control Board. The owner of the land overlying groundwater has the first right to withdraw water for reasonable beneficial use on its overlying land. No permit is required.

The extent of water appropriation in areas adjacent to the park will not be known until the rights in these areas are adjudicated. Water for visitors and administrative use in the headquarters area is supplied by the town of Twentynine Palms. The town of Joshua Tree provides water for administrative uses in the Indian Cove area. Water for Lost Horse ranger station and Cottonwood Springs is provided by NPS-owned wells.

## Water Quality

Ground and surface water appears to be unaffected by water use outside the park since the majority of the land is at a higher elevation than its surroundings, and no water flows in from outside sources. There have been documented increases in metal contaminants in ephemeral pools created by seasonal rainfall. This is probably due to an increase in airborne pollutants.

#### AIR QUALITY

The park has been designated as a class I airshed by the Clean Air Act of 1977. This classification allows the least incremental increase in air pollutants of all classes. The Clean Air Act (section A) also gave the National Park Service substantial responsibility for the prevention of any future damage to air quality and for remedying any existing impairment to visibility in mandatory class I federal areas resulting from human-caused pollution.

Air pollution is detectable on most days. Summer months have the worst levels, and visibility is frequently impaired. During the winter air quality is generally good when the prevailing air flows are not from the Los Angeles basin. The Little San Bernardino Mountains can form a barrier to the air pollution from Los Angeles with pollutants filtering in from southwest to northeast. Very small amounts of air pollutants are generated in the park and are primarily from automobiles and dust. Automobile exhaust and the emissions from diesel generators contribute only minor amounts of pollutants. Vehicle traffic on the dirt roads is very light and does not contribute significantly to reduced visibility.

National air quality standards for ozone have been exceeded in the park, especially during summer months, and air pollution damage to plants in the biomonitoring garden have been documented. Besides existing air pollution sources, new sources outside of the park, such as landfills and electrical power plants, have been proposed by private developers.

Joshua Tree National Park contains several critical desert vistas, such as the 360° panorama from Ryan Mountain. Many subtle earth colors are displayed in the desert, and plants have adopted subdued photochemical colorations, exchanging dark greens for grays and browns.

The park has excellent star gazing because of the clear desert air and lack of artificial light.

Standard visual range averages 50 miles and is highest during winter, lower during fall and spring, and lowest during the summer. While natural levels of desert haze associated with fine dust particles is frequently mentioned in historical literature, there is little doubt that most visual degradation has taken place in the past decade.

#### THE CULTURAL ENVIRONMENT

#### **ARCHEOLOGY**

The Joshua Tree area has been the focus of sporadic archeological investigations for over 60 years, but the sequence of prehistoric human occupations is still imperfectly understood. Fluted projectile points of the Paleo-Indian period have been found elsewhere in the region. These artifacts are thought to be associated with a tradition of big-game hunting that may date back to 9000 B.C.. Artifacts of a slightly later period, the Early Archaic, which include those of the Dieguito and Lake Mohave complexes, were also found in the region. There may be evidence at Joshua Tree National Park of Paleo-Indian or Early Archaic occupations. Good evidence exists of human occupation in what is now the park during the Middle and Late Archaic periods, which together range from about 3000 B.C.. to A.D. 1100. Artifacts of the Pinto complex dating from about 3000 B.C., such as Pinto projectile points, are well known by archeologists. They come from the Pinto Basin type site and from other sites in the park. Type sites are those with distinguishing characteristics of an identified and defined cultural complex. Patayan occupation or influence from the lower Colorado River region, associated with brown and buff ceramics, may have begun as early as A.D. 750 in what is now the park. Fitting the archeology into categories like "Middle Archaic" or "Patayan" assumes significant changes in lifeways, economy, and social organization. A more useful model is the "Desert Culture" or "Desert Archaic," an early, successful, and long-lasting adaptation to desert living. This mode of living is presumed to have been characterized by small, mobile bands and by participation in a mixed hunting and gathering economy. Although milling equipment, the bow, ceramics, and perhaps even horticulture were added to the culture over time, the basic configuration of the culture may have remained relatively stable.

After about A.D. 1000, occupation of the park area increased considerably, judging from the frequency of sites that date within the last thousand years. At the time of European contact, the boundaries of three American Indian groups — the Cahuilla, Chemehuevi, and Serrano — intersected at points now in the park. The descendants of these Indian groups continue to live in the area and have cultural interests in the park.

#### HISTORY

Exploration, cattle raising, homesteading, and mining shaped what is now Joshua Tree National Park. The first European to enter the area was a Spanish army officer, Pedro Fages, commander of California's Spanish forces, who described the "date palms," probably Joshua trees, which he saw as he crossed the Mojave Desert in 1772. More Spanish expeditions in the area took place in 1774 and 1776. The southern periphery of the present park was briefly explored from December 1823 through January 1824 by Captain Jose Romero, representing the government of Mexico, who was dispatched to find and evaluate for overland travel the east-west Cocopa-Maricopa Trail from San Bernardino to the Colorado River. This route of the Cocopa-Maricopa Indians was one of the major pre-European contact Indian trails in the area. Another such trail was the Mojave, located farther north, which also extended from San Bernardino to the Colorado River, connecting with north-south trails along both banks of the river.

Jedediah Smith made an overland journey to California in 1826. He was a fur trapper with the Rocky Mountain Fur Company who visited the Mohave Indian villages along the Colorado River and then trekked westward over the Mojave Indian Trail toward the Pacific Ocean. There were a few other early expeditions in the 1830s and 1840s. During the gold strike of 1849 gold seekers from the east passed through on their way to central California.

In 1865 the first mining claim was filed in the present park. It was for the Jeff Davis Mine in Rattlesnake Canyon. Mining, mostly for gold, continued in and near the park into the 1960s. Mining over the years added adits, diggings, shafts, equipment, structures, and roads to the landscape. It also added sources of water — wells were dug or pipelines constructed from water sources to process the ore. Approximately 2,000 shafts or other diggings remain.

The first attempts at cattle raising took place in the area in the early 1860s in the Mojave where stockmen grazed large numbers of cattle in the desert in the winter and along the river or wash bottoms in the summer. The high desert had reliable grazing; the galletta grass and succulent saltbushes provided good browse in the winter and spring. The first stockman to graze his cattle in what is now the park apparently was Oliver Smith, whose Texas longhorns grazed in the vicinity of Quail Spring from about 1870 to 1876.

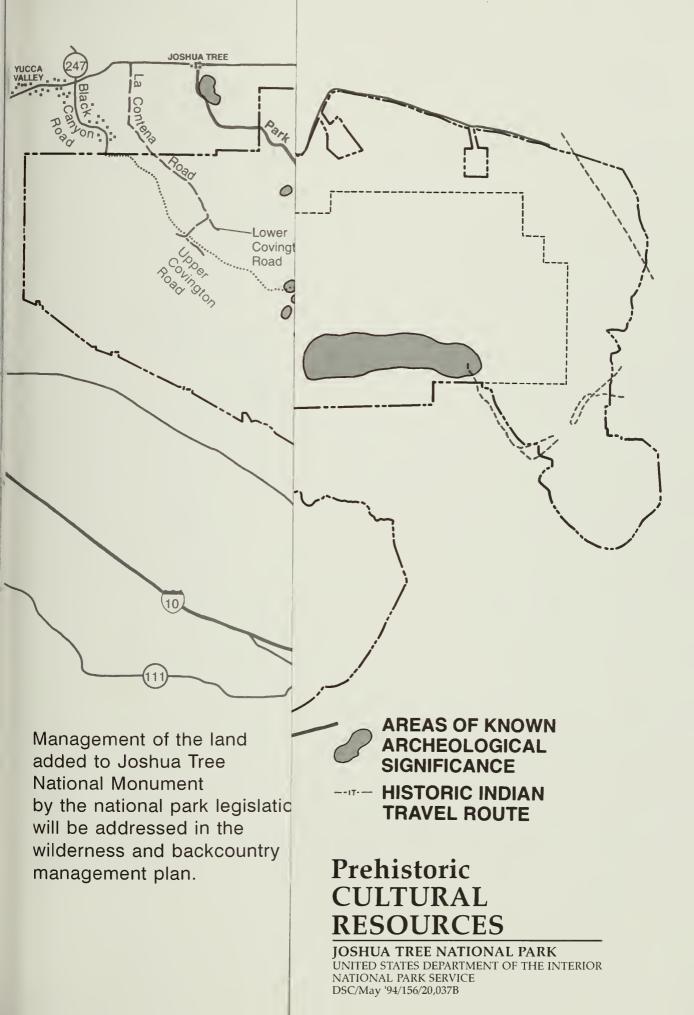
Cattle raising peaked during the 1920s, about the time that homesteading was getting started in the area. It continued at least through the 1940s and may have lasted longer. William F. Keys (1879–1969), who was an entrepreneur, miner, and rancher, lived most of his life on the homestead known as Keys-Desert Queen Ranch. He is known to have maintained a cattle herd of about 100 head into the early 1940s. He stayed on the ranch until his death in 1969 and may have had some cattle into the 1960s.

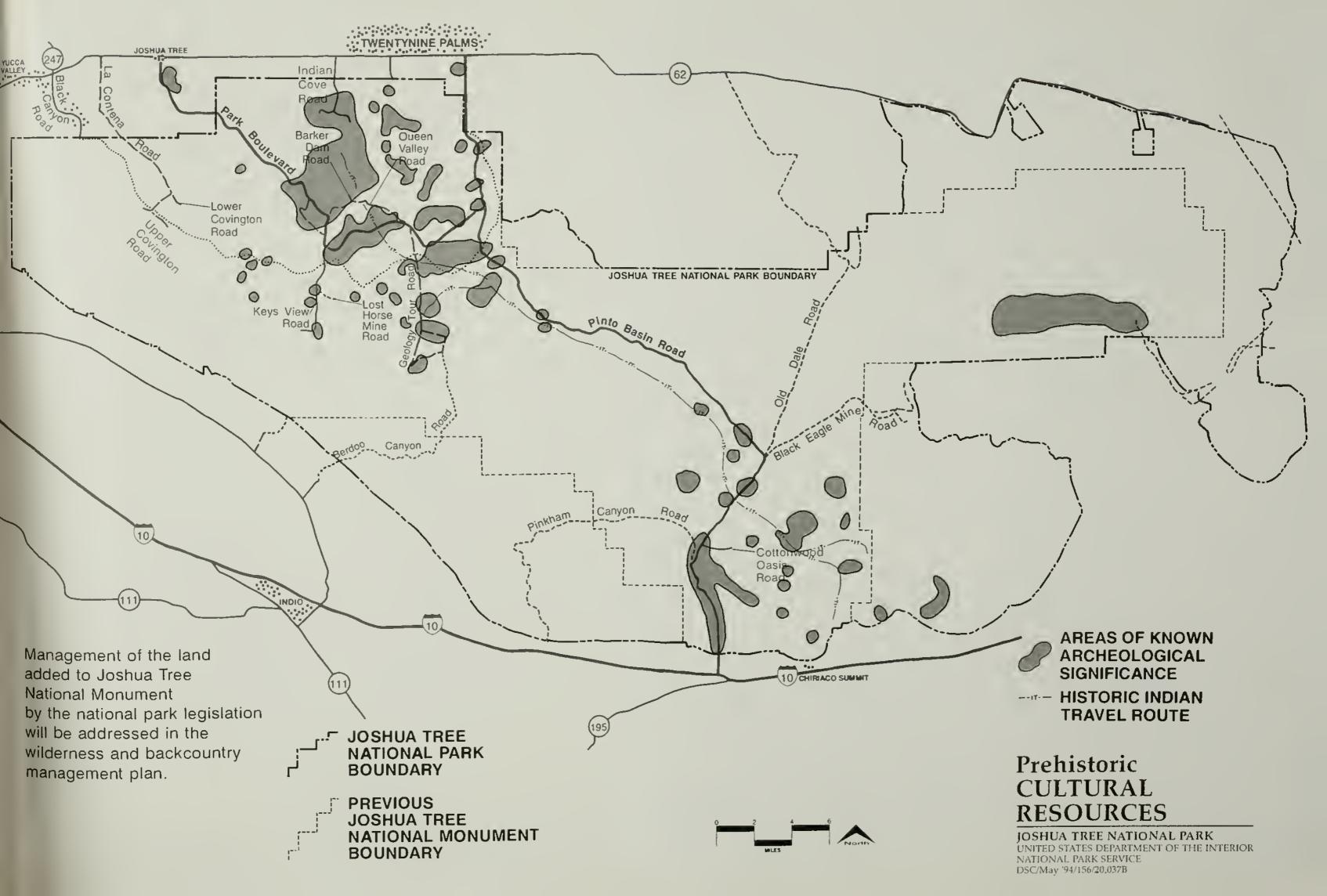
Cattle raising (which included open-range grazing, ranching with corrals and fences, and even some rustling in the hidden canyons and valleys) brought dams, reservoirs, and wells plus buildings and other structures that often revealed a highly individualistic, entrepreneurial adaptation to the desert. Evidence of ranching remains at several sites, including Keys-Desert Queen Ranch.

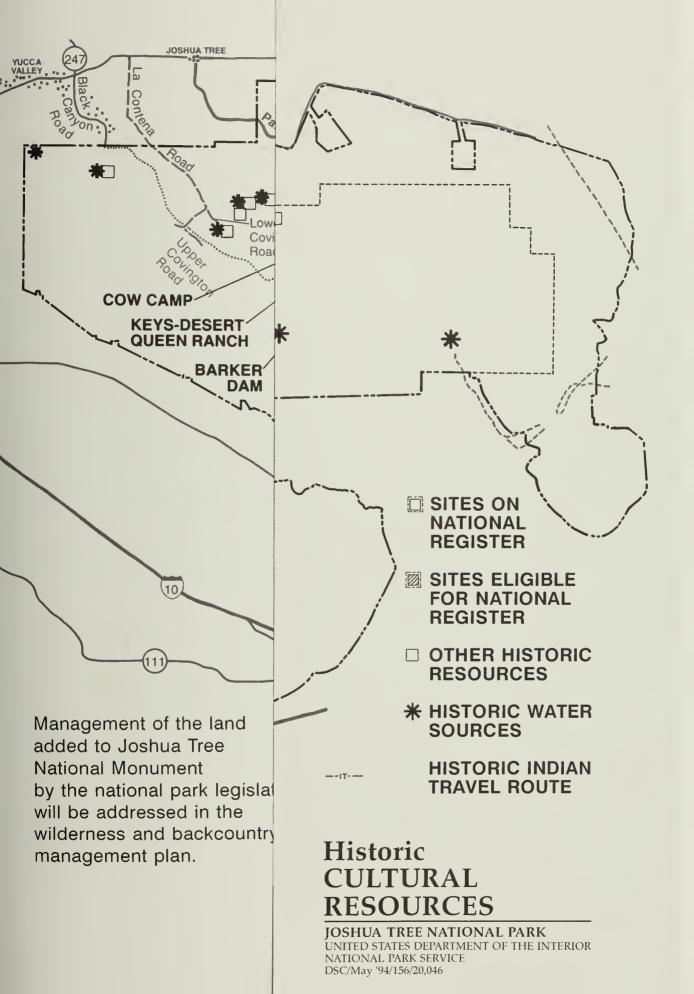
#### **ETHNOGRAPHY**

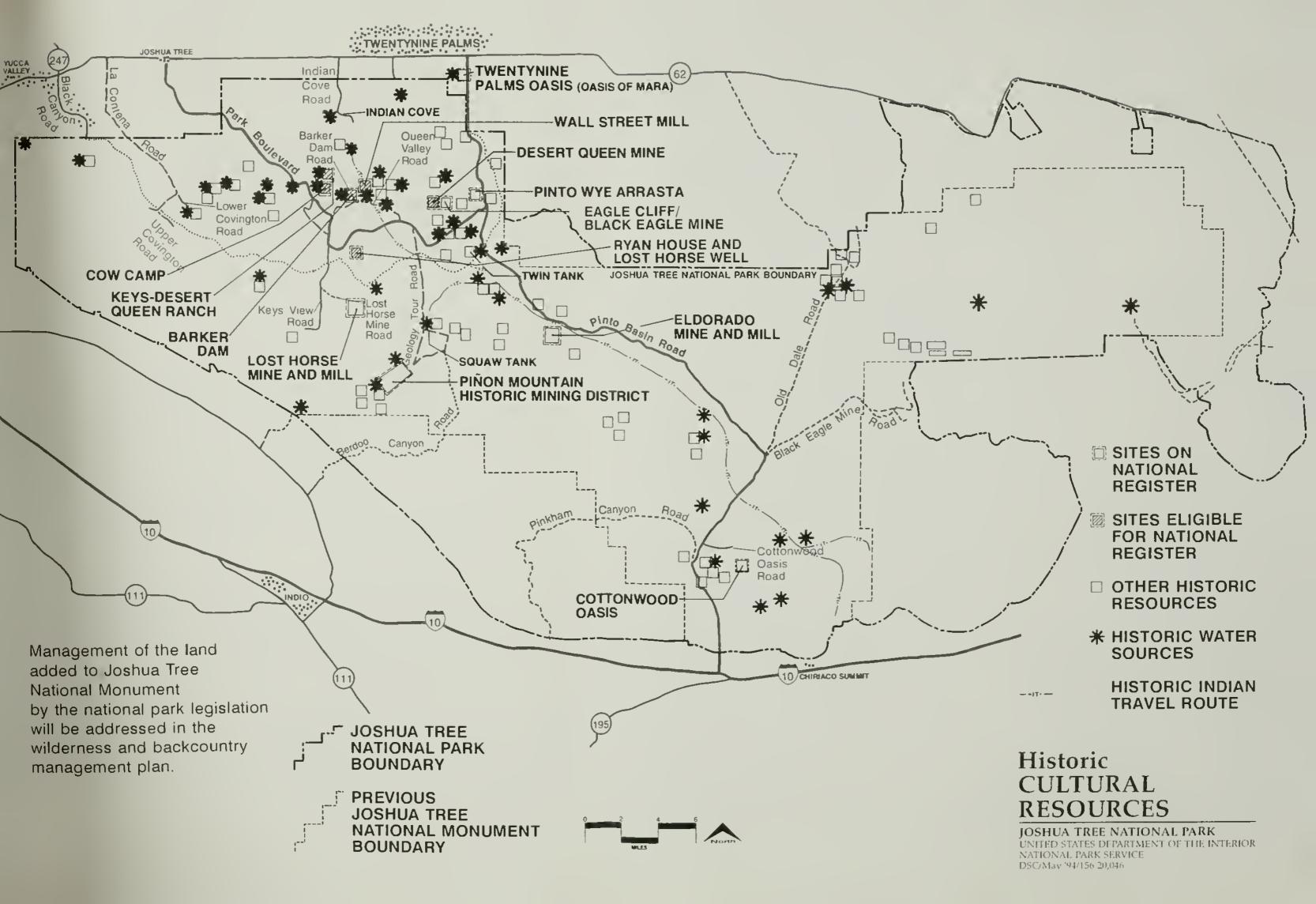
The ethnography and ethnohistory of Joshua Tree National Park involve the traditional life and cultural history of three American Indian groups who lived in the area at the time of European contact. The territories of these groups — the Cahuilla, Chemehuevi, and Serrano — met at a point now in the park. They were mostly hunters and gatherers, although each group also practiced some horticulture. Other groups such as Mohave and Maricopa traders east of the park regularly passed through on treks back and forth to the coast.

The Cahuilla, Chemehuevi, Mojave, and Serrano tribes maintain strong interests in the park. The Agua Caliente Band of Cahuilla Indians, the Cahuilla Tribe of the Morongo Indian Reservation, the Fort Mojave Indian Tribe, the Chemehuevis and Mohaves of the Colorado River Indian Tribes, the Serrano Tribe of the Morongo Indian Reservation, and the Twentynine Palms Band of Mission Indians are in regular contact with the park. They want to gather traditional plants for food, medicine, and personal (not commercial) crafts; meditate and pray in a sacred area; or study the archeological and ethnographic artifacts in the









Campbell Collection and other park collections to confirm more of their heritage and to pass it on to young people.

## **ARCHEOLOGICAL SURVEYS AND HISTORICAL STUDIES**

There have been about two dozen archeological surveys conducted in the park, ranging from the early exploratory work in the 1920s and 1930s to more recent small scale, development-oriented surveys. A recent survey of 75 miles of road corridor provided a lengthy transect of the various environmental zones of the park (Ervin 1985). Still, less than 10% of the park has been surveyed systematically to modern standards. As of 1989 about 250 archeological sites had been recorded.

Numerous historical studies have been completed.

## **Types of Sites**

Archeological sites of all periods tend to be small and usually are not obvious. Most frequent are the remains of small campsites. These are found often as eroded open sites, more rarely as buried open sites — such as the remains at the Oasis of Mara — and occasionally as rock shelter sites. Sites are marked by scatters of chipped stone, ground stone, and infrequent ceramic sherds. There may also be small rock rings, rock alignments, cairns, bedrock mortars, and grinding slicks. The presence of "midden" or dark, organic, and artifact rich deposits has been noted. A considerable amount of rock art has been recorded in the park. Artifact caches, remnant trails, and quarries of chippable stone are occasionally found.

In addition to prehistoric sites, historic Euro-American sites, including ranches, homesteads, and mines, probably have archeological components. These are likely to include trash dumps, buried structures, unrecorded features, and other aspects needing archeological investigation.

## National Register Status

Six historic period sites have been placed on the National Register of Historic Places: Barker Dam, Cow Camp, Desert Queen Mine, Keys-Desert Queen Ranch, Ryan House and Lost Horse Well, and Wall Street Mill. Twentynine Palms Oasis (the Oasis of Mara) as an archeological and historical site and six additional historical sites have been formally determined eligible for the national register: Cottonwood Oasis, Eagle Cliff (Black Eagle) Mine, Eldorado Mine and Mill, Lost Horse Mine and Mill, Pinyon Mountain Historic Mining District, and Pinto Wye Arrastra.

Barker Dam is a stone and concrete dam built across a natural tank of water to impound rainwater for cattle. It was begun in the early 20th century and expanded later. It became part of the homestead holdings of William F. Keys (1879–1969) and was "a vitally important permanent water hole in [what became] Joshua Tree National Monument" (Greene 1983).

Cow Camp consists of ruins of buildings and a curved concrete dam built by William F. Keys in the late 1940s as a water source for cattle. A well was dug earlier by others in the late 19th century. The site is important as part of a theme of agriculture in relation to livestock raising.

The Desert Queen Mine is a late 19th century gold mine that was owned by William F. Keys in the early 20th century. Remains include tunnels, shafts, and adits plus a stone building and some foundations of structures. The mine "is said to have produced several million dollars. The first production was reported in 1895 and the last in 1941" (Greene 1983).

Keys-Desert Queen Ranch was the 20th century homestead of William F. and Frances Lawton Keys. The ranch house — including the house itself and several related structures as well as a "concrete dam northeast of the ranch house [that] stored water from seepage and rainfall" (Greene 1983) — was the headquarters of horticultural, livestock, and mining operations. This property epitomized the Euro-American subsistence and entrepreneurial way of life in the California Desert during the late 19th century and the early and middle 20th century in what became Joshua Tree National Park (Greene 1983). Many artifacts remain from Keys-Desert Queen Ranch. They are part of the park's collections and could be used for onsite display, consistent with the concept of preservation for interpretation. Volunteers have been identified for equipment demonstrations.

Ryan House and Lost Horse Well reflect a cattle raising and mining complex of the late 19th and early 20th centuries. It is typical of the subsistence and entrepreneurial ranching and mining operations of the California desert. Jepp and Tom Ryan built the adobe ranch house, whose walls are still standing, about 1896. The site is also important in the administrative history of the park because it served as the residence and headquarters of District Ranger Matt Ryan during the late 1930s and early 1940s.

Wall Street Mill is a cattle-watering and ore-milling site that was active from 1896 to the 1960s. It was bought by William F. Keys in 1930. In 1933 he moved a two-stamp mill there. The two-stamp mill "was first made in Los Angeles for E. Holland and Company by the Baker Iron Works about 1891" (Greene 1983); it is still in place.

Cottonwood Oasis is an important natural water source that apparently has been known to Euro-Americans since the mid 1880s. It served mines on the north and east side of the Pinto Basin as well as cattlemen in the area and freighters and travelers passing by.

Eagle Cliff (Black Eagle) Mine is a gold mine with stone ruins, a roofed rock-sheltered cabin, and other associated rock shelters used for mining activities plus a blacksmith site. Its peak period was from the late 19th century to the first third of the 20th century. It was owned by William F. Keys, and ore was processed at his Wall Street Mill.

Eldorado Mine and Mill is an early 20th century gold mine that produced silver and molybdenite up until World War II. Remains include shafts, mine workings, cast iron and concrete vats, machinery remnants, mill and mining campsites, some stone foundations, and the ruins of three buildings.

Lost Horse Mine and Mill had to do with gold mining from the 1890s through the 1930s. A "ten-stamp mill was erected at the Lost Horse Mine by the Lost Horse Mining Company soon after 1897. Water to run the plant was piped in from Lost Horse Spring and from several wells near the spring site" (Greene 1983). Much of the mill is intact.

Pinto Wye Arrastra is an outstanding example of a relatively large engine-powered, wagon-wheel arrastra that is important in the region "as the only wagon wheel arrastra yet found possessing integrity of location and construction" (Greene 1983). It is in excellent condition, and its period of activity seems to have been the early to mid 20th century.

Pinyon Mountain Historic Mining District consists of several mines and mills that operated from the late 19th to mid 20th centuries. Distinctive features include the shafts of the Pinyon Mine, which are lined with piñon logs representative of "a type of early shaft construction prior to the time milled planks and beams became accessible" (Greene 1983).

Twentynine Palms Oasis (Oasis of Mara) has been an important natural water source and area of settlement, known traditionally to indigenous tribes such as the Serranos and Chemehuevis. They shared a reservation there through the early 20th century. Reservation land remains in the area that belongs to the Twentynine Palms Band of Mission Indians, although they do not reside there but in the greater park area. Euro-American habitation in the oasis vicinity began in the 1870s.

No sites or districts that are solely archeological have been formally determined eligible for the national register. It has been suggested that all known sites should be considered eligible, but that formal determination and nomination should wait until further information becomes available. The data gathering is underway.

Nearly all sites recorded since 1970 have been assessed as eligible by project archeologists. For example, five out of the seven cremation sites excavated in the early part of this century have been evaluated as potentially eligible. These sites are associated with the repatriation of American Indian human remains that took place in the park.

A site in the general vicinity of Cottonwood Canyon and Cottonwood Springs is in pristine condition because of its isolation. It has circular earthen depressions for dwellings and storage structures as well as a host of surface artifacts. Apparently this habitation site functioned as a village or extended encampment during the protohistoric or historic period. The site possesses a great depth of time, and excavation has the potential of yielding much additional archeological information. This site is an outstanding example of the archeological potential of the park and should be considered for the national register. All archeological sites in the absence of evaluation must be treated as if eligible for the National Register of Historic Places.

Preliminary ethnographic evidence suggests that one particular location in the park may be a sacred site. Chemehuevi use of the site for prayer and meditation was observed in 1991 (Schneider 1992). The spur of the Mojave Desert and Colorado Desert Indian Trail leads directly to the site, as indicated on the cultural resource maps. All such sites are possible traditional cultural properties. In the absence of evaluation they must be treated as if eligible for the national register.

Park Boulevard, Keys View Road, Indian Cove Road, and Pinto Basin Road are all considered ineligible for the national register because of integrity problems. These roads generally follow the corridors and in some cases parallel or overlay historic mining, cattle-related, or stage and freighting transportation routes. They also may represent road segments adapted for vehicle use during the early 1940s. However, they have been paved, realigned, widened, and otherwise converted for use as circulation roads. The principal paved roads lack historic significance and integrity (Schneider and Warren 1992).

There are other roads that have not been examined, such as the route from Indio through Pushawalla Canyon to mines in the Hexie Mountains and the road to Pinto Wells from the Chuckwalla Valley. As part of the resources management plan, preliminary historical examination will consider nominations for listing on the National Register of Historic Places.

The roads generally accessible to the public have been preliminarily examined for potential eligibility. Eight of the 13 roads examined are potentially eligible (Schneider and Warren 1992). Nomination is appropriate because a formal determination is needed on the historical significance and integrity of the narrow dirt road known as Route 100, or Queen Valley Road, from Park Boulevard to Hidden Valley as an original access route for cattle or mining operations. The other seven represent the numerous dirt, four-wheel-drive roads in the park and should be nominated as follows: (1) Berdoo Road from the Geology Tour Road to the southern boundary, (2) Black Eagle Mine Road, (3) both branches of the Eureka Peaks-Covington Flats Road, (4) the Geology Tour Road, (5) Lost Horse Mine Road, (6) Old Dale Road, and (7) Pinkham Road. These roads are associated with the historic mining, cattle, and stage and freighting operations that took place in what is now the park. They retain much of their integrity as historic transportation routes.

Indigenous subsistence patterns, trails for seasonal migrations, and regional trade are important aspects of the history of the area prior to European contact. The Indian Trail, connecting the Mojave and Colorado Deserts, indicated on two cultural resource maps, is worthy of detailed archeological investigation for national register consideration.

Samuelson's Rocks, in the general vicinity of Quail Spring, should be evaluated for national register eligibility. Around 1927 John Samuelson, a miner and homesteader, chiseled his own sayings on the flat, smooth surfaces of eight rocks in a boulder field. He included comments on economics, evolution, government, nature, and politics. Samuelson's messages are remarkably well preserved and could be significant as historic folk art.

## REGIONAL AND ADJACENT LAND USE

The proximity of Joshua Tree National Park to the Los Angeles metropolitan area and to a large military base generates a steady flow of visitors. The recreational demands of the population of the Los Angeles region are enormous. For people who are subjected to increasing automobile congestion, air pollution, and disappearing open space, the desert offers much in the form of rest and relaxation, fresh air, clear skies, outdoor recreation, solitude, and contemplation. Many return frequently for specific recreational activities. California desert environments have traditionally been viewed as wastelands, and the park has been damaged and abused because many of the visitors are not aware of the fragile nature of the resources.

Counties within a 100-mile radius of Joshua Tree National Park are Los Angeles, Orange, Riverside, San Bernardino, Imperial, and San Diego. These counties contain the major population centers of southern California. According to the 1990 census, the population totalled more than 18 million people and the population is still growing. Over 10 million acres of public land in these counties are available for recreation. The majority are managed by the Bureau of Land Management.

Some land adjacent to the park has been subdivided into small desert communities for homesites. Morongo Valley, which parallels most of the north boundary, is almost completely subdivided into homesteads or desert homesites. Other desert homesites extend along the southwestern boundary along the foot of the Little San Bernardino Mountains. Farther to the south lies the sea level Coachella Valley, an irrigated agricultural area of date palms, vineyards, and citrus groves. The mountainous portions along the boundary are largely in the public domain, where the primary use is vehicle-oriented recreation. Along the eastern boundary in the Eagle, Coxcomb, and Sheephole mountains, there are numerous gold and silver mining claims. The largest group of active mining claims is the Eagle Mountain Mine, owned and operated by the Kaiser Steel Company, which mined iron ore at the southeast corner. The buildings and clearings of small homesteads belonging to mine employees along the northern boundary of the area affect the natural scene, and there is trespass from prospecting and mining activity.

The world's largest landfill is proposed within 1 mile of the boundary. The landfill would use abandoned open mining pits in the Eagle Mountains. Its proximity poses some obvious threats to the adjacent wilderness. Blowing trash, dust, noise, and odors could destroy the fragile setting, and the proximity of this operation presents many less obvious threats to the natural ecosystem. The landfill would accommodate 20,000 tons of refuse each day for more than 100 years. Household trash attracts scavengers such as ravens and coyotes, which can flourish in such a setting. Ravens are known to eat young tortoises; the largest known population of tortoises in the park is within 6 miles of the proposed landfill.

If the landfill is not constructed, the abandoned open pits would continue to attract other development proposals. There is a least one current proposal to fill the pits with water for use in a hydroelectric operation. This type of development could have serious effects on adjacent natural systems by introducing a wide range of nonnative plant and animal species.

#### THE AFFECTED ENVIRONMENT

The world's largest Marine Corps base is nearby. Military overflights from a number of bases already impact the wilderness. Overflights, noise from military training, and night sky light pollution affect the park.

Urbanization and incompatible land uses along the boundary can cause profound deterioration of resources. Examples of these threats include air pollution, groundwater pumping, noise and light pollution, alteration of natural systems along the boundary, and visual pollution of scenic vistas.

#### VISITOR USE

#### **ACCESS AND CIRCULATION**

Access to Joshua Tree National Park is from two major east-west transcontinental arteries. Visitors enter directly from Interstate 10 through the Cottonwood entrance by using the freeway interchange 26 miles east of Indio and travel north 1 mile to reach the south boundary.

Travelers from the west on Interstate 10 leave the freeway at the State Route 62 interchange, 16 miles east of Banning, and travel north and east to Joshua Tree, Indian Cove, and Twentynine Palms. Travel is over four-lane paved highways.

The park is linked to Interstate 40 through Amboy, 50 miles to the north, by paved highway from Twentynine Palms. Travel from the metropolitan Los Angeles area, 150 miles to the west, is over Interstate 10 and State Route 62. This latter route extends eastward to Parker, Arizona, on the Colorado River.

Visitors occasionally enter the park through one of several dirt road entrances, some of which connect with the paved roads in the park. The four paved road entrances account for over 90% of the total visitation, with about 70% using the Joshua Tree and Twentynine Palms entrances.

There are approximately 80 miles of unimproved former wagon trails in the park. Many of these trails have had little or no use in the past 20 years. Washouts from summer storms have obliterated some of the former roads. Management actions in the 1970s closed over 70 miles of roads.

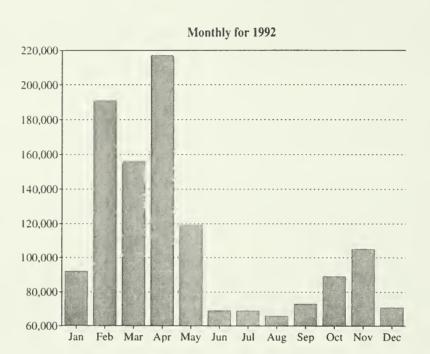
Nearly all transcontinental bus lines provide services to Indio, Palm Springs, and Banning. There is local bus service between Palm Springs, Banning, and Twentynine Palms. Palm Springs Airport has the nearest commercial passenger service. Private and charter planes can land at the Yucca Valley, Twentynine Palms, or Chiriaco Summit airports.

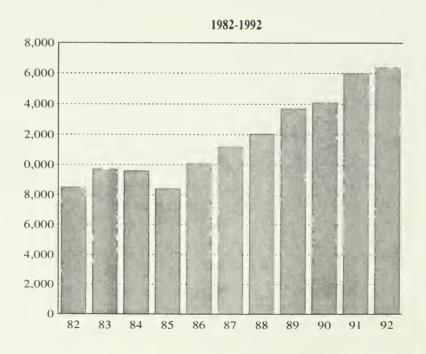
Circulation through the park for public use is over 252 miles of roads; 80 miles of paved and 172 miles of unimproved dirt roads lead the visitor away from the developed areas into the desert. With the exception of about five miles in the Indian Cove, Black Rock Canyon, and Fortynine Palms area on the north edge of the park, all paved roads in the park are connected.

#### **VISITATION**

The deserts of California have incurred dramatic human development in the last fifty years. Increased populations have meant increased visitation. The park is about 120 miles east of Los Angeles. Over 18 million people live in the greater Los Angeles/San Diego area and the population is expanding rapidly. The most recent visitor survey (April 1991) found that 76% of those polled lived in southern California. Approximately half of the Californians are repeat users and the majority of visits are for less than one day.

## Joshua Tree Visitation





Annual visitation passed the 1 million (1,026,430) mark in 1990. About half the annual visitation takes place between February and May.

Increased visitation and inadequate visitor control has had a number of consequences. Roadside damage has resulted from illegal parking, desert vegetation has been destroyed at campgrounds, around parking areas, and along social trails, and the visitor experience has been compromised by conflicting use and overcrowding.

Parking in designated parking areas and along road shoulders in the heavily used areas (see Parking and Pullouts graphic) far exceeds capacity during heavy use periods. Peak season parking demand in these areas has been estimated to be: Wonderland of Rocks area — 430 cars/37 RVs, Cap Rock — 25 cars/2 RVs, Ryan Mountain — 100 cars/10 RVs. Geology Tour Road, Split Rock and Live Oak, and Keys View use far exceeds present capacity.

If visitation continues to increase at near the same rate, the total could reach 3–4 million over the next 10–15 years. However, this growth rate could be heavily influenced by changing economics and the related populations trends in southern California.

#### **VISITOR ACTIVITIES**

Viewing and studying scenery, plants, and wildlife are the primary visitor activities, followed by general recreational activities (hiking, camping, picnicking, rock scrambling), and viewing and studying cultural sites. Joshua Tree is popular with technical rock climbers because of the quality of the climbing and ready access to the rocks and camps. A number of visitors are technical rock climbers, and many other visitors watch the climbers.

The sites visited by the majority of visitors to Joshua Tree are Jumbo Rocks, Cholla Cactus Garden, Hidden Valley, Cottonwood Springs, Oasis Visitor Center and Keys View.

### Frontcountry Experiences

The visitor experience is currently focused on the Mojave Desert section of the park, with the Lost Horse and Pinto Wye planning units most heavily used. The Indian Cove and Covington Flats units are very heavily used by local and repeat visitors. The major paved road (either northwest to south or south to northwest) traverses a cross section of the park's resources. From the northwest (Joshua Tree) entrance, visitors travel through the most scenic portion of the high desert with magnificent stands of Joshua trees. From there visitors move on to the Hidden Valley area to hike, camp, climb, and learn about people from both ancient and recent times who have adapted to this harsh environment. The main tour route has one spur road that takes visitors to Keys View. It has the most outstanding views of valley, mountains, and desert from an elevation of 5,200 feet. From Pinto Wye visitors have the choice of traveling north to the Oasis of Mara to explore the oasis and get information at the visitor center, a side trip that requires backtracking on the route, or south through the transition zone. The Pinto Basin provides a stark contrast with its vast spaces and parched landscape. Visitors may then choose to stop at a palm oasis.

The Oasis Visitor Center is the only place that offers a full range of information and interpretation. Both the facility and the interpretive media are inadequate to meet the curren needs of visitors. Visitors entering from the south (Cottonwood entrance) must travel long distances to reach this facility, usually with little awareness or understanding of the resources they have passed along the way. If they wish to experience both the Mojave and Colorado Deserts, a side trip is necessary. The west entrance (Joshua Tree entrance) is a basic fee collection station with only a few orientation wayside exhibits and a minimum of information and orientation.

There are 14 developed frontcountry trails less than 2 miles in length. Twelve have self-guiding interpretive media. This trail network provides varying levels of discovery opportunities for visitors.

The park has 10 developed campgrounds: Belle has 17 sites, White Tank has 15 sites, Jumbo Rocks has 130 sites, Ryan has 31 sites, Hidden Valley has 39 sites, Indian Cove has 101 sites, Indian Cove has 13 sites, Sheep Pass has 6 sites, Cottonwood has 62 individual sites and 3 group sites, and Black Rock Canyon has 100 sites. Both Ryan and Black Rock campgrounds provide facilities for campers with horses. Ryan, Hidden Valley and other interior campgrounds fill first during heavy use periods. Cottonwood and Black Rock campgrounds are the last to fill.

# Threshold Experiences

A variety of unsurfaced roads (both 2- and 4-wheel drive) provide a totally different experience for those visitors who like to get off the main road. The Queen Valley loop and Covington Flats provide the main 2-wheel-drive experiences. The Geology Tour Road and Old Dale Road presently provide the main 4-wheel-drive experiences.

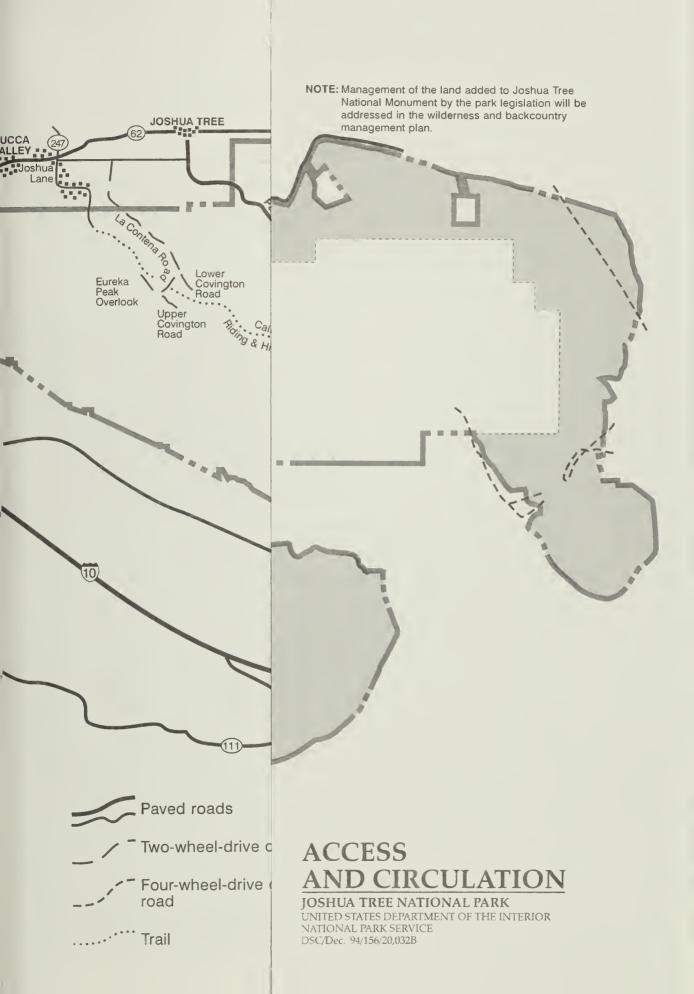
Fifteen hiking trails between 2 and 10 miles in length provide opportunities for exploring resources of the threshold areas.

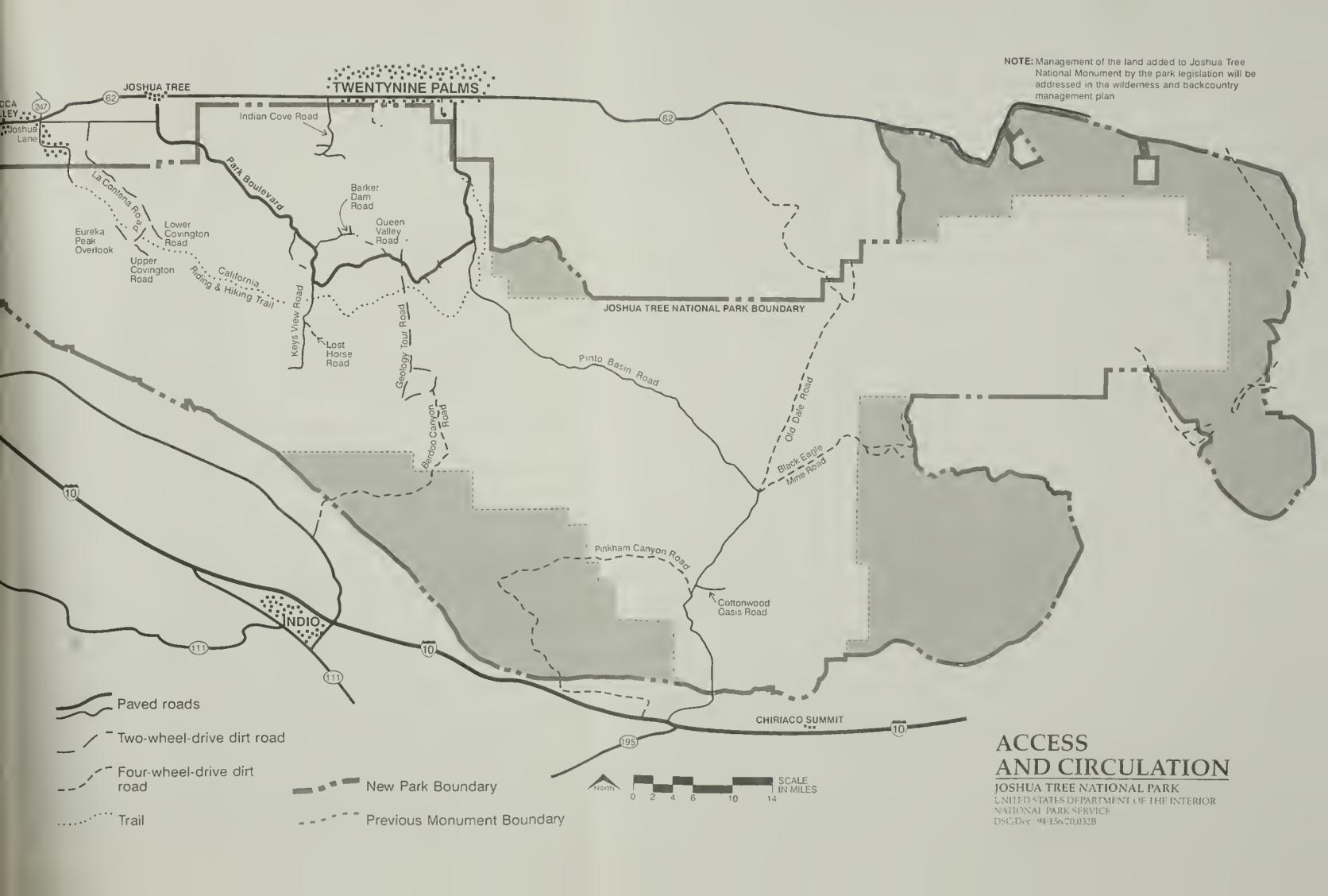
Rock climbing is increasingly popular throughout the Mojave Desert portion of the park. The Wonderland of Rocks, Hidden Valley, Quail Springs, and Indian Cove areas are the most popular rock climbing locations. There are some 4,000 climbing routes recorded in the park. These include a wide spectrum (faces, overhangs, cracks, etc.) encompassing all levels of difficulty. A few areas of significant historical or geological interest such as Skull Rock, Split Rock, Arch Rock, and the area around Keys Ranch are closed to rock climbing.

## **Backcountry Experiences**

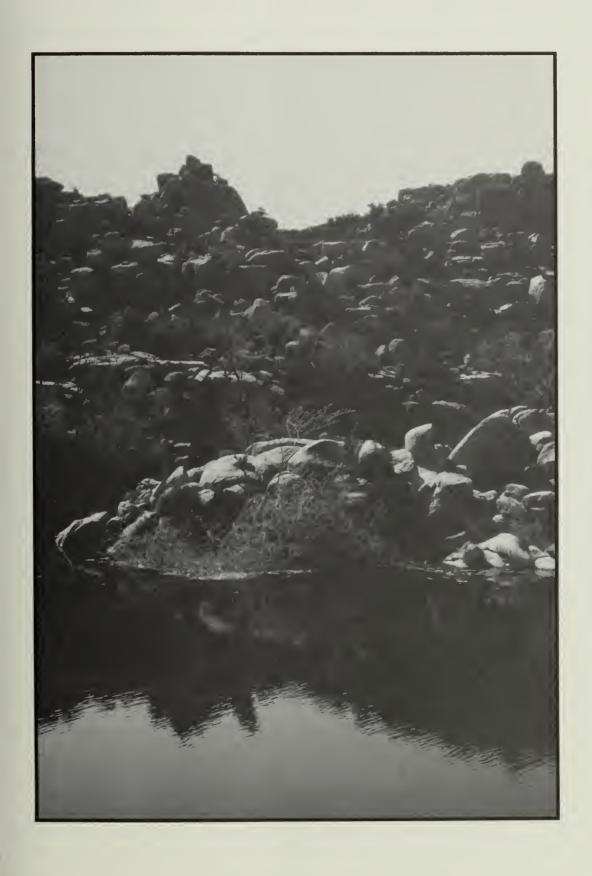
Approximately 593,490 of designated wilderness provide the hardy, adventurous visitor with an opportunity to hike and explore a vast desert landscape.

Placement of expansion bolts used in technical rock climbing is presently banned in designated wilderness units. About 33% of the routes in the park are in wilderness units. Of these, about 37% have at least one bolt. Many routes can be climbed using alternative means and can be top roped. Placement of expansion bolts in nonwilderness is allowed.





# **ENVIRONMENTAL CONSEQUENCES**





#### INTRODUCTION

#### **DERIVATION OF IMPACT TOPICS**

To focus on the most significant impact topics, the issues, alternatives, and impacts were evaluated throughout the planning process. All impact topics, including those raised by the public, were evaluated by the planning team and narrowed to specific topics that include only those of significant environmental concern.

#### IMPACT TOPICS DISMISSED FROM FURTHER ANALYSIS

Topics not to be analyzed further include climate, natural hazards, biosphere reserve, wilderness, potential wilderness additions, off-road vehicle use, or external land use. These topics were considered, but there would be no impacts or effects on any of them.

The water resource topics of floodplains, water rights, and water quality will not be analyzed further since there would be no impacts or effects from the alternatives.

Air quality problems in Joshua Tree are associated with the regional airshed, which contains major population centers and power plants. Dust from dirt roads is not significant in comparison to the regional problems. Although visitation is projected to increase, no proposals under any alternative would significantly alter air quality.

Impacts to the surrounding communities from proposed actions in this plan would be minimal and are not further analyzed.

#### **IMPACT TOPICS ANALYZED**

#### Native Vegetation and Soils

There is no parkwide information on soils. Most soils are unconsolidated alluvial material lacking soil profiles. Because soils cannot be identified and because the general analysis of impacts on soils would also reflect the disturbance to native vegetation, these impact topics have been combined in this document.

# Species of Special Concern

Most vegetation types are regionally common. Species of special concern and desert spring ecological communities are the most sensitive to development. Since listed species (as provided by the U.S. Fish and Wildlife Service and known by the staff) are in areas unaffected by the proposal and alternatives, only Joshua trees affected by road construction are analyzed fully.

Most park wildlife species are regionally common. A total of 14 species of animals are listed by the federal government and the state of California as endangered, threatened, or otherwise

in need of special consideration and protection. Of the listed species, the majority would continue to benefit from management activities because they would be protected from illegal hunting and collection, and their habitat would be preserved. They would be relatively unaffected by the proposal or either alternative. The only species affected might be the desert tortoise, which could be potentially affected by the road construction.

Prior to design or construction, surveys will be complete for any listed plant or animal species.

#### Wetlands and Riparian Habitats

Desert spring communities and riparian areas are critical wetlands habitat. The only habitat of this type that could be affected by the alternatives is Cottonwood Oasis.

#### **Cultural Resources**

Some significant cultural resources have been identified. Some of these would be affected by development and visitor use proposals.

#### Visual Resources

Visual quality is one of the most significant resource values. Effects on visual resources would result from development, road construction, and possible development on adjacent land.

# Visitor Use and Experience

Development and visitor use levels under the alternatives would directly affect the visitor experience. Visitor facilities, roads and trails systems, and availability of information, orientation, and interpretation would all be affected.

# **IMPACTS ON NATURAL RESOURCES**

# IMPACTS ON NATIVE VEGETATION AND SOIL

Acreage that could be disturbed by development is described below.

Revegetation of disturbed sites and return to more natural conditions could require anywhere from 50 to 100 years. Slow growth is a result of low annual precipitation, which is generally less than 3 inches at low elevations and from 3 to 12 inches at higher elevations.

# Alternative A - Proposed Action

**Analysis.** This alternative would reduce the impacts of social trails and roadside parking by providing more and better designed parking areas. There would be impacts as a result of development, road reconstruction, and parking area construction. Most borrow pits would be closed and restored.

**Conclusion.** Approximately 104 acres of new disturbance to natural vegetation and soil would be required. A total of 91 acres adjacent to the roads would be associated with the road reconstruction project. The majority of the new disturbance would be along the roads and would be distributed throughout the park. The total disturbance would not be significant.

Work in previously disturbed areas would affect approximately 25 acres. An additional 5.6 acres of previously disturbed land would be returned to natural conditions through rehabilitation. More area would be rehabilitated as the wilderness and backcountry plan determines which dirt roads would be closed.

TABLE 18: SUMMARY OF IMPACTS UNDER ALTERNATIVE A — THE PROPOSED ACTION

	Disturbance in Previously	New	
Planning Unit	Disturbed Areas	Disturbance	Restored Area
Covington Flats			
Parking for Calif. Riding and Hiking Trail	0.3		
Vault toilets in Covington Flats		0.4	
Expanded picnic facilities	1.0	1.5	
Indian Cove			
Day use parking	2.0	2.0	
Additional picnic facilities		1.5	
Vault toilets	0.8		
Headquarters			
Construction of new administration facility	1.2		

Planning Unit	Disturbance in Previously Disturbed Areas	New Disturbance	Restored Area
Lost Horse			
Parking project	7.9	2.3	
Lost Horse ranger station	0.5		0.3
Campsite improvements	10.5		
New west entrance visitor center	0.5	1.0	
Pinto Wye			
Additional parking and pullouts		0.8	
Transition			
Additional parking and pullouts		0.2	
Rehabilitation of borrow pits			5.4
Pinto Basin			
Cottonwood			
Additional duplex		0.2	
Entrance station	0.3	0.3	
New visitor contact center		0.2	
New picnic facilities		0.4	
Additional parking		0.2	
Parkwide			
Road reconstruction		92.7	
Total	25.0	103.7	5.7

#### Alternative B — No Action

Under this alternative there would be no additional impacts on native vegetation and soils due to development. However, the road improvement projects would continue to upgrade park roads. The impacts from the planned road reconstruction would affect approximately 91 acres adjacent to the roads. Impacts from social trails and roadside parking would continue because of inadequate parking and campgrounds and would result in additional loss of natural habitat.

# Alternative C — Minimum Requirements

Analysis. Like the proposed action the minimum requirements alternative would reduce impacts of social trails and roadside parking. By defining and paving the pullouts and parking areas and providing access to the rocks piles, the social trails would be minimized.

The impacts of the road and parking projects would be less than under the proposed action since there would be no construction of parking areas.

**Conclusion.** Approximately 94 acres of disturbance would be required on previously undisturbed land for development; 93 would be adjacent to current roads. As in the proposed action, the majority of impacts to vegetation would be along the existing roads and would not be significant.

TABLE 19: SUMMARY OF IMPACTS UNDER ALTERNATIVE C — MINIMUM REQUIREMENTS

Planning Unit	Disturbance in	New Disturbance	Restored Area
	Previously Disturbed Areas		
Covington Flats			
Indian Cove			
Day use parking	2.0		
Headquarters			
Construction of new administration facility	1.2		
Lost Horse			
Parking project	11.0		
Lost Horse ranger station	0.5		0.2
Pinto Wye			
Additional parking and pullouts		0.2	
Transition			
Additional parking and pullouts		0.2	
Rehabilitation of borrow pits			5.4
Pinto Basin			
Cottonwood			
Additional duplex		0.2	
Entrance station	0.3	0.3	
Parkwide			
Road reconstruction projects	7.6	92.7	
Total	22.6	94.2	5.6

### IMPACTS ON SPECIES OF SPECIAL CONCERN

The park contains a number of threatened, endangered, and sensitive species as well as species of concern, including Joshua trees. There would be no known impact to any known federally or state-listed plant or animal populations except for the desert tortoise. All areas that would be developed would be surveyed for listed plant or animal species. Any impact would be mitigated with consultation with federal and state agencies.

# IMPACTS ON JOSHUA TREES

# Alternative A — Proposed Action

Analysis. The actions that would affect Joshua trees are the road reconstruction project (including parking areas) and other development in the Lost Horse planning unit. Road design would minimize the impacts primarily by staying within the existing alignment, minimizing widening. Clear delineation of parking lots and roads and increased enforcement of parking restrictions would greatly reduce the impacts from vehicles driven onto adjacent areas, compacting soil surrounding nearby Joshua trees.

The actual number of trees that would be removed cannot be determined until preliminary road and parking designs are completed. Approximately 250–300 Joshua trees could be removed. This number would be reduced through adjustment of road alignments and by salvage of as many trees for replanting as possible. As other proposed developments were constructed there would be a need to disturb a small number of Joshua trees (less than twenty per proposed development), but every attempt would be made to salvage the trees for revegetation.

Conclusion. About 250–300 Joshua trees would be impacted. After the road design was determined, an impact assessment would be completed that would address the total number impacted. The biological impact to the Joshua tree would be insignificant since there are over 5.5 millon in the park. However, special efforts would be made to mitigate impacts by avoiding large trees during the design and transplanting trees during construction.

#### Alternative B — No Action

Joshua trees along the road corridors would be affected, because the road projects would continue. The impact is estimated at 100–200 Joshua trees. Many of these would be salvaged for replanting. As in the proposed action, this number could be reduced through adjustments of road alignments. An impact assessment will be completed after the road design is determined. The impact biologically to the Joshua tree would not be significant

# Alternative C — Minimum Requirements

**Analysis**. The road project would be the same as in the proposed action, except there would be no expansion or construction of parking areas.

**Conclusion**. The impacts on Joshua trees would be similar to the no-action alternative, except there would be a number of trees affected as a result of increased development. Estimates of the number of trees impacted would be 150–200 as a result of the road project and development. An attempt to salvage trees for replanting would be required.

#### IMPACTS ON THE DESERT TORTOISE

The U.S. Fish and Wildlife Service has been contacted in reference to the proposed action in the Lost Horse planning unit and the first two phases of the road reconstruction project. With their guidance, the park conducted a desert tortoise survey in 1992 and 1993. The survey sought to determine if the road project and other actions would impact the tortoise in the surveyed areas and whether the current road affects the tortoise.

The survey determined that evidence of tortoise was low in the area of phases I and II of proposed road reconstruction, except for a section west of Hidden Valley campground. The Fish and Wildlife Service concluded that the area was examined with appropriate detail for a clearance, including the zone of influence (area affected by the project), and that the road projects could proceed without further surveys with the exception of the Hidden Valley.

The survey was unable to determine whether the present road has been a contributing factor to the low tortoise population in the surveyed area.

# Alternative A — Proposed Action

Analysis. The road reconstruction and increase in the number of designated parking spaces would decrease the need for offroad parking. This would decrease impacts to tortoise habitat. The area of phases I and II of road reconstruction were surveyed in the spring of 1991 and one tortoise burrow was found near Queen Valley Road in the Hidden Valley area. The additional development and phases III–V road reconstruction would require additional surveys in areas of tortoise habitation before construction. During preliminary design for all construction projection, the Park Service would again consult with the Fish and Wildlife Service to ensure compliance with the requirements of the Endangered Species Act.

Conclusion. The first two phases of road construction will be in areas of low tortoise habitation (0–7/sq. km) and with the implementation of mitigation techniques approved by the U.S. Fish and Wildlife Service, the first two phases of the road reconstruction project are unlikely to have an adverse effect on the species. The paving of Barker Dam Road and the upgrading of the Geology Tour Road and increasing traffic loads or speed could lead to additional tortoise roadkills. Based on current experience, such roadkills could be expected to average less than one per year. However, tortoise numbers and roadkills in the Hidden Valley and Barker Dam area are likely to be inflated because visitors have used this area to

release tortoises. Education of visitors about the desert tortoise, its endangered status, and the impacts of unauthorized tortoise releases would reduce impacts to the tortoise.

The National Park Service will be preparing additional environmental compliance documents, probably environmental assessments, for all future construction projects, including all phases of road reconstruction as they are funded and designed. The National Park Service will have adequate details for the proposals and any impacts they may have, as well as alternative evaluation to develop mitigation measures. Surveys will be completed in areas of tortoise habitat that may be affected by construction, and there will be further consultation with the U.S. Fish and Wildlife Service to ensure compliance with the Endangered Species Act. To establish baseline data, the National Park Service wold continue to survey areas of tortoise habitat and monitor road mortality, especially in areas of high tortoise density.

### Alternative B - No Action

There would be no impacts as a result of new development. However, the road reconstruction project would disturb approximately 91 acres adjacent to the roads. The area for phases I and II of the road reconstruction project in the Lost Horse planning unit has been surveyed and these phases would probably not have an adverse effect on the tortoise. As future phases of the road project are planned and designed in the Transition, Cottonwood, and Indian Cove planning units where there are higher tortoise densities, tortoise surveys would be completed to ensure compliance with the Endangered Species Act.

# Alternative C — Minimum Requirements

Analysis. The road design would be similar to that in the proposed action, except that no parking areas would be built or expanded. Clear delineation of the edges of parking areas and trails would add greater control of parking and would decrease social trails. The additional development planned under this alternative and phases III–V of the road reconstruction would require additional tortoise surveys in areas of tortoise habitat prior to construction. The Fish and Wildlife Service would be consulted during preliminary design for all construction.

Conclusion. There would probably be no adverse effects on the desert tortoise as a result of phases I and II of the road project since planning would be identical to the proposed action. Future phases of the road project would require tortoise surveys to ensure compliance with the Endangered Species Act.

#### IMPACTS ON WETLANDS AND RIPARIAN HABITAT

# Alternative A — Proposed Action

Analysis. There would be no adverse impacts on wetlands or riparian habitats from development or changes in visitor use. Impacts to vegetation and soils at Cottonwood Oasis would be reduced. Visitors would be more likely to stay on the designated trails, which would be clearly signed. Braided trail sections would be revegetated. Trampling effects would

be reduced by directing visitors along a boardwalk through the oasis. An interpretive exhibit would be used to inform visitors of the nature of the oasis community, its susceptibility to impacts from foot traffic, and the need to stay on designated trails.

**Conclusion**. The proposed action would not adversely impact wetlands and riparian habitat. It would reduce the current impacts on Cottonwood Oasis. The wetlands habitat would be protected by having visitors limited to a platform.

#### Alternative B — No Action

There would be no adverse impacts on wetlands or riparian habitats. There would be continued degradation of the Cottonwood Oasis spring and surrounding vegetation and soils due to the extensive foot traffic off the designated trails. The braided trails through the oasis would remain.

#### Alternative C — Minimum Requirements

Analysis. There would be no adverse impacts on wetlands or riparian habitats from development or changes in visitor use under this alternative. Impacts on vegetation and soil at Cottonwood Oasis would be reduced by keeping visitors on the designated trails, which would be clearly signed. Braided trail sections would be revegetated. An interpretive exhibit would be used to inform visitors of the nature of the oasis community, its susceptibility to impacts from foot traffic, and the need to stay on designated trails.

**Conclusion.** There would be no adverse impacts to wetlands or riparian habitat. Impacts from visitor use of the Cottonwood Oasis would be reduced.

#### IMPACTS ON CULTURAL RESOURCES

#### ALTERNATIVE A — PROPOSED ACTION

#### **Analysis**

The proposed action would bring about a more systematic treatment of cultural resources. Programs would be expanded in archeology, cultural ecology, curation, ethnography, and historic preservation. This alternative provides for two new positions — a full-time cultural resources specialist and a cultural anthropologist to implement these programs through direct involvement or contract administration. Their work would benefit both cultural and natural resources.

According to the resources management plan, collection of needed baseline data would be done through studies and monitoring. The priorities for historic preservation would be applied systematically and consistently under the proposed action. Properties considered for national register eligibility would also be approached systematically and consistently.

Public use could affect nearby cultural resources that would be vulnerable to vandalism or inadvertent damage. Actions to reduce these impacts would include increased patrols, monitoring to detect vandalism and illegal collection, education of visitors about the significance of the cultural resources and the need to protect them, and an extensive public outreach program to educate the public about the importance of leaving natural and cultural resources undisturbed for present and future generations.

To ensure protection of any unknown cultural resources, archeological surveys would be conducted for all land that could be affected by specific road construction or development proposals well before those proposals were implemented. Any potentially adverse effects to cultural resources, if unavoidable, would be mitigated by actions developed in consultation with neighboring American Indian groups, the State Historic Preservation Office, and the Advisory Council on Historic Preservation as stipulated in 36 CFR 800 (see appendix B on compliance with sections 106 and 110 of the National Historic Preservation Act of 1966, as amended).

#### Conclusion

The management, protection, and preservation of important cultural resources would be significantly improved. All aspects of inventorying, protecting, and preserving important cultural resources would be ranked by establishing ongoing programs that would be systematically implemented. There would be sufficient personnel. Educational programs would help in protecting resources, and the chances of random or destructive vandalism would be markedly reduced.

#### ALTERNATIVE B — NO ACTION

#### **Analysis**

Cultural resources management, which includes archeology, cultural ecology, curation, ethnography, and historic preservation, would continue to be opportunistic. Implementation of cultural resource projects would remain unranked and unsystematic. The lack of baseline data would hamper management decisions. Staffing would remain at current levels with no full-time cultural resources specialist, cultural anthropologist, or archeological ranger.

Historic preservation at the current level would allow the natural deterioration of the historic structures to continue. Historic national register structures would be stabilized one at a time, as funds became available.

There would be no proactive outreach to help preserve local American Indian cultures. Avoiding development of possible traditional use areas would be handled on a case-by-case basis.

Random damage or vandalism to cultural resources would not be reduced. The levels of patrols, monitoring, education of visitors about the importance of the resources, and public outreach programs would continue at current levels.

To ensure protection of any unknown cultural resources, archeological surveys would be conducted for all land that could be affected by specific road construction or development proposals well before implementation. Any potentially adverse effects to cultural resources, if unavoidable, would be mitigated by actions developed in consultation with neighboring American Indian groups, the State Historic Preservation Office, and the Advisory Council on Historic Preservation as stipulated in 36 CFR 800 (see appendix B on compliance with sections 106 and 110 of the National Historic Preservation Act of 1966, as amended).

#### Conclusion

Under the no-action alternative the management, protection, and preservation of important cultural resources would remain limited, opportunistic, and unsystematic throughout the park. Cultural resources would be more subject to vandalism, chance damage, and loss of historic fabric.

#### ALTERNATIVE C — MINIMUM REQUIREMENTS

#### **Analysis**

Cultural resources management under the minimum requirements alternative would rank projects. Projects in archeology, cultural ecology, curation, ethnography, and historic preservation would be ranked in priority order to better meet park needs. More baseline data would be acquired to aid in informed management decisions. Staffing would be increased by at least one full-time cultural resources specialist and one full-time ranger. Where appropriate,

the concept of cultural ecology would have increased influence over the coordination of cultural and natural resource projects.

Historic preservation at the minimum requirements level would establish priorities for national register properties for stabilization. Matching materials would be sought for replacement, but there would be no interpretation of these properties.

Ethnographic knowledge would increase somewhat because ranked projects would meet park needs more effectively. There would be some proactive outreach to help preserve American Indian cultures. Avoiding development of possible traditional use areas would be better handled under this alternative than under no action.

Chances of random damage or vandalism to cultural resources would be reduced by increasing patrols and monitoring to detect damage. Interpretation and public outreach programs to educate the public about the significance of the resources and the importance of leaving natural and cultural resources undisturbed would increase somewhat, although not to the same extent as under the proposal.

#### Conclusion

The management, protection, and preservation of important cultural resources would improve under the minimum requirements alternative. Cultural resources management would be more systematic. Ranking projects by order of importance would improve conditions. Even without ongoing programs, better information for decisions would be produced by setting priorities. The chances of random or destructive vandalism and the loss of fabric of other historic properties would be reduced.

#### **IMPACTS ON VISUAL RESOURCES**

#### ALTERNATIVE A — PROPOSED ACTION

#### **Analysis**

Maintaining visual quality in Joshua Tree National Park has become increasingly important. Most proposed actions would upgrade developments in disturbed areas to minimize the creation of visually intrusive scars. Intrusions of development on scenic vistas would not appreciably change. Campgrounds, picnic areas, and restroom facilities would be redesigned to reduce impacts to vegetation and soils. The primary new visitor facility, the west entrance visitor center, would be sited to take advantage of dramatic views to the south across the Mojave Desert, which would enhance interpretation of this environment, but it would be visible from inside the park. It would be designed to minimize its impact on park vistas. Design guidelines would be developed to ensure that all new or modified facilities would visually harmonize with the surrounding environment.

Attempts would be made to reduce visual impacts in the backcountry by revegetating redundant trails and old road scars identified in the trails plan and wilderness and backcountry management plan. Acquisition of inholdings would reduce the potential for new development that would intrude on the natural scene. The Park Service would work with adjacent property owners and review development proposals to minimize the visual impacts from urban encroachments near the boundary.

Road guidelines that emphasize resource sensitive design standards would address maintaining curves and a low profile and would limit the number of Joshua trees removed to reduce visual impacts on all main roads.

Paving and striping of large parking areas at Barker Dam and Wall Street Mill trailhead, Wonderland of Rocks backcountry staging area, Intersection Rock, and Hall of Horrors would be visually obtrusive. These lots would be sited to minimize their visibility and would use previously disturbed areas to the extent possible.

#### Conclusion

This alternative would minimize visual intrusions from new development by using disturbed land. It would protect the scenic quality of the park. The purchase of inholdings would decrease the threat of possible intrusive development and minimize visual impacts.

#### **ALTERNATIVE B — NO ACTION**

#### **Analysis**

Visual resources would remain unimpaired as long as maintenance is adequate. As visitation increases, an equivalent increase in maintenance would be critical, or visitor use would cause

more social trails, detrimental impacts on vegetation, and increased wear and tear on constructed facilities.

Many undesirable trends affecting the visual resources would continue in this alternative. Overused facilities would continue to be uninviting, braided trails would detract from the natural scene, and undefined parking would continue to impact more terrain than necessary.

Use of road traces is likely to continue or increase without actions proposed to limit or close access. Continued use would prevent natural revegetation and possibly widen the road, making it more visually intrusive.

### Conclusion

Undefined, random parking areas, campgrounds, and encroaching development near the park boundary would continue to cause visual intrusions, reducing scenic quality and contributing to a poor first impression of the park. Without improvements to current facilities, the overall visual appearance would continue to deteriorate.

# ALTERNATIVE C — MINIMUM REQUIREMENTS

#### **Analysis**

Visual intrusions caused by foot and vehicle disturbance to vegetation and soil would be generally reduced by clearly delineating the boundaries of designating parking areas, campsites, and picnic sites. Vegetative screening around sites would help provide a visually appealing atmosphere. The general improvement of trails, trail surfaces, walks, signs, fee collection, housing, and utilities would have a minimal increase on visual impacts. The appearance of the facilities would be improved. Most facilities would be remodeled following design guidelines to blend the appearance of structures with their surroundings. No expansion of facilities would affect visual resources.

Some previously disturbed access roads, illegal access roads and redundant trails would be evaluated in the trails and backcountry management plans. Revegetation of some of these roads and trails would reduce visual impacts.

#### Conclusion

Impacts on scenic quality would remain minimal. Improvements to facilities without expansion would minimize visual intrusions.

#### IMPACTS ON VISITOR USE AND EXPERIENCES

Under each category the effects of the proposed action and alternatives on visitor use and experiences can be divided into those relating to visitor understanding and enjoyment of the resources, those impacting visitor distribution throughout the park, and those impacting visitor participation in recreational activities. Many of the impacts are difficult to quantify, as they would result in qualitative changes to the visitors' experiences or activities rather than a quantitative change. For example, improving a road or upgrading a campground would improve the visitor experience, but neither would necessarily affect the number of visitors accommodated.

#### ALTERNATIVE A — PROPOSED ACTION

## **Analysis**

The proposed action would expand and improve information, orientation, and interpretive media and services. The development of adequate visitor contact facilities at the three main park entrances along with a completely redesigned wayside exhibit system would orient visitors and provide information about resource features, visitor activity options, locations and scope of interpretive services, road conditions, and safety information.

There would be three entry point reception centers where visitors would be introduced to the park. Visitors would have access to information and orientation for the entire park and would be able to better plan their visit and maximize their desired experience. Each of these three visitor facilities would introduce the overall interpretive themes, but also provide a different interpretive focus. The west and south entrances would focus on the Mojave and Colorado Desert environments respectively, with in-depth interpretation of the cultural resources at headquarters. Visitor understanding and appreciation of the natural and cultural resources would be greatly improved by these facilities as well as by the updating and expansion of wayside exhibits, publications, and interpretive trails. Improvement of the Black Rock Canyon nature center would enhance not only the experience of visitors to that area but would provide a facility for educating school and other groups.

Improvements in the roads, parking, and the trails, along with road and trail guides, would help to distribute visitors more evenly throughout the area and reduce congestion. The proposed shuttle system to the core use area with onboard interpretation would increase opportunities for visitor education and would reduce traffic congestion. Designated parking capacity in the most heavily used areas of the park, primarily the Lost Horse unit, would be greatest under this alternative.

The paving of Barker Dam Road and the parking areas along the primary park roads in Lost Horse planning area would assist in delineating these facilities and would help control roadside and shoulder parking in nondesignated parking areas. Paving of Barker Dam Road would also allow a variety of vehicle types, but not more vehicles, to access parking for the Barker Dam interpretive trail and other trailheads in this area. the parking lot capacities in this area would be limited to parking levels that already occur on some of the busiest days of the year. To reduce competition for limited parking in this area, the plan proposes a

connected network of roads, trails, parking areas, and shuttle routes to serve various visitor destinations in this area of the park. Visitors who could not find a parking space in a lot closest to their destination could park at a lot farther away, but have the option to bike, hike, or take the shuttle. Improving visitor awareness of the wide variety of opportunities available throughout the park is intended to better distribute visitors and encourage use in other areas.

There would probably be an increased use of Wall Street Mill because of increased awareness and emphasis on interpretation of the historic resource and easier access to the combined Wall Street Mill and Barker Dam parking area. Delineation of trails around the mill and interpretive and resource protection signs and brochures would aid understanding and enjoyment. There would also be an increased need for protection of this valuable historic resource.

The proposal would improve opportunities to explore more remote areas and to experience a cross section of environments and features. The Geology Tour Road and Lost Horse Mine Road would be upgraded to two-wheel drive. Some other dirt roads in the backcountry would be designated and marked to direct visitors. Better signs for designated trails, revegetation of braided trail sections, added interpretation along trails, and development of a trails guide would also greatly improve visitor awareness and enjoyment of the trail system.

The ban on the placement of expansion bolts in designated wilderness would continue until recommended studies are completed. The temporary prohibition on further bolting in wilderness would prevent physical alteration of natural resources while further studies and planning related to the appropriate balance of resource use and protection proceeded. This would result in a short-term inconvenience to some climbers in wilderness. It would preclude use of some climbing routes. The ban does not preclude climbing with bolts in nonwilderness areas of the park. The National Park Service does not recommend reliance on existing bolts. Climbers must be aware that they participate in the sport at their own risk. The park allows the activity but cannot guarantee the safety of climbers.

The quality of the visitor experience would improve with the redesign of campground and picnic area layouts and better definition of individual sites. Conflicting uses would be separated. Appearance of the areas would improve with the rehabilitation of impacted soils and vegetation and replacement of the portable toilets. The overall number of picnic sites would increase, including the addition of a small picnic area in the Pinto Basin. The number of campsites would not appreciably change. The improved registration system and time limits would allow more access to campsites. However, the demand for campsites would probably continue to exceed the number available during peak use times, typically the spring months.

The new administrative facilities would provide the infrastructure for improving all park operations. Increased efficiency and expanded facilities would improve management of resources and visitor experiences.

#### Conclusion

Visitor experience and use would significantly improve throughout the park under the proposed action. Information distribution programs would be expanded, thus improving the visitors' ability to have a safe and enjoyable experience. Broadening the interpretive programs

and improving media about the resources and activities would serve more people and more interests and enhance understanding of the park's significance.

The proposed action would encourage a greater distribution of visitors throughout the park, thereby helping to reduce congestion and enhance visitor enjoyment of the varied resources and recreational activities.

The quality of the recreational experience would be enhanced by the improvement of the roads and trails systems, campgrounds and picnic areas, and by separating conflicting uses.

#### **ALTERNATIVE B — NO ACTION**

#### **Analysis**

No major changes would occur under the no-action alternative. Consequently, visitor use and experience would not improve. Visitor understanding and appreciation as well as distribution and participation in quality recreational activities would remain unchanged. There would be confusion due to inadequate information, orientation, and direction of visitors to designated areas for different activities.

Only basic information and orientation would be provided at the west entrance. There would continue to be a lack of adequate information, orientation, and resource interpretation for the majority of visitors that use this entrance. The south entrance visitor contact and fee station would continue to be confusing and undersized to present necessary information, orientation, and interpretation materials on both a parkwide basis and for the Colorado Desert. Confusion and inconvenience would exist throughout the park because roads, parking areas, trails, and visitor facilities are poorly signed and delineated, and there is no comprehensive trail or road publication to guide visitors.

The wayside exhibit system would remain. The limited ability to upgrade the exhibits and their insufficient numbers and locations would continue to preclude full visitor education and understanding of the resources.

Because the road, parking, and trail network would not be changed, use patterns would continue. Inadequate parking and congestion at heavily used areas would continue. A plan for evaluation of dirt roads and upgrading of some for two-wheel use would not be done. Visitors with standard vehicles would be limited to the developed areas.

The ban on the placement of expansion bolts in designated wilderness would continue until recommended studies are completed. The temporary prohibition on further bolting in wilderness would prevent physical alteration of natural resources while further studies and planning related to the appropriate balance of resource use and protection proceeded. This would result in a short-term inconvenience to some climbers in wilderness. It would preclude use of some climbing routes. The ban does not preclude climbing with bolts in nonwilderness areas of the park. The National Park Service does not recommend reliance on existing bolts. Climbers must be aware that they participate in the sport at their own risk. The park allows the activity but cannot guarantee the safety of climbers.

Camping and picnicking and the quality of these experiences would remain unchanged. The quality of the visitor experience at these facilities would continue to be diminished by the unattractive surrounding sites, the confusing array of social trails, and the portable toilets. Conflicts between user groups such as campers, climbers, picnickers, and trail users would continue. The demand for campsites would probably continue to exceed the number available during peak use times, typically the spring months.

#### Conclusion

Under the no-action alternative there would be no new development or services and no corresponding improvement in either the quality or quantity of visitor experiences. Orientation, information, and interpretation would continue to be limited and insufficient to adequately direct visitors to designated areas for different activities and convey the interpretive and educational themes. It would continue to be difficult for visitors to learn about the resources and available activities or to plan for a safe and enjoyable experience. The quality of visitor facilities would remain low in most areas. Conflicts between recreational users would continue.

# ALTERNATIVE C — MINIMUM REQUIREMENTS

#### **Analysis**

The goal of increasing visitor understanding and appreciation of the natural and cultural resources would be somewhat improved, primarily for visitors entering from the north. The visitor center at headquarters would be improved through rehabilitation of the exhibits and adding parkwide orientation materials in the lobby. Some additional information and orientation material would be available for visitors entering from the south through rehabilitation of the contact station. The heavily used west entrance would still only provide some basic information and orientation materials. Visitors would be better oriented to the resources and available activities as they enter the park, although much less so than under the proposal.

Visitor understanding and appreciation would be increased through onsite interpretive signs and exhibits. Updating of the wayside exhibits would better inform visitors about the nature of the resources. However, the present system and location of waysides would not adequately address all the interpretive and educational themes. Visitors' opportunities for interpretive contacts with staff would be increased, primarily in the Keys Ranch area.

There would be some redirection of visitors to designated areas for different activities under the minimum requirements alternative. A trails and road handbook would help to distribute visitors. In the most heavily used areas, primarily in the Lost Horse unit, a better and clearer system of trails between parking areas and visitor destinations would allow improved access to these destinations. Designated parking in these areas would be approximately the same as presently exists. However, restriction of parking to clearly designated parking areas would reduce the number of day users that could be accommodated.

As under the proposal, opportunities to explore more remote areas and to experience a cross section of environments and features would improve. The Geology Tour Road and the Lost Horse Mine Road would be upgraded to two-wheel drive. Some other dirt roads in the backcountry would be designated and marked to direct visitors on these corridors. Better signs for designated trails, revegetation of braided trail sections, added interpretation along trails, and development of a trails guide would also greatly improve visitor awareness and enjoyment of the trail system.

The ban on the placement of expansion bolts in designated wilderness would continue until recommended studies are completed. The temporary prohibition on further bolting in wilderness would prevent physical alteration of natural resources while further studies and planning related to the appropriate balance of resource use and protection proceeded. This would result in a short-term inconvenience to some climbers in wilderness. It would preclude use of some climbing routes. The ban does not preclude climbing with bolts in nonwilderness areas.

The quality of the visitor experience would be improved by better defining the limits of individual sites, thus limiting the extent of impacts to surrounding soils and vegetation. Visually intrusive portable toilets would be replaced. Conflicting uses would also be separated. The number of camp and picnic sites would not change. The improved registration system and time limits would allow more visitors access to campsites. However, the demand for campsites would probably continue to exceed the number available during peak use times.

Improved park support facilities would improve management of all aspects of operations and improve resource protection and visitor experience.

#### Conclusion

Visitor experiences and uses would be somewhat improved. Visitors would have better interpretive facilities. There would be some improvement in the quality of recreational activities, and there would be little change in visitor distribution.

#### CUMULATIVE IMPACTS

#### NATURAL RESOURCES

Under the proposal there would be an impact to the Joshua trees because some would be removed for roads, parking areas, or buildings. The number of trees affected would be reduced by adjusting road alignments, planting new trees, and salvaging and replanting trees when possible. The Joshua tree is protected in four federal units and various state and local parks in southern California. Due to widespread distribution of the Joshua tree throughout the Mojave Desert and its protected status, the cumulative impact to the Joshua tree community under the proposed action would be negligible.

The Mojave population of the desert tortoise has been affected by activities and development throughout California and Nevada. Any action would be closely monitored by the National Park Service and the U.S. Fish and Wildlife Service and would comply with the *Draft Recovery Plan for the Desert Tortoise (Mojave Population)* prepared by the U.S. Fish and Wildlife Service. Actions that could affect the tortoise would result primarily from the road reconstruction. Road reconstruction would be designed to have the least possible effect on the tortoise. Development of the proposed Eagle Mountain landfill could have a significant effect on the desert tortoise as well as on other wildlife, air and water quality, and wilderness values. The cumulative impacts on the tortoise and other park resources from actions proposed in this plan would be a minor additional impact relative to the potential adverse effects from the proposed landfill.

Protection of the resources from external threats as well as preservation of the scenic vistas that extend beyond the park boundary would depend on NPS review and recommendations concerning development outside the park. Such actions may have only limited success on land use decisions that could be detrimental. It is probable that resources and scenic vistas could be adversely affected by incompatible land use and development outside the park.

#### **CULTURAL RESOURCES**

Ground disturbance would be part of construction, road widening and paving, and the redesign of visitor use areas. These would require archeological surveys and mitigation. The number of impacted archeological sites would be small compared to the vast amount of undiscovered archeological material estimated to remain in the park.

Through design changes and visitor education, the proposed action would have the positive effect of directing visitors to designated areas for specific types of activities. That would reduce the number of visitors chancing upon cultural resources and disturbing or vandalizing them. Thus the management, protection, and preservation of important cultural resources would be significantly improved.

There would be no cumulative adverse impacts; cumulative effects would be beneficial because of the proposed systematic approach to cultural resources management through the concept of cultural ecology.

#### VISITOR EXPERIENCE

Traffic congestion on state routes and at intersections that access the park is not a problem at this time. Traffic would probably increase as visitation to the park and recreation visits to public land in the southern California desert region and the population of surrounding communities grow. The cumulative growth in traffic could lead to increased congestion and decreased highway safety on roads leading into the park.

# UNAVOIDABLE ADVERSE IMPACTS IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES SHORT-TERM USE VERSUS LONG-TERM PRODUCTIVITY

The area proposed for development and road construction under each of the alternatives would be permanently lost as natural habitat and the larger Joshua trees that would have to be removed cannot effectively be replaced in kind.

While most developed areas can be restored over time to original conditions, the use of land and financial resources to affect the proposed development would be irreversible and irretrievable. The commitment would be greater under the proposal than under alternative C, which is primarily confined to disturbed areas. The development under both alternatives would be centered in developed areas so that the new land committed to development would be minimal. There would be no irreversible or irretrievable commitment of resources under the no-action alternative.

Over the short term, the implementation of the proposal would disrupt visitor services, some historic features, and a small portion of the natural environment during construction. Over the long term, visitors would be able to better experience camping in the park since reservations would be confirmed in advance. The new development would be designed to blend with the historic structures and the surroundings and the intrusion into previously undeveloped area would be minimized. Camping would remain at or near existing levels in any of the development alternatives.

Under the proposal and alternative C, the short-term effects would be negligible. Camping would remain intact and overnight visitation would remain static. Over the long term, day use from accommodations outside the park would increase, adding congestion and increasing competition for the limited visitor services.



# CONSULTATION/ COORDINATION



#### PUBLIC INVOLVEMENT

# SCOPING PROCESS AND ISSUES AND ALTERNATIVES RAISED

Meetings, public workshops, and surveys were an integral part of the scoping process. The purpose was to identify all issues, alternatives, and impact topics that should be considered in planning and to keep the public informed throughout plan formulation. A notice of intent to prepare an environmental impact statement for the Joshua Tree general management plan and to begin scoping for that process was issued in the *Federal Register* on May 15, 1990.

The first formal public involvement was in May 1990, when public scoping meetings were held near Twentynine Palms and Joshua Tree, California, to seek input on planning issues from the public. The most common issues raised were:

- camping availability of sites, tent only, tents and RVs, quiet areas, reservations, walk-in camping
- climbing access, rests, belting
- horse use trails, camping, water
- roads access to sites, deterioration, speed limit, parking
- visitor use development need for restrooms, information, patrol

In the summer of 1990 the government offices of San Bernardino and Riverside counties and the city of Twentynine Palms were asked to review an early draft copy of the document.

The California State Historic Preservation Office was provided an advance copy of this document for review.

Section 7 of the Endangered Species Act directs all federal agencies to use their authority to carry out programs for the conservation of endangered or threatened species. Federal agencies are required to consult with the U.S. Fish and Wildlife Service to ensure that any action authorized, funded, or carried out by the agency does not jeopardize the continued existence of listed species or critical habitat.

Informal consultation with the U.S. Fish and Wildlife Service was initiated in June 1990, with a request for a list of species that may be present in the project area or be affected by the project. One threatened species, the desert tortoise, and several candidate species were noted and are included in this appendix. Telephone consultations continued between resource management staff and the U.S. Fish and Wildlife Service as the project developed. Topics discussed included the status of the project as well as methods of population surveys and mitigation techniques that may be necessary. The U.S. Fish and Wildlife Service has reviewed this document.

Consultation with American Indian groups was initiated in November of 1990. The American Indian groups consulted were those who have had traditional seasonal territories (the Cahuilla, Chemehuevi, and Serrano), or trade routes (the Maricopa and Mojave) in or through what is now the park. They may maintain contemporary cultural interests in the land.

The American Indian concerns centered in four areas: (1) protection of sites in the park (2) sharing cultural resources information (3) properly consulting American Indian groups on finds of human remains and artifacts, on management plans, and on future exhibits, and (4) access to the park without restrictions on gathering traditional use plants. These concerns have been addressed in the general management plan and in ongoing programs.

American Indian consultations continued during the spring and summer of 1992 and culminated in the reburial and recremation of human remains and associated artifacts. Over 60 persons participated in the sacred ceremonies, mostly representing the Cahuilla, Chemehuevi, and Mojave tribes.

On May 15, 1991, park representatives met with the Interagency Natural Areas Coordinating Committee, which is a group of federal, state, and local agencies involved in managing natural areas in the California Desert. Prior to their meeting, the National Park Service sent out background information to help participants understand the challenge the National Park Service faced with the draft general management plan, a questionnaire to evaluate the role and significance of the park in the California Desert region, and a proposed agenda for the meeting.

#### Issued discussed were:

- (1) the role of the other agencies in the California Desert region, i.e., the purpose of those agencies and the purpose of the areas they administer
- (2) the significant resources in the areas protected by other agencies in the California Desert
- (3) the kinds of activities available at the other areas and the problems associated with managing them
- (4) areas where cooperative planning and management between agencies can be used to more effectively manage resources and visitor activities

All of these issues are addressed in the general management plan.

In November 1991 two meetings were held to discuss road reconstruction. There was a proposal to include the dirt Queen Valley road as part of a paved one-way road. This proposal was dropped after the meetings. There was support for reconstruction of the roads on existing alignments. Impacts on the Joshua trees and desert tortoise were of concern. Parking was emphasized as a major concern. As a result of these meetings, the road reconstruction project was incorporated into the draft general management plan.

All of these issues are addressed under the goal to improve park circulation.

Informal meetings were held with members of key public interest groups in May of 1992 to discuss the alternatives in this document. Issues discussed at these meetings were primarily roads (same issues raised as in November 1991) and camping, both of which are addressed under the goals to manage visitation areas effectively and improve circulation.

#### **RESPONSE TO THE 1994 LEGISLATION**

An agreement has been reached within the Department of the Interior to approach planning and management of the 25 million acre California Desert region on an integrated ecosystem basis. The California Desert has been designated an official pilot project of the national performance review to demonstrate effective ecosystem management, planning, and agency reinvention efforts. Joshua Tree National Park will be an active partner in these multi-agency, multi-species ecosystem management plans. Geographically, Joshua Tree National park will be influenced by three ecosystem plans — the Northern and Eastern Colorado Desert coordinated Management Plan, the West Mojave Desert Coordinated Management Plan, and the Coachella Valley Habitat Conservation Management Plan.

# AGENCIES, ORGANIZATIONS, AND PERSONS TO WHOM COPIES OF THE DOCUMENT HAVE BEEN SENT

#### Federal Agencies

Advisory Council on Historic Preservation

Department of Agriculture

Forest Service

Soil Conservation Service

Department of Defense

Marine Corps, Twentynine Palms

Department of the Interior

Bureau of Indian Affairs

Bureau of Land Management

Bureau of Mines

Bureau of Reclamation

Fish and Wildlife Service

Geological Survey

National Park Service

Death Valley National Park

Lake Mead National Recreation

Area

Western Archeological and

Conservation Center

Department of Transportation

Federal Aviation Administration

Federal Highway Administration

**Environmental Protection Agency** 

#### State Agencies

California Department of Fish and Game

California Department of Forestry

California Highway Patrol

California Parks and Recreation

California Office of the Governor

California Historic Preservation Officer

Native American Heritage Commission

# **Local Agencies**

City of Cathedral City

City of Chiriaco Summit

City of Coachella

City of Indian Wells

City of La Quinta

City of Lake Tamarisk

City of Palm Desert

City of Palm Springs

City of Rancho Mirage

City of Salton City

City of Twentynine Palms

Los Angeles Metropolitan Water District

Town of Desert Center

Town of Yucca Valley

# Organizations

Access Fund Arizona Mountaineering Club Audubon Society Backcountry Horsemen of America California Native Plant Society Chamber of Commerce, Coachella Valley Chamber of Commerce, Palm Springs Chamber of Commerce, Palm Desert Chamber of Commerce, Indio Chamber of Commerce, Joshua Tree Chamber of Commerce, Twentynine **Palms** Chamber of Commerce, Yucca Valley Chamber of Commerce, Desert Hot Springs Coachella Valley Horsemans Association Coachella Valley Natural History Association Desert Protective Council Desert Tortoise Council Eagle Mountain Energy Hi Desert Museum Living Desert Museum Malki Museum Morongo Basin Conservation Association Morongo Basin Mounted Sheriff's Posse

Association
National Wildlife Federation
Nature Conservancy
Palm Springs Desert Museum
San Diego Climbers for Access
San Diego County Trails Council
Santa Ana River Unit/BCHC
Sierra Club

National Parks and Conservation

San Diego Chapter San Gorgonio Chapter Angeles Chapter Southern California Edison Co. Wilderness Society

#### Tribal Governments

Agua Caliente Band of Cahuilla Indians
Barona Band of Mission Indians
Cabazon Band of Mission Indians
Cahuilla Band of Mission Indians,
Cahuilla Reservation
Campo Band of Mission Indians
Chemehuevi Indian Tribe
Colorado River Indian Tribes
Cuyapaipe Band of Mission Indians
Fort Mojave Indian Tribal Council
Inaja and Cosmit Band of Mission
Indians

Jamul Band of Mission Indians
La Posta Band of Mission Indians
Los Coyotes Band of Mission Indians
Manzanita Band of Mission Indians
Mesa Grande Band of Mission Indians
Morongo Band of Mission Indians,
Morongo Reservation

Pima-Maricopa Indian Tribal Council Quechan Indian Nation of the Fort Yuma Reservation

Torres Martinez Band of Mission Indians,
Torres Martinez Reservation
San Manuel Band of Mission Indians
San Pasqual Band of Mission Indians
Santa Rosa Band of Mission Indians
Santa Ysabel Band of Mission Indians
Soboba Band of Mission Indians
Sycuan Band of Mission Indians
Twentynine Palms Band of Mission
Indians

Viejos Group of the Capitan Grande Band of Mission Indians

# SUMMARY OF PUBLIC COMMENTS ON THE DRAFT ENVIRONMENTAL IMPACT STATEMENT

A number of comments were received in letters and at public meetings following the release of the draft general management plan / environmental impact statement in August 1994. A notice of availability was published in the *Federal Register* (59 FR 43855) on August 25, 1994. Approximately 800 copies of the draft were distributed to government agencies, public interest groups, and individuals. The public comment period ended November 7, 1994.

Two public meetings were held in Joshua Tree and Palm Desert, California on September 14 and 15 respectively. The purpose of the meetings was to receive oral and written comments on the draft plan and environmental impact statement. Thirty people attended the meeting in Joshua Tree and eight people attended the meeting in Palm Desert. Many of the comments received during the meetings were reiterated in the written comments and are addressed in the following section. Other comments that required clarification, text corrections, or revision of the plan included:

**Comment:** A number of comments from hikers and equestrians pertained to trail use such as types, locations, lengths, and numbers of trails and placement of backcountry boards, boundary signs, and backcountry registration sites.

**Response:** These are details beyond the scope of the general management plan and will be addressed in the wilderness and backcountry management plan and proposed trails plan. The general management plan does call for the use of signs, small exhibits, and backcountry boards at entry points into the backcountry and wilderness to inform visitors of regulations and resource concerns in these areas.

**Comment:** There is a need for more parking areas along the Pinto Basin Road for backcountry access.

**Response:** Trailhead parking would be provided along this road and would be addressed during the latter phases of the road reconstruction project.

**Comment:** Better signs and parking for backcountry access along the park boundary are needed.

Response: A statement has been added in the "Parkwide Alternatives" section similar to what was contained in the development concept plan section. It states that the wilderness and backcountry management plan will evaluate trails and points of entry for hiking and backcountry use, and that the park would work with adjacent landowners to allow parking at wilderness access points where vehicle use and parking inside the park boundary would not be possible.

**Comment:** The plan prohibits vehicles over 20 feet long on Keys View Road. Allow horse trailers on the road to the backcountry board at the California Hiking and Riding Trail.

**Response:** In order to avoid widening Keys View Road and removing numerous Joshua Trees, the draft plan proposed to restrict vehicles over 20 feet long on this road beyond Cap Rock. The road curves that pose the greatest concern for safety of large vehicles are beyond

the California Riding and Hiking trailhead. This trailhead is a major stopping point and first available road junction for equestrians riding out of Covington. Consequently, the plan has been revised to state that there would be a posted advisory against use by vehicles over 20 feet beyond that trailhead (Juniper Flats backcountry trailhead). A pullout for measuring vehicles would be provided near that parking area.

Comment: Use of volunteers should be addressed in the plan.

Response: The plan has been revised to include that the park would actively support and encourage the use of volunteers.

**Comment:** The use of road numbers instead of names is unclear; parking area 1 is misplaced; and pullout totals in the "Visitor Use Areas" tables are incorrect.

Response: The plan has been corrected.

Comment: The general management plan and environmental impact statement should take into account impacts such as lighting, zoning, rural setting, visitor intrusions, on adjacent residents from building a visitor center at the west entrance.

Response: The plan has been revised to state that prior to a final decision on the placement of a visitor center near the west entrance, more alternative site evaluations and environmental impact analysis would be completed. See written responses regarding placement of proposed visitor centers.

One hundred and forty-four comment letters were received from government agencies, interest groups, and individuals during the comment period. All letters from government agencies and interest groups are reprinted at the end of this section. Also included are reprints of letters from individuals that raised points needing clarification, that resulted in text corrections or modifications of the proposal, or that were chosen to represent the range of issues included in the individual letters. No responses are provided to comments that only expressed opinions and did not identify a needed text clarification, correction, or modification.



# United States Department of the Interior

BUREAU OF LAND MANAGEMENT Pain Springs — South Coast Resource Area G-Boo Gernet Avenue Post Office Box 2000 North Pain Springs, CA 92258-2000

1795 (CA-066.30)

SEP 2 - 1894

Eernest Quintane, Superintendent Joshus Tree National Monument 74485 National Monument Drive Twentynine Palms, CA 92277

Dear Mr. Quintana:

Thank you for the opportunity to comment on the Draft General Management Plan and Environmental Tepact Statement to the Joshua Tree National Monument. We offer the following comment:

Page 22. last paragraph. The proper name for the Big Morongo preserve is the Big Morongo Canyon Area of Critical Environmentel Concern. The proper name for the fringe-toed lizard preserve is the Cocchelle Valley Fringed-Foed Lisard Preserve and Area of Critical Environmental Concern.

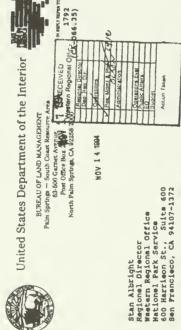
If you have any questions, please contact Elena Misquez at (619) 251-4826. Thank you.

John Bfendus Julie Bougan Area Manager Sincerely,

la

# RESPONSES

2a. The plan has been revised to correct the names for these areas.



JOSHUA TREE NATIONAL MONUMENT - Dreft General Management Plan, Development Concept Plans & EIS Re:

Desr Mr. Albright:

We have reviewed the Draft General Managament Plan and EIS for Joshus Tree National Monument and would like to provide you with the following comments:

1) In the Chapter, Alternatives, Including the Frirest Action discussed on page 27, the lease of Backcountry/Wilderness Managament is addressed. Insofar es BLM administered lands are adjacent and in closs proximity to Perk Service boundaries, we welcome and support your planned ection to pursue cooperative systeme and support your planned ection to pursue cooperative ecological units which extend beyond the monument boundary which states along the Monument's ecotomic and provident and weeten boundary. incorrect descriptions or designetions were given in the draft document. The areas as listed in the draft plan should be correctly designsed as follows:

Big Morongo Canyon Arsa of Critical Environmental

.

The Desert Lily Sanctuary ů

Coachella Valley Fringe-toed Lizerd Prsserve and ACEC. Concern (ACEC). ġ

	2b.	Two of the primary management goals for the park are (1) to facilitate cooperative
		planning throughout the California Desert ecosystem with other public agencies and communities and (2) to participate cooperatively in the preservation of ecological units that extend beyond the park boundary. The plan has been revised to include these regional planning initiatives and their relationship to this general management plan.
n	2c.	The plan has been revised to the reflect the change of status from monument to national park and the addition of 234,000 acres. Specific management guidance for
2) Also, in terms of overell plan coordination and cooperative management opportunities, two BLM planning efforte are underway which have a direct ecological relationship to the Monument.		management of the new land will be addressed by the Wilderness and Backcountry Management Plan that is in preparation.
These plane are the MEST BOLDYS COOLDINGS MANAGEMENT FOR THE THE NOTTHERN AND ESTEIN COLORAGO DESERT CONTLINES MANAGEMENT PLAIL, both of which are regional planning afforts driven by concerns for desert tortoles. Additionally, for your	2d.	The Park Service supports efforts to enhance interagency coordination and cooperative information and interpretation programs. The plan has been revised to
information, the Coachella Valley Association of Governments (CVA), is leading an effort, in consultation with the U.S. Fleh & Wildlife Service and the California Department of Fish & Game to develop the Coachella Valley Multi-Species Inbutat Management		further reflect this direction, including evaluation of the development of interagency visitor centers at the west and south entrances.
Plan. With 234,000 acree of new lande which were added to the newly designated Joshua Tree National Park, under the provisions of the recently passad California Desert Protection Act of 1994, opportunities for enhanced planning coordination and cooperative management may be relevant to your needs.	2e.	First priority projects include actions at the west and north entrance, which include the new visitor center near the west entrance and improvement of the north entrance (Twentynine Palms) visitor center. Second priority projects include development of
<ol> <li>In light of the recent passage of the California Desert Protection Act, the assumption is postively made that the draft plan document will be revised to reflact designated new parklands and widerness areas and the transition from National Monusant to</li> </ol>		the south entrance visitor facility. Further identification of project priorities is given in appendix A.
itional Park. Also, under the new lag ortunities for information sharing, each afforts which could be marged fied for purposes of inter-agancy coc fift. We would appreciate and ancoun rift. We would appreciate and ancoun	2f.	The plan has been revised to note that the park is working with the city of Desert Hot Springs and the Bureau of Land Management on the preparation of a regional trails plan that includes a proposal for trail access into the park from Desert Hot Springs. 3a. USFWS
4) On page 50 under the section on Plan Implementation, it is not clear what priority, if any, will be given to development of interpretive facilities or a visitor center. Also note, under the fifth priority the need for "additional interpretive singe" (sic) signe.		
5) For the Covington Planning Unit, there appears to be no mention of the planned trail from Desert Hot Springe, across BLM land, and into the Park.		
Overall, the draft document does a good job of presenting management alternatives and their potential effecte. We support the proposed action alternative bringing en appropriate level of management attention and visitor services to an area of outstanding resource values. We truly appreciate the opportunity		

RESPONSES			
COMMENTS	t on the Draft Gensral Management Plan and EIS for se National Monument.	Julia Dougan Julia Dougan Araa Managar intendent, JTNM	

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United States Department of the Interior

PISH AND WILDLIFE SERVICE

Hovember 18, 1994

PED-COR A NED-COR

Regional Director, Western Regional Office Metional Park Service

Field Supervisor

Draft Environmental Impact Statement, General Management Plan and Development Cencept Film for Joshua Tree Matienal Menument Subject;

The Fiels and Wildlife Service (Service) received your request for comments on the above mentioned document(e) on August 70, 1984. "Outertunately, the cover of the document this suit indicate that it was a dark and it was therefore seaside due to other obligations. Please accopt our comments at this tiss.

General Comments

It is the Service's understanding that the proposed action is the adoption of the central Nanagament Plan and link it is the part of the Convertal Nanagament Plan to mirrialize discuthences to resources while maintening existing values activities and services, it is also the Service's understanding that day was expectly would be appeaded in some areas and that opportunities for villatrass and stail expertunities for villatrass and stail experimenties for villatrass and stail experiments in the document provided that significant imposts the proposed action as described in the occur as a result of the setien.

From the standpoint of the Netional Environmental Folicy Act, and the Industrial Species Act (EAS), the Service expant conscur that the proposed acting acts of the Service and Service at Section Would note have an adverse affect on desert corrects. The reason for this complished is the indirect effects roads and that use our have on this species. Where roads pass Through baltar occupied by desert creates, appetive impacts (which exities, manufortised handling, unmithoritied negative impacts (vahicle strikes, unauthorised hundli) releases of desert tortoles, etc.) should be expected.

In addition, some assessment of conflicts between desert tortoise and vebicing nameds to be completed to take into consideration where conflicts were likely As use of Josbus Tree Mational Botument increases, the Lucideuse of webicles conflicts between deesrt tostoles and vehicles occur or are likely to occur. accidentally striking desert tortoise and other species is expected to increase. The Mational Park Service should begin identifying sawas where some light on this farms. Once areas are identified where impacts to profise are likely, measures med to be developed and impleamment to profisite profession and other riddite mortality.

If any activity of the Bational Park Service may affect a lieted species.

the plan would be adequate to address their concerns at a programmatic level. The Fish and Wildlife Service concurred that the inclusion of the following measures in Park Service would again consult with the U.S. Fish and Wildlife Service during preliminary design for all construction projects to ensure compliance with the Endangered Species Act. The following is an excerpt from the letter to U.S. Fish and consultation with that agency regarding desert tortoise issues in the plan. The U.S. A letter was forwarded to the U.S. Fish and Wildlife Service after further informal Wildlife Service: За.

plan for Joshua Tree National Park, the National Park Service will be are funded and designed. At that time, the National Park Service will have adequate details for the proposals and any impacts they may have, as well In response to your letter commenting on the draft general management preparing additional NEPA compliance documents, most likely environmental assessments, for all future construction projects as they as alternative evaluation as required by NEPA. Surveys will be completed in areas of tortoise habitat that may be affected by construction, and there will be further consultation with the U.S. Fish and Wildlife Service to ensure compliance with the Endangered Species Act. To establish baseline data, the National Park Service will continue to survey areas of tortoise habitat and monitor road mortality, especially in areas of high density. Mitigation measures will be developed as appropriate during future road design. In addition, the National Park Service will use various park media -brochures, park newspaper, etc - to inform park visitors about the tortoise and the impacts of unauthorized ortoise releases in the park.

general All of this information will be incorporated into the final management plan. Thank you for your comments.

RESPONSES

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consultation under section 7 of the EdA is required. If an action is likely to adversely effect a listed species, elicitat directly or indirectly, formal consultation is received. The results of formal consultation is received to the casults of formal consultation would be the development of a Mislegical Opinion by the Service.

hassed on information contained in the document, formal consultation appears to be warranted. Files to formal consultation, direct ispaces to authable desert cortoles babitat need to be quantified. Petential activities that may adversely attact desert cortoles also meed to be identified, and quantified appropriate. Once all direct and indirect impacts are identified, appropriate allightion measures need to be developed. It is important to mee that the outwart prorate use of facilities within loadua Tree Sistional Nomemore, where extinctions would ilkely adversely affect desert tortoles, should be consulted on. Where these abounds he initiated tolloring the development of electuates formal commulation electuations.

### Specific Comments

On page 16, whate other Monument plans, studies, and proposals are briefly described, a discussion of the Monument's first Management Plan needs to be included. In addition, if there are any other plans that would affect the natural environment, thay to need to be briefly discussed as well.

In closing, the Sarvice supports the Montaent's profuced alternative provided that measures are taken to sinkingle Separts to desert croticles and other enskitive species and babitate within Josha Tres Sattonia Noussent. In addition, a programmatic consultation would probably be the best approach for the Martine to the test in section (8 to balance approach for the Martine to the montains rightflig this latter please contact archive persons of the other please contact

(1-6-95-7-048)



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

26 Hewtherne Street San Francisco, Ca. 94106-3901 October 24, 1994

Regional Director Wastern Regional Office Watchall Park Sarvice 600 Harrieon St., Suice 600 San Francieco, CA 94107-1375

Dear Mr. Albright:

Activities hes reviewed the Braft General Management Plan/
Development Concept Flans and Evidence Handgement Plan/
Development Concept Flans and Evidence taggest statement for Joshue Tree Netional Monument, California. We are eubmitting the following comments in accordance with our responsibilities under the National Environmental Policy Act (NEPA). Council on Environmental Policy Act (NEPA). Council on Environmental Policy Act (NEPA), concil on Environmental Quality requisitions implemental quality requisitions implemental General Scott Parts 1500-1508), and Section 100 of the Clean Air Act.

In the Draft General Management Plan/EIS the National Park Service examines two alternatives, along with continuents of existing management (no action), to improve resource protection and visitor opportunities at Joshua Tres Netional Monument over the next 10 to 15 years. The electrose, which are described at two levels of detail (nonment-vide and by planning unit), address management policies for netwos and parking, and administrative facilities. All alternatives, including "no action," would entail upgrades of the existing road system and parking. In eddition the two ection alternatives would reassess backcoad status in preparation for some oleaness and revegetation. The professes detical in preparation for some oleaness and revegetation. The professes detical factors and interpretive exhibits (such as management equirement and interpretive exhibits) than the "management equirement" electrative

In many respects the proposed actions in the elternatives are etated generally, and the impact assessment for the General Management Plan is correspondingly spaced. Bits specific implements, the mass described in the Plan (read resistance, closures, facilities destins, and the like) will in many cases depend on subsequent planning. The Plan/ES sloo mentions that cartain issues which are not covered in this document, such as abendoned mine lands, will be addressed in more detailed plans and studies (pp. 14-15). More detailed analysis of impacts on biological resources, air quality, water, and other

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aspects of the environment would be possible at these later planning stages.

With the understanding that more specific plans, and appropriate MERA compliance, will be necessary to implement many of the measures proposed in the General Management Plan, we have rated this Plan/SIS LO-1 (lack of Objections—adequate impact Concentration) see attended rating sheet). We believe that the Concentration see attended rating sheet). We believe that the Mithin Joshum Tree. We note that with the likely national park designation for the Monument (assumming the California beneath Protection Act is signed) some management fastumes may be affected. The the attended derailed commands we have suggested expanding the discussion on this change in statums we have suggested aspanding the topics for clarification in the Final SIS.

We appreciate the opportunity to review the Plan/RIS. Please sand a copy of the Final RIS to this office when the document is officially submitted to RPA Esadgmarters. If you have any questions, please call me at 415-744-1574, or contact Carolyn Yslas at 415-744-1580.

Yours truly,

606

David Parrel, Acting Chief Office of Federal Activities

# SUMMARY OF RATING DESIGNITIONS AND POLLOW-UP ACTION

## Environmental Impact of the Action

### of Objections

The EPA coviner has not viscalified any possestial environmental topical requiring substantive stranges in the proposal. The croise way have during any opportunities for application of militagetion measures their contribute to accomplished with no more free free free free to the proposal.

### HC Servicemental Concerns

The ESA review has identified confromment layered for shalf he revieled in refat to fully protect the convictables.

Contractive secures new preptite dispayes to the professive internative or application of missions measures that can reduce the environment impact. ESA would like to work with the last spency to reduce these impacts.

### Po-Environmental Objection

The EPA review has leastfled significant environmental impacts that make be welsted in order to provide adaptes presents for the conversable of Corrective adaptement may require advantable that gas to the preferred alternative or consideration of tensor before project alternative (declaring the on action alternative or a new sharrantive). EPA formed metals the local agency to reduce these trapers.

### SILEnvironmently Unsettherry

The EBA review has identified solvens environmental impaces that are of sufficient angulated dust they are areastalectory from the saudopoint for the forest constraints are not with the back agency to review. EPA loaned are work with the back agency to review to the respect to the promotion amendationary impaces are not conceed at the final EXX mags, this propusal will be reconstrained for wherein is the Consider the Effective (CER).

### Advenues of the Impact Satemen

### Campory 1-Adequate

EPA bulavie de draß EES adequalety son freit die environmentel lenyacity) of de preferred alterutive and doos of the attractive insponsably vertable in de project endors. No ferrett manybal or data collection is necessary, bet the reviews any suggest in a uddics of charfyld takening of jeffrenden.

### Canadry 2-hanffulny Interpreton.

The dreft EXX does not consist entitless information for EXA to fully states entroconstal impact that should be avoided in local to fully proper the entrochains of the EXA to the extension that instanting are restorably by this bid simulativity and are writing the approxime of abstraction analyzed to that EXX, which could reload the entrocassis limited of action. The identified softional information, data, statyres, or discussion should be included in the final EXX.

### Campior 3-Indepen

EDA dope ant believe flux the draft ESS statementy inseress promishly rightlicant environmental impacts of the action of the U.S. reviews the sicrements assympted were the statement assympted in the draft ESS, which should be taken by entirely the promoting highlicant novironmental impacts. BEA believes the take the Married and analysis of enclosures are of each or required impacts. BEA believes the taken the Married analysis and the statement of the statement are of each or required and they should not take the statement of the spotsment is an equalitated for proposed could be a considerate for efforts. One to the statement of the spotsment is against the reference of the statement of the spotsment is against the reference of the statement of the spotsment is against the reference of the statement of the spotsment is against the reference of the spotsment is against the reference of the spotsment is against the reference of the spotsment of the spotsment is against the reference of the spotsment is against the reference of the spotsment of the spotsment is against the reference of the spotsment of the spotsmen

Phone: IDA Manuel 1640, "Policy and Procedures for the Barter of Puthonal Actions Imperius, the Environment."

## RESPONSES

4a. As indicated in the draft plan, implementation plans would be revised or developed following completion of the GMP process. The Interpretive Prospectus and Wilderness and Backcountry Management Plan are in preparation. The plan has been revised to clarify that NEPA documents for these plans would tier from this general management plan / environmental impact statement.

4b. The plan has been revised to explain that the land added to the park in 1994 would be addressed in the Wilderness and Backcountry Management Plan, which would initiate further surveys and identify any additional issues pertinent to the management of the new land. The Wilderness and Backcountry Management Plan would serve as an amendment to the general management plan and would include a separate public involvement process and environmental impact statement.

4c. In general, water resources would continue to be evaluated by the Resources Management Plan, which is reviewed annually. The plan has been revised to note that ground and surface water conditions at the Oasis of Mara would be monitored. Studies of the hydrogeology would be undertaken in order to understand the groundwater system that supports the oasis and impacts to that system. The park would continue to provide supplemental water to maintain the oasis until such studies were completed. The Park Service is also monitoring the status of state water rights adjudications that may affect water basins in the park.

4d. The number of parking spaces and miles of road that would be reconstructed under each alternative has been added to the Summary of Alternatives table.

STREAM MOOTEN STAT ALHEOL SCHTTER AND LUNCTEN HER MANTON LINCOTTON STATUS CHANGE THE MANTON CHANGE THE THE MANTON CHANGE THE MANTON CHANGE

General comments:

1. The General Management Plan/RIS is described as providing a framacurk for more detailed plans and studdies, including land protection, abandoned mine lands, beckcountry management, and trails (pp. 14-16). A number of important issues (nonfederal lands in the monument, sdjearel land uses, water lesching from abandoned mines, for example) ere not covered in the General Management Plan but are deferred to these more detailed plans. However, the Plan/RIS is vegue about the schedule for these prans.

piens. if possible, the final als should state when these plan vill be revised or developed, end should clarify whether the Netions! Park Service intends to tier WEDA documents for these plene from the General Management Plan/EIS.

4a

2. As the General Managasent Plan/EIS notes briefly (p. 14), the California Desert Protection Act would expand the size of the monument by roughly 100,000 ecree (chiefly on the southern side) and establish Joshua Free se a netional park. (alvan likely elgning of the legalation, we suggest that the tha final KIS explain whether these charges vould effect the managasent priorities identified in the Plan or introduce admissioners managasent priorities the new areas would be integrated with this General Managasent Plan.

4p

3. It appears that limited water supply is an leave which is not contronted directly in the PlantPIS. Clearly, a nuber of vintox facilities are not supplied with water. The Plant Bis also mentions that discharges in some of the springs are decreasing, although the cause of have not been detarmined. The PlantFig States that the the 1918 'Resources Management Plant direct the Service to develop a plan to protect Monument water rights, and to adquire rights for additional supplied, an amendating provide more information on the actuse of plant to protect and secure water. To what extent does neighboring devalopment rely on supplies (such as ground ween; which could affect water evallability and water-dependent resources within the Monument teasity

Detailed comments:

4c

 The Finel Bis should provide e summary table lieting quantified features, including parking (space), roads upgraded (miles), and campround feolities, for the three siternatives and skathy confictions. Our east this information is scattered

**4**d

The draft plan states that the land protection plan would be revised to incorporate a proactive program for acquisition from willing sellers of all private inholdings within the natural zone. The current zoning designations are based on the last master plan for the park and have been added to the document.

4e.

PER LEGALLO EXPRINT LACANCO LIGRIGOSARONNY JARREDYNYN TVERRO PARHONON PRIMILINE EELL OTHEON SOLVER JEWS PRIMILINE PALIERINGO VAR

5. Explain in the Final EIS how information in this Plan will be used to guide decisions regarding land acquisition in the "management acnes." Quantify the current soning designations (see p. 68).

throughout the text.

**4e** 

RESPONSES

### COMMENTS

# The Resources Agency

Pete Wilson Governor

Douglas P. Wheeler Secretary of California

Western Regional Office RECEIVED // ian Regional Presion California Cunservation Corps • Department of Bosting is Waterways • Department of Con Department of Pish & Carne • Department of Forestry & Fire Protection • Department of Parts & Remainste • 1 Novembar 4, 1994 Res Momt Elec III

Operations

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Action Taken

U. S. Department of Interior National Park Service ATTN: Stanley Albright 600 Harrison Street Suite 600 San Francisco, CA 94107-1172

Dear Mr. Albright:

We coordinated review of this document with the Native American Heritage and State Lands Commissions, the Colorado River Beasin Regional Water Quality Control Board, and the Departments of Conservation, Fish and Game, Parks and Recreation, and Transportation. The State has reviewed the General Management Plan, Development Concept Plans, Environmental Impect Statement, Joshua Trea National Monument, Riverside and San Bernardino Counties, submitted through the Office of Planning and Research.

The Department of Transportation's Districts have submitted the attached comments for your consideration.

Thank you for providing an opportunity to review this

Sincerely,

for James T. Burroughs
Deputy Sacretary and General Counsel well aforas

Attachments

Office of Planning and Rasearch 1400 Tenth Street Secremento, CA 95814 (SCH 94094005) :00

The Resources Building Secramento, CA 95414 (916) 652-5656 FAX (916) 653-8102

Califorus Cousti Commission » Califorus Tahoe Conservancy » Colorido River Board of Califorus Energy Resources Conservation & Development Commission » « In Principe Bay Conservation & Development Commission State Local

Street on reveled paper

5a. The plan does not propose major expansion of visitor use facilities that would significantly affect traffic to the park. A separate study and environmental impact analysis would be done for the proposed visitor facilities that would be located near the west and south entrances to the park. Impacts on traffic flow or intersections that could be affected by facility locations would be evaluated as part of that analysis.	is not a problem at this time and was not identified as an issue during the scoping process for this plan. However, traffic will probably increase as visitation to the park and recreation visits to public land in the southern California Desert region increase. Growth in surrounding communities will also increase traffic. The plan has been revised to note that this cumulative growth in traffic could lead to increased traffic congestion and decreased safety on roads leading to the park.	5c. See response 5a.			
Stets of California	Memorandum  To : MR. MICHAEL CHIRIATII, JR. State Clearinghouse State Clearinghouse Office of Planning & Research 1400 loth Street Sacramento, CA 95814  Fig. No.: 08-SBd-62-18.2/31.2  Sacramento, CA 95814  From : DEFARTMENT OF TRANSFORTATION District 8	Subject: Joshua Tree National Monument, Draft General Management Plan, Development Concept Plans, Environmental Impact Statement We have reviewed the above-referenced document and request consideration of the following comments:	The report proposes various improvements to the monument visitor facilities, which infers increased visitor tase, yet the impacts of this greater use are not addressed on the State and regional transportation facilities. Of particular concern to Caltrans, are the impacts on State Route 62 and intersections which access the monument facilities.	• A traffic study is needed for this project and should include the following from a vorst case viewpoint: existing and future average daily traffic (ADT) volumes, traffic generation (including peak hour), traffic distribution, analysis of peak hour demand and capacity using delay methodology for intersections along with current and projected capacities of local roads, state highways and freeways that might be	biscussion of the impacts should also include traffic safety and any impact associated with the construction, maintenance, and operation of any anticipated highway improvements. In addition, the report should list the funding source of any potential improvements to the State highway.

NR. MICHAEL CHIRIATTI, JR. October 18, 1994
Page 2

When available, we would like to receive the Traffic Study, Notice of Determination, Final Environmental Impact Statement, Conditions of Approval, the date of any public hearing on this project, and any prepared or future document relative to development within the Monument. Please send this information to:

Maisoon Afaneh Transportation Planning, CEQA/IGR California Department of Transportation P.O. Box 231 San Bernardino, CA 92402

If you have any questions, please contact Maisoon Afaneh at (909) 383-5928 or FAX 383-7934.

HARVEY J. SAWYER, Chief Office of San Bernardino County Transportation Planning Marrow

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Memorandum

State of California

N. GAYOU Department of Water Resources

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Dete: October 31, 1994 <u>≥</u>

11-RIV-010 R 81.5

Califors District 11 Review of the EIS to Joshua Tree Mattenal Monument SCH-94091005 DEPARTMENT OF TRANSPORTATION District 11 Plenning

What will be the traffic impacts at the Interstate Route 10 interchange at Box Canyon and Cottonwood Springs Roads?

District 11's question is as follows:

Subject F103

Cur contact person is Suzanne Lahitte, Project Engineer, Project Development North, (8:19) 686-6458.

BD/MO:ce

BILL DILLON, Chief Planning Studies Branch

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RESPONSES

NOV-67-1994 15:04

NAT'L PARKS & CONG ASSOC.

518 835 4441

8.0

National Parks and Conservation Association

PACIFIC REGIONAL OFFICE

November 1994

San Francisco, CA 94107-1372 600 Harnson Street, Suite 600 Western Regional Office National Park Service Stanley Albright

DRAFT GENERAL MANAGEMENT FLAN, DEVELOPMENT CONCEPT PLANS AND ENVIRONMENTAL IMPACT STATEMENT - JOSHUA TREE NATIONAL 2

Dott Stan:

The Nazonal Parks and Conservation Association (NPCA) is pleased to respond with comments to the above referenced document. As you know, NPCA is the only private non-printf critical organization dedicated solely to protecting, preserving, and enhancing the U.S Nazonal Park System. We have 450,000 members antinewed; including more than 90,000 in

Without the recommended improvements to visitor facilities and basic operational systems, we can expect an increase in the degradation of the resource, an increase in user conflicts, and an g management systems and lack of adequate visitor facilities. Joshua Tree, like most units of First of all, we would like to recognize the efforts of the preparers of the this document the National Park System, is suffering under the demands of ever increasing visitorship the whole, it correctly addresses the difficulties Joshua Tree NP faces under its present overall daminishment of the visitor experience.

approach to problem solving in proposing menagement systems that will reduce the impacts For this reason, we urge the Park Service to adopt Alternative A - the Proposed Action. It most fully addresses the threats facing Joshua Tree and will supply the park with the tools of increasing visitation. An additional component outlining the research and process for and resources necessary for protecting this unique resource. We commend its proactive determining the park's visitor carrying expacity is required, however. Without this information, the park cannot adequately plan for future visitor management needs

Our specific comments follow

C Pacific Regional Office P. O. Box 1289, Oakland, CA 94604-1289 Tel: (310) 839-9922 • Fex: (510) 835-4441

National Office 1776 Mass. Avc., N.W., Washington, D.C. 20036 Tel: (202) 223-6722 • Fax: (202) 659-0650

			6b. This landfill and potential impacts from its operation have been identified in the
NOV-67-1994 15:05	NAT'L PARKS & CONS ASSOC.	518 835 4441 P.83	"Planning Issues and Management Concerns' and "Affected Environment" sections
Nethoral Parts and Conservation Association	Association	~	of the plan. Because the Park Service has no authority to prohibit or control
			commercial development outside the park, the plan proposes a general strategy to
			address this issue as well as other issues dealing with adjacent land use. The National
Canada Comments			Park Service would work with adjacent property owners and local, county, state, and

additions and a survey be done to identify previously unknown management concerns. We also feel that the existing threat of a landfill at Eagle Mountain, though outside the park, should be viewed as a management issue necessary of treatment in the GMP (see also Pg. 5). The plan only briefly memons the newly legislated boundanes which adds some 239,000 additional acres to Joshua Tree We appreciate that the new lands minagement strategies. Note the less, the plan should be antended to account for the new are for the most part designated wildeness and, therefore, do not appreciably after

> 6a 9c

### Preservation of the Resource

The General Management Plan is the bass for all management decisions in the park. As such, its guidance must be reflective of the enabling legislation, the Organic Act and all other up against the principles of preservation required by these national and international mandates federal laws regulating resource protection. Joshua Tree is further bound as a United Nations It follows, then, that the purposes of and goals for management of Joshua Tree, as articulated understanding human impact on the planet. Any action undertaken by the park must be held in the GMP, set forth the highest possible standards of resource preservation. We offer the Biosphere Preserve to protect its lands as an ecosystem of significant importance to following suggestions

incorporate the standards set forth in Organic Act of 1916 and state that the "natural unimpaired so that they can be interpreted, understood and enjoyed by present and and cultural resources of the Colorado and Mojave deserts are to be preserved (pg. 8) The stated purposes for Joshua Tree NP should Purposes of the Park future generations."

preservation of the resource are the most effective way to keep impacts at a minimum instructed in the ethics and methods necessary for enjoying the park while leaving no trace of their visit. Increasing visitation will, necessarily, create impacts on the park interpretave Themes (pgs 9-10) in reference to the above, the unterpretave themes Programs which create a partnership between visitors and the Park Service for the should reflect this mandate. As part of interpreting the desert, visitors should be

p9

9c

well. As a management document, the GMP must give more guidance to staff than to Management Goals: (pg. 10) The management goals must reflect this mandate as simply "manage the lands and wildeness more effectively." We urge the language direct park actions from the stated purpose of preserving the lands and wilderness values unimpaired.

ee

USEC CONDICES: (pg 12) We support the plan's emphasis on resolving user conflict within the problems. Development of interpretive materials educating visitors on how to avoid conflicts modification of the visitor facilities and interpretive direction will work to alleviate the park. It would be neighte to amounte the specific nature of these conflicts and now would also be appropriate

**9** 

The plan has been revised to reflect this purpose and include the "preserved unimpaired" language. 6c.

ederal officials to identify the park's resource concerns. The Park Service would review, evaluate, and make recommendations to local governments concerning all proposals or developments or activities that might affect park resources. These

evaluations and recommendations would be specific to each development proposal

outside the park.

- The interpretive themes have been revised to include a statement on the leave no trace" ethic. ed.
- The first management goal has been revised to "manage land and wilderness to preserve them unimpaired for future generations." ee.
- The parkwide alternative section describes the general strategy for dealing with the primary user conflicts and congestion in the Lost Horse planning unit, which is the at the three main park entrances and a completely redesigned wayside exhibit system trails systems and availability of road and trail guides would help distribute visitors throughout the area and the park. More specific visitor conflicts are noted in the development concept plan sections where proposed actions to address these conflicts most popular area of the park. The development of improved visitor contact facilities would orient visitors and provide information about resource features and various visitor activity options. This, along with improvements in the roads, parking, and are further described. . 19

See response 4b.

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RESPONSES

consultation. This would be a continuation of existing conditions. No visitor conflicts A more complete outline of the criteria used in determining the recommendations The plan provides guidance to the interpretive program, including an objective to provide educational programs for school groups in the region. Specifics on how to a Native American consultation plan, it would meet legal requirements for with traditional sacred sites were identified during the planning process. If conflicts were to arise in the future, park management would address these concerns in for all the historic structures has been added to the plan. Applicable laws, regulations, and guidelines that pertain to properties and sites listed on, or that may be determined eligible for listing on, the National Register of Historic Places is contained achieve this objective, such as development of park-related curriculum for The plan proposes a connected network of roads, trails, parking areas, and shuttle Visitors who could not find a parking space in a lot closest to their destination could park further away but would have the option to hike, bike, or take a shuttle to their destination. As a means to improve visitor circulation in this busy area, bicycle use on designated roads would continue to be allowed as would the use of some trails. A trails plan would provide specific guidance on the layout of the interconnecting trails system and would determine which trails would be most appropriate for bicycle use based on the terrain and resource, visual quality, and visitor use concerns. The Wilderness and Backcountry Management Plan would address the use of mountain The park currently has a horse management plan, which would be reviewed and updated following completion of the general management plan and Wilderness and Although the no-action alternative does not take a proactive approach in developing coutes to serve various visitor destinations in the most heavily used area of the park classrooms, is a detail beyond the scope of this general management plan. The plan has been revised to elaborate on this management approach. accordance with all applicable laws and Park Service policy. bikes in the backcountry outside of wilderness. Backcountry Management Plan. in appendix B. 68. 6h. <u>.</u> 6k. 6i. 61. 9,08 repenence and resource protection objectives. Working with scientists, NPCA has developed Equation Use: The use of horses in Johna Teo is another case where planning can prevent in nortices between equatorian and that Users. The park should ubluze its already appropriate in the General Management Plan, we ask that the plan include a description of the be accomplished. The key points of this planning process should be arriculated to the General relevant research can be found in the two volume Visitor Impact Management and is available positive relationship with the variety of horse user groups to establish and implement a horse cultural and oatural resources. We would like to see a broader description of how this would deterioration of a resource must be based on sound interpretation of the laws promulgated for determining such a recommendation. The plan should include a statement of policy by which buildings are classified along with supporting documentation from the Cultural Resource Plan With its proximity to millions of school age children, Joshua Tree development of park-related curriculum for classrooms. Through this curriculum teachers of all levels would become allies of the park in the achievement of its interpretive goals Infortunately, some user conflicts exist simply as a function of the number of visitors in the and NPS-23, Cultural Resources Management Guideline. Additionally, the table on pages 28 represents a significant opportunity for environmental, National Park and natural and cultural Name American Consultance. We applaud the Park Service on its proposal to work closely implementation of this consultation process regardless of the alternative chosen. In addition, we recommend that the current use of traditional sacred sites by Native Americans be given There is little mention of mountain hike management in the plan While history programs. Included in the objectives for the interpretation program should be the in eight step program for determining carrying capacity. This framework along with the park. The park must prepare for the day visitation levels interfere with the park's visitor 835 4441 its protection. While we caunously agree that some historic structures may be swited for not prevalent as of yet, we can assume that the growth of this recreational activity will resources within the park. Any management decisions which consciously allow for the sventually reach Joshua Iree. If establishing guidelines for trail use by bicycles is not We look forward to an integrated approach to management of HISTORIC SINCTURES. Joshua Tree has been set aside to preserve the natural and cultural with the Native American community as is outlined in the plan. We encourage full ppropriate consideration in the plan's approach to the resolution of user conflicts. 519 nd 29 should include supporting evidence for the recommended treatment Management Plan so as to provide managers appropriate direction mand deservoranum, the ONE should outline a more comp NHI'L PARKS & CONG RESERVE, National Parts and Conservation Association rocess by which they will be created. Micraelity A - Proposed Action Visuor Use/Interpretation: Resource Management: NA-67-1936 15:10 Mountain Bikes nelq tomogenen 89 6h 8

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	NA-7-1994 1918 NH1'L PHOUS & CONS PSECC. 518 835 4441 P.65	6m. The park would encourage the development of sites for camping outside the park on both private and public land. This would include the option of pursuing such developments through private operations and the Bureau of Land Management.	<b>삼</b> 등
	Netional Parts and Conservation Association	6n. The park would pursue the cooperation and support for the shuttle system from all park user groups. The routes and scheduling of the shuttle system are beyond the	all ac
	Visitor Escilities: NPCA supports the Park Service's foresight in retaining the current canadary for overnight camping. As noted in the plan, visitorship will contain to prow in the	scope of this pian. The pian does can for a study to determine the most energy feasible system.	<u> </u>
	coming years. It would be ill-advised for the park to begin a tread of increasing campground capacities based on future demand. This slippery slope approach can never hope to accommodate the ever increasing number of visions and will only serve to push development	60. It was not the intent of the plan to reject the use of a subterranean design for the new visitor center. The plan has been revised to clarify that the siting of a visitor center in	ÿ ïi ,
em 6	no sensitive states, we also agree may vistation will producy exceed the captury of pairs facilities in the coming years. The GMP, therefore, should include an outline of the plan by which the peak will help facilitate of site camping opportunities. Potential working relationships with both private operations and the BLM should be arreculated.	Printo basin is the element rejected from further consideration. Additional site-specific information is necessary to evaluate designs for the visitor facilities at the west and south entrances to the park. This would be done as part of the preliminary	al ry
	Ronds/Circulation: The development of shurtle routes for high congestion areas of the park is	design process.	
u9	an important sepect of the plan. Cooperation aboud be supply within the climbing and trail- user communices to help encourage the use of such a system, thereby reducing the amount of parking needed for longer term park visits. Accordingly, shuttle schedules should provide for higher levels of use in mortaings and late aftermoons, as visitors enter and leave the needer.	6p. Redesign of facilities in this area, including the Black Rock campground, horse camp, and day use parking would include restoration of areas surrounding the facilities.	, d
	Monument Operations/Stetainsole Design. The desert provides a prime setting for the utilization of sustainable architecture and design. NPCA obviously supports the use of these	6q. See response 6k.	
9	iechnologies to the fullest extent practical. We agree that the siting of a visitor center in the Finto Basin would constitute an unwarranted impact, though believe that elements of the proposed design can and should be incorporated into the development of a visitor center at the West Entrance. Specifically, a partly substranted easign would blend unto the surrounding area, creating less visual distintance on the viewshed. The up-front costs associated with		
	construction of this type would be recaptured through greatly reduced heating and cooling requirements. These sustainable design elements should also be incorporated into interpretave materials, explaining the environmental benefits of appropriate technology		
	Persidoment Constol Plans		
] d9	Covingend Planning Unit: The redesign of Black Rock campground and removal of the tennis courts is an excellent start in reabbilitating this area. This facility is in serious disrepair due to 18 years as "Hylystone." Beyond redesign, however, much of the area surrounding the campground requires senious resoration work. This element should also be noted in the plan. This, along with the development of the natural environmental education center, will be a vest improvement over the cosining facility.		
	Lost Horse Planning Unit: The Key's Ranch seems to illustrate the NPS paradox of leaving the resource unimpaired for the enjoyment of visitors. Adding costumed interpretation and promoting the Ranch as a major interpretative resource can only quicken its decay Moreover, greater visitor usage of the ranch will require greater stabilization measures and the		
	potential loss of its historic fabric. As noted above, the plan should inclinde a statement of guidelines for assessing and preserving all historic structures of, at a minimum, reference to relevant laws and NPS guidelines related to cultural resource preservation.		

RESPONSES

The plan has been revised to eliminate this new parking area. Instead, the Barker Dam parking lot would be expanded and the Wall Street Mill lot and dirt access road would be eliminated and those areas revegetated. A trail would connect the Barker Dam lot to the Wonderland backcountry trailhead near the Wall Street Mill lot. 6r.

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NHI'L PHACS & QUING HOSUC,

W-67-1994 15:67

National Parts and Conservation Association

The plan has been revised to indicate that further evaluation and environmental impact analysis of the current and alternative road alignments would be completed prior to construction. 6s.

Mention of the potential development and impacts from the Eagle Mountain landfill has been added to this section of the plan. Surveys to address potential impacts from adjacent land use would be identified through the Resources Management Plan. 6t.

The section on cumulative impacts has been revised to indicate that the Eagle Mountain landfill could have major impacts on park resources, including the desert tortoise. See response 6b. en.

and? This should be clarified in the plan as we are unable to comment on this proposal with The map relating to the proposed placement of the consolidated parking area for Burker Dam and Wall Street Mill is not clear. Is the intent to place the lot somewhere midway between revegntating the other? If so, what is the reasoning behind impacting presently undisturbed the existing parking areas? Was consideration given to simply expanding one area and the information given

6r

impacts are created by the current alignment nor those resulting from any realignment. If and Iransinon Planning Unit The realignment of the road around the cholla garden constitutes a significant impact on the resource. The plan does not provide adequate specificity as to what when realignments are identified, further covironmental impact analysis will be required and should be stated in the plan.

**6**8

6t

development of the Eagle Mountain Mine site as well as anticipated impacts. We recommend Pinto Bassa Plenaing Unit Included in this section should be mention of the potential working with universities in establishing baseline data for highorn sheep and torioise

Egyironingtalal Consequences

populations

proposed Eagle Mountain Landfill. The project raises grave concerns for the torioise as well document, its possibility tasses management concerns for the park. The document does raise as for potential impacts on wilderness values. While that project is not within scope of this Desert Torsoise. Not included in the section on the desert tortoise is the threat posed by the follows then that this document include a component outlining how the park will approach this prospect of a landfill or other development outside the boundaries of the park. cooperatively with other agencies and communities to facilitate ecosystem protection. It this issue briefly. It is further stated that, as a management goal, the park will work

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In closing, we would like to thank the Park Service for the opportunity to provide comments on the foshus. Tree National Park General Management Plan. Please keep us informed as to any and all development with respect to this and other planning issues

Director, Pacific Region

cc: Ernie Quintana



ANGELES CHAPTER SCHERA CLUB 3345 WILMHER GOGILLVAR 2 - SOF - LOS ANGELES - CALFORNIA - 903 3 - 212357-487 - FACELISSES 5 444

Movember 3, 1994

Regional Director Western Regional Office National Park Service 600 Harrison St., Suite 600 San Francisco, CA 94107-1372

Dear NPS Regional Director:

Enclosed arc the comments of the Sierra Club's Angeles Chapter (covering Los Angeles and Grange Counties, and 50,000 Sierra Club manhers residing therein), on the Joshua Tree National Park General Management Plan, Development Concept Plan and the DEIS. Thank you very nuch for your easeful review of these comments.

The Sierra Club is looking forward to a strong collubaration with the National Park Service and shares great pride with you in helping America (and indeed, the world) enjoy this newest of our National Parks.

Most sincerely,

James B. Schoedler

Jim Schoedler, Vice-Chair Executive Committee

Ernie Quintana Phil Lingren :00

to be addressed by the Resources Management Plan.

# RESPONSES

The plan identifies as one of the purposes of the park to preserve the character and values of wilderness within the park, and that a management goal would be to The plan sufficiently acknowledges the importance of these values and character. The issue of noisy overflights has been added to the list of impacts from adjacent land use. Inventory, research, and monitoring of impacts from overflights would continue

7a.

'manage land and wilderness to preserve them unimpaired for future generations".

SIERRA CLUB - ANGELES CHAPTER:

(Hingson)

-

General Management Plan COMMENTS: JOSHUA TREE MATIONAL PARK:

Development Concapt Plan

Novamber 2, 1994

BY DICK HINGSON

Deserts in particular, and wilderness in general, offer neturel quiet as a cardinal resource and attribute. A good term for natural quiet is quietude. Quietude refera to a state or eltuation where natural eounds can be heard unintarrupted by technological sounds of human beinge. Particularly in the desert quietude is a state of netural ellence, since ambient netural sound levele are often below the limit of human ear detactability.

Joahua Tree National Park is a wild, dasart park unit. Nearly 80% of it is lagislated wildernass.

The documents under raview give insufficient weight to so apscial a resource/attributa as quietude within Joshue Tree Netionel Perk, The Sierra Club believes it is just as critical to as other park resources such as air visibility/quality, wildlife, water, trees, etc. Furtharmore, the wilderness character of the park is emphatically defined the upon the protection of quietude from derogation by aviation and other technological noises.

The Sterra club strongly urgae that the GMP and DEIS be revised as appropriate to articulate this articulate and present plane for better protecting it. Some opportunities to do so are suggested as follows (boided material suggested as additions):

- and animals and quietude, along with spectacular geological faaturss, ars all resourcas." Introduction: Page 3, Paragraph 5 (expand)
  "Unusual desert plants and animals and quiet
- Introduction: Page 9, Peragraph 3 (expand)
  "The wilderness provides an opportunity for physical and
  enditory solitude in nature. Clean air eneures an extensive
  vieual range, and mountains, basine, canyons, massive
  boulders and rock outcrops, and desert plant life combins to
  make the mounent outetanding scanically. The netural questix shannoss the overell impact of euch stunning Boenery. 5
- Introduction: "Management Gcals" Page 10 (expand)
  Expand third bullst to say, "improve Knowladge of matural
  and Cultural resources, Indiuding quistude." (expand) e e
- Flancing lesses and Management Concerns "Adjacent Land Use" (Page 13, fourth sentence in that section) .

7a

SIERRA CLUB - ANGELES CHAPTER

(Hingson)

"Other concerns include effects from air and water bollutante, invesion of nonnative species from adjacent lande, intrusion of noisy, oft-frightening, siroreft (both olyilian and military) into otherwise signt park sirpsee."

Parkvide Alternatives: Page 19, Paragraph 3
". .opportunities to experience the Backcountry wilderness
"in physical and auditory solitude in much of the park."

Alternative A: "Back Country/Wildernese Management" Page 20, Paragraph 2.

Following this paragraph, another paragraph could be Included: Particular needs are increasing to inventory, research, and monitor low-level switch affects on park quietude. Neens to encomplish this similar to ones recently employed in Grand Canyon and Haleskels Metional Perke will be applied.

Page 22, 5th Paragraph, 2nd Sentence

The park service would monitor, review, evaluate, etc.

Alternative A: "Visitor Use" Page 30, Paragraph 4 insert an additional paragraph after this paragraph to this effect.

Visitors would be educated in brochurss and eigne se to the resource/attribute of quietude, and would be warned of the park's degree of control or not se to euditory darogation from insufficiently requisted low-level eigraft. An appropriete exhibit explaining quietude will be dassigned for the visitor contere. Procedures for filling appropriete complaints will be provided, and consultation with the FAA and DOD will be socslerated.

THE AFFECTED ENVIRONMENT: "The Natural Environment" P. 150 е 6

AIR QUALITY: Page 150, paragraph 3, add phrase as shown to affice estatency of large vegetation combined with articardinary natural quiet accentuates the vastrases of QUIETUDE, (add antire section, just following the "Air Quality" section): the view."

"More than 80% of Joshua Tree National Park is designated as wilderness, where solitude—both physical and auditory—ebould be the rule. For things are more incompatible with wilderness concepte than the sudden, designing overhelming roar of unforessen, low-level military jets, the noise of helicopters, or the loud droning of eingle engine aircraft overhead.

RESPONSES

SIERRA CLUB - ANGELES CHAPTER

(Hingson)

DUIETUDE (continued)

"Unfortunately, the park is located just a few miles from a large military base and within easy aviation reach of numerous others. Additionally, the military has an approved low-level aircraft training routa (VR-1257) that runs the langth of the park. Joshua Traa's backcountry and front-country are frequently subjected to overflights of aircraft country all sizes and descriptions.\*

"The incompatibility is intensified further in that Joshua Tree is a <u>desert</u> park, normally characterized by an envelopa of natural eilanca.

natural quiet in desert parks such as the Grand Canyon, and directed the Park Service th racommend measures to address and remedy the issue system-wide. The National Park Servica issued such recommendations to Congrese on Saptember 12, 1994." "In Public Law 100-91, Congress recognized the importance of

THE CULTURAL ENVIRONMENT: "Regional and Adjacent Land Usa" Page 165, lines 1 and 2: (expand) 6

"(For paople who are subjected to) increasing automobile congestion, air pollution, and disappearing open space and <u>distub</u>, the desart offers much in the form of rest and relaxation, fresh air, clear ekies, outdoor recreation, solitude and <u>silence</u> for contemplation."

Page 165, last paragraph: (axpand)

even other more distant California/Newada military installations is another threat. Frightening, low-level military overfilghts at near ground level, some originating hundrads of miles away, seriously impact the park's wildarness character and visitor exparison. Immediately adjacent military training activities additionally introduce noise and night sky pollution, aven ground shaking." "The proximity of the world's largest Marine Corps base and

ENVIRONMENTAL CONSEQUENCES Page 173 10. Quietude should at least be mantioned in this section. Particularly in a desert vilderness park, it IS e specific topic of significant environmental concarn.

CONSULTATION AND COORDINATION PAGES 193 & 194 12.

Integrate the term "evietion ectivities" above the park into

Page 191

"Natural Rasources"

CUMULATIVE IMPACTS

11:

this section.

SIERRA GIUB - ANGELES CHAPTER

On page 194 there is reference to an Interagency Natural Areas Coordinating Committee meeting of May 15, 1991. Did military, i.e. Department of Defense, representative participate? Did representative of the Federal Aviation Administration attend? Mas the need for better coordination re preserving quistude from aviation discussed? If quietude problems in the airspace aboves the park ware in fact discussed with DOD and ZAA, there's no evidence provided that these lesues are anywhere addressed in the GMP, being eo addressed.

On Page 195, there is mention of informal meetings hald with "mambers of key public interest groups" in May of 1992. Was the Sierra Club included in those meeting? It eeems possible it was not; the Sierra Club being omitted on Page 196 from the Liet of organizations to whom copies of the

FOOTNOTE, FROM PREVIOUS PAGE:
Freecading two paragraphs adapted from "Project Statement JOTR-N-0.2, "Monitor Effects of Aircraft Overlights", 1993 Joshua Tree Resources Management Plan, pp. 132-134."

"Jet Training Invades Joshua Tree National Monument" by Dick Hingson Skyguard (Winter, 1990) Note also ATTACHMENT:

RESPONSES

See response 2d.

Ъ.

-5-

SIERRA CLUB - ANGELES CHAPTER

(Landers)

GMP

Development Concept Plan DEIS COMMENTS: JOSHUA TREE NATIONAL PARK

by Ralph Landers

The proposed landfill use adjacent to the Loshua Tree National Park will cause many undesirable situations; such as: resources posed by the proposed landfill just south of the park? Does the plan sufficiently address the threat to Joshua Tree

Increased traffic from dumo trucks with the accompanying dust; diesel motor noise.

Insect invasion, especially files and other garbage eaters such as rodents.

> å ů

Odoriferous emissions that will invade the National Park and affect the wilderness ambience.

Landfill operation is projected for 100 years! r o Predatory visitation by ravens which have been observed to lay in walt for desert tortoise hatchlings to appear, then catch and ear them. The desert tortoise habitat of the majority of the tortoises in the NP is only six miles from the proposed landfill. e.

by Judy Anderson & Jim Schoedler

We are concerned about the proposed placement of a new visitors' center inside the park. We attach an article by Secretary Babbitt A New Conservation Ethic" (L.A. Times, 6/1/94), in which he arques for "gateway" outside-the-park "staging areas" for visitor information services, among other things.

It would be better to put the visitor center on public (BLM) land just outside the boundary. This applies to the important and much needed west end entrance visitors center, as well as to any proposed expansion complex at Cottonwood. The southern center would be constructed on public land south of the boundary, between the park and the interstate highway. It might well be an interspency facility, with expenses shared with BLM as a center where they could also provide additional information on the new which expenses shared with BLM as a center where they could also provide additional information on the new wildernesses just south of the park —"Mecca Hills, Orocopia, Chuckwalla. This is an area which is already receiving overflow camping, and a campsground might be planned in connection with the visitor center.

COMMENTS

SIERRA CLUB - ANGELES CHAPTER

(Anderson - Schoedler)

COMMENTS by Judy Anderson & Jim Schoedler, (cont.)

We oppose the permitting of placement of bolts in areas used by climbers, even if only a potential possibility. Some reasons:

- Is the rock less important than a flower? Removing any vegetation is not permitted -- even picking a flower is not acceptable. How can placing a boll be acceptable? Is the destruction of vegetation around the base of a boulder which has new bolts less important than picking a flower?
- Is the rock less important than putting a grate over an abandoned mine hole? An environmental review is necessary for such an action. Shouldn't the placement of a bolt, and the associated changes in use patterns, also require environmental review? ġ
- Is the placement of a new trail on a rock face, visible to anyone within the vicinity, to be permitted at the whim of any climber with a drail? Would a hiker tried of following the existing trails be allowed to place cairns or rock piles to mark a new force trail he thinks others might enjoy hiking, or so he can safely find his way back to his car? ΰ
  - What happened to the "LEAVE NO TRACE" ethic? With increasing visitor levels this becomes ever more important. Leaving bolts is more intrusive than leaving chalk marks neither is appropriate. Wkrecall arguments about lug soles not being appropriate in some places because they dig into the soil too much, so we leave the lugs at home. Ď,



### San Diego Chapter Sierra Club Mountaineering Committee

Tel (619) 287-3434 Fax (619) 534-6833 e-mail rhughes@ucsd.edu

4605 Estrella Avenue San Diego

Regional Director
Western Regional Office
National Park Service
600 Harrison St. Suite 600
San Francisco
CA 94107-1372

# re: General Management Plan, Joshua Tree

Dear Si

I would like to bring to your attention several problems with the proposed Joshua Tree GMP, many of which are concerns because they are only vaguely covered in the GMP.

### Camping and parking

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The GMP states that fees and registration will be required for all camping. It is not clear whether this means that advance registration will be required. We would like to suggest that advance registration not be required for the majority of campaises in the monument.

I see no purpose in rerouting the west entrance road to the south side of Intersection Rock. The rationale for this should be clearly justified as it will cause unnecessary disturbance.

The GMP makes no specific reference as to which parking turnouts would be enhanced along the west entrance road. Many of these turnouts are currently inadequate and parking overflows onto both sides of the road. Furthermore, namy of these turnouts serve significant climbing areas such as Hemingway Butters. The NPS has proven unsuccessful in preventing the polificantion of multiple traits in such areas. The Access Fund has flagged pathways between these turnouts and the base of climbing areas in an effort to help reduce the proliferation of traits that criss-cross and enode the desert floor. The turnouts which are to be retained and those which are to be enhanced need to be clearly defined before comment on their appropriateness is possible. Furthermore, these turnouts need to be augmented with trait such as those marked by the Access Fund.

## RESPONSES

- 8a. The plan has been revised to clarify that first-come, first-served camping would be retained. Reservations would be required at Black Rock, all group sites, and Ryan horse sites. Reservations for some additional campsites would remain a future management option.
- 8b. The plan states that the intersection at Intersection Rock would be relocated to improve traffic flow, sight distance, and safety. The intersection of Park Boulevard and Barker Dam Roads has a high hazard potential because there is a major visitor activity area at the intersection (Intersection Rock), there are multiple turns into various visitor use areas (the campground, day use parking, Barker Dam Road, and Hidden Valley area), the intersection carries a high volume of through traffic, and sight distance on the approach is limited because of the curve. All through traffic on Barker Dam Road also passes adjacent to the campsites on the southern side of Hidden Valley Campground. Realignment of Park Boulevard and relocation of the intersection to the south side of intersection rock would increase sight distance along the approach to this area, and clearly separate entrances into the day use parking area at Intersection Rock, the campground, the Hidden Valley area, and Barker Dam Road. Through traffic on Barker Dam Road would no longer pass through a portion of the campground.
- for the road reconstruction project. Parking between Lost Horse Road and the turnoff lot would be along Park Boulevard, .25 to .5 mile east of the Lost Horse ranger station access road. Paved pullouts would be provided approximately every .25 mile along The plan has been revised to clarify that trailhead pullouts between the west entrance and Quail Springs would be retained and paved. Conceptual designs and specific numbers, size, and locations of these pullouts would be determined during design to Hidden Valley would be consolidated into three primary parking areas with associated trailheads for nearby rock formations. These three areas include the Lost Horse ranger station access road lot (20 cars), Hidden Valley north lot (15 cars, 1 RV), and a third Hemingway lot (15 cars, 1 RV) that was added to the plan. The Lost Horse ranger station access road lot is near the intersection of this road with Park Boulevard. Hidden Valley north lot is about .25 mile west of the intersection of Park Boulevard and the road to Hidden Valley at an pullout near slam or jam climbs. The Hemingway Park Boulevard. These pullouts would use existing dirt pullouts or disturbed areas wherever possible and would have connecting trails. 8c.

Ryan campground is one of the premier rock climbing campground sites in the monument and, without offerse to the horse users, it is unclear why this particular site should be partly given over to horse users. Unless clear justification for this option is given, and no alternative is explored, I am not in favor of including horse user

### Rock climbing

**8**e

spaces in Ryan campground.

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It is inappropriate for the GMP to refer readers to the Backcountry Management Plan (BMP) for guidance on the Climbing Management Plan since the BMP is presently unavailable. Furthermore, the VERP process that is currently being pursued by the Joshua Tree start segregates the Park into different zones. The areas that are being covered by the GMP are distinct from those to be addressed by the BMP, suggesting that this is an attempt by the NPS to duck issuing a statement of policy on rock climbing in Joshua Tree.

A small fraction of rock climbers is placing expansion bolts on blank rock faces to protect leads on climbs that acould otherwise be top open in perfect starty. This bedonstic practice is causing a great deal of ill will between rock climbers and Park managers, a situation that must be rectified. Therefore, we support the current moratorium on placing new expansion bolts in the Wilderness pending introduction of some process that can registate the production new Ported Fourier. However, we propose that there should be some mitemprocess by means of which potentially dangerous sub-standard expansion bolts can be replaced on climbs, especially on multi-pritch climbs such as "Walk on the Wild Side." The ban on replacement of existing expansion bolts in the backcountry, a policy that appears to be unique amongst all NPS units to Joshua Tree, ought to be lifted. To continue prohibiting replacement of suspect expansion bolts is courting lawsuits brought against the NPS by injured climbers.

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### Roads

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The proposed paved roads that will provide increased access into Barker Dam and the Geology Tour road are counter-productive to minimizing visitor disturbance of these semi-primitive park areas. Furthermore, these roads will increase mortality to the sensitive desert tortoise population.

The GMP appears to have a bias against backcountry users. The 4WD dirt road into the northern end of the Coxcomb mountains travels up a wash and therefore its use causes no degradation of the Park's natural resources. However, this road is used by Sierra Club mountain climbers to reach Tensor, Spectre and Dyadic peaks. There is no rationalte given for cloning this particular access road, although one might conjecture that one possibility of the NPS to collect user entry fees at such locations. Indeed, the GMP does not state which roads are to be closed. I don't doubt that other roads fall into this same category of unnecessary closure.

Sincerely,

Dr Richard J. Hughes Mountaineering Committee Chair

RESPC

8d.

Ryan Campground is along the California Hiking and Riding Trail and can be reached in a day from Black Rock, a major equestrian staging area. It provides the only overnight site in the interior of the park for equestrians. The plan supports the continued use of Ryan campground by this user group. Because equestrians typically need to plan their trips in advance and their choice of sites would be limited, the plan also proposes the use of a reservation system for these horse campsites.

8e. The climbing management plan will be revised based on several ongoing resource studies and will be incorporated into the Wilderness and Backcountry Management Plan. The Park Service believes that the completion of the studies is necessary to provide a rational basis for decisions regarding climbing management. The Climbing Management Plan will then comprehensively address climbing issues throughout the park. Until these studies are completed, the general management plan recommends the continuation of the management guidelines regarding climbing in the park. This includes the continued ban on expansion bolts in designated wilderness.

8f. See response 8e. The plan was revised to reflect that the Park Service cannot guarantee the safety of climbers and that reliance on existing bolts is not recommended.

heavily used Lost Horse planning area would delineate these facilities and help to Paving Barker Dam Road and the parking areas along the primary park roads in the control roadside and shoulder parking. Paving Barker Dam Road would also allow a variety of vehicle types, but not more vehicles, to access parking for the Barker Dam interpretive trail and other trailheads in this area. The parking lot capacities would be limited to the levels that are already reached on some of the busiest days of the year. To reduce competition for limited parking in this area, the plan proposes an connected network of roads, trails, parking areas, and shuttle routes to serve various destinations in this area of the park. Visitors who could not find a parking space in a lot closest to their destination could park further away and have options to hike, bike, or take a shuttle to their destination. Additionally, improving the public's awareness of the wide variety of visitor opportunities throughout the entire park is intended to better distribute visitors and encourage use in other areas, including the Geology Tour Road. This road would be improved to a two-wheel drive dirt road (not a paved road) to allow more visitors to experience the interpretive opportunities 88.

Increased mortality to the desert tortoise could occur if traffic increases on these roads. However, tortoise densities in these areas are low (0-7/km) to moderate (8-29/km) and based on current experience, such roadkills would be expected to average less than one per year. The Park Service would develop mitigation measures during road design in consultation with the U.S. Fish and Wildlife Service.

8h. This area of the park is designated wilderness. Vehicles are prohibited.

RECEIVED

JOSHUA TREE HOV 2" 194

### San Gorgonio Chapter Sierra Club

Serving Riversade and San Bernardino Counties Theybuse Comp e Los Servantos Group San Bernardino Mins Group e Mojave Group 348 N. Mountan View Ave., Suite 130 (719) 281-5015

Regional Director Western Regional Office National Park Service 600 Harrison St. Suits 600 San Prancisco, 6a 94107-1372

First and foremost I would like to Thank all those involved in the creation of this most important and long overdue General Amagement Plan. Upon reviewing the Jan I wish to give my support for the implementation of Alternative A-Proced Action, However, there are some areas of concern I would like to address. Dser Sir.

9a

1) West Entrance Visitor Center. Can the proposed visitor center be built in the town of Joshus Hree or perhaps as a viable alternative can the Federal Lands outside the boundary of the park be used for this proposed center? (Ref. Map " Monument and surrouding Landonnership Status " Egg. 16") is this visitor center really a necessity or would it be in the best inherest to upgrade and remeda to crutt visitor center in Prentynine Palms? I have stateched to this memon a copy of an article that appeared in The Los Augeles Times on June 181, 1994 by Secretary of The Interior Bruce Babbitt. In it Mr. Eabbitt described " New Conservation Ehit" he would like to see in our Newload Perks and Monuments. I believe this flam to see an our Newload Perks and Monuments. I believe this does not mest with his definition of Ethics. I appreciate the argument that 60% of park visitation pas through the west entrance, but that is szactly what they do- pass through, I am concerned with the impact on the unique and diverse ecceptem that this visitor center and the additional traffic vill affect.

<u>Bolting Ban</u>—The plan states that a ban on bolting in the wildstness areas shall be in affect pending the results of an onegoing study. I urge the management to continue this ban throughout the entire park and not only the wildstness areas. This conflicts with the ustainability of the resource. Besides, from the easthetics viewpoint, the scare caused by the rusting of bolts on these viewpoint to the sepaling, what happened to the "Leave No philosophy of management of park resources for the long term Fracs " sthic? 5

## RESPONSES

- improvement of the visitor facilities the serve the north and south entrances are considered necessary to contact, orient, and educate visitors upon their arrival. Because the majority of visitors use the west entrance, contact at that point was felt Provision of a visitor center near the west entrance as well See response 2d. to be crucial 9a.
- See response 8e. 9b.
- See response 4b. 9c.

STRY ENE! DATE

- See response 7a. 9d.
- See response 6n. 9e.

Oct. 11 1991.

The park has a recycling program that would continue to address recycling throughout the park. The general management plan has been revised to note this. 96





To explore, enjoy and preserve the nation's forests, waters, widdife, and wilderness



### San Gorgonio Chapter Sierra Club

CCIVALIVAELY A U

Serving Riverside and Saa Benardino Counies Theylus Group & Los Skramso Group San Benardino Mins. Group • Mojave Group 548 N. Mounain View Ave., Suite 130 (714) 381-5015

3) Backcountry Management Plan. Although I am aware of The Backcountry Management Plan for the park, I believe this should of been included in this General Management Plan, The California Desert Protection Act ands an additional 200,000 acree of land to our park. There needs to be an addebtdum, of other description of how the

planning for these added lands will be handled.

Military Overflights— The Plan does not address this issue at all, bespite the fact the park is mostly wilderness are and visitors are encouraged to experience the solitude and silence. The vilderness offers, it can be quite deficient with jet fighters I am gover your head. I have experienced it numerous times, Does Park Management plan to address this issue? Furthermore, I am sure studies would show a negative affect such noise invasion creates no both animal and plant life.

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Shuttle Service. I welcome and encourage the need for a shuttle system throughout the park, especially on the busy weekends during the vildinomy snows in spring. The vildinomy snows in spring. The flan addresses this issue 3

6) Recycling Plan—Not addressed in the plan. This needs to be addressed and encouraged throughout the sutire park along roadside cutouts and in all campgrounds.

In closing, I again Thank You for the opportunity to comment on this most important Management Plan. I look forward to working closely with Superintenent Quintman in making this plan a reality. It is heartwarming to know that he will lead this effort, Planse continue to keep me informed on this and other Park Planning Issues.

Philip Lindgren Coordinator- Dasert Committee San Gorgonio Chapter

cc: Ernie Quintana Peter Burk Joan Taylor

To explore, enjoy and preserve the nation's foresis, waters, wildlife, and wilderness

2 of 2



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LIMDA E. SHREVES, ESQ.
LIMDA E. SHREVES, ESQ.
KELLEY DAVE G. MARREN
S15 S FLOWER STE 1100
LOS ANGELES CA 9 0 0 7 1

November 4, 1994

Regional Director
Western Regional Office
National Park Service
600 Harrison Street, Suite 600

San Francisco, California 94107-1372

Re: Draft General Management Plan for Joshua Tree National Monument

National Monutue

Dear Sir or Madam

The purpose of this letter is to set forth the concerns of The Access Fund with the Draft General Management Plan for Joshua Tree National Monument (the "Monument") (the "Draft GMP"). The Access Fund is a national mon-profit organization of climbers dedicated to preserving America's climbing resources and climbers' access to those resources. The Access Fund supports andres of climbing impacts, funds land acquisitions and impact mitgation projects, publishes climber educational and low impact climbing materials, and assists in the preparation of climbing and backcountry management plans at allowed of climbing or management plans at Yosemite National Park, Devils Tower National Monument, City of Rocks National Reserve, Canyonhards National Park, Punackes National Monument, City of Colorado National Monument, Globra Monument, Globra Monument, Robert Stational Monument, Gooder National Forest and other climbing areas on state and federal lands.

NPS-8, Management Politics, states at page 8:2 that "the National Park Service will encourage revertailonal advivities ... that promote visitor enjoyment of park resources through a direct association or relation to those resources ..." Approximately fifty to seventy-five percent of the visitors to the Monument are climbers. As the Monument's major user group, climbers have a keen interest in Monument policy development and management. For this reason, The Access Pund and other local climbing groups have actively worked with the Park Service to ensure that policy and management decisions reflect the interests of climbers.



DONATIONS TO THE ACCESS FUND ARE TAX DEDUCTIBLE

Regional Director November 4, 1994

Findings from the biological study were presented to the public in March. The park will present the findings of the cultural resource study to the public when it is completed. Preliminary results of the sociological and biological studies are available

10b. The plan has been revised to state that most routes can be climbed without bolts.

at the park.

Findings from the sociological study were presented to the public in January 1995.

10a.

Our primary concern of The Access Pund is the finalization of the Climbing Management Plan (the TBMP'). Our concerns with the BMP and the interim Climbing Management Plan (the TBMP'). Our concerns with the BMP and the interim Climbing Management Plan have been set forth in previous correspondence and remain unussauged. However, inasmunch as the BMP and the Climbing Management Plan are components of the Draft GMP, we believe it appropriate to set forth our general concerns with the Draft GMP at this time, and address our specific concerns with the BMP and the Climbing Management Plan at a later date. This should not in any way be interpreted as approval of the BMP or the interim Climbing Management Plan by The Access Fund.

Unless otherwise stated, this letter will address concerns with "Alternative A - Proposed Action" ("Alternative A"). Although we have attempted to limit discussion of our concerns to only those issues which directly or indirectly affect climbers, many of the actions proposed by the Draft GMP will affect all users of the Momunent. It is our sincere hope that the Draft GMP will be implemented in such a way that the interests of all users, including climbers, will be equally served.

A. Perchanicy and Wilderness Use and Management. The Access Fund has previously stated its concerns with the BMP and the interim Climbing Management Plan and has worked with Park Service personnel at the Monument to develop theses Plans. The Draft GMP does not clearly state what activities will be permitted in backcountry and wilderness areas, but it is our understanding that these matters will be fully resolved in the BMP. It is our sincere hope that the Park Service will containe to work with The Access Funds of finalize the BMP and the Climbing Management Plan. Hopefully this mutual cooperation will result in a Climbing Management Plan that will belance the desires and goals of both the climbing community and the Park Service.

The Draft GMP refers several times to studies which are or have been made concerning the effects of climbing in wilderness areas. By this letter, The Access Fund requests that it be provided with copies of any studies which have been or will be prepared concerning these materias. This will enable us to interact more productively with the Park Service in developing the Climbing Management Plan. In addition, The Access Fund has previously indicated that it wistes to work with the Park Service to develop and conduct its own independent study concerning climbing in the Monument. To date we have received no meaningful feedback regarding this proposal.

Finally, the Draft GMP contains certain inaccurate statements about bolting and fixed anchors. In particular, the Draft GMP states that all rock climbing routes can be climbed without bolts. This is simply untrue. Several routes in the Monument cannot be climbed without the aid of fixed protection. While this is arguably not the forum for debating the many issues surrounding bolting in the Monument, we wint to clarify this

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10c. The plan does not propose segregation of different user groups into separate campgrounds. A loop in Ryan Campground would be designed to meet needs of horse users. The Park Service would prohibit other users in this loop when it is reserved by equestrians. This would avoid safety hazards associated with large animals.

RESPONSES

10d. Equestrian sites at Black Rock and Ryan Campgrounds and group sites at Sheep Pass and Indian Cove Campgrounds are the only campsites proposed for certain users. Other campsites would be open to tents or RVs. 10e. The campground registration system is an operational issue that is beyond the scope of this general management plan. The plan has been clarified that first-come, first-served camping would be retained. See response 8a. Camping fees would continue to be charged only at Black Rock and Cottonwood and group sites. Charging fees at other unimproved campgrounds will be evaluated at a later date.

10f. See response 10e. Fees for campgrounds would be evauated at a later date. Fees would be based on comparability studies with similar nearby campgrounds.

misstatement in the event that it is relied upon by those who are not familiar with technical rock climbing techniques or the type of routes available in the Monument.

Regional Director November 4, 1994

Page 3

B. Recletion of Campgrounds and Implementation of Reclaration System. Redesign of the campgrounds in the Monument to effect some separation between incompatible user groups such as motorhomes and backpackers seeking quiet is long overdue. Although certain groups such as horse users and large groups have special needs, it would detract from the overall experience to strictly segregate each user group into separate campgrounds. Many national parts have set aside certain campground areas that are available for tent users only while maintaining other campgrounds areas where campers,

available for tent users only while maintaining other campgrounds areas where campers, trailers and motorhomes are permitted. Where feasible, user groups should not be prohibited from camping in areas which cater primarily to one user group. For example, if space is available, tent users should not be precluded from using sites in campgrounds set aude for horse users.

10c

p01

The Draft GNPB does not indicate the percentage of sites that will be allocated to "special need" user groups or whether campsites in these areas will be available to other user groups. A description of how campsites will be allocated to special need user groups is necessary to ensure that all user groups will have an equal opportunity to enjoy the expetience of camping in the Monument. Hopefully, if campgrounds are allocated so that some user groups are preferred over others, the interests of those users who seek a more direct association with Monument resources will prevail.

The redesign of certain camping areas to meet the needs of special user groups logically suggest to the implementation of a reservation system to ensure that these user groups have access to the campsites that have been provided especially for them. Each alternative proposal contemplated by the Drift GMP indicates that a registration system will be implemented and fees and time limitations will be established. However, no details are given concerning the registration system or the nature of the fees and time limitations which will be imposed. It is important that campsites be available on both a reservation and a "first-come first-served" basis. The Monument is destination for climbers from around the world, most of whom would not be aware that advance reservations are required to camp in Monument. A system that allows both reserved and first-come first-served camping will ensure fair allocation of campsites at peak times when space is limited as well as ensure that campsites will not remain vacant if users cancel their reservations of fail to show.

10e

Finally, the fees for camping in the Monument should be minimal. High fees would unfairly discriminate against lower income users who may not be able to afford any vacation other than a family camping trip. Camping is one of the few remaining activities that can be enjoyed by people from all walts of life, and the national park system was

10f

W LAST SUGBLIFFED. 72

Regional Director November 4, 1994 Page 5 The Access Pund appreciates being included in the development of the Draft GMP, the BMP and the Clinibing Management Plan in ight of the fact that the Monument is such an important area to climbers around the world. We hope that the Park Service will continue to keep The Access Pund and other interested groups informed about matters which affect climbels in the Monument so that we can work together to develop a plan that will enable climbers to maximize their experiences at the Monument in a way that adequately preserves its resources for generations to come.

Very truly yours,

GLENN D. PINSON, Regional Access Coordinator

ional Access Coordinator

LINDA B. SHREEVES, ESQ., Regional Access Coordinator

ce: Ernest G. Quintana, Superintendent, Joshua Tree National Monument Tom Gavin, Backcountry Ranger, Joshua Tree National Monument

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11a. The statements in the plan regarding bolts have been revised.

# Arizona Mountaineering Club

P O BOX 1695 . PHOENIX. ARIZONA 85001

November 3, 1994

600 Harrison Street, Suite 600 San Francisco, CA 94107-1372 Western Regional Office National Park Service Regional Director

Dear Sir,

The purpose of this letter is to respond to the National Park Service's (NPS) draft General Mountaineering Club (AMC) cannot offer its support for any option presented in the Maria GMP at this time. The AMC believes that several points need to be clarified or corrected prior to our support being offered. These points are outlined below. All points discussed are in reference to Alternative A (the NPS preferred alternative), but where Management Plan (GMP) for Joshua Tree National Monument. The Arizona appropriate, apply to the other alternatives.

### Rock Climbing

It is positive that the NPS acknowledges Joshua Tree National Monument as one of the most popular climbing spots in the world, but the draft GMP is biased against climbers:

• The draft GMP terms protection bolts as "rock defacing." This is an unsupported judgment statement and must be removed from the GMP.

The draft GMP states that all bolts in wilderness are unnecessary as "all roules can be climbed with alternative methods." This is simply not true. Many lormations in the pitch climbing which can not be safely top-roped. Since all routes cannot be safety monument have no non-technical way to the summit, or offer traversing or multiclimbed without bolts, this statement should be removed.

11b

11c

change this ban to allow for the replacement of bolts in designated wilderness. This The AMC supports the temporary ban on the placement of new holts in designated wilderness until further studies and a recommendation are made. The NPS should is a critical safety issue, and the change should be made immediately.

11b. See response 10b.

11c. See response 8e.

### The plan includes the conversion of the campsites on the northern perimeter of The purpose of the campground redesign is to better delineate roads, parking, trails, and campsites and reduce impacts from the indiscriminate parking and site use. Redesign is not expected to enlarge the footprint of the campgrounds on the land nor change the composition of user types. The capacity of campgrounds would not appreciably change. The plan has been revised to indicate that campsites would not The plan has been corrected to locate parking for the Oyster Bar at parking area 21. RESPONSES Hidden Valley Campground to walk-in sites. be restricted by user type. See response 10d. 11g. See response 8c. See response 6a. See response 6r. 11e. ' 11h. 11f. 11i. The proposed reservation system for all camping in the monument does not appear to it currently stands, the plan could greatly after this experience as well. It is recommended that the NPS work with the Friends of Joshua Tree and the Access Fund to believes that the plan provides a basis for improving the Joshua Tree experience. But, as The AMC is confused by the relocation of the Oyster Bar parking area approximately eliminate inaccuracies and improve the aspects of the plan that have been detailed above. The AMC is concerned about the proposal to create large paved parking lots (e.g., paving one lot near Echo Tee as a Keys Ranch staging area, one large lot for Barker Sheep's Pass. The NPS should reconsider its decision and implement this proposed appear to make getting an accurate environmental impact statement difficult as well. Thank you for the opportunity to participate in the review of the draft GMP. The AMC No mention of a walk-in climber's campground is made. The Access Fund and other campground. As camping is already limited, and "camp full" signs are the norm in allow for camping on a first-come first-serve basis. The plan should be revised to climbing groups have supported the creation of a climber's campground for several The AMC supports the NPS proposal to relocate camp sites that are located at the Entrance to Quail Springs and from Hemmingway to Hidden Valley Campground The vagueness of certain aspects of the plan (e.g., campground redesign, campsite 5 miles further down the road. This parking area is paved and has a curb, and is The AMC does not support the NPS proposal to eliminate parking from the West years. The Access Fund has offered to fund the effort and proposed a site near numbers) makes it difficult to analyze and understand the draft GMP. It would indisturbed areas (e.g., proposed Barker Dam/Wonderland Ranch parking) Dam/Wonderland Ranch). These combined lots will create user conflicts. The AMC does not support creating large paved parking lots in previously turrently in a good location. Moving it seems to offer little benefit. This eliminates not only parking, but access to much of the mon COMMENTS spring and fall, this campground is much needed, allow for first-come first serve-camping base of climbing areas. General 11e 11g11f 111

CLIVILLEINIS

TALOT CINGES

Please place the AMC on the mailing list to receive mailings about the GMP and the Backcountry Management Plan. Send this information to the attention of the Access Committee, Arizona Mountaineering Club, PO Box 1695 Phoenix Arizona 85001.

Thomas Matthews Chairperson, Access Committee

About the Arizona Mountaineering Club: The AMC is a non-profit organization with approximately 300 members. While AMC members participate in many outdoor recreational and conservation activities, the primary focus of the AMC is rock climbing. Joshua Tree National Monument is a common fall, winter and spring rock climbing destination for our members. AMC members take an active interest in preserving monument resources, and participated in climber organized cleanup and low impact use efforts.

RESPONSES

12a. See response 10b, 11a, and 11b.

# SAN DIEGO CLIMBERS FOR ACCESS

10734 VILLA BONITA SPRING VALLEY OCT 28th 1994 Pl of 3 CA. 91978 San Francisco, CA 94107-1372 Western Regional Office, National Park Service 600 Harrison Street, Regional Director,

Sublects: Proposed Climbing regulations, Parking & Camping changes for Joshua Tree N.M.

Dear Sirs,

We are a 300 member organisation of climbers in San Diego county, California. Many of us climb and camp regularly at Joshua Tree N. M. I attach a name and address list of our memberahlp. I am writing to you at the request of our membership as we wish our views to be known

We are apalled at the wording used and some of the opinions expressed in your recently published General Management Plan. Not only do these statements show a lack of knowledge of Technical Climbing they also convey a strong scose of BICOTRY on the part of the authors. Specifically we object to the word

deficing on P22 third paragraph and to the statements all routes can be climbed using alternative means

On the first point;

and can be top roped' on P170.

difficulty spotting them even when they know the bolts are there. Bolts take up very little space and remove A) Fixed bott hangers are very small and usually hard to see. Experienced climbers often have minuscule amounts of rock.

factor is that they have been there longer!. Also we would point out that a few dozen feet of new blacktop Grafitti' and Native Rock art on the same basis 'that they deface the natural rock'. Their only redeeming B) As to the word 'defacing', as strong a case could be made for the removal of both 'Historical surface effectively 'defaces' a larger area than all the holts ever placed in Joshua Treel.

To correct you on the P170 statements;

2)Fixed bolts are usually only placed where 'natural' protection is not available or is suspect, in fact in the event of a fall.

climbers frequently remove unnecessary bolts from routes on ethical grounds!

1) Pised protection is not used to 'climb' it is used to 'protect' the lead-climber from death or injury

3) Many climbs gannot be protected without the use of fixed protection. Climbers would be at high risk from death or injury if they lead climbed these routes without the fixed boits! As to there being too

12a

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indicating that they are poorly protected and still have a substantial death or lojury risk in the event of a many bolts, a large portion of all climbs (probably more than 33%) have an 'X', 'R' or 'PG' rating

because they are multi-pitch and thus too high for practical top roping. Climbing on top rope is a totally 4) Many climbs cannot be 'top roped' as there is no non-technical access to the set-up point or different and much easier experience than lead-climbing a route even with fixed bolts in place. PARKING

12b

management needs. CAMPING:

parking changes in the Pian need to be discussed with the users of the monument not based totally on

The Plan effectively removes many parking areas close to some popular climbing areas. Those persons wishing to climb in these areas will be left to walk long distances or risk illegal parking. The

boolding in the hands of a commercial agency on both cost and convenience grounds. On cost; many of the The camping in the Monumeot works fine as it is, "it ain" broke" so why change it?. We object to some of the proposed changes in the booking and cost of camp sites. We oppose the proposal to place

12c

use of a commercial booking agency have oot had many dealings with such enterprises. Put bluntly they are users of campaites are on low income, they are comprised of students, senior citizens and large families. A qoket survey of campsites on most-weekends will confirm this. These people do not have the money to pay a 'royal pain in the rear end', even the simplest of booldings usually takes multiple phone calls to arrange. Many people's Jobs do not permit them the luxury of malding these calls during worlding hours so they are fees for camping and so would be 'squeezed' out by this proposal. It is obvious that those proposing the become near impossible to obtain as some groups/persons seem to have found ways to 'beat the system'. effectively precluded from booking these campaites. Further, bookings on peak or Holiday weekends

Our final point on campsites is that, to our knowledge, no other National Park or Monument that has camping falls to provide first-come first-served campsites. 12c

activity. We do understand the need for wilderness, the needs of wildlife and the necessity of preserving the quality of our wild places. We accept that specific areas need to be closed, sometimes for extended periods, We are an environmentally aware group and feel that climbing can and should be a low impact to protect Raptors and other creatures during their breeding seasons and other times when they are sensitive to disturbance. We recognize that the use of motorized drills is inappropriate and often unnecessary in many areas.

12b. See response 8c.

12c. See response 10e.

12d. See responses 6a.

RESPONSES

We are, however, concerned that our safety and access are not compromised by decisions that are not based on sound research. It is our collective opinion that fixed botts need to be replaced on a regular, but not frequent, basis as they all deteriorate and become unsafe over time. Climbs that have been in use for many decades will be unsafe without known good boits in place. We also believe that regulation of climbing equipment such as challe, protection devices, and Ald climbing hardware would be difficult, if not impossible, to enforce.

We urge you to keep regulations to a minimum and to manage the public lands under your juriediction by co-operation and mutual respect. We believe that the large majority of the 'Climbing Community' is sufficiently mature to practice low impact reacreation based on trust rather than on regulation. Adequate regulations already exist in most areas to manage the risk to nature and man as well as to protect the environment. Climbing is a traditional use of public lands including wilderness areas. It has mostly been a safe, low impact, sport and can be even more so in the future.

Please make any future changes of regulations and guide lines to the use of public lands after full consultations with all interested users.

Please put my name and address on your mailing list so that I can keep our members

Informed of pending changes.

Yours Sincerety,

MICHAEL M. BROWN, CHARMAN

San Diego County Trails Council, Inc. P.O. Box 2727 : El Cajon, CA 32021-0227 (613) 562-5025 : (613) 330-0745

November 3, 1994

Mr. Ernie Quintana, Superintendent United States Department of Interior National Park Service Joshua Tres National Monument 74465 National Monument Drive Twentynins Palms, CA 92277-3597 Subject: General Management Plan - Joshua Tree National Monument

Dear Mr. Quintana:

San Diego County Trails Council, Inc. is a grassroots, citizen sponsored, nonprofit corporation dedicated to pressrve and maintain non-motorized, multi-use, riding and hiking traile.

We strongly support a general management plan for the Joshua Tree Mational Monument that not only increases public avareness and protection of the wildernese areas, but allows equeetrian use.

Lately, it appears the equestrian has become the scapegoat for natural resources and environment preservation but is species or animals. The "equestrian" has become "politically" incorrect unjuetly. Equestrian as become "politically" incorrect unjuetly. Equestrian are important foour society, history and county, eater and federal lande from which they are now being excluded.

Please includs the equeetrians in your General Management plan and allow them continued privileges to enjoy the beauty, plant and wildlife they have had for so many years.

I would appreciate being informed of any action taken regarding the General Management Plan for Joshua Tree Mational Monument.

Sincerely,

Maryanns Vancio Trails Coordinator A MOSE.-PROPRI CORPORATION Describe to the Acquesses and members of Rephy and his sig Trans

241



Morongo Basin Mounted Sheriff's Posse 6527 White Feather Road Post Office Box 337 Joshua Tree, California 92252

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County of San Ber

October 30, 1994

Unitad Statee Department of the Interior National Park Service 74485 National Monument Drive Prentynine Palma, CA 92277-3597 Mr. Ernie Quintana, Superintendant

Dear Mr. Quintana,

This letter is in regards to the draft General Management Plan for Joahua Tree National Monument.

The members of the Morongo Baein Mounted Sheriff's Poase (MBMSP) would like to contribute their ideas and comments to you, and all concerned othera, regarding horse use in the monument.

The WBMSP assists the sheriff's department in conducting asarches are rescue missions throughout San Bernardino County, and whenever necessary. Riveride County, Objacte of these searches may include lost persons (often in a compromising, life-threatening altuation), discovering and preserving of syldence, and sometimes involving the remains of a decessed. To date we have been very succeefful in resolving our assignmente, but to maintain that kind of rating,

Joshua Tree National Monument, with ite variety of terrain, has been a fundamental aid to our trainings and practices, an ideal setting for members to learn map and compass, tracking, handling of a mock crime scene, coordinating grid patterns, radio communivolunteers must keep abreast of the current techniques.

We have held four benefit rides at Black Rock Horse Camp, (our only fundraising event) which helps us to afford classroom materials for in-assivice programs, and to purchase up-dated equipment. Uging the monument for these purposes has been very much apprescations, just to name a few.

aei that the attached liat of recommandations, upheld by relating talestared concerne, if implemented that would benefit all equestrian related concerne, if implemented was recognize the vital role the rangers play in maintaining and preserving our wonderful monuments and parks, for future use and

look foreward to working with you.

Do Lee Hall Commandsr, MBMSP Baat regards,

ed/DLH

Regional Director, Weatern Regional Office cc: Tom Gavin

MECEINED 11/3

SAN BERNARDINO COUNTY SHERIFF'S DEPARTMENT

888 Eart Third Street \* San Bernardino, California 92415-0061

Pout Office Box 689 \* San Bernardino, California 92402-0369

14a. Parking for trailheads open to horse use would be designed to accommodate horse trailer/vehicle parking.	14b. The plan proposes improved trail marking and maintenance.	14c. See response 14a.	14d. Trail access to Pushawalla Canyon would be maintained with vehicle barriers near	the trailhead.	14e. Day use parking for hikers and equestrians would be provided at the Ryan Ranch	to fine a control of the continue to be provided at the backcountry board at Ryan Camperound	146		14g. Dee response 14d.	<u> </u>	14i. The plan includes the placement of a new restroom at the Black Rock horse camp								
		DRAFT RECOMPENDATIONS-HORSE USE JOSHUA TREE NAT'L. MON'T., OCT. 1994	1. Develop all existing horee traile as riding & hiking traile.	2. Enlarge parking area at Lower Covington Plat to allow horse trailer/vehicle parking.	<ol> <li>Parking space for horse trailers along California Riding &amp; Hiking (CRHT) at back country boards.</li> </ol>	4. Provide adequate trail markers and trail maintenance (funding available for maintenance).	5. Provide horse trailer/vehicle parking at trailheads-Decert Queen Mine, Pine City (both on same lot), and Boy Scout Trail	<ol> <li>Maintain the Queen Valley &amp; Covington Flats dirt roads for 2- wheel drive. Upgrade Geology Tour Road to a 2-wheel drive</li> </ol>	route. Also remove rock barriers at Geology Tour Road & Push- avalla Canyon Trail to Pinyon Well. (Geology Tour Road & Pin- yon Well was originally a horse trailer parking area).	7. Enhancement of Ryan Camp; return to horse use and allow for day use parking. Also add/establish a reservation system for Ryan Horse Camp. A fancy computer system for reservations le	not necessity in our opinion. Black Rock personnel write them down on a clipboard, with success. A reservation system would manage visitation areae effectively.	8. Request that Ryan Horse Camp bs given maximum amount of equastrian RV spaces; request Phase 1 priority instead of Phase 4 in GMP; and request a prominent sign specifying "Horse Camp" at Ryan horse trailer parking area.	<ol> <li>Provide adequate horse trailer parking for Pushawalla Canyon entrance from Indio Hills area for Coachalla Vallay equest- rians and hikers.</li> </ol>	".nvide adequate horee trailer parking for Boy Scout Trail a Indian Cove area for 29 Palms equestrians and hikers.	<ol> <li>Continued access to Quail Springe area for local reeldents near Monument Manor.</li> </ol>	12. Continued accese to Black Rock Horse Camp from southvestern area of Yucca Valley and Morongo Valley, via Poletine Road.	13. Continued access by Yucca Valley locals to Black Rock via N/S entrance at wash one mile east of camp.	Presently, at Black Rock Horse Camp, we like the nice level parking available, as well as running vater, reatronas, and the separation of the Horse Camp from the non-horse camp. A restroom facility directly addacant to the horse camp. A restroom facility directly addacant to the horse camp.	

RESPONSES

# COACHELLA VALLEY HORSEMANS ASSOCIATION

October 24, 1994

Ernie Quintanta

Superintendant
United States Department of the Interior
National Park Service
Joshua Tree National Monmant
T4485 National Mounmant Drive
Twenty-Wine Palms, CA 92277-3579

Dear Mr. Quintana:

The Coachella Valley Horseman's Association fully endorses the attached "draft recommendations for horse use at the Joshua Tree National Monument", as well as the "additional comments",

The horse and rider are an integral part of California and the West, both historically and for future generations. It is impertive that the national park system recognize the horse and rider and we appreciate the opportunity to provide input.

If we can be of any further assistance, please do not hesitate to call on us.

Sincerely Yours,

Stephan M. Kopp Acting Secretary 34-285 Suncrest Cathedral City, CA 92234

See response 14a.	See response 14e.	See response 14f.	See response 14b.	See response 14a.	See response 14d.	See response 14a.	See response 14h.	See response 14i.													
15a. See resp	15b. See resp	15c. See resp	15d. See resp	15e. See resp	15f. See resp	15g. See resp	15h. See resp	15i. See resp													
		DRAFT RECOMMENDATIONS-HORSE USE JOSHUA TREE NAT'L. MON'T., FALL 1994	1. Parking space for horse trailers along California Riding 5. Hiking (CRHT) at back country boarde.	<ol> <li>Enlarge parking area at Lower Covington Flat to allow horse trailer/vehicle parking.</li> </ol>	3. Develop all existing horse trails as riding 6 hiking trails.	4. Enhancement of Ryan Camp; return to horae usa and allow for day use parking. Also add/establish a reservation ayatem for Ryan Horsa Camp. A fancy computar ayatem for reservations is not not a managed to the second of the se	down on a clippozet, with success. A reservation system would manage with tattation areas effectively. Referrant amount of eques-	trian RV spaces; requast Phase i priority instand of Phase 4 in GMP; and request a prominent sign specifying "Horse Camp" at Ryan, horse trailer parking area.	5. Provide adequate trail markers and trail maintenanca (funding available for maintanance).	6. Provide horsa trailer/vehicle parking at trailheads - Desert Quaen Mine, Pine City (both on same lot), and Boy Scout Trail.	7. Maintain the Quean valley & Covington Flata dirt roada for 2-wheel drive. Upgrade Geology Tour Road to a 2-wheal driva Foute. Also remove Fock Dairlers at Geology Tour Road & Pusha - walla Campyon Trail to Playon well.		9. Adequate horea trailer parking for Boy Scout Trail from Indian Cove area for 29 Palms aquestrians and hikers.	10. Continued access to Quail Springa area for local residents nasr Monument Manor.	<ol> <li>Continued access to Black Rock Horse Camp from authwestern area of Yucca Vallay and Morongo Valley, via Polalina Road.</li> </ol>	12. Continued access by Yucca Vallay locals to Black Rock vis N/S antranca at vash ons mile asst of camp.	Additional commenta: Presently, at Black Rock Horea Camp, wa like tha nice leval parking available, as wall as running water, reatrooms, and the aeparation of the Horse Camp from the non-horae	camp. A restroom facility difectly adjacent to the horse camp.	Due to the lack of the availability of water in the back country, overnight camping is not auggested, and water is not provided at Ryan Camp. Riding out of camp and raturning each day, or day use, is beat.  Bicycle riding is permitted only on astablished roads.	ino	
			, ,	BC1		156		15c	15d	15e	15f	15g			15h			15i			

### October 12, 1994

Ralph Johnson, Acting President Santa Ana River Unit/BCHC

Mira Lome, CA 91752 PO Box 810

United States Department of the interior, Ernie Quintane, SuperIntendent

Joshua Tree Netional Monument 74485 Netional Monument Drive National Perk Service

Dear Mr. Quintane,

29 Palms, CA 92277-3597

Unit/BackCountry Horsemen of Celifornia, end other equestrians in general. I'm concerned that the current trend of negetive legisletion toward equestriens might influence future decisions in the draft of the Horsee end mules are very much a pert of our hietory, and it would truly be a sheme to let negative feedback restrict horses and mulee from equestriens for the most part ere responsible citizens, end do our best to I'm writing on behalf of myself, the members of the Santa Ana River Joshua Tree National Monument. Regerdless of the neglect of e few, General Management Plan (GMP) for Joshua Tree Netional Monument. preserve the beauty of the back country.

resources menegement, visitor use, general development, park administration and operations for the next 10 to 15 years. I hope you take realize that the purpose of the General Management Plan is to adopt a layout for Joshus Tree Nationel Monument to guide natural end cultural into consideration equestriens and our needs and wishes, too. I've ncluded some general areas of equestrian concerns and wishes:

- Parking spece for horse trailers elong Californie Riding & Hiking Trails(CRHT).
- Enlerged parking erea at Lower Covington Flat, to ellow horse traller/vehicle perking.
- Develop ell existing horse traits as riding & hiking treils ص ښ
- day use parking. Also, add/establish a reservetion system for Ryan Horse Camp. A reservation system would manage visitation areas effectively. Also, request that Ryen Horse Cemp be given a meximum Enhancement of Ryan Camp; with e return to horse use end allow for amount of equestrien RV spaces; request Phase 1 priority instead of

16c 99

16a. See response 14a. 16c. 6b.

See response 14e. See response 14f.

16a

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16f. See response 14d.	16h. See response 14h.	16i. See response 14i.						1			
Phase 4 in GMP, and request a prominent eign specifying "HORSE CAMP" as Ryen horse trailer parking erea.	<ol> <li>Provide adequate trail markers and treif meintenance (funding available for meintenanca).</li> </ol>	Provide horse trailer/vehicle parking at trail heeds - Desert Queen     Mine, Pine City (both on same lot), and Boy Scout Trail.	7. Maintain the Queen Valley and Covington Flats dirt roads for 2-wheel drive. Upgrede Geology Tour Road to a 2-wheel drive route. Also remove rock barriers at Geology Tour Road & Pushawalla Cenyon Trall to Pinyon Well.	Adequate horse trailer parking for Puehewalia Canyon entrance from Indio Hille area for Coachelia Valley equestrians and hikers.     Adequate horse trailer parking for Boy Scout Trail from Indian Cove area for 29 Palme equestrians and hikers.	Continued access to Quell Springs area for local residents near Monument Menor.      Continued access to Black Rock Horse Camp from southwestern area     of Yucca Valley and Morongo Valley, via Poleline Road.	12. Continued access by Yucca Valley locale to Black Rock via N/S entrance at wash one mile east of camp.	13. At Black Rock Horse Cemp, the level parking, as well se the running water, restrooms, and the separation of the Horse Camp from the non-horse camp is really appreciated. A restroom facility directly adjacent to the horse camp would be welcomed.	Places advise me if I need to get more involved in guarantasing tha rights of equastrians in the General Management Plan of Joshua Tree National Monument.	Sipperally yours.	oo: Regional Director Wastern Regional Office Netional Park Service 600 Harrison Street, Suite 600 San Frencisco, CA 94107-1372	
	19g	16e	16f	891	loh 16h		16i	1			

16d. See response 14b.

### BACK COUNTRY HORSEMEN OF AMERICA P. O. Box 597 Colombia Falls, Mt. 59912



PUBLIC LIAISON COMMITTEE

Myton Filidins, DVM, Chailman data Whise Read, Bearenfald, CA 8331 Wert (967) 823 1180 Human (1967) 842 1180 Fall (888) 822 1077 Fall (888) 822 9077 November 15, 1994 Welferh Regional Office Bes Momt & Plan Administration Pyplic Attains Operations

Superintendent Joehus Tree National Monument 74465 Netional Monument Drive 29 Palma, Celifornia 92277-3597 Action Taken Ernie Ouintens

Deer Mr. Quintane,

On behalf of the National Board of Directors of the Back

Country Horsemen of Americe I em writing to endores the Dreft Recommendatione for Horse Ums - Joshue Tres Netionel Monument es presented by Jens de Helaby.

Back Country Horsenen of Americe is an organization of horsenen in alevan veetern etates - dedicated to the preservetion of reorestional etook use on public lende. I have enclosed e copy of our last netional neveletter for your review. Sincerely,

Mylm

Hylon Filkine, D. V. H.

Jens de Heleby P.O. Box 1041 Vucce Velley, CA 92286-1041 000

Regional Director NPS 600 Harrieon Street Suite 600 San Francisco, CA 94107-1372

COMMENTS

November 7, 1994

Regional Director Weatern Regional Office National Perk Service 600 Herrison St. Suite 600 Æ

Dear Director:

We, the members of the Conchilla Valley Natural History
Association Vould like to comment on the General Management
Plant for Joshus free National Park. Most of our comments
have been deteiled in the praceding letter written by the
Socretary of the Board of Directore, W. B. Schwenn.
However, our membership believe that one comment needs to be
amphasized. Plasse don't widen any of the existing roads
make them comply with the speed limit with which they ere
now posted. Lower the speed limit to whatever speed will

comply with federal regulations for a road of that width.
We are thinking of the sefety of our users, histers, mainly,
who may be walking across these roads or along the roads and those of our members who ride bikes in the park. Widening
the roads will only have the effect of incressing the spead
at which people are driving.

For additional comments with which our membership concurs, please refer to the ascretary's personal letter as noted above.

Meritans CUNHA Whilewen For Natseauch Bushis 4 M. B. (Bern) Schwenn //U/ruf Acting Secretory for the Board of Directors, Conchille Velley Natural History Rancho Mirage, CA 92270 619-775-1771 Sincerely yours, P.O. Box 1962 Association

cc. Ernie Quintana, Park Superintendent

Western Regional Office Action Taken

Roads would only be widened on the main through routes — Park Boulevard and 18a.

by 2 feet in combination with design criteria and traffic management strategies to achieve increased safety while limiting the impacts to resources and visitor

experience. Design speeds and posted speeds on park roads would consider

protection of resources, visitor experience, and safety concerns.

Pinto Basin Road. These roads would be reconstructed to a 24-foot paved top width from the present 22-foot top width. Speed limits are only one factor in determining

roadway width. Other factors include resource considerations, visitor experience, volumes and type of traffic, safety, and terrain. The plan proposes widening the road

San Francisco, California 84107-1372

Draft General Management Plan For Joshua Tree National Park

18a



See response 2d. The Park Service would undertake a separate study and environmental impact analysis to evaluate alternative sites in and outside of the park or the new west and south entrance visitor facilities. 19a.

See response 19a. The study would also evaluate operating these visitor centers as nteragency facilities. 19b.

See response 2c. 19c.

October 16, 1994

Jugar -013

> San Francisco, CA 94107-1372 600 Harrison St. Suite 600 Western Regional Office National Park Service

Regional Director

Re: Draft General Management Plan for Joshue Tree Netional (Perk) Monument

Dear Sirs:

After reviewing the draft document, I found much to commend the planners for improvements, end areas where the plen can be atrengthened in its protection and There ere some good ideas. However, I have a number of auggestions for people menagement provisions. 1. The west end entrance visitors center is very importent. It needs to be constructed boundary, where there elready ere buildings just outside, or on a separate piece of land, apparently BLM owned, which is just a mile outside the boundary. as soon as possible. My suggestion is that whenever possible, it is useful to place such visitors centers in already impacted areas. So, it needs to sit just inside the

interagency facility, with expenses shered with the Bureau of Land Management es a just south of the (park) monument — Mecca Hills, Orocopia, Chuckwalle. This is en area which is elready receiving overflow camping, and e campground might be planned in connection with the visitor center. center where they could elso provide edditionel information on the new wildemesses that an expanded visitor center be constructed on public land south of the boundary, 2. I suggest that rather than building a lerge complex et Cottonwood on the south between the park and the intenstate highway. Such a visitor center could be an

Both of the above facilities need to be planned so that they ere models of energy efficiency. Passive solar, active solar, convection cooling, earth-sheltered, low profile, low visible impact, and low weter consumption are just e few of the concepts which cooperating organization/natural history association, etc., to reduce the fiscal load. need to be incorporated into the design. It should also be designed so that it is possible to establish shuttle service into the park from the verious entry points. Whenever possible, auch facilities should be established in conjunction with e

3. There needs to be an addendum, or other description of how the planning for the additional 250,000 acres edded by the Galifornia Desert Protection Act will be handled. This new acreage needs planning as detailed and thoughtful as the current plan. The two ere obviously going to be interdependent documents, end it is certainly advisable

19c

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19a

19b

19d. See

CLYLLALIVALLY

to go forwerd with the planning for the existing monument ecreage, but the public needs to know now it can be involved in the planning for the expension acres. It is my understanding that this planning may take place in connection with BLM and other

needs to know how it can be involved in the planning for the expension acres. It is may understanding that this planning may take place in connection with BLM and other egoncy ecosystem planning. While I appreciate the efforta to do ecosystem planning, such plans should be subservient to the purposes of the parklands.

4. Much more extensive planning needs to take place which takes into account that the (park) monument is susceptible to becoming an island, isolated from BLM or Forest Service units by Intarvening urbanization. Active planning for a variety of

On the west end, possibly in connection with existing nature centar lands, an open space confidor needs to be maintained to highway 62, where the San Gorgonio Wildemess Additions now extend to the west side of 62.

acosystem corridors needs to be incorporated.

19d

On the northeastern corner, there needs to be active planning for an open space corridor which crosess Highway 62. Whille there is wildemess on both sides of the highway, e multi-land highway in the future could foreclose all opportunities for species pessage across the highway. To the southeast, the same active concern with connections with the desert lify sanctuary need to be monitored. While there has been some agriculture in this sea, it is possible that these lands too, could be converted to housing development. An annual letter to Caffrana informing them of your concerne may keep them town cutting the (park) monument of by ill designed highways.

Along the southwestern boundary along the Little San Bernardino Mountelins a corridor needs to be meintelined to the Coachella Valley Preserve, for mutuel support of the endangered species within the preserve, and threatened species within the (park) monument.

One such link is not sufficient, regardless of its location. There ere a variety of habitats and their associated species within the (park) monument, end chuckwalls, tortoises, and lizards don't use the same terrein es riparian species, or bighom sheep. Each type needs corridors.

I am appalled that if appears that the plan will be permitting the placement of boits in areas used by climbers. I do not distinguish between Inside and outside wildemess. It is all within the park unit. I regret that it was ever allowed. This conflicts with the philosophy of Management of park resources for the long tarm sustainability of the resources. Is the rock less important then a flower? Removing any vegetation is not permitted – even picking a flower ia not acceptable. How can plecing a bolt be acceptable? I is the destruction of vegetation around the base of a boulder which has new bolts less important than picking a flower?

19d. See response 2b.

19e. See response 8e. The continuation of existing management guidelines also allows bolting outside of wilderness areas in the park. The climbing management plan will

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comprehensively address climbing issues throughout the park including bolting.

19e

Is the rock lass important than putting a grate over an abandoned mine hole? An environmental review is necessary for such an action. Shouldn't the placement of a bolt, and the associated changes in use patiems, also require individual aintrommental review?

Is the placement of a new trail on a rock face, visible to anyone within the vicinity to be permitted at the whim of any climber with a drill? Would a hikar tired of following the axisting trails be allowed to place caims or rock plies to mark a new foot trail he thinks others might enjoy hiking, or so he can safely find his way back to his car?

What happened to the "LEAVE NO TRACE" ethic? With increasing visitor levels this becomes ever more important. Leaving botts is more intrusive than leaving chalk marks — neither is appropriate. I recall arguments about lug soles not being appropriate in some places because they dig into the soil too much — so, we leave the lugs at homa.

I give no credence to the supposed argument that such use is "traditional." How long does it take to make it 'traditional?" A decade? Bolt use is very new. "Traditional" climbers didn't use them. It used to be traditional to gather dead and down vegetalion for campifities, and have big bonfliess for averyone to sit around a night. The Firefall at Yosemita was traditional. It was traditional to go out to the desert and gather cacti to take home for your garden, too, at one time, or dump your oil alongside the road, or to drive your garden, too, at you wanted. Times and standards change. The standards become more strict when the new use is determined to be destructive.

New technology which makes some things possible which ware not prevously feasible does not mean that they should be done. Not every rock needs to be climbed. Some may remain for future generations. A distance runnar uses the best technology possible to train and bring his body into bester condition, but tha fight is between the person and the clock. If climbing is turning into a "sport" as some have said, then it behooves the sporting community to establish standards for their "sport" which do not rely on artificial aids. The runner who does the dash in 10 seconds doesn't get to count his record if the wind is at his back. How can a technically aided climb be acceptable?

And finally, to the aesthetics. How can a sport which railies on defacing nocks for the ages be acceptable? There are some classic rocks and photo spots within the monument. Would they be equally appealing with a string of boths on them, and the coloning different whare the rock has been spalled off from bad both placement? Silcing across the face of a boulder with a string of boths is equivalent to taking a razor blade to the Mona Lisa. It might not be visible to many, it might be reparable to some degree, but the scar is there, and the life of the painting is shortened, as is the life of the rock. It is a sad and pitlable world where such destruction goes unchallenged.

6. Shuttle service needs to be available on a more extensive route scheme than that presently envisioned. I noticed that the local market will support a \$3.00 fee for a ride iron 29 Paims to the Marine Base. Surely on heavy weekends, especially in the spring when roads become cloged with cars full of people who want to stop and look at the widflowers, the market could support a scheme of shuttle busses that move people through the park to the flower fields and back to their cars. It seems preferable to widening roads. Whether subsidized or full fee, I can imagine lots of drivers who would rather looks at the flowers than worry about fraffic.

We see in the plan the result of neglect and low funds distributed to the "monument". Everything from replacing pipes to plans has been delayed for decades. Hopefully the new "PARK" will now get more of the attention and funding it deservee.

Please keep me informed of progress of this and all associated plans. Whoever compiled the list of organizations or Individuals to receive copies of the draft plan has an extremely poor list. To have ignored the Desert Protective Council, which was formed 40 years ago specifically to delend Joshua Tree from a cross park highway and from further mining encroachments, and the Sierra Club, which has been having regular meetings with the last 3 superintendents was a serious oversight. One wonders who else was dropped off the list.



cc: Emie Quintana Phil Lundgren

19£

See response 8a. 20a.

700 AVINE CENTER DRIVE TELEPHONE (714) 753-2854 RANDY K. VOCEL BAVINE, CALIFORNIA 92718 FACRIMILE (7:4) 793-2899 LAW OFFICES OF SUITE BOO

Western Regional Office

RECEIVED Regumal Director

November 3, 1994

Steel Mami & Plen 6000 Samulatration

28ralions

Stanley Albright, Regional Director Western Regional Office

San Francisco, CA 94107-1372 600 Harrison Street, Suite 600 National Park Service

Action Taken

Draft General Management Plan - Joshua Tree National Park (nee Monument) Re:

Dear Mr. Albnght:

I appreciate the opportunity to review and comment upon the Draft General Management Plan (GMP) for Joshua Tree National Park. I also wish to extend my gratitude to Supt. Quintana for meeting with me personally to discuss the GMP.

of important issues facing Joshua Tree. Nevertheless, there are a some significant problems with the plan, staticularly in the area of pating and camping. Unfortunately, the multiple change over in GMP planning personnel may have contributed to these problems, many of which were identified in 1991 in connection with the read improvement proposal. Generally, the GMP is a sound document that identifies and attempts to address a number

I. CAMPING
The GMP proposes to place all camping in the Park on a reservation basis. This proposal is extremely ill considered, and I am actually unaware of any NPS unit that has actually placed all camping on a reservation basis. An all reservation proposal will offer no means of reassigning campsites to "no-shows". More importantly, at Joshus Tree such a restrictive reservation system is neither needed or desirable.

Joshua Tree's prime visitation season runs from mid-October through mid-April. Most visitors hail from the local Southern California area. Few, if any, campers come to the Park on planned family vacations. This is especially true for tent campers (the vast majority).

are limited to the use of specific sites. The GMP wisely proposes to set aside, in a separate loop area, horse sites. As part of this planning, these sites should be restricted to horse users and be obtained on a reservation basis. Reservations for selected sites at selected campgrounds may Some visitors would benefit from being able to reserve sites. These include large groups and horse users. Currently, group campsites are obtained by reservation. It would make sense to expand the reservation system to include horse users, since they must haul large trailers and also make sense.

20a

Stanley Albright, Regional Director November 3, 1994 Page Two (2)

# II. PARKING AND ROAD IMPROVEMENTS

The parking plan set forth in the GMP comes almost without alteration from Joshus Tree National Monument, California, Environmental Assessment, Reconstruction of Park Routes 12, 13, and 112, Associated Visitor Use Areas, August 1991 (the "1991 Road Plan"). As you may be aware, the 1991 Road Plan was the subject of resounding criticism by the public and environmental groups.

In response, the NPS and some former members of the GMP Planning Team met with public representatives and noured the affected road and parking areas. Numerous comments were received concerning parking and road improvements, many of which are mirrored in this letter. However, it appears that none of these concerns and comments were addressed or have been incorporated into the GMP. Prior to preparation of the GMP, the current GMP Team Captain had never visited the Park.

### PARKING

The GMP states that "Parking lots would be linked to visitor destinations." Despite these stated gooals, the GMP eliminates numerous existing parking sites and hence access to visitor destinations. The GMP also combines some lots in such a manner that user conflicts are created, and unnecessarily locates stone lots in previously non-impacted areas. Just as importantly, creation of some parking lots will dramatically increase visitation and related impacts to Parkresources that are currently lightly visited.

The maps in the GNP which show roads, parking and other features are extremely poor and inaccurate. Without specific consultation to the 1991 Road Plan, the locations or design of specific parking areas is nearly impossible.

# A. Elimination of Parking and Access - West Entrance to Osail Springs Picnic Area

Numerous parking areas, informal, dirt lots with concrete barriers, and paved are eliminated in the GMP. For instance, there is no parking provided from the West Entrance to Quall Springs Picnic Area. As is shown in the attached maps, a number of visitor destinations exist along this six (6) mile stretch of road. Specifically:

1. Lizards Landing Durnout. This long-existing parking area is located approx.

1.8 miles southeast from the West Entrance (See Map #1). It is the only access point for climbing and hiking rails. Numerous horse trails are also found in this area. Recommendation: Provide 2-3 car parting at existing location.

## RESPONSES

20c. See response 8c. Parking between Quail Springs and the Lost Horse ranger station road would include lots at Quail Springs picnic area, Boy Scout trailhead, and Wonderland of Rocks - orientation west (approximately .25 south of Boy Scout parking area), in addition to pulloffs about every .25 mile.

2. Various. Parking Areas for Samuelson Stants and Netrocodis. Area. Several small to medium size dirt and one paved lot are found commencing about 3.3 miles southwest sof the West Entrance. These lots provide hiking access to the evest commendation. Since so the west carea along the Negropolis Smill shad climbing access to areas along the Negropolis Hill. (See Map #7) Recommendation; Provide three (3) tumout oriented, parking areas, approx 4-5 car each, in addition to planned scenic tumouts.

Stanley Albright, Regional Director November 3, 1994

Page Three (3)

3. Vagmarken Hill Parking One medium sized (6-7 car) dirt lot is found on the west side of the Park road approx. 5.5 miles from the West Entrance. It provides climbing and hising access to Vagmarken Hill area. (See Map #2) Recommendation. A 5-6 car, turnout type, parking area should be provided in the currently impacted area. A 3-4 car turnout should be provided approximately .5 miles further along the Park road for climbing access extreme rightend of Vagmarken Hill

# Elimination of Parking and Access - Onail Springs Pillic Area in History Valley Campground.

1. Roadside Rock Parking. A small turnout area exists approx. . . 75 south of Key's Corner (Boy Scout Trailhead Lot area), adjacent to a rock formation along west side of the road (at a left-hand curve in the road). Provides parking for multiple climbing opportunities in this area (including the referenced rock formation). (See Map #3) Recommendation: A small 34 are turnout types area is needed here.

A 20 car lot is proposed along the Lost Horse Ranger dirt road to provide access to the Hernigway Butters and the Lost Horse Ranger dirt road to provide access to the Hernigway Butters dimbing arest (Cot 4A.). The 1991 Road Plant (and hence the GMP) did not want to place any parking along roadways. The long established parking area for Herningway Butters is located along the Park road, about 4 mile past the Lost Horse road. (See Maps #3 & 4) A marked trail system leads from this lot to several highly popular climbing areas. The proposed lot is located at the site of other estating parking for other climbing areas adjacent to the Lost Horse Ranger road. The Proposed lot would eliminate the existing Henningway parking area and trail system.

The new lot would significantly increase (2 to 3.5 times) the approach to the climbing areas, create the need to develop new trail systems (causing new impacis), and provide an inadequate number of parking spaces (due to combuing with an existing to for access to other areas). There would also be a tendency for climbers to approach the multiple rocks not from the current single parking area along a marked trail, but from multiple "tumoust" along the Park road. This would lead to creation of multiple and intersocing braided trails.

The plan addresses parking along the primary paved park roads in the most heavily used areas of the park. Trailhead parking areas along secondary dirt roads would be retained. 20d.

plan has been revised to maintain the separate Keys wait lot. 20f.

See response 20i.

along the Lost Horse Ranger dirt road. Multiple dirt parking areas exist and provide access to many popular sites. Not part of the backcountry, this should be discussed in the GMP and planned accordingly. rocks adjacent thereto.

20d

Recommendation: Provide paved parking at existing Hemingway parking area (better defined) 15-20 cars. Keep existing parking along Lost Horse Ranger road for access to

Stanley Albright, Regional Director November 3, 1994

Page Four (4)

on the west side of the Park road, approx. 7 miles past the Lost Horse dirt road, just past a 50 foot pillar west of the road. (See Maps #3 & 5) This parking area provides access to Playhouse Rock and several other climbing area. Playhouse Rock is very popular with beginning/novice 4. Milcoost - Paylouse Rock Parking. A small 4-5 car dirt parking area exists climbers. The GMP eliminates this lot. Recommendation; Pave and define parking area, turnout style or otherwise, for 4-6 cars.

 Dihedral Rock Parking. Currently roadside parking is utilized by climbers to
access the very popular formation known as Dihedral Rock. (See map # 5) Multiple small
turnouts will lead to indirect approach and intersecting braided trails. Recommendation: A 4 car pullout would suffice to provide access, develop marked trail. 6. Hithen Valley North Let IGMP Let Di. It is impossible to ascertain where this lot is to be located with any certainty. A dirt lot does exist in this general vicinity. It is impossible to comment upon the propriety of this parking area until its location can be determined. Better maps would have helped.

20e

C. "Wanderland of Rocks Backcountry Stavin, Area" GMP Lot 28.

inadequate existing parking in this area (approx 45 cars) is essentially consolidated into one lot. It is important to note that 75 cars is considered to the current expected parking nodes for this area on most weekend day. Nevertheless, the current "wait lot" for the Keys Ranch Tour (10-12 cars per tour) would be eliminated and be added to the mix. A 20-25 car capacity A large parking area (75 car, 5 RV) is planned at the Echo Tee area, along Barker Dam Road (GMP Lot #28). This area is the most popular climbing site in the entire Park. The ncrease (over current) would result.

20f

narrow dirt Bighorn Pass Road. Even without paving the road, or addition of the Keys Ranch Tour "wait lot", the new planned parking would be barely adequate. As planned, severe congestion and user conflicts (climbers, Keys Ranch Tour and new visitors) will result. However, as is discussed below, the paving of Bighorn Pass Road will dramatically increase vehicular traffic (3 to 5 times or more). With rare exception, RVs do not travel the

20g

See response 8c. 20e.

An expanded parking area would be provided at Echo T. Vehicles would still be allowed to park in a dirt lot near Echo Cove that is limited by the topography. The

## RESPONSES

20h. The plan has been revised to consolidate these two lots but at the Barker Dam lot. See response 6r.

20i. See response 8g regarding the planned strategy for addressing increasing use. Wall Street Mill is a significant historical resource that is proposed for preservation and interpretive use. Although the trailhead would be pulled back farther from the site, visitation would probably increase, which would result in increased encounters with other hikers. Affects on the resource would be mitigated as described in the cultural resource impacts section. A single, clearly marked, designated trail would be established to minimize social trails to and through the site. Additional actions to reduce impacts would include informational and interpretive signs at the site.

Stanley Albright, Regional Director November 3, 1994 Page Five (5) <u>Recommendation(s)</u>: (1) Place Keys Ranch Tour "wait lot" elsewhere. Perhaps lengthwise, parking along road between Hidden Valley C.G and the planned lot (#28). (2) Place spur (entrance) to Lot 28 further north, to the north (left) of the "T" in the road, and where those driving to Barker Dam will not mistakenly enter.

(3) Do not pave road to Barker Dam (see below).

D. Barker Dam & Wall Street Mill Parking (GMP Lot 20).

Two existing parking areas (Barker Dam and Wonderland Ranch) are consolidated into a new lot: GMP Lot #26. The new lot will be placed on a previously non-impacted area roughly halfway between the two existing lots.

20h

The Barker Dam lot is currently heavily used by a multitude of visitors. Some come to see Barker Dam, some to hite the nature trails, some to see the petroglyphs, some to climb. Visitor stays are typically short. The Wonderland Ranch parking area is used almost acclusively by backcountry hikers and climbers (a few visit the Wall Street Mill). Stays are typically very long (most of the day, if not all day). It is important to note that the Wall Street Mill is currently not referenced by any Park visitor literature or privately published Park visitor guidebooks. Little information can be found on this historic site. Hence visitation is light, and impacts generally limited.

Combining the two lots, in conjunction with paving the Barker Dam road, will (1) lead to user conflicts between backcountry users and limited stay visitors. (2) Parking capacity will quickly be exceeded, as the paved road draws 3 to 5 times (or even more) as many vehicles, including RVs (which are currently rarely seen). (3) Visitation to the Wall Street Mill will dramatically increase (since this site will apparently be "promoted"), as will vandalism to the structures and artifacts and to the lightly traveled desert environment.

No formal trail system or signage exists to or at the Wall Street Mill. This result is in contradiction of the stated goals of the Backcountry Management Plan (and federal law) to protect the Mill site as a sensitive resource area.

Recommendation(s); (1) Keep Barker Dam and Wonderland Ranch/Backcountry parking areas separate, including keeping access to Wonderland Ranch parking along separate dirt road.

(2) Despite concerns about runoff and possible archeological sites near the existing Barker Dam lot, retain this area for Barker Dam

20i

<ol> <li>The location of parking for the Oyster Bar and Love Nest has been α plan.</li> </ol>
20k. This lot would be retained and the plan has been corrected to state th
201. The plan has been revised to clarify that dirt road access to the Deser would be maintained. The network of dirt roads in Queen Valley woul

Stanley Albright, Regional Director November 3, 1994 Page Six (6) parking. The environment and any possible arch, hopelessly compromised already.

g

sites

(3) Do not pave Barker Dam road.

6. Mohave Plants Exhibit (GMP Lot 12).

This is not a parking area for the "oyster bar". It is a parking area for the Love Neet/Planet X areas. An established and marked trail system leads to these formations east of the road. The exact location of this lot should attempt to coincide with the trail.

203

F. Ryan Tumout (GMP Lot 21).

Page 40 states that this lot is to be eliminated, the chart on page 48 states that it will be a 16 car site. This is the Oyster Bar parking area. A marked trail leads to these popular formations. It should be retained.

20k

G. Geology Tour Road: Desert Oueen Backcountry (GMP Let 24).

There is strong intimation that dirt road access to the Desert Queen Mine will be eliminated. A popular destination for many people, the dirt roads should remain open to those who wish to experience these historic mines.

201

The GMP fails to address the environmental consequences of paving the road (social & biological). Paving this road, combined with a separate signed turnoff for the road (one must now go through the Hidden Valley Campground to access the road), will dramatically increase usage and visitation to Barker Dam and the surrounding backcountry. Currently it is a rare RV (if any) that ventures out to Barker Dam. Traffic is generally light. A 3 to 10 times increase of traffic can be reasonably expected. As stated above, I question the wisdom of paving the narrow dirt road to Barker Dam

20m

It is certainly desirable to eliminate the majority of "through" traffic that kicks up dust in the campground which results from the existing access to Barker Dam. However, the extensive paving of this road (and new road alignment) is not the solution.

Recommendation: Pave road to new campground entrance only.

orrected in the

ert Queen Mine ild be evaluated and any redundant routes would be closed and revegetated or converted to trails.

20m. See response 20i.

20n. Wording regarding climbing has been revised.

Stanley Albright, Regional Director November 3, 1994

Page Seven (7)

# III. DIACCURATE AND BIASED COMMENTS CONCERNING CLIMBING

The GMP discusses climbing (but not other user groups) in a biased and inaccurate manner. These statements are found on the following pages: 13, 22, 170, 187, 188 & 189. In

particular:

20n

(1) Calling bolts "rock defacing expansion bolts" [p22] is incorrect and biased. Those familiar with bolting do not hold this opinion (including NPS personal).

(2) The "temporary" ban on bolting and replacement does preclude use of existing routes [p170]. Many old anchors are unsafe and need replacement. Bolts have failed since the ban, resulting in injuries and rendening routes unclimbable.

(3) Most bolted routes can not be climbed "using alternative methods" [pp170, 187, 188 & 189]. This statement is just completely false. Some climbs have no means of reaching the summit except by the [bolted] route. Many climbs can not be safely top-roped due to the overhanging nature of the route of the route. The statement demonstrates a complete ignorance of climbing. As such, it is clearly biased and missinforms the public and those who rely on this document for impartial and accurate information to make or comment upon management decisions.

(4) No other group, despite the nature of their impacts (e.g.: horse users) is singled out as are climbers. I would be happy to discuss any of these comments with members of the Planning Team, Park staff or other NPS personnel. Please feel free to contact me at the number listed above.

Very truly yours,

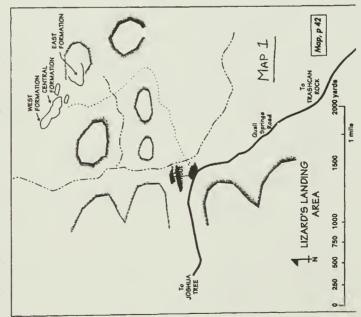
LAW OFFICES OF RANDY K. VOGEL

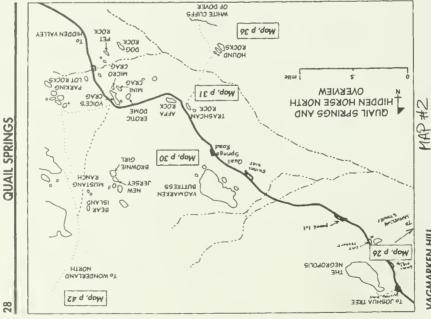
RKV:rr

COMMENTS

LIZARD'S LANDING

This area lies. 75 mile nurtheast of the main road into the Joshua Tree National Monument (Quail Springs Road). You'dl find Lizard's Landing at a point the Lis mise (1.9 km) towards Hidden (List Cangground from the Joshua Tree (List Cangground from the Joshua Tree (List Cangground from the Joshua Tree (List Springs) to see the first side of the road just where the road makes a sharp right (southerly) turn. Several approaches a sharp right (southerly) turn. Several approaches as the road just where the road makes are possible. From the parking area; you can his enotheast about 5 mile up the low hillistics, skriring to the east of the hill ahead. From here, head roughly north (and slight) west). A mile over low ridges to the Central Formation. An alternative approach (longer and roughty and rougher) begins at the gravel pit and



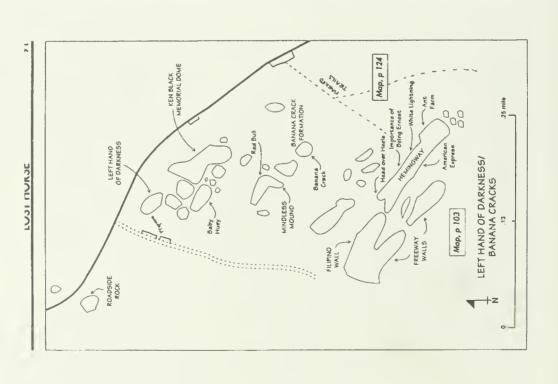


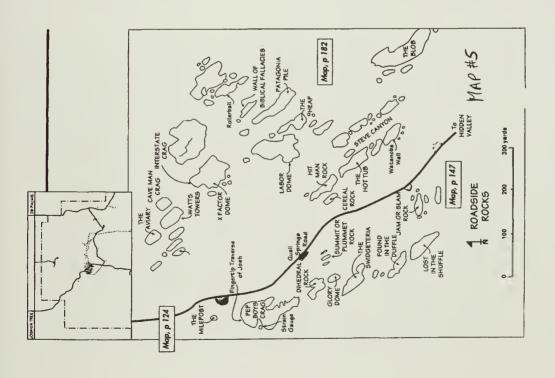
VAGMARKEN HILL

Vagmarken is the large hill that comes into view approximately 5.5 miles past the Joshua Tree Entrance to the monument and 1.2 miles before you reach Trashean Rock. It is on the left (east) side of the road. The known rouses lie either on small brown formations on the lower left-hand (northwest) portion of the hillside (The Intimidator Rocks), or on the larger buttesses (Vagmarken Buttresses) to the right and higher on the hillside.

RESPONSES

COMMENTS





### RESPONSES

21a. Implementation of actions in the plan would be dependent on funding levels approved for the park. One criteria for funding an action is its inclusion in an approved plan.

21b. See response 8e.

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Comments Regarding the

General Management Plan

Development Concept Plans

Environmental Impact Statement

JOSHUA TREE MATIOHAL MONUMENT

for

, October 22, 1994

þ

Ae a long-time visitor to Joshua Tree and author of a general visitor's guidabook on the monument, i have revised the subject plans and Els with great interest. As 1 consider Alternative A (the Proposed Action) to be the moet likely to be adopted, and bence the most carefully documented, I will address all comments herein towards that proposal.

In general, I am in agreement with the document's statements with respect to shortcomings under the present management system and associated inadequate vieltor facilities. Wisitation has continued to increase, with little improvement in the physical plant of the monument, leading in some instances to resource damage and negative impacte on visitor enjoyment. The Alternative A proposals represent an admirable attempt to correct this situation.

In many areas the plan still remains too general. While this may be the nature of a "yeneral" plan, the lack of specificity often means a lack of compliance in the long run. A number of comments that follow, both under the general comments section and the specific comments eaction address this issue.

GENERAL COLORDITE:

Plan Implementation: Does adoption of the plan trigger a concomitating budgetery commitment by the Park Service to implement the plan?

<u>Bolting Ban:</u> (see pp. 13, 22, 187) The plan states that a ban on bolting in <u>wilderness areas</u> shall be in effect pending the results of an on-going study. Limiting the coverage of the ban and study to only wilderness areas is insufficient, as the majority of bolting activities occur in non-wilderness areas near

21a

21b

requirements? My own concern, as with many park visitors, is with the vieual pollution created by bolts. I am affronted by botts on rocke in the campground every bit as much as I am by their presence in an official Wildernses Area. While I cannot offer a solution to the bolting problem, I strongly recommend that the Management Plan extend some kind of interim control of bolting in non-wildernses areas, and that the follow-up bolting plan cover the entire monument. and can in affect place as many bolts at as many locations as they feel are raquised to support their level of climbing ability. This opens up ths serious philosophical quastion: Should the Park Service allow each individual park visitor to place permanent fixtures on park features, even if based on a safety concern? By extension, should individuals, or groups, then have the right to incall safety rails, chalms and cables, again based upon their own personal assessment as to eacety.

I believs that the climbers themselves should be made part of the solution, parhaps in this form of a consultang committee to the Park Sarvice. If bolts are really required, thay should be placed only by permit (except, of course, in an emergency situation). The Park Service should establish some basic criteria or quidelines on what would constitute an acceptable bolting, and the first permit raview could be partormed by the climber's committee. A sufficient open review period on tentetivally approved bolt applications should be astablished to allow the gansral public to comment before a final decision is made. Such an arrangement would have to be carefully worked in order to avoid the possibility of liability on the part of the

atterio receities Management; (pp. 1v, 181) The plan acknowledges throughout that advarse impact will occur on flus mistoric properties py allowing matural acertication. We justification is presented for this position, and only passing reference is made to a "cultural resources management plan" on 181. The reference, in lower caps with no record of this document in the bibliography, gives the appearance that little consideration has been given to historic preservation. A pertinent summation of policy setablished by the Cultural Resources plan should be included in the Gensral Management Plan, either directly in the text or as an appendix. See the Specific Comments section of this document for further discussion regarding this issue as it pertains to specific sites. interpretive fronts - Outreach Fronts (p. 31) Hany of the interpretive program objectives could be greatly added by expanding the roles of the Cooperating Association (Joshua Tree Natural History Association) and merby educational institutions (e.g., Pall Springs Museum, UC Riversids, Cal State University at San Bernardino, Collega of the Desart, Copper Mountain J.C.).

Sal funded field study program, similar to those daysloped a Grand Carlyon, Yossmite and Sequoia, should be undertaken at Grand Carlyon, Yossmite and Sequoia, should be undertaken at

See response 6k. Management of cultural resources is a component of the Resources Management Plan. 21d. The plan has been revised to state that the park would involve the Joshua Tree National Park Association to address operational needs of the park

21c

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1	COMMENTS	RESPONSES
		21e. Specific programs would be identified and priorities would be set in the Wilderness and Backcountry Management Plan.
		21f. See response 6f.
	8. Getter, Committe to Serbrail Pilan.	21g. This has been added.
	Joshua Tree. Not only can field etudy courses augment the interpretive programs offered by the Park Service, they can also be used as a staff training vebicle.	21h. See response 21d. The specific activities that would involve the cooperating association would require operational decisions.
21e	Rehabilitation: (P. 22) The commitment to backcountry rehabilitation and inholding acquisition/rehabilitation is a positive move. The plan would be strengthened by identifying some specific projects.	21i. See response 6o.
21f	Visitor Conflicts: The plan does not clearly identify what these conflicts are or how they are to be resolved. In several instances, modifications in campground layoute and parking are cited as a method of separating users, but again in only a general contact. Are we talking about rock climbers vs. other users? It is primarily parking and campground space? And how is this resolved on a site-to-eite baeis around the monument?	
21g	Interpretive trouts - these: (pp. 9-10) "Leave No Trace" ethics ehould be added to theme 5, as this movement is gaining great momentum in other desert unite of the National Park system.  Minimizing human impact on both the backcountry and the daveloped corridors of Joshua Tree will be critical as visitation rates continue to increase. The adoption of the "leave no trace" philosophy in the general plan, and its strong delivery to park visitors, base particular application in the issue of bolling.  "Leave no trace" visitor stills should be ancouraged through free publications, displays at each visitor facility, and be incorporated into the interpretive brochure given to visitore at the fee etations. This activity will beet etem from a strong statement in the general plan.	
	interpretive frogram - Special Program incleaniation: The concept of costumed interpretation at Kays Ranch, or indeed at any of a number of hietoric eitee within the monument, has great appeal and has proven very successful at other units of the National Park Service. However, I balleve that such programs usually have fallen under the direction of the cooperating association, as in fact have many specialized tours (e.g.,	
21h	Life at control of the activities at Raye Ranch, placing the day-to-day operation of the activities at Raye Ranch, placing the day-to-day operation of toure under the sagis of the Natural Hietory Association ehould at be stated as an option in the plan.	
211	Visitor Genter - location/Construction: (p. 31, p. 137) The reasons given for rejecting the "partially eubertranson circular museum/visitor center" on p. 137 may have been valid for the Pinto Basin aite, but they do not nacesearily apply to the West Gate eite. Sursiy, some of the bidh cost associated with the Pinto Basin proposal was associated with establishing electrical and water utilities dasp in the heart of the monument. These	
	coets would be minimal for the West Gate location, adjacent as it is to the community of Joshua Tree. Since the majority of park visitore enter through the West Gate, I consider it imperative to put the new visitor center into service as quickly as possible.	

	A. Gates, Sements to General Plan.	21j. See response 6m. The Park Service cannot obtain permits for private developers. However, park management could make recommendations to permitting government agencies in support of these types of developments. Establishment of additional campgrounds on BLM land would not necessitate a memorandum of understanding.
	If poatponed pending upgrading of other facilities, it probably will never be built. This is simply one of the most affective	21k. Backcountry camping as well as issues pertaining to land added to park would be addressed in the Wilderness and Backcountry Management Plan.
	ways to extracte the average visitor about the nettrain instroy or the park and inculcats their own eenee of personal atewardship. Now that the Monument has been enlarged and upgraded to park atetue, it easms even more critical to create the best visitor center poseible.	211. See response 6g.
	paround Capacity: (p. 137) Tha problem acity is mentioned numerous times and quify real solution offered is to ancourage o	Zim. Four-Wheel-drive foutes would be designated but not maintained.
21j	34), but ho detaile are provided. Will the Park Sarvice help private campground developers obtain permite? I euggest that the Park Service enter into a Memorandum of Underatanding with BLM to establish nearby "overflow" campgrounds on adjacent BLM lands.	
21k	Cambing - Primitive: One camping issue not addressed by the plan is the possibility for primitive camping in a backroads environment (similar to beath Valley). The addition of lands on the coutheast side of Pinto Basin as the racult of the Desert Protection Act could make this a possibility in the area accessed by the Black Esqle Mins Road. This area is crossed by the Black Esqle Mins Road. This area is crossed by the plack Esqle Mins Road.	
	mine roads which might make it suitable for this activity. The lower parts of Little Berdoo Canyon might also support this type of activity. One length of the Pinkham Canyon route, heavily impacted by old mining activities, could also be considered. In short, there should be a survay of possibla locations in the monument. If none are found alitable, then at least tha issue will have been addressed and disposed of.	
211	Trail Bikes: (p. 34, p. 105) The issue of trail bikee, with their attendant capacity for damaging the desert environment, is not adequately addressed. The principal atatessen teays that trails will be open to bicyclae "where appropriate." In the onen	
	desart flate charactaristic of most of the monument, where trails are unconstrained by natural barriers, mountain bicycle traval in any and all directions is accomplished with relative ease. It is doubtful that any trail in the monument is auitable for thie typs of unsupervised activity. Bicycles ahould be limited to paved roads, dirt roads, and 4-wheel drive routes. Joahua Tree should not make the mistake that Noab, Utch, did in making this type of recreation overly welcome. There, the resources are beginning to take a real beating as ever greater numbers of bicyclers are luced to this saif-promoted mountain-bike center. Taking a strong etand now to greatly limit bicycling will prevent future problems.	
	Tour-fine) Drive Fiel Meintenence: Four-wheel driving is beraly touched upon in the plan other than the mention that some routes	
21m	wheal drive clubs to maintain them? Will maintenance of any kind be allowed?	

## RESPONSES

21n. See response 2b. These plans are not referenced because they have not been completed.

210. See response 2c and 6t.

Page 5 of 8

1. Catme, Commenta to General Pian

COMMENTS

21n

De quickly amended, sven if only with a tentrive plan chould be quickly amended, sven if only with a tentrive plan, for management of the 200,000+ acrea added by the California Desert Protection Act. In particular, due to the potential Kaisar mine landfill, the major Esgle Mountains and Coxcomb additions require special attention with regard to establishing a wildlife cenaus baseline. ecoaystem management plans that touch upon the monument. The report should reference these (both in text and bibliography), and deacribe how the monument's plans interment with theee. In there mutual agreement/compatibility in the plans?

Report organization: I assume that the document has been prepared in accordance with an approved government style standard, but I found the organization and format made for difficult reading. Simply numbering the table as and maps, and then referencing them by number in the text, would greatly aid the reader. For axample, on my first two read-throughs, I failed to note the table of listed sites on the National Register of Mistoric Places on pp. 28-29, the only place in the document linking the recommendation to allow "natural destriction" to specific aites by name; yet, deterioration of five aites in mentioned in the text a number of times, but it is never linked to the table. The Bibliography is inadequate. It contains extraneous lietings and falls to list many of the documents referenced in the body of the document (e.g., Cultural Resources Management plan, interagency ecosystem management plans). The index should be expanded to include all named siese in the text.

21p. The plan has been clarified to state that guided tours only would continue and visitors would be prohibited from entering the structures. There would be no new development at the site. Keys Ranch would be the primary location for cultural history education in the interior of the park and Twentynine Palms cultural center would be the primary site for cultural interpretation. 21r. See response 20i 21q. Se response 6r. Pags 30 states that Keys Ranch "would be stabilized and developed as the primary location for cultural history education. The only specific given ie ths auggestion that the ranch would lend itself to costumed interpretation, with tourse to continus to be series it to costumed interpretation, with tourse to continus to be given by the Park Service. It is doubtful, given the fragility of the historic fabric of Keys Ranch, that it could be dsveloped in this way. Conducted tours are rightly kept to small groups that can be monitored to minimize thest of artifacts. Even at this level, there is a slow lose of interprity in the site. Added development would hasten the process. Finally, the use of Keys Ranch as "the primary location for cultural history education appears to go counter to the development of the Twentynins Palms facility for this express purpose. While cultural aducation in the sours area, the primary focus for this type of activity should be directed to the Twentynine Palms cultural facility. In the core area letelf, the historic resources would be better served by developing a local point at Kyan Ranch (already heavily impacted) or sven by a small museum at Lost Horse Ranger Station, but not be to be missed and associated visitation of Keys (OPE WOLFE Planning Unit - Barker Dan/Well st. Mill Parking:
(Pp. 45, 102-111) This map on page 45 does not adequately locats
this present Barker Dam and Well St. Mill parking areas. My interpretation is that the proposed new and consolidated parking lot lies approximately half-way between this present trainlasds.

No convincing need is presented for this action that appears to disturb a new area to creats the consolidated parking lot, nor doss the plan specifically etter that the old lote will be rehabilitated. If the primary goal is to create more parking capacity, it makes more eanse to enlarys the already impacted Barker Dam lot and close off the Well St. Mill access road altogether. If this were done, a trail could be constructed from the Backer Dam lot to the Well Street Mill. This longer trail would also be more effective at warding off casual vandale who usually don't like to walk very far. interpreted and protected. Unsecorted visitors will venture into the structure of the mill, as they always have. A carefully designed trail, which would provide access into a small portion of the etructure, might satisfy this craving. Also of concern in developing this resource, is the protection of the Keys/Bagley shooting monument. This stons could be sasily carried off by a couple of men, or defaced in situ. Ite only protection to date has been the relative secrety of its location. Some thought should be given to its security. Without great care, the should be given to its security. Without great care, the security. role force Plenning Dult - reliet will; (pp. 102-104) Thie rule and its associated collection of artifacts (tanks, toole, old cars, structures) is extremely vulnerable to vandalism. The plan does not adequately describe how ths resource will be - Keye Rapobs 1. Cates, Comments to General Plan SPECIFIC CONDENTS:

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21s. The plan proposes that trails be redesigned to protect surrounding resources (including cultural resources) and that social trails be restored. A trails plan would address the specific siting of trails. The plan has been revised to preserve the adobe ranch walls.

RESPONSES

## 21t. See response 21h.

21u. Parking in this area would be redesigned and would include space currently occupied by the old tennis courts.

## 21v. See response 21k.

21w. The plan addresses parking along the primary paved park roads in the most heavily used areas of the park. Trailhead parking areas along secondary dirt roads would be retained and redesigned — in this case to accommodate horse trailer parking. The plan proposes that trails be redesigned to protect surrounding resources and that social trails be restored. A trails plan would address the specific siting of trails. The plan has been revised to include the development of an interpretive trail for the Desert Queen Mine area.

21x. See response 6s.

A. Gatta. Commits to General Flam.

Lost social trails have proliferated between the campground Headstone Social trails have proliferated between the campground Headstone Rock outcrop, and tha ranch site. The plan should specifically address how this elitation abould be corrected (through better formal trails?). Ryan Ranch itself is virtually ignored by the plan. The ruins of the ranch, its role in the development of the address man, its role in the development of the address that address mandarook morters and percepting, create an excallant elduation for an interpretive trail. Stabilization of the old adobe walls at the ranch, or at least application of chanicals to retard the process, abould be given high priority in order to maintain the option of thair use in an interpretive program. The modern junk on the site of eq. MPS pumphouse attructure) should be removed. The pipelina trail to Lost Horse mina should be officially adopted, maintenanced and eigned.

proposal to davalog a natura center at Black Rock is an excellent proposal to davalog a natura center at Black Rock is an excellent idea. The plan dose not specify who will organiza the proposal colorado/Rojave desert biosphere reserva seminare (pp.30-31), and is sparea in the operational details of the center. This appears again to rappear an excellent area in which to expand the role of the cooperating association. The site map of Black Rock does not appear to provide adequate day-parking for the nature center, particularly parking and turnaround space for school busse. This facility, along with the proposed cultural center at Twentynine Palme, represent an outstanding opportunity to exarcise the outraach program attered as one of the plan's major goals.

21u

21t

21v

the possibility for primitive arr-camping in the plan does not address the possibility for primitive arr-camping in the sestern part of the Monument. This has occurred on a sporadic basis at two locations on the northarn and of tha Coxcomb. Thare are a numbar of primitive routes running part way into the Coxcombe from the aqueduct road. Now that this area has been brought fully into the park, the plan should be assanded to etate that they will be closed and rehabilitated.

Nine pre Flannia DNA: (pp. 112-118) The Deaert Queen Mine/Pine City parking area in ot mantioned. This parking lot is small and often congested on busy weakends. Directional trail signs are needed, both at the trailmend and at critical junctione around the Desert Queen Mine. The avarage visitor arriving at the trailmend doesn't know which direction to set out for the mine site. Here is another opportunity for creating a good interpretive trail natwork, going first to the mine old mine site.

21w

21x

remailion Planting Unit: (pp. 119-122) The plan does not adequately justify why the road ahould be ralocated around the cholla Garden. This area of densa cholla growth is quite extensive, particularly towards the north, and to avoid it altogethar would raquira much more than a minor road realignment. The plan implies that the cholla plant community has been disturbed by vialtation, but on-site visits over the years do not convince me of this. The road realignment esams an unnecessary

272

Minto East onte - Wildlife: Due to proximity of Eagle Mountain Kaiser mine and its potential exploitation as a land-fill, the plan should stress the importance of establishing a good baseline on tortoise and bighorn sheep populations in order to assess the effects of any future development. Are current and planned surveys adequate. expenss that could be better used to acquire and rehabilitate some of the private inholdings and old roads in the nearby Turkey Flat region of bitto Basin.

21y

P. Cates, Comments to General Plan

Cottonrod Flaming Unit: The plan for a boardwalk at Cottonwood Spring is positive and should land to both improved interpretation and restoration of vegetation and walldlife at this resource.

Cottonrood Planning Unit - #ildline mater scurse: (pp. 130-135) For many years, Cottonwood Spring has been adversely impacted by constant foot-trafits, with has also affected its use by wildlife. The plan should stress the importance of this water source for wildlife, as well as address the possible development of nearby Wood Spring as a wildlife water source. This latter badly overgrown and not really accessible to wildlife.

restructions than in the fig. (pp. 148-149) Should the city of twentynine Palms pay for maintaining artificial irrigation of this desis of Mara, since lowering of the local water table may be due to pumping of nearby wells? Should artificial irrigation be employed at all? Would a more important lesson be taught by allowing the "natural" process of water diversion to the human spopulation take place and letting the palms die? The important issue of water management at Mara should be addressed.

IN CLOSING: Thank you for this opportunity to comment on the proposed plans and actions. As a new National Park located so near a huge metropolitan area, Joshua Tree's natural resources will come under ever-increasing pressure. I urge that Park Service to keep resource protection firmly in the forefront of management decisions. Plasse continue to keep me informed of park planning issues.

Thanking you sincerely,



Ernie Quintana Phil Lundgren ::00

21z

22b. The no action alternative assumes a continuation of the phased road reconstruction project, including realignment of Barker Dam road near intersection Rock. Barker Dam Road would not be widened under any alternative. The park service would be preparing additional NEPA compliance documents, most likely environmental assessments, for all future road reconstruction projects as they are funded and designed. At that time the park service would have adequate details for the proposals and to further evaluate impacts as well as alternative evaluation as required by NEPA.

22c. See response 8c.

22d. Many of the proposed lots would consolidate the use from a number of existing smaller parking areas (primarily turnouts) or where pulloffs have developed along the roads when existing lots were full. The old turnouts and pulloffs would then be obliterated and revegetated. The plan discusses the approximate location and size of the proposed parking areas for the heavy use areas of the park and that additional pulloffs would be placed approximately every .25 mile along Park Boulevard. As previously stated, additional, more detailed environmental compliance documents would be prepared for future road reconstruction projects which includes the design of the parking areas.

Hemingway and Lost Horse Valley areas. I have observed that these areas are convenient for the climbers but most convenient for non-climbers who wish to would be obliterated and access blocked." Obviously, these parking areas and seems to be to provide more parking areas near the climbing areas (that would Page 39 states "All unneeded or undesirable parking areas (primarily turnouts) have been created in the first place. My question is: Who decides which ones climbers. If sufficient parking is not provided near these climbing areas, then are "unneeded or undesirable" and which ones are retained? Will there be en not likely be used much by non-climbers). This solution would also be in line day use parking areas. I prefer to leave these ereas more or less as they ere road reconstruction. In the paragraph on page 176 describing Alternative B am also opposed to the paving of campground roads, campsite parking and I agree with and approve of the plan to widen and improve all of the existing visit nearby attractions such as the Hidden Valley Nature Walk. Rather than Alternative) indicate 92.7 acres of new disturbance (Monumentwide) due to having climbers fill up lots neer the Hidden Valley trailhead, a better solution The area of new disturbance as a result of the proposed paving of the road with respect to paving. Better delineation with rock barriers or vegetation No Action, it is stated that "reconstruction would affect approximately 93 turnouts were needed and desired by someone, otherwise they would not Alternative and the No Action Alternative even though the latter does not very popular with rock climbers and often attract significant numbers of involve paving the road from Intersection Rock to the Barker Dam area. climbers will park in (and possibly fill) other lots which are actually less will be disturbed by this road? The table on pages 175-176 (Preferred Thus, the same acreage is reported for both the Preferred It appears that there are not enough parking areas and pullouts in the from Intersection Rock to the Barker Dam area is not clear. opportunity for public input on this issue? with the desire to mitigate user conflicts. Somehow, this does not add up right. paved roads in the Monument. would be welcome. environment...." ı, ė. 7 22d 22c 22b

as 75% of the sites at any particular campground. I would be opposed to a situation where, at a particular campground, all of the sites are by reservation only or all of the sites are first come, first serve. All campgrounds should have a mixture of reservation and first come, first serve sites.

Regarding the reservation system, I would prefer thet it be either (A) administered by Netional Park Service personnel, or (B) administered by e private firm that cuses not charge a premium above the actual site lag. I strongly object to being forced ite., no alternative) to obtain my reservation from a private firm that not only collects the site fee but also an additional fee for their service. Why should a critican and traxpayer be required to pay a fee to a private profit-oriented) organization for the privilege of camping on public land (i.e., my lang)? I have found Mistix to be particularly annoying and inconvenient in this regard. I would rather pay a higher fee directly to the NPS (to provide additional personnel) than to be forced to deal with a private firm to obtain my reservation.

11. In the large scheme of things, this is a relatively minor point but I object to "costumed interpretation" for Keys Ranch suggested on page 30. I feel that this is a practice which is disrespectful to the Keys' memory, smacks of commercialization and is just plain tacky.

Thanks for considering my comments end allowing me to participate in the planning process. And congratulations on becoming a National Park!



cc: Mr. Ernest Quintana, Superintendent Joshua Tree National Park 74485 National Monument Dr 29 Palms, CA 92277

RESPONSES	23a. The visitation figures have been corrected.	250. See response 6a.	23c. See response 11a and 2Un.										
COMMENTS		fia			SUBJECT: Draft General Management Plan - Joshua Tree NM October 12, 1994 Regional Director, Western Regional Office National Park Service 600 Harrison Street, Suite 600 San Francisco, CA 94107-1372	Dear Sir or Madem;	Thanks for sending me a copy of the Draft. I am deeply concerned that this Draft is not a suitable document for policy and planning purposes.  There are numerous errors and inconsistencies in the "hard data" presented in the doc-	ument. As a simple example, the counts of visitation presented on pages 167-8 are inconsistent—the visitation for 1922 is reported as 1.3 million in the figure at the top of page 167 and tas more than 16 (sixteen) million in the figure at the top of page 168.  Even after repositioning the decimal point in the latter figure, the results cannot be reconciled. The statement that annual visitation first surpassed the one million mark in 1990 also contradicts the figure on page 168 (even allowing for the misplexed decimal point).	There are numerous other difficulties in the presentation (or lack thereof) of supporting data and the methods used to gather and summarize the data, which ironing out these incomistencies would not fix.	I was startled and disappointed to see that a reservation system is being proposed for all campgrounds (page 34). My experience camping in JTNM suggests that this would be a	harmful change. I know that 'group' campsites must be reserved weeks in advance and that it is hard to get a reservation even if one calls a few hours after the sites are up for reservation. In spite of this, I have noticed that it is rare for all of the 'group' sites to actually be occupied. I have also seen campsites in busy campgrounds abandoned early on a Saturday (e.g. to take a sick child home) that could not have been put to use had a reservation system been in effect.	The suggestion on page 187 that the ban on the placement of fixed anchors for climbing "would not preclude use of any climbing routes, as all routes can be climbed with alternative methods" is frightening. The "alternative methods" that come to mind are climbing	without a rope and climbing on a rope that is sent down from the top. Each of these "al- ternative methods" has its dangers. Climbing without a rope has obvious dangers. As for

# Page 2: JTNM Draft Management Plan

top-roping, some rocks cannot be safely climbed without ropes and fixed anchors (as would be needed to establish the top-rope) while others follow a tortuous course making serious falls a possibility even on a top-rope. While I appreciate that another document will deal with climbing management in detail, I worry that the misinformed off-hand opinion I see here will be carried into that document.

My wife and I have long enjoyed visiting places of natural beauty—including National Parks—and I appreciate that resource management is necessary and desirable in popular area. However, I am deeply concerned that the Draft General Management Plan does not provide a suitable basis for planning. Sincerely, RESPONSES

24a. The plan has been revised to include the improvements at the Twentynine Palms

administration and visitor facilities as a priority one.

(6) 27

# Joshua Tree National Monument Visitors Center

Tuesday, October 4, 1994

Joshua Tree National Monument Attn: Emie Quintana National Monument Drive Twenty Nine Palms, Ca. 92277

Dear Mr. Quintana,

After reviewing the General Management Plan and Development Concept Plans for the Joshua Tree National Monument, I would like to go on record in support of the following:

I support the plan to establish a visitor's center in Joshua Tree, at the Park Ave

I also support the development of the cultural center and expanded administrative buildings in 29 Painns at the current Visitor's Center. However, the modernization and expansion of the 29 Painns facility should be accomplished prior to any other. development

Thank you for your consideration. Sincerely,

SECEIVED JOSHIJA TREE

90T 6 '94

24a

# APPENDIXES PREPARERS & CONTRIBUTORS BIBLIOGRAPHY INDEX



### **APPENDIX A: COST ESTIMATES**

### GENERAL MANAGEMENT PLAN ESTIMATE JOSHUA TREE NATIONAL MONUMENT for

04/19/95

### PROPOSED ALTERNATIVE

IMPORTANT: This estimate, based on minimal detail, may require a substantial contingency for undetermined	P H	IN THOUS	SANDS OF DO	
appurtenances, plus funding for design-related studies.	A	GROSS	DI ANNINO	TOTAL
DEVELOPMENT ITEM	S	CONSTR.	PLANNING COSTS	TOTAL
DEAFFOLIAIFIAI II FIAI		- 00013	00313	00313
PARKWIDE DEVELOPMENT				
Parkwide revegetation of old roadbeds & trails	5	197	38	234
Parkwide barriers for illegal access canyons (24)	4	94	18	112
Signs for illegal access points (100)	4	7	1	8
SUBTOTALS		297	57	354
COVINGTON PLANNING UNIT				
Modify Black Rock Campground (BRC) drainage	2	131	25	156
Modify BRC circulation and site separation	2		5	31
Pave BRC roads and parking	2		76	476
Revegetate BRC	2		50	312
10 car paved parking for Calif. R&H trail at BRC	2		4	27
Backcountry board for Calif. R&H trail at BRC	2	3	1	3
Expand BRC picnic area with 6 new sites plus ramadas	2	42	8	51
Backcountry vault toilets	3		21	131
Highway signs (6) for backcountry and BRC	3		1	7
Entrance rehabilitation to backcountry	3		4	23
Well defined gravel parking for 8 vehicles in backcountry	3		2	11
Trail signs (50)	3		4	23
Environmental Education Center at BRC	5		75	468
Provide backcountry interpretation exhibits (HFC)	4	24	5	28
Provide fire management interpretation exhibits (HFC)	4	13	3	16
SUBTOTALS		1481	283	1763
INDIAN COVE PLANNING UNIT				
Realign road at entrance & resurface 2 miles of road	4	462	88	550
Paved parking for day use and picnicking (30 cars)	4		11	70
Rehabilitate 101 individual campsites	4	106	20	126
Improve 114 individual campsites		0.5	40	404
Rehabilitate 13 group campsites	4	85	16	101
Improve 13 group campsites		44	2	13
Add 6 picnic sites	4		278	1736
Replace portable toilets with vault toilets (53)	4	8	2	9
New entrance sign at highway	4		5	28
Campground exhibits (HFC) Exhibits on North Americans and 1/4 mi. nature trail (HFC)			4	23
Remodel 240 sq. ft. contact station	4		7	45
Fencing to prevent illegal trespassing (1/2 mi.)	4		3	21
Reconstruct amphitheater	4		19	117
Newnotidot amplitudater				

Entrance area restrooms with plumbing	4	131	25	156
Septic system for entrance area restrooms	4	52	10	62
Entrance area vault toilets				
Add 100 sq. ft. ranger office to contact station	4_	13	3	16
SUBTOTALS		2582	493	3074
HEADQUARTERS PLANNING UNIT				
Resurface Oasis of Mara trail, 5 ft. wide		(complete)		
Improve Oasis of Mara interpretive exhibits (HFC)	1	20	4	23
Additional trail to non-NPS cultural features	3	16	3	19
Increase V.C. and employee parking, 40 cars	1	79	15	94
Improve 10 picnic sites and add one group site w/ramada	1	26	5	31
Improve interpretive and informational signs (24)	1	9	2	11
Clean up V.C. interpretive exhibits (HFC)				
Provide new V.C. interpretive exhibits (HFC)	1	655	125	780
Remodel V.C. space (use existing exhibits)				
Construct addition to V.C.	1	413	79	491
Additional office space as min. requirement (200 SF)				
Replace 2 major entrance signs and 1 minor one	1	79	15	94
VIP duplex	4	393	75	468
Rehabilitate vehicle compound, 5600 SF	1	183	35	218
Construct new administrative complex (Programmed)	1	637	122	758
SUBTOTAL	٠	2509	479	2988
3031317L		2000	4,0	2000
LOST HORSE PLANNING UNIT				
Relocated Boy Scout trailhead	1	5	1	5
Pave campground roads and upgrade site furnishings (62)	2	325	62	387
Horse and RV campground loop east of Ryan CG, 25 sites	1	197	38	234
Improve Turtle Rock & Quail Springs picnic sites (21)	2	39	7	46
Road signs for facilities (60)	1	16	3	19
Replace portable toilets with vault toilets	2	440	84	524
Major entrance signs (2)	1	71	14	84
Natural and cultural exhibit/displays (40) (HFC)	4	5	1	6
New contact station at west entrance, 1000 SF	4	0000	500	0400
New visitor center at west entrance, 10,000 SF	1	2620	500	3120
Extend community water to west entrance, 300 ft.	1	12	2	14
Community water meter fee	1	9	2	11
Boundary fencing	5	126	24	150
Interpretive signs on trails, 12 (HFC)	4_	5	1	6
SUBTOTAL		3868	738	4606
DIAMO MAGE DI AMMINIO MAIT				
PINTO WYE PLANNING UNIT				4.4
Relocate Arch Rock & Skull Rock trailheads	3	9	2	11
Clean up and define campsites at White Tank CG	2	26	5	31
Clean up and define RV campsites at Belle CG	2	21	4	25
Rehabilitate picnic sites and define parking (5)	2	9	2	11
Replace 34 portable toilets with vault toilets	2	935	179	1114
Replace 6 wayside exhibits (HFC)	4	39	8	47
New interpretive displays (10) (HFC)	4	66	13	78
Trailhead and interpretive signs (24) (HFC)	4	22	4	26

Extend power to north entrance fee station	1	138	26	165
Extend community water to north entrance fee station	1	208	40	247
Extend telephone to north entrance fee station	1	138	26	165
Install security system in north entrance fee station	1	3	1	3
Provide new fee station w/restroom at north entrance	1	79	15	94
Provide pressure water tank system for fee station	1	7	1	8
Remodel north entrance fee station w/information board	·	·	·	
Maintenance area 20,000 gal. water storage tank	2	48	9	58
Maintenance area shower facility	2	59	11	70
Upgrade maintenance alarm system	5	52	10	62
Provide telephone at maintenance area	5	131	25	156
SUBTOTAL	<b>-</b>	1990	380	2370
OODICIAL		1990	300	2370
TRANSITION PLANNING UNIT				
Rehabilitate Cholla Cactus Garden trailhead	3	105	20	125
Improve Cholla Cactus Garden trail signs (24)	3	6		
	5		1	7
1/4 mile interpretive trails at 4 washes		46	9	55
Interpretive exhibits and signs for "Wash" trails (HFC)	5	3	1	3
Depressed borrow pit picnic area w/ramadas, 6 sites	5	42	8	51
Paved parking and entrance drive for picnic area, 10 cars	5	29	6	34
Roadside picnic tables (6)			_	
Vault toilets at Cholla Cactus Garden	3	28	5	33
Rehabilitate 6 borrow pits	5_	314	60	374
SUBTOTAL		573	109	682
PINTO BASIN PLANNING UNIT				
Backcountry registration boards (4)	3	8	2	9
Mile markers (20)	5	3	1	3
Roadside interpretive exhibits along Old Dale Rd. (HFC)	3	8	2	9
Provide new radio repeater & upgrade radio equipment	2	262	50	312
Boundary signs at Old Dale Road (12)	3	3	1	3
Routed entrance sign at Old Dale Road entrance	3 _	16	3	19
SUBTOTAL		299	57	356
COTTONWOOD PLANNING UNIT				
Improve trail designation with signs (24)	3	6	1	7
Contact station, 3800 SF	2	996	190	1186
Expand 3 campground restrooms for accessibility	2	157	30	187
New duplex residence	2	165	32	197
Picnic area at new contact station	2	13	3	16
Covered storage for maintenance, 2000 SF	5	157	30	187
Covered parking for 8 maintenance vehicles	5	110	21	131
Well to reservoir 6" ductile iron pipe, 2 miles	2	415	79	494
8" PVC water distribution line, 2000 LF	2	92	18	109
Ranger office and fee collection, 800SF	2	105	20	125
Pull telephone line through existing conduit, 6 miles	5	63	12	75
New entrance sign at south entrance	1	35	7	42
Interpret NPS policies better at south entrance (HFC)	5	164	31	195
	3	66	13	78
Improve trail and signs, 5 miles		30		, ,

Oasis viewing platform (600 SF) Remodel existing contact station, 450 SF	3	31	6	37
SUBTOTAL		2575	491	3066
GRAND TOTAL		16173	3087	19260
Cost breakdown by phases:	1 -	5644	1077	6721
	2 -		953	5946
	3 -		89	555
	4 -	3241	619	3860
	5 -	1829	349	2178
		16173	3087	19260
Note: All cost figures are for FY '94 construction costs				
and should be escalated for future years.				
Also, see note at top of estimate concerning conting	encies.	_		
		Gross		
ESTIMATES OF		Construc.	Planning	Total
ROAD CONSTRUCTION COSTS AND PHASING		Costs	Costs	Costs
Dhasa 4.				
Phase 1:  Lost Horse, Pinto Wye, & Indian Cove planning	unite			
Roads	j umis-	4176	797	4973
Pave parking		359	69	427
Additional parking		21	4	25
Additional parking		21	-	25
Phase 2:				
Lost horse planning unit-				
Roads		2645	505	3150
Pave parking		71	14	85
Additional parking		759	145	904
Phase 3:				
Transition and Pinto Basin planning unit-				
Roads		4115	785	4900
Additional parking		113	21	134
Phase 4:				
Cottonwood planning unit- Roads		4040	904	5018
Roaus		4213	804	5010
Phase 5:				
Headquarters planning unit-				
Pave parking		84	16	100
Pinto Wye planning unit-				
Roads		1700	325	2025
Indian Cove planning unit-				
Roads		756	144	900
Pave parking		38	7	45
PROPOSAL- Total estimated cost of FLHP funded roady	vor >>	19050	3636	22686

### GENERAL MANAGEMENT PLAN ESTIMATE JOSHUA TREE NATIONAL MONUMENT for MINIMUM REQUIREMENTS ALTERNATIVE

04/19/95

Fencing to prevent illegal trespassing (1/2 mi.)

IMPORTANT: This estimate, based on minimal detail, may require a substantial contingency for undetermined appurtenances, plus funding for design related studies.	P H	IN THOUSANDS OF DOLLARS				
	A	GROSS				
	S	CONSTR.	PLAN	TOTAL		
DEVELOPMENT ITEM	E	COSTS	COSTS	COSTS		
DADICAUDE DEVEL ODMENT						
PARKWIDE DEVELOPMENT	_	407	20	224		
Parkwide revegetation of old roadbeds & trails	5	197	38	234		
Parkwide barriers for illegal access canyons (24)	4	7	4	•		
Signs for illegal access points (100)	4	203	1 39	242		
SUBTOTALS		203	39	242		
COVINGTON PLANNING UNIT						
Modify Black Rock Campground (BRC) drainage	2	131	25	156		
Modify BRC circulation and site separation	2		5	31		
Pave BRC roads and parking		20	3	01		
Revegetate BRC						
10 car paved parking for Calif. R&H trail at BRC	2	22	4	27		
Backcountry board for Calif. R&H trail at BRC	2		1	3		
Expand BRC picnic area with 6 new sites plus ramadas		9	•	Ŭ		
Backcountry vault toilets						
Highway signs (6) for backcountry and BRC	3	6	1	7		
Entrance rehabilitation to backcountry	3	20	4	23		
Well defined gravel parking for 8 vehicles in backcountry	3		2	11		
	3	20	4	23		
Trail signs (50) Environmental Education Center at BRC	5	413	79	491		
Provide backcountry interpretation exhibits (HFC)	4	24	5	28		
Provide fire management interpretation exhibits (HFC)	4		3	16		
SUBTOTALS		686	131	817		
SUBTUTALS		000	, , ,	• • • • • • • • • • • • • • • • • • • •		
INDIAN COVE PLANNING UNIT						
Realign road at entrance & resurface 2 miles of road	4	431	82	513		
Paved parking for day use and picnicking (30 cars)	4		11	70		
Rehabilitate 101 individual campsites	·					
Improve 101 individual campsites	4	40	8	47		
Rehabilitate 13 group campsites						
Improve 13 group campsites	4	34	7	41		
Add 6 picnic sites						
Replace portable toilets with vault toilets (53)	4	1458	278	1736		
New entrance sign at highway	1	8	2	9		
Campground exhibits (HFC)						
Exhibits on North Americans & 1/4 mi. nature trail (HFC)	4		4	23		
Remodel 240 sq. ft. contact station	4	38	7	45		

21

25

Entrance area restrooms with plumbing	4	20	_	0.0
Entrance area vault toilets	4	28 13	5 3	33
Add 100 sq. ft. ranger office to contact station SUBTOTALS	4 -	2148	410	<u>16</u> 2558
SOBTOTALS		2140	410	2556
HEADQUARTERS PLANNING UNIT				
Resurface Oasis of Mara trail, 5 ft. wide		(complete)		
Improve Oasis of Mara interpretive exhibits (HFC)				
Additional trail to non-NPS cultural features				
Increase V.C. and employee parking, 40 cars	•	00	-	0.4
Improve 10 picnic sites and add one group site w/ramada	3	26	5 2	31
Improve interpretive and informational signs (24) Clean up V.C. interpretive exhibits (HFC)	3	9 367	70	11 438
Provide new V.C. interpretive exhibits (HFC)	3	307	70	430
Remodel V.C. space (use existing exhibits)	3	262	50	312
Construct addition to V.C.	3	202	30	312
Additional office space as min. requirement (200 SF)	3	39	8	47
Replace 2 major entrance signs and 1 minor one	1	79	15	94
VIP duplex	1	165	32	197
Rehabilitate vehicle compound, 5600 SF				
SUBTOTALS	_	948	181	1129
LOST HORSE PLANNING UNIT				
Relocated Boy Scout trailhead	1	5	1	5
Pave campground roads and upgrade site furnishings (62)				
Horse and RV campground loop east of Ryan CG, 25 sites		00	_	40
Improve Turtle Rock & Quail Springs picnic sites (21)	2	39	7 3	46
Road signs for facilities (60)  Replace portable toilets with vault toilets	1	16	3	19
Major entrance signs (2)	1	71	14	84
Natural and cultural exhibit/displays (40) (HFC)	4	5	1	6
New visitor center at west entrance, 4000 SF	7	Ŭ	'	•
Extend community water to west entrance, 300 ft.	1	12	2	14
Community water meter fee	1	9	2	11
Boundary fencing	5	126	24	150
Interpretive signs on trails (12) (HFC)	4	5	1	6
SUBTOTALS	_	286	55	341
PINTO WYE PLANNING UNIT				
Relocate Arch Rock & Skull Rock trailheads	_		_	
Clean up and define campsites at White Tank CG	2	26	5	31
Clean up and define RV campsites at Belle CG	2	21	4	25
Rehabilitate picnic sites and define parking (5)	2	9 935	2 179	11 1114
Replace 34 portable toilets with vault toilets Replace 6 wayside exhibits (HFC)	4	39	8	47
New interpretive displays (10) (HFC)	4	66	13	78
Trailhead and interpretive signs (24) (HFC)	4	22	4	26
Extend power to north entrance fee station	1	118	22	140
Extend community water to north entrance fee station	i	208	40	247
Extend telephone to north entrance fee station	1	138	26	165
and the private to traite outside too others.				

Install security system in north entrance fee station	1	3	1	3
Provide new fee station w/restroom at north entrance	·		•	•
Provide pressure water tank system for fee station	1	7	1	8
Remodel north entrance fee station w/information board	1	26	5	31
Maintenance area 20,000 gal. water storage tank	2	48	9	58
Maintenance area shower facility	2	59	11	
Upgrade maintenance alarm system	5	31		70
Provide telephone at maintenance area	5		6	37
SUBTOTALS	³_	131	25	156
SUBTUTALS		1887	360	2247
TRANSITION PLANNING UNIT				
	•	405	00	405
Rehabilitate Cholla Cactus Garden trailhead	3	105	20	125
Improve Cholla Cactus Garden trail signs (24)	3	6	1	7
1/4 mile interpretive trails at 4 washes	_			
Interpretive exhibits and signs for "Wash" trails (HFC)	5	3	1	3
Sunken borrow pit picnic areas w/ramadas, 4 sites				
Paved parking and entrance drive for picnic area, 10 cars	5	29	6	34
Roadside picnic tables (6)	3	5	1	6
Vault toilets at Cholla Cactus Garden	3	28	5	33
Rehabilitate 6 borrow pits	5	314	60	374
SUBTOTALS		489	93	583
PINTO BASIN PLANNING UNIT				
Backcountry registration boards (4)	3	8	2	9
Mile markers (20)	5	3	1	3
Roadside interpretive exhibits along Old Dale Rd. (HFC)	3	8	2	9
Provide new radio repeater & upgrade radio equipment	2	262	50	312
Boundary signs at Old Dale Road (12)	3	3	1	3
Routed entrance sign at Old Dale Road entrance	3	16	3	19
SUBTOTALS	Ĭ	299	57	356
OODIGIALO		200	0,	000
COTTONWOOD PLANNING UNIT				
Improve trail designation with signs (24)	3	6	1	7
	3	U	'	•
Contact station, 3800 SF	2	157	30	187
Expand 3 campground restrooms for accessibility	2	165	32	197
New duplex residence	5	157	30	187
Covered storage for maintenance, 2000 SF	_			
Covered parking for 8 maintenance vehicles	5	110	21	131
Well to reservoir 6" ductile iron pipe, 2 miles	2	415	79	494
8" PVC water distribution line, 2000 LF	2	89	17	106
Ranger office and fee collection, 800 SF	_	00	40	7.5
Pull telephone line through existing conduit, 6 miles	5	63	12	75
New entrance sign at south entrance	1	35	7	42
Improve NPS policies interpretation @ south entrance (HF				
Improve trail and signs, 5 miles	3	66	13	78
Oasis viewing platform (600 SF)	3	31	6	37
Remodel contact station, 450 SF	1_	44	8	53
SUBTOTALS		1339	256	1595
GRAND TOTALS		8286	1581	9867

	PHAS	SE		
COST BREAKDOWN BY PHASES:	1	942	180	1122
	2	2408	460	2868
	3	1040	198	1238
	4	2320	443	2763
	5	1576	301	1877
		8286	1581	9867

Note: All cost figures are FY'94 construction costs and should be escalated for future years.

See note at top of estimate concerning contingencies.

ESTIMATES OF ROAD CONSTR. COSTS AND PHASING	GROSS CONSTR. COSTS	PLAN COSTS	TOTAL COSTS
Phase 1:			
Lost Horse, Pinto Wye, & Indian Cove planning units-			
Roads	4176	797	4973
Pave parking	157	30	187
Phase 2:			
Lost Horse planning unit-			
Roads	2645	505	3150
Pave existing parking	265	51	316
, are snaming pariting		•	
Phase 3:			
Transition and Pinto Basin planning units-			
Roads	4115	785	4900
Pave parking	29	5	34
Phase 4:			
Cottonwood planning unit-	4040	004	5040
Roads	4213	804	5018
Phase 5:			
Headquarter planning unit-			
Pave parking	84	16	100
Pinto Wye planning unit-			
Roads	1700	325	2025
Indian Cove planning unit-			
Roads	756	144	900
Pave parking	38	7	45
MIN. REQ Total estimated cost of FLHP funded roadwork	18177	3469	21646

### GENERAL MANAGEMENT PLAN ESTIMATE JOSHUA TREE NATIONAL MONUMENT for NO ACTION ALTERNATIVE

04/19/95

STS LISTED	BELOW ARE
THOUSANDS	S OF DOLLARS
oss	
NSTR. PL/	AN TOTAL
STS COS	STS COSTS
16440	3139 19589
1	THOUSANDS OSS NSTR. PL STS COS

These are the total estimated costs of FLHP funded roadwork for the No Action Alternative.

### APPENDIX B: COMPLIANCE

### **SECTION 106 REQUIREMENTS**

The proposed action for Joshua Tree National Park would comply with section 106 of the 1966 National Historic Preservation Act as amended. It would also comply with the implementing regulations of this law, contained in *Regulations for the Protection of Historic and Cultural Properties*, 36 Code of Federal Regulations (CFR) 800. It would also comply with the National Park Service *Management Policies* (1988) and the *Cultural Resources Management Guideline*, known as NPS-28 (1994).

Joshua Tree National Park contains properties and sites listed, or that may be determined eligible for listing, on the National Register of Historic Places. Consequently and in accord with the legislation, regulations, and guidelines, actions that may affect these properties and sites, such as the approval and ultimate implementation of this proposed action, are subject to review and comment by the Advisory Council on Historic Preservation and the California historic preservation officer.

Pursuant to 36 CFR 800, the Advisory Council on Historic Preservation, the National Conference of State Historic Preservation Officers, and the National Park Service have executed a programmatic agreement related to the planning process. The Advisory Council and the California historic preservation officer have participated in the development of this plan through informal consultations and formal briefings and reviews. The topics under review include treatment of properties and sites on or eligible for the national register and consultations about archeological and ethnographic resources with interested American Indian groups.

The National Park Service has provided the Advisory Council on Historic Preservation and the California historic preservation officer with opportunities to comment on the draft general management plan during the planning process. This was done in accordance with stipulation E of the August 15, 1990 programmatic agreement and in compliance with section 106 of the National Historic Preservation Act of 1966 and the National Environmental Policy Act of 1969.

Actions that meet the criteria of programmatic exclusions as stipulated in the August 15, 1990, programmatic agreement among the National Conference of State Historic Preservation Officers, the Advisory Council on Historic Preservation, and the National Park Service will be evaluated, reviewed, and documented internally by the National Park Service through assessment of effect forms. Archeological surveys would be conducted prior to ground-disturbing actions. Archeological clearances would be obtained as stipulated in the November 21, 1979, agreement between the National Conference of State Historic Preservation Officers and the National Park Service. Archeological clearance would document that an action would have no effect on archeological resources. Proposed actions not meeting the programmatic exclusion definition may be determined to need no further review under section 106 of the National Historic Preservation Act of 1966 as amended. Such agreements, however, must be determined mutually and must be fully documented. Actions not covered by the above must undergo full section 106 procedures as stipulated in 36 CFR 800. The National Park Service will consult with the State Historic Preservation Office and the Advisory Council on Historic Preservation as appropriate on any such actions.

The park maintains an ongoing dialogue with American Indian groups who have expressed an interest in the Campbell Collection and other park archeological and ethnographic collections. During the spring and summer of 1992 the monument conducted an extremely successful repatriation of human remains and associated artifacts. The park is complying with the Native American Graves Protection and Repatriation Act of 1990 (NAGPRA). As with section 110 of the National Historic Preservation Act, the inventorying and cataloging of artifacts would be the least systematic under the no-action

alternative; more systematic under the minimum requirements alternative; and most systematic under the proposed action.

### **SECTION 110 REQUIREMENTS**

The programmatic agreement calls for the systematic inventorying of cultural resources following the *Guidelines for Federal Agency Responsibilities* under section 110 of the National Historic Preservation Act. Under the no-action alternative, cultural resource inventorying would remain largely opportunistic, dependent upon separate funding for individual projects. The priorities determined by the resource management plan serve as a guide. Under the minimum requirements alternative, such inventorying probably would be more systematic. The priorities determined by the resource management plan would be used to tie into programmatic sources of funding such as monies from the Applied Ethnography Program, the Historic Preservation Fund, and the Systemwide Archeological Inventory Program. Under the proposed action alternative, the inventorying would be the most systematic. Cultural and natural resources management would be integrated and funding through the parkwide program of cultural ecology. This approach best recognizes the relationships among various cultural and natural resources and manages accordingly. The level of personnel is another variable; staffing increases from the no-action alternative through minimum requirements to the proposed action.

### COMPLIANCE

0::	COMPLIANCE					
Site	Actions	Compliance				
Belle Campground	Redesign campsites; pave roads and campground parking	Programmatic exclusion (g) invoked if the action occurs in previously disturbed areas; archeological clearance required if the action involves breaking new ground in previously undisturbed areas.				
Black Rock Canyon	Renovate fire center; expand the maintenance area and reestablish a permanent position; redesign camping and picnicking sites, including the horse camp; designate parking; upgrade toilets  Separate NPS functions and visitor uses; provide volunteer housing; construct an administrative facility; designate an employee entrance and parking; secure parking for NPS vehicles; redesign the desert plants nursery and provide for expansion; use present visitor center for cultural resources interpretation.	Programmatic exclusion (g) invoked if the construction or expansion occurs in previously disturbed areas; archeological clearance required if the construction or expansion involves breaking new ground in previously undisturbed areas.  Programmatic exclusion (g) invoked if the construction or expansion occurs in previously disturbed areas; archeological clearance required if the construction or expansion involves breaking new ground in previously undisturbed areas.				
Headquarters						
Hidden Valley	Redesign camping and picnicking sites; reconstruct roads; realign Park Boulevard and Barker Dam Road intersection; expand current and add new parking areas	Programmatic exclusion (g) invoked if the construction or expansion is in previously disturbed areas; archeological clearance required if the construction or expansion involves breaking ground in previously undisturbed areas.				
Indian Cove	Redesign camping and picnicking sites; pave roads and site parking; designate popular rock climbing spots as day use only areas; add picnicking sites near nature trail.	Programmatic exclusion (g) would be invoked if the construction or expansion occurs in previously disturbed areas; archeological clearance required if the construction or expansion involves breaking ground in previously undisturbed areas. Clearance would also be required for petroglyphs, pictographs, or other artifacts in areas opened to rock climbing.				
Live Oak Picnic Area	Redesign and expand picnicking and parking sites; separate rock climbing from picnicking; upgrade toilets	Programmatic exclusion (g) invoked if the action occurs in previously disturbed areas; archeological clearance required if the action involves breaking ground in previously undisturbed areas. Archeological clearance also required for possible petroglyphs, pictographs, or other artifacts for any new areas opened to rock climbing				

Site	Actions	Compliance
Lost Horse Ranger Station	Maintain ranger station, weather station, and utilities	Programmatic exclusion (g) invoked if the actions are in previously disturbed areas; archeological clearance required if the actions involve breaking new ground in previously undisturbed areas.
North Entrance	Replace fee station; provide or upgrade power, water, telephone, and security system.	Programmatic exclusion (g) invoked if the action is in previously disturbed areas; archeological clearance required if action involves breaking ground in undisturbed areas.
Park Routes 12 and 13 (east/west highway and Keys View Road)	Widen, smooth out curves, and reconstruct routes; construct additional parking; redesign parking	Archeological clearance required
Pinto Wye Maintenance Facility	Construct storage bins at borrow pit for gravel and other maintenance materials; revegetate borrow pit; construct larger capacity water storage facility; improve telephone service	Programmatic exclusion (g) invoked if the action occurs in previously disturbed areas; archeological clearance required if the action involves breaking new ground in previously undisturbed areas.
Split Rock Picnic Area	Provide an access point for rock climbing and a trailhead for hiking; upgrade toilets	Programmatic exclusion (g) invoked if the action occurs in previously disturbed areas; archeological clearance required if the action involves breaking new ground in previously undisturbed areas. Archeological clearance required for petroglyphs, pictographs, or other artifacts in areas opened to climbing
South Entrance	Construct a visitor contact facility and new entrance station	Archeological clearance required.
West Entrance	Construct a visitor center at the boundary.	Archeological clearance required
White Tank Campground	Redesign campsites; pave roads and campground parking; upgrade toilets	Programmatic exclusion (g) invoked if the action occurs in previously disturbed areas; archeological clearance required if the action involves breaking new ground in previously undisturbed areas.

### APPENDIX C: CONSULTATION WITH THE U.S. FISH AND WILDLIFE SERVICE



### United States Department of the Interior

FISH AND WILDLIFE SERVICE
ECOLOGICAL SERVICES
CARLSBAD FIELD OFFICE
2730 Loker Avenue West
Carlsbad, California 92008

April 29, 1994

Memorandum

To: National Resource Specialist, Denver Service Center,

National Park Service (Attn: Greg Jarvis)

From: Field Supervisor

Subject: Request for Candidate, Proposed, Threatened, or Endangered

Species for the General Mamagement Plan and Environmental Impact Statement for the Joshua Tree National Monument,

Riverside County, California (1-6-94-SP-144)

This memo is in response to a request dated March 11, 1994, requesting information on potential species of concern within the proposed project area. We are providing a list of endangered, threatened, and candidate species which may be present within the area of the project within the jurisdiction of the Carlsbad Field Office. The enclosed list of species partially fulfills the requirements of the Fish and Wildlife Service (Service) under Section 7(c) of the Endangered Species Act of 1973, as amended (Act).

Section 7(a)(2) of the Act requires a Federal Agency, in consultation with, and with the assistance of the Service, insure that any action it authorizes, funds, or carries out, is not likely to jeopardize the continued existence of any listed species or results in the destruction or adverse modification of critical habitat. To meet this requirement, Biological Assessments are required under section 7(c) of the Act if listed species or critical habitat may be present in the area affected by any major construction activity. Federal agencies have the responsibility to prepare a Biological Assessment if your proposed action is a major construction activity that requires the preparation of an Environmental Impact Statement. If a Biological Assessment is not required, your agency still has the responsibility to review its proposed activities and determine whether the listed species will be affected. Moreover, "action' means all activities or programs of any kind authorized, funded, or carried out, in whole or in part, by Federal agencies. In addition, "action area" means all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action.

Section 7(d) of the Act prohibits Federal agencies and applicants from making any irreversible or irretrievable commitment of resources which has the effect of foreclosing the formulation or implementation of reasonable and prudent alternatives which would avoid jeopardizing the continued existence of listed species or resulting in the destruction of critical habitat.

2

During the assessment or review process, the agencies may engage in planning efforts, but may not make any irreversible commitment of resources. Such a commitment could constitute a violation of section 7(a) of the Act. If a listed species may be adversely affected, agencies should request, in writing through our office, formal consultation pursuant to section 7 of the Act. Informal consultation should be used to exchange information and resolve conflicts with respect to listed species prior to a written request for formal consultation.

A Federal agency is required to confer with the Service when the agency determines that its action is likely to jeopardize the continued existence of any proposed species or result in the destruction or adverse modification of proposed critical habitat. Conferences are informal discussions between the Service and the Federal agency, designed to identify and resolve potential conflicts between an action and proposed species or proposes critical habitat at an early point in the decision making process. The Service makes recommendations, if any, on ways to minimize or avoid adverse effects of the action. These recommendations are advisory because the jeopardy prohibition of section 7(a)(2) does not apply until the species is listed or the proposed critical habitat designated, and the Federal agency determines whether or not formal consultation is required. The conference process fills the need to alert Federal agencies of possible steps that an agency might take at an early stage to adjust its actions to avoid jeopardizing a proposed species.

Candidate species are included for the purpose of notifying a project proponent in advance of possible proposals and listings which at some time in the future may have to be considered in your planning activities. If early evaluation of a project indicates that it is likely to adversely impact a candidate species, we recommend that the Federal agency seek technical assistance from this office in an effort to avoid or reduce impacts to such species.

We want to closely coordinate with the Federal agency and applicant during the preparation of the Biological Assessment. Our goal would be to provide technical assistance that identifies specific features that could be incorporated into the project to avoid adverse impacts to listed species. Should you have any questions regarding the species listed or your responsibilities under the Act, please contact Shawnetta Grandberry at (619) 431-9440. Goif C. Kobetich

Attachment

<sup>&</sup>quot;Construction Project" means any Federal action which significantly affects the quality of the human environment designed primarily to result in the building or erection of man-made structures such as dams, buildings, roads, pipelines, channels, and the like. This includes Federal actions such as permits, grants, licenses, or other forms of Federal authorizations or approvals which may result in construction.

Listed Endangered, Threatened and Candidate Species that May Occur in the Area of the Joshua Tree National Monument Riverside County, California (1-6-94-SP-143)

4

Common Name	Scientific Name	Status
Listed Species		
BIRDS Bald eagle	Haliaeetus leucocephalus	E
Peregrine falcon	Falco peregrinus	E
FISH Unarmored Threespine Stickleback	Gasterosteus aculeatus williamsoni	E
REPTILES Desert tortoise (Mojave Desert population)	Gopherus (=Xerobates Scaptochelys) agassizii	Т
Proposed Species		
AMPHIBIANS California red-legged frog	Rana aurora draytoni	PE
BIRDS Southwestern willow flycatcher	Empidonax traillii extimus	PE
MAMMALS Peninsular Bighorn sheep	Ovis canadensis cremnobates	PE
PLANTS Triple-ribbed milk- vetch	Astragalus tricarinatus	PE
Candidate Species		
AMPHIBIANS Mountain yellow- legged frog	Rana muscosa	C2
Western spadefoot toad	Scaphiopus hammondii	C2r

Common Name	Scientific Name	5 Status
BIRDS		
Bell's sage sparrow	Amphispiza bellii bellii	C2
California spotted owl	Strix occidentalis occidentalis	C2
Eagle Mountain scrub	Aphelocoma coerulescens cana	C2
Loggerhead shrike	Lanius ludovicianus	C2
Mountain plover	Charadrius montanus	C2
Northern goshawk	Accipiter gentilis	C2
southern California rufous-crowned sparrow	Aimophila ruficeps canescens	C2
San Diego horned lizard	Phrynosoma coronatum blainevillei	C2
PLANTS		
Munz's onion	Allium munzii	C1
Nevin's barberry	Berberis nevinii	Cl
Thread-leaved Brodiaea	Brodiaea filifolia	C1
Little San Bernardino Mountains Gilia	Gilia maculata	C1
San Diego ragweed	Ambrosia pumila	C2
Bear Valley woolly- pod	Astragalus leucolobos	C2
Flat-seeded spurge	Chamaesyce platysperma	C2
Many-stemmed live- forever	Dudleya multicaulis	C2
Parish's bush-mallow	Malacothamnus parishii	C2
Robison's Monardella	Monardella robisonii	C2
San Diego button bush	Tetracoccus dioicus	C2

### Executive Order

### WITHDRAWAL OF PUBLIC LANDS FOR CLASSIFICATION

### CALIFORNIA

By virtue of the authority vested in me by the act of June 25, 1910 (ch. 421, 36 Stat. 847-848), as amended by the act of August 24, 1912 (ch. 369, 37 Stat. 497), it is hereby ordered that the surveyed and unsurveyed public lands within the following-described area in the State of California be, and the same are hereby, temporarily withdrawn for classification and pending determination as to the advisability of including such lands in a national monument, subject to the conditions of the aforesaid acts, to valid existing rights, and to the provisions of existing withdrawals affecting certain of such lands, including withdrawals made under the act of June 17, 1902 (ch. 1093, 32 Stat. 388-390), in connection with the Colorado River storage project:

SAN BERNARDINO MERIDIAN

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T. 1 S., R. 4 E., secs. 19 to 36, inclusive:
T. 1 S., R. 5 E., secs. 19 to 36, inclusive;
T. 1 S., R. 6 E., secs. 19 to 36, inclusive;
T. 1 S., R. 7 E., secs. 10 to 36, inclusive;
T. 1 S., R. 8 E., secs. 19 to 36, inclusive;
T. 1 S., R. 9 E., secs. 19 to 36, inclusive (unsurveyed);
Tps. 1 S., Rs. 10 to 15 E., inclusive (part unsurveyed);
Tps. 2 S., Rs. 4 to 15 E., inclusive (part unsurveyed);
T. 3 S., R. 5 E., secs. 1 to 3 and secs. 10 to 12, inclusive;
T. 3 S., R. 6 E., secs. 1 to 18, inclusive, and secs. 23 and 24;
T. 3 S., R. 7 E., secs. 1 to 24, secs. 25 to 27, and secs. 34 to 36, inclusive;
Tps. 3 S., Rs. 8 to 15 E., inclusive (part unsurveyed);
T. 4 S., R. 7 E., secs. 1 to 3 and secs. 10 to 12, inclusive;
Tps. 4 S., Rs. 8 to 15 E., inclusive (part unsurveyed);
T. 5 S., R. 8 E., secs. 1 to 3 and secs. 10 to 12, inclusive;
Tps. 5 S., Rs. 9 to 13 E., inclusive (part unsurveyed);
T. 6 S., R. 9 E., secs. 1 to 17, secs. 21 to 27, inclusive, and secs. 35 and 36:
Tps. 6 S., Rs. 10 to 12 E., inclusive;
T. 7 S., R. 10 E., secs. 1 to 16 and secs. 23 to 26, inclusive, and sec. 36:
Tps. 7 S., Rs. 11 and 12 E.;
containing approximately 1,136,000 acres.
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This order shall continue in full force and effect unless and until revoked by the President or by act of Congress.

FRANKLIN D. ROOSEVELT.

THE WHITE House, October 25, 1933.

[No. 6361]

### 45. Joshua Tree National Monument

Establishment: Proclamation (No. 2193) of August 10, 1936.....

### BY THE PRESIDENT OF THE UNITED STATES OF AMERICA

### A PROCLAMATION

[No. 2193-Aug. 10, 1936-50 Stat. 1760]

WHEREAS certain public lands in the State of California contain historic and prehistoric structures, and have situated thereon various objects of his toric and scientific interest; and

WHEREAS it appears that it would be in the public interest to reserve such lands as a national monument, to be known as the Joshua Tree National

Now, THEREFORE, I, Franklin D. Roosevelt, President of the United States of America, under and by virtue of the authority vested in me by section 2 of the act of June 8, 1906, ch. 3060, 34 Stat. 225 (U. S. C., title 16, sec. 431), do proclaim that, subject to existing rights and prior withdrawals, the following-described lands in California are hereby reserved from all forms of appropriation under the public-land laws and set apart as the Joshua Tree National Monument:

### SAN BERNARDINO MERIDIAN

T. 1 S., R. 5 E., secs. 19 to 36, inclusive.

T. 2 S., R. 5 E., secs. 1 to 6, 11 to 13, inclusive, and those parts of secs. 7, 8, 9, 10, 14, 15 and 24 lying north of the north boundary of the Colorado River Aqueduct right-ofway.

T. 1 S., R. 6 E., secs. 19 to 36, inclusive. T. 2 S., R. 6 E., secs. 1 to 18, 21 to 26, inclusive, and those parts of secs. 19, 20, 27, 28, 34, 35 and 36 lying north of aqueduct right-of-way.

T. 3 S., R. 6 E., that part of sec. 1 lying north of aqueduct right-of-way.

Ts. 1 and 2 S., R. 7 E. (Partly unsurveyed).

T. 3 S., R. 7 E., secs. 1 to 6, 8 to 16, 23 to 24, inclusive, and those parts of secs. 7, 17, 18, 21, 22, 25 and 26 lying north of aqueduct right-of-way.

Ts. 1 and 2 S., R. 8 E. (partly unsurveyed).

- T. 3 S., R. 8 E., secs. 1 to 30, 33 to 36, inclusive, and those parts of secs. 31 and 32 lying north of aqueduct right-of-way.
- T. 4 S., R. 8 E., those parts of secs. 4 and 5 lying north of aqueduct right-of-way.

T. 1 S., R. 9 E., secs. 5 to 9 and 16 to 36, inclusive.

Ts. 2 and 3 S., R. 9 E. (partly unsurveyed). Ts. 1 to 3 S., R. 10 E. (partly unsurveyed).

T. 5 S., R. 10 E., secs. 1 to 30, inclusive, and those parts of secs. 31 to 36 lying north of aqueduct right-of-way.

Ts. 1 to 4 S., R. 11 E. (partly unsurveyed).

T. 5 S., R. 11 E., secs. 1 to 30 and 32 to 36, inclusive, and that part of sec. 31 lying north of aqueduct right-of-way.

T. 6 S., R 11 E., those parts of secs. 1 to 6 lying north of aqueduct right-of-way.

Ts. 1 to 5 S., R. 12 E. (partly unsurveyed).

T. 6 S., R. 12 E., those parts of secs. 1 to 6 lying north of aqueduct right- of-way.

Ts. 1 to 4 S., R. 13 E. (partly unsurveyed).

T. 5 S., R. 13 E., secs. 1 to 24, inclusive, and those parts of secs. 28, 29, 30 and 31 lying north of aqueduct right-of-way (partly unsurveyed).

Ts. 1 to 3 S., R. 14 E. (partly unsurveyed).

T. 4 S., R. 14 E., secs. 1 to 11, 14 to 23, 27 to 34, inclusive, and those parts of secs. 12, 13, 24, 25, 26 and 35 lying west of aqueduct right-of-way (unsurveyed).

Ss. 1 and 2 S., R. 15 E. (partly unsurveyed).

T. 3 S., R. 15 E., secs. 1 to 19, inclusive, and sec. 24; those parts of secs. 20, 21, 22, 23, 25, 26, 29, 30 and 31 lying north of aqueduct right-of-way (partly unsurveyed).

T. 4 S., R. 15 E., those parts of secs. 6 and 7 lying west of aqueduct right-of-way;

containing approximately 825,340 acres.

Warning is hereby expressly given to all unauthorized persons not to appropriate, injure, destroy, or remove any feature of this monument and not to locate or settle upon any of the lands thereof.

The Director of the National Park Service, under the direction of the Secretary of the Interior, shall have the supervision, management, and control of the monument as provided in the act of Congress entitled "An Act To establish a National Park Service, and for other purposes," approved August 25, 1916 (ch. 408, 39 Stat. 535, U. S. C., title 16, secs. 1 and 2), and acts supplementary thereto or amendatory thereof.

In witness whereof, I have hereunto set my hand and caused the seal

of the United States to be affixed.

Done at the City of Washington this 10th day of August, in the year of our Lord nineteen hundred and thirty-six and of the Independence of the United States of America the one hundred and sixty-first.

Franklin D. Roosevelt.

By the President:
WILLIAM PHILLIPS,
Acting Secretary of State.

### [Public Law 837—81st Congress] [Chapter 1030—2d Session]

[H. R. 7034]

### AN ACT

To reduce and revise the boundaries of the Joshua Tree National Monument in the State of California, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That Joshua Tree National Monument, in the State of California, established by Proclamation Numbered 2193, of August 10. 1936 (50 Stat. 1760), hereafter shall comprise the following-described area:

### SAN BEHNARDING MERIDIAN

Township 1 south, range 5 east, sections 22 to 27, inclusive, and sections 34 to 36, inclusive; township 2 south range 5 east, portion of cast half lying north of the north right-of-way line of the Colorado River aqueduct but excluding therefrom that portion of the Long Canyon Camp and dump area in section 27; township 1 south, range 6 east, sections 19 to 36, inclusive; township 2 south, range 6 east, sections 1 to 30, inclusive, that portion of section 31 lying north of the north right-of-way line of the Colorado River aqueduct, and sections 32 to 36, inclusive; township 3 south, range 6 east, portion lying north of the north right-of-way line of the Colorado River aqueduct but excluding therefrom that portion of the Deception Camp and dump area in section 14, that portion of the West Deception Camp and dump area in section 10, and the portions of the East Wide Canyon Camps and dump areas in sections 5 and 6; township 1 south, range 7 east, sections 1 to 4, inclusive, and 0 to 15, inclusive, unsurveyed, section 16, sections 19 to 23, inclusive, section 24, unsurveyed, and sections 25 to 36, inclusive; township 2 south, range 7 east; township 3 south, range 7 east, portion lying north of the north right-of-way line of the Colorado River aqueduct but excluding therefrom that portion of the Fan Hill Camp and dump area in section 20; township 1 south, range 8 east, partly unsurveyed; townships 2 and 3 south, range 8 east; township 1 south, range 9 east, sections 5 to 9, inclusive, sections 16 to 23, inclusive, and sections 26 to 35, inclusive; township 2 south, range 9 east, sections 2 to 11, inclusive, and sections 14 to 36, inclusive, partly unsurveyed; township 3 south, range 9 east; township 4 south, range 9 east, sections 1 to 5, inclusive, and sections 11 to 14, inclusive; township 2 south, range 10 east, sections 25 to 36, inclusive, unsurveyed; township 3 south, range 10 east, partly unsurveyed; township 4 south, range 10 east, sections 1 to 18, inclusive, sections 22 to 26, inclusive, and sections 35 and 36; township 5 south, range 10 east, section 1; township 2 south, range 11 east, sections 25 to 36, inclusive, unsurveyed; townships 3 and 4 south, range 11 east, partly unsurveyed; township 5 south, range 11 east, sections 1 to 18, inclusive, sections 22 to 27, inclusive, and sections 34, 35, and 86; [CHAPTER 1030]

### AN ACT

To reduce and revise the boundaries of the Joshua Tree National Monument in the State of California, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That Joshua Tree National Monument, in the State of California, established by Proclamation Numbered 2193, of August 10, 1936 (50 Stat. 1760), hereafter shall comprise the following-described area:

Joshus Tree National Monument, Calif.

### SAN BERNARDINO MERIDIAN

Township 1 south, range 5 east, sections 22 to 27, inclusive, and sections 34 to 36, inclusive; township 2 south, range 5 east, portion of east half lying north of the north right-of-way line of the Colorado River aqueduct but excluding therefrom that portion of the Long Canyon Camp and dump area in section 27; township 1 south, range 8 east, sections 19 to 36, inclusive; township 2 south, range 6 east, sections 1 to 30, inclusive, that portion of section 31 lying north of the north right-of-way line of the Colorado River aqueduct, and sections 32 to 36, inclusive; township 3 south, range 6 east, portion lying north of the north right-of-way line of the Colorado River aqueduct but excluding therefrom that portion of the Deception Camp and dump area in section 14, that portion of the West Deception Camp and dump area in section 10, and the portions of the East Wide Canyon Camps and dump areas in sections 5 and 6; township 1 south, range 7 east, sections 1 to 4, inclusive, and 9 to 15, inclusive, unsurveyed, section 16, sections 19 to 23, inclusive, section 24, unsurveyed, and sections 25 to 36, inclusive; township 2 south, range 7 east; township 3 south, range 7 east, portion lying north of the north right-of-way line of the Colorado River aqueduct but excluding therefrom that portion of the Fan Hill Camp and dump area in section 20; township 1 south, range 8 east, partly unsurveyed; townships 2 and 3 south, range 8 east; township 1 south, range 9 east, sections 5 to 9, inclusive, sections 16 to 23, inclusive, and sections 26 to 35, inclusive; township 2 south, range 9 east, sections 2 to 11, inclusive, and sections 14 to 36, inclusive, partly unsurveyed; township 3 south, range 9 east; township 4 south, range 9 east, sections 1 to 5, inclusive, and sections 11 to 14, inclusive; township 2 south, range 10 east, sections 25 to 36, inclusive, unsurveyed; township 3 south, range 10 east, partly unsurveyed; township 4 south, range 10 east, sections 1 to 18, inclusive, sections 22 to 26, inclusive, and sections 35 and 36; township 5 south, range 10 east, section 1; township 2 south, range 11 east, sections 25 to 36, inclusive, unsurveyed; townships 3 and 4 south, range 11 east, partly unsurveyed; township 5 south, range 11 east, sections 1 to 18, inclusive, sections 22 to 27, inclusive, and sections 34, 35, and 36; township 6 south, range 11 east, portion of sections 1, 2, and 3 lying north of north transmission line right-of-way which is adjacent to the north right-of-way line of the Colorado River aqueduct but excluding therefrom the Aggregate Deposit in section 3; township 2 south, range 12 east, section 13 and sections 23 to 36, inclusive, partly unsurveyed; townships 3 and 4 south, range 12 east, partly unsurveyed; township 5 south, range 12 east, sections 1 to 24, inclusive, and sections 26 to 34, inclusive, partly unsurveyed, and portions of sections 25 and 35 lying north of north transmission line right-of-way which is adjacent to the north right-of-way line of the Colorado River aqueduct; township 6 south, range 12 east, portions of sections 2, 3, 4, 5, 6, and 10, lying north of north transmission line right-of-way which is adjacent to the north right-of-way line of the Colorado River aqueduct, but excluding therefrom the Bumpani's Aggregate Deposit in section 4; township 2 south, range 13 east, sections 1 and 2 and sections 7 to 36, inclusive, partly unsurveyed; township 3 south, range 13 east, sections 1 to 18, inclusive, partly unsurveyed; township 5 south, range 13 east, sections 6, 7, 18, and 19, unsurveyed; township 1 south, range 14 east, sections 33 to 36, inclusive, partly unsurveyed; township 2

township 6 south, range 11 east, portion of sections 1, 2, and 3 lying north of north transmission line right-of-way which is adjacent to the north right-of-way line of the Colorado River aqueduct but excluding therefrom the Aggregate Deposit in section 3; township 2 south, range 12 east, section 13 and sections 23 to 36, inclusive, partly unsurveyed; townships 3 and 4 south, range 12 east, partly unsurveyed; township 5 south, range 12 east, sections 1 to 24, inclusive, and sections 26 to 34, inclusive, partly unsurveyed, and portions of sections 25 and 35 lying north of north transmission line right-of-way which is adjacent to the north right-of-way line of the Colorado River aqueduct; township 6 south, range 12 east, portions of sections 2, 3, 4, 5, 6, and 10, lying north of north transmission line right-of-way which is adjacent to the north right-of-way line of the Colorado River aqueduct, but excluding therefrom the Bumpani's Aggregate Deposit in section 4; township 2 south, range 13 east, sections 1 and 2 and sections 7 to 36, inclusive, partly unsurveyed; township 3 south, range 13 east, sections 1 to 18, inclusive, partly unsurveyed; township 5 south, range 13 cast, sections 6, 7, 18, and 19, unsurveyed; township 1 south, range 14 cast, sections 33 to 36, inclusive, partly unsurveyed; township 2 south, range 14 east, partly unsurveyed; township 3 south, range 14 east, sections 1 to 18, inclusive, partly unsurveyed; township 1 south, range 15 east, sections 31 to 35, inclusive, partly unsurveyed; township 2 south, range 15 east, sections 2 to 36, inclusive, partly unsurveyed; township 3 south, range 15 east, sections 1 to 12, inclusive, partly unsurveyed, and section 18, unsurveyed; township 2 south, range 16 east, sections 18, 19, 30, and 31, unsurveyed; and township 3 south, range 16 east, sections 6 and 7 unsurveyed.

Sec. 2. All public-domain lands heretofore included within the Joshua Tree National Monument which are eliminated from the National Monument by this Act are hereby opened to location, entry, und patenting under the United States mining laws: *Provided*, That such public-domain lands or portions thereof shall be restored to application and entry under other applicable public land laws, including

the mineral leasing laws.

Sec. 3. All leases, permits, and licenses issued or authorized by any department, establishment, or agency of the United States, with respect to the Federal lands excluded from the Joshua Tree National Monument by this Act, which are in effect on the date of the approval of this Act shall continue in effect, subject to compliance with the terms and conditions therein set forth, until terminated in accordance with

the provisions thereof.

SEC. 4. The Secretary of the Interior is anthorized and directed, through the Bureau of Mines, the Geological Survey, and the National Park Service, to cause a survey to be made of the area within the revised boundaries of the Joshua Tree National Monument with a view to determining to what extent the said area is more valuable for minerals than for the National Monument purposes for which it was created. Report of said survey shall be filed with the President of the United States Senate and the Speaker of the House of Representatives on or before February 1, 1951.

Approved September 25, 1950.

64 STAT.] 81st CONG., 2D SESS.—CHS. 1030, 1046—SEPT. 25, 26, 1950

south, range 14 east, partly unsurveyed; township 3 south, range 14 east, sections 1 to 18, inclusive, partly unsurveyed; township 1 south, range 15 east, sections 31 to 35, inclusive, partly unsurveyed; township 2 south, range 15 east, sections 2 to 36, inclusive, partly unsurveyed; township 3 south, range 15 east, sections 1 to 12, inclusive, partly unsurveyed, and section 18, unsurveyed; township 2 south, range 16 east, sections 18, 19, 30, and 31, unsurveyed; and township 3 south, range 16 east, sections 6 and 7 unsurveyed.

SEC. 2. All public-domain lands heretofore included within the Joshua Tree National Monument which are eliminated from the National Monument by this Act are hereby opened to location, entry, and patenting under the United States mining laws: Provided, That such public-domain lands or portions thereof shall be restored to application and entry under other applicable public land laws, including

the mineral leasing laws.

Szc. 3. All leases, permits, and licenses issued or authorized by any department, establishment, or agency of the United States, with respect to the Federal lands excluded from the Joshua Tree National Monument by this Act, which are in effect on the date of the approval of this Act shall continue in effect, subject to compliance with the terms and conditions therein set forth, until terminated in accordance with

the provisions thereof.

Sec. 4. The Secretary of the Interior is authorized and directed, through the Bureau of Mines, the Geological Survey, and the National Park Service, to cause a survey to be made of the area within the revised boundaries of the Joshua Tree National Monument with a view to determining to what extent the said area is more valuable for minerals than for the National Monument purposes for which it was created. Report of said survey shall be filed with the President of the United States Senate and the Speaker of the House of Representatives on or before February 1, 1951.

Approved September 25, 1950.

Certain public-domain lands.

Prior leases, etc.

Survey.

#### AN ACT

To include within the boundaries of Joshua Tree National Monument, in the State of California, certain federally owned lands used in connection with said monument, and for other purposes.

June 30, 1961 [H. R. 5416]

Joshua Tree No-

tional Monument,

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Act of September 25, 1950, chapter 1030 (64 Stat. 1033; 16 U.S.C. 450ii), is hereby amended by inserting after the period at the end of section 1 the following: "Also, all that portion of the south half of the northeast quarter and of the north half of the southeast quarter of section 33, township 1 north, range 9 east, San Bernardino base and meridian, in the county of San Bernardino, State of California, shown on map titled 'Record of Survey' by H. F. Cameron, Junior, licensed engineer 6826, dated December 29, 1948, and James B. Hommon, licensed engineer 6916, dated October 5, 1949, and made for the National Park Service, Department of the Interior, and recorded October 17, 1949, in volume 7, page 72, of the official records of the county of San Bernardino, said land being described as follows:

"Beginning at the United States Government Land Office monument marked as the east quarter corner of said section 33, thence proceeding on a true bearing south 89 degrees 02 minutes 10 seconds west a distance of 50.01 feet to the true point of begin-

ing of the hereinafter described parcel of land;

PUBLIC LAW 87-81-JUNE 30, 1961

175 STAT.

"Thence north 0 degrees 02 minutes 55 seconds west a distance of 250.08 feet to a point of curve; thence along the arc of a curve to the left having a radius of 20.00 feet a distance of 31.73 feet to a point of tangency; thence south 89 degrees 02 minutes 40 seconds west a distance of 2,559.24 feet; thence south 0 degrees 19 minutes 50 seconds east a distance of 270.76 feet;

"Thence south 0 degrees 21 minutes 02 seconds east a distance of 409.32 feet to the beginning of a curve; thence along the arc of a curve to the left having a radius of 280.98 feet a distance of 275.93 feet to a point of compound curvature; thence along the arc of a curve to the left having a radius of 800.00 feet a distance of 753.98 feet to a point of tangency; thence north 69 degrees 22 minutes 58 seconds east a distance of 125.31 feet to the beginning of a curve;

"Thence along the arc of a curve to the right having a radius of 1,400.00 feet a distance of 1,042.74 feet to a point of tangency; thence south 67 degrees 56 minutes 33 seconds east a distance of 94.55 feet to the beginning of a curve; thence along the arc of a curve to the left having a radius of 700.00 feet a distance of

366.52 feet to a point of compound curvature;

"Thence along the arc of a curve to the left having a radius of 167.60 feet a distance of 240.17 feet to a point of tangency; thence north 0 degrees 02 minutes 55 seconds west a distance of 648.91 feet to the point of beginning containing 57.839 acres, more or less."

Approved June 30, 1961.

### PUBLIC LAW 94-567 [H.R. 13160]: Oct. 20, 1976

## NATIONAL PARK SYSTEM—WILDERNESS DESIGNATED

An Act to designate certain lands within units of the National Park System as wilderness; to revise the boundaries of certain of those units; and for other purposes.

Wilderness areas Designation. 16 USC 1132 note

Re it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That in accordance with sertion 3(c) of the Wilderness Act (78 Stat. 890; 16 U.S.C. 1132(c)), the following lands are hereby designated as wilderness, and shall be administered by the Secretary of the Interior in accordance with the applicable provisions of the Wilderness Act:

Joshua Tree National Monument, Calif.

(g) Joshua Tree National Monument, California, wilderness comprising four hundred and twenty-nine thousand six hundred and ninety acres, and potential wilderness additions comprising thirtyseven thousand five hundred and fifty acres, depicted on a map entitled

"Wilderness Plan, Joshua Tree National Monument, California", numbered 156-20,003-D and dated May 1976, to be known as the Joshua Tree Wilderness.

Sec. 2. A map and description of the boundaries of the areas designated in this Act shall be on file and available for public inspection in the office of the Director of the National Park Service, Department of public inspection. the Interior, and in the office of the Superintendent of each area designated in the Act. As soon as practicable after this Act takes effect, maps of the wilderness areas and descriptions of their boundaries shall be filed with the Interior and Insular Affairs Committees of the United States Senate and House of Representatives, and such maps and descriptions shall have the same force and effect as if included in this Act: Provided, That correction of clerical and typographical arrors in such maps and descriptions may be made.

SEC. 3. All lands which represent potential wilderness additions, apon publication in the Federal Register of a notice by the Secretary of the Interior that all uses thereon prohibited by the Wilderness Act 16 USC 1131 have ceased, shall thereby be designated wilderness.

Sec. 4. The boundaries of the following areas are hereby revised, and those lands depicted on the respective maps as wilderness or as revision. potential wilderness addition are hereby so designated at such time and in such manner as provided for by this Act:

description.

Publication in Federal Register.

Boundary

90 STAT. 2692

PUBLIC LAW 94-567-OCT. 20, 1976

# Public Law 94-567 94th Congress

# An Act

Oct. 20, 1976 [H.R. 13160]

To designate certain lands within units of the National Park System as widerness; to revise the boundaries of certain of those units; and for other purposes.

Wilderness areas. Designation. 16 USC 1132 note. Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That in accordance with section 3(c) of the Wilderness Act (78 Stat. 890; 16 U.S.C. 1132(c)), the following lands are hereby designated as wilderness, and shall be administered by the Secretary of the Interior in accordance with the applicable provisions of the Wilderness Act:

Bandelier National Monument, N. Mex. (a) Bandelier National Monument, New Mexico, wilderness comprising twenty-three thousand two hundred and sixty-seven acres, depicted on a map entitled "Wilderness Plan, Bandelier National Monument, New Mexico", numbered 315–20,014–B and dated May 1976, to be known as the Bandelier Wilderness.

Gunnison National Monument, Colo. (b) Black Canyon of the Gunnison National Monument, Colorado, wilderness comprising eleven thousand one hundred and eighty acres, depicted on a map entitled "Wilderness Plan, Black Canyon of the Gunnison National Monument, Colorado", numbered 144-20,017 and dated May 1973, to be known as the Black Canyon of the Gunnison Wilderness.

Chiricahua National Monument, Ariz. (c) Chiricahua National Monument, Arizona, wilderness comprising nine thousand four hundred and forty acres, and potential wilderness additions comprising two acres, depicted on a map entitled "Wilderness Plan, Chiricahua National Monument, Arizona", numbered 145-20,007-A and dated September 1973, to be known as the Chiricahua National Monument Wilderness.

Great Sand Dunes National Monument, Colo. (d) Great Sand Dunes National Monument, Colorado, wilderness comprising thirty-three thousand four hundred and fifty acres, and potential wilderness additions comprising six hundred and seventy acres, depicted on a map entitled "Wilderness Plan, Great Sand Dunes National Monument, Colorado", numbered 140–20,006—C and dated February 1976, to be known as the Great Sand Dunes Wilderness.

Haleakala National Park, Hawaii. (e) Haleakala National Park, Hawaii, wilderness comprising nineteen thousand two hundred and seventy acres, and potential wilderness additions comprising five thousand five hundred acres, depicted on a map entitled "Wilderness Plan, Haleakala National Park, Hawaii", numbered 162-20,006-A and dated July 1972, to be known as the Haleakala Wilderness.

Isle Royale National Park, Mich. (f) Isle Royale National Park, Michigan, wilderness comprising one hundred and thirty-one thousand eight hundred and eighty acres, and potential wilderness additions comprising two hundred and thirty-one acres, depicted on a map entitled "Wilderness Plan, Isle Royale National Park, Michigan", numbered 139-20,004 and dated December 1974, to be known as the Isle Royale Wilderness.

Joshua Tree National Monument, Calif. 1974, to be known as the Isle Royale Wilderness.

(g) Joshua Tree National Monument, California, wilderness comprising four hundred and twenty-nine thousand six hundred and ninety acres, and potential wilderness additions comprising thirty-seven thousand five hundred and fifty acres, depicted on a map entitled

"Wilderness Plan, Joshua Tree National Monument, California". numbered 156-20,003-D and dated May 1976, to be known as the Joshua Tree Wilderness.

(h) Mesa Verde National Park, Colorado, wilderness comprising eight thousand one hundred acres, depicted on a map entitled "Wilderness Plan, Mesa Verde National Park, Colorado", numbered 307-20,007-A and dated September 1972, to be known as the Mesa Verde Wilderness

(i) Pinnacles National Monument, California, wilderness comprising twelve thousand nine hundred and fifty-two acres, and potential wilderness additions comprising nine hundred and ninety acres, depicted on a map entitled "Wilderness Plan, Pinnacles National Monument, California", numbered 114-20,010-D and dated September 1975, to be known as the Pinnacles Wilderness.

(i) Saguaro National Monument, Arizona, wilderness comprising seventy-one thousand four hundred acres, depicted on a map entitled Monument, Ariz. "Wilderness Plan, Saguaro National Mounment, Arizona", numbered 151-20,003-D and dated May 1976, to be known as the Saguaro Wilderness.

(k) Point Reyes National Seashore, California, wilderness comprising twenty-five thousand three hundred and seventy acres, and potential wilderness additions comprising eight thousand and three acres, depicted on a map entitled "Wilderness Plan, Point Reyes National Scashore", numbered 612-90,000-B and dated September 1076 to be known as the Point Power Wilderness 1976, to be known as the Point Reyes Wilderness.

(1) Badlands National Monument, South Dakota, wilderness comprising sixty-four thousand two hundred and fifty acres, depicted on a map entitled "Wilderness Plan, Badlands National Monument, South Dakota", numbered 137-29,010-B and dated May 1976, to be known as the Badlands Wilderness.

(m) Shenandoah National Park, Virginia, wilderness comprising seventy-nine thousand and nineteen acres, and potential wilderness additions comprising five hundred and sixty acres, depicted on a map entitled "Wilderness Plan, Shenandoah National Park, Virginia", numbered 134-90,001 and dated June 1975, to be known as the Shenandoah Wilderness.

Sec. 2. A map and description of the boundaries of the areas designated in this Act shall be on file and available for public inspection in the office of the Director of the National Park Service, Department of Public inspection. the Interior, and in the office of the Superintendent of each area designated in the Act. As soon as practicable after this Act takes effect, maps of the wilderness areas and descriptions of their boundaries shall be filed with the Interior and Insular Affairs Committees of the United States Senate and House of Representatives, and such maps and descriptions shall have the same force and effect as if included in this Act: Provided, That correction of clerical and typographical errors in such maps and descriptions may be made.

SEC. 3. All lands which represent potential wilderness additions, upon publication in the Federal Register of a notice by the Secretary of the Interior that all uses thereon prohibited by the Wilderness Act 16 USC 1131 have ceased, shall thereby be designated wilderness.

Sec. 4. The boundaries of the following areas are hereby revised. and those lands depicted on the respective maps as wilderness or as potential wilderness addition are hereby so designated at such time and in such manner as provided for by this Act:

Mesa Verde National Park,

Pinnacles Monument, Calif.

Saguaro National

Point Reyes National Seashore,

Badlands Monument,

Shenandoah National Park,

Map and description,

Publication in Federal Register.

Isle Royale National Park, Mich.

16 USC 408g.

(a) Isle Royale National Park, Michigan: The Act of March 6, 1942 (56 Stat. 138; 16 U.S.C. 408e-408h), as amended, is further amended as follows:

(1) Insert the letter "(a)" before the second paragraph of the first section, redesignate subparagraphs (a), (b), and (c) of that paragraph as "(1)", "(2)", "(3)", respectively, and add to that section the following new paragraph:

"(b) Gull Islands, containing approximately six acres, located in section 19, township 68 north, range 31 west, in Keweenaw County,

Michigan.3.

(2) Amend section 3 to read as follows:

"SEC. 3. The boundaries of the Isle Royale National Park are hereby extended to include any submerged lands within the territorial jurisdiction of the United States within four and one-half miles of the shoreline of Isle Royale and the surrounding islands, including Passage Island and the Gull Islands, and the Secretary of the Interior is hereby authorized, in his discretion, to acquire title by donation to any such lands not now owned by the United States, the title to be satisfactory to him.".

Pinnacles National Monument, Calif. (b) Pinnacles National Monument, California:

(1) The boundary is hereby revised by adding the following described lands, totaling approximately one thousand seven hundred and seventeen and nine-tenths acres:

(a) Mount Diablo meridian, township 17 south, range 7 east: Section 1, cast half east half, southwest quarter northeast quarter, and northwest quarter southeast quarter; section 12, east half northeast quarter, and northeast quarter southeast quarter; section 13, east half northeast quarter and northeast quarter southeast quarter.

(b) Township 16 south, range 7 east: Section 32, east half.

(c) Township 17 south, range 7 east: Section 4, west half; section 5, east half.

(d) Township 17 south, range 7 east: Section 6, southwest quarter southwest quarter; section 7, northwest quarter north half southwest

Publication in Federal Register.

(2) The Secretary of the Interior may make minor revisions in the monument boundary from time to time by publication in the Federal Register of a map or other boundary description, but the total area within the monument may not exceed sixteen thousand five hundred acres: Provided, however, That lands designated as wilderness pursuant to this Act may not be excluded from the monument. The monument shall hereafter be administered in accordance with the Act of August 25, 1916 (39 Stat. 535; 16 U.S.C. 1 et seq.), as amended and supplemented.

(3) In order to effectuate the purposes of this subsection, the Secretary of the Interior is authorized to acquire by donation, purchase, transfer from any other Federal agency or exchange, lands and interests therein within the area hereafter encompassed by the monument boundary, except that property owned by the State of California or any political subdivision thereof may be acquired only by donation.

Appropriation authorization.

(4) There are authorized to be appropriated, in addition to such sums as may heretofore have been appropriated, not to exceed \$955,000 for the acquisition of lands or interests in lands authorized by this subsection. No funds authorized to be appropriated pursuant to this Act shall be available prior to October 1, 1977.

SEC. 5. (a) The Secretary of Agriculture shall, within two years after the date of enactment of this Act, review, as to its suitability or nonsuitability for preservation as wilderness, the area comprising approximately sixty-two thousand nine hundred and thirty acres located in the Coronado National Forest adjacent to Saguaro National Monument, Arizona, and identified on the map referred to in section 1(j) of this Act as the "Rincon Wilderness Study Area," and shall report his findings to the President. The Secretary of Agriculture shall conduct his review in accordance with the provisions of subsections 3(b) and 3(d) of the Wilderness Act, except that any reference 16 USC 1132. in such subsections to areas in the national forests classified as "primitive" on the effective date of that Act shall be deemed to be a reference to the wilderness study area designated by this Act and except that the President shall advise the Congress of his recommendations with respect to this area within two years after the date of enactment of this Act.

(b) The Secretary of Agriculture shall give at least sixty days' advance public notice of any hearing or other public meeting relating

to the review provided for by this section.

Sec. 6. The areas designated by this Act as wilderness shall be Administration. administered by the Secretary of the Interior in accordance with the applicable provisions of the Wilderness Act governing areas designated by that Act as wilderness areas, except that any reference in such provisions to the effective date of the Wilderness Act shall be deemed to be a reference to the effective date of this Act, and, where appropriate, any reference to the Secretary of Agriculture shall be deemed to be a reference to the Secretary of the Interior.

Sec. 7. (a) Section 6(a) of the Act of September 13, 1962 (76 Stat. 16 USC 459c-6. 538), as amended (16 U.S.C. 459c-6a) is amended by inserting "without impairment of its natural values, in a manner which provides for such recreational, educational, historic preservation, interpretation, and scientific research opportunities as are consistent with, based upon, and supportive of the maximum protection, restoration and preservation of the natural environment with the area" immediately

after "shall be administered by the Secretary".

(b) Add the following new section 7 and redesignate the existing 16 USC 459c-7.

section 7 as section 8:

"Sec. 7. The Secretary shall designate the principal environmental education center within the Seashore as 'The Clem Miller Environmental Education Center,' in commemoration of the vision and leadership which the late Representative Clem Miller gave to the creation and protection of Point Reyes National Seashore.".

Sec. 8. Notwithstanding any other provision of law, any designation of the lands in the Shoshone National Forest, Wyoming, known as the Whiskey Mountain Area, comprising approximately six thousand four hundred and ninety-seven acres and depicted as the "Whiskey Mountain Area-Glacier Primitive Area" on a map entitled "Proposed Glacier Wilderness and Glacier Primitive Area", dated September 23, 1976, on file in the Office of the Chief, Forest Service, Department of Agriculture, shall be classified as a primitive area until the Secretary of Agriculture or his designee determines otherwise pursuant to classification procedures for national forest primitive areas. Provisions of any other Act designating the Fitspatrick Wil-

Rincon Wilderness Study Area, suitability review 16 USC 1132 note.

Report to President.

Notice and hearing.

The Clem Miller Environmental Education Center, designation. 16 USC 459c-6a. Whiskey Mountain Area. classification as a 90 STAT. 2696

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derness in said Forest shall continue to be effective only for the approximately one hundred and ninety-one thousand one hundred and three acres depicted as the "Proposed Glacier Wilderness" on said

Approved October 20, 1976.

#### LEGISLATIVE HISTORY:

HOUSE REPORT No. 94-1427 (Comm. on Interior and Insular Affairs).
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CONGRESSIONAL RECORD, Vol. 122 (1976):
Sept. 22, considered and passed House.
Oct. 1, considered and passed Senate, amended; House agreed to Senate

amendments.

1	law enforcement, and the protection and management of National
2	Park resources and values.
3	(2) Vacancies in the advisory commission shall be filled by
4	the Secretary so as to maintain the full diversity of views
5	required to be represented on the advisory commission.
6	(c) The Federal Advisory Committee Act shall apply to the
7	procedures and activities of the advisory commission.
8	(d) The advisory commission shall cease to exist ten years
9	after the date of its establishment.
10	SEC. 308. BOUNDARY ADJUSTMENT.
11	In preparing the maps and legal descriptions required by
12	sections 304 and 602 of this Act, the Secretary shall adjust the
13	boundaries of the Death Valley National Park and Death Valley
14	National Park Wilderness so as to exclude from such National Park
15	and Wilderness the lands generally depicted on the map entitled
16	"Porter Mine (Panamint Range) Exclusion Area" dated June 1994.
17	TITLE IV - JOSHUA TREE NATIONAL PARK.
18	SEC. 401. FINDINGS.
19	The Congress finds that
20	(1) a proclamation by President Franklin Roosevelt in
21	1936 established Joshua Tree National Monument to protect
22	various objects of historical and scientific interest;
23	(2) Joshua Tree National Monument today is recognized as
24	a major unit of the National Park System, having
25	extraordinary values enjoyed by millions of visitors;
26	(3) the monument boundaries as modified in 1950 and 1961
27	exclude and thereby expose to incompatible development and
28	inconsistent management, contiguous Federal lands of

essential and superlative natural, ecological, archeological, paleontological, cultural, historical, and wilderness values;

- (4) Joshua Tree National Monument should be enlarged by the addition of contiguous Federal lands of national park caliber, and afforded full recognition and statutory protection as a National Park; and
- (5) the nondesignated wilderness within Joshua Tree should receive statutory protection by designation pursuant to the Wilderness Act.

SEC. 402. ESTABLISHMENT OF JOSHUA TREE NATIONAL PARK.

1 2

There is hereby established the Joshua Tree National Park, (hereinafter in this section referred to as the "park"), as generally depicted on a map entitled "Joshua Tree National Park Boundary -- Proposed", dated May 1991, and four maps entitled "Joshua Tree National Park Boundary and Wilderness", numbered in the title one through four, and dated October 1991 or prior, which shall be on file and available for public inspection in the offices of the Superintendent of the park and the Director of the National Park Service, Department of the Interior. The Joshua Tree National Monument is hereby abolished as such, the lands and interests therein are hereby incorporated within and made part of the new Joshua Tree National Park, and any funds available for purposes of the monument shall be available for purposes of the park.

SEC. 403. TRANSFER AND ADMINISTRATION OF LANDS.

Upon enactment of this title, the Secretary shall transfer the lands under the jurisdiction of the Bureau of Land Management epicted on the maps described in section 402 of this title,

without consideration, to the administrative jurisdiction of the 1 National Park Service for administration as part of the National 2 Park System. The boundaries of the park shall be adjusted 3 accordingly. The Secretary shall administer the areas added to 4 5 the park by this title in accordance with the provisions of law 6 generally applicable to units of the National Park System, 7 including the Act entitled "An Act to establish a National Park 8 Service, and for other purposes\*, approved August 25, 1916 (39 9 Stat. 535; 16 U.S.C. 1, 2-4). 10 SEC. 404. MAPS AND LEGAL DESCRIPTION. Within six months after the date of enactment of this title, 11 12 the Secretary shall file maps and legal description of the park with the Committee on Energy and Natural Resources of the United 13 States Senate and the Committee on Natural Resources of the United 14 States House of Representatives. Such maps and legal description 15 16 shall have the same force and effect as if included in this title, except that the Secretary may correct clerical and typographical 17 18 errors in such legal description and maps. The maps and legal description shall be on file and available for public inspection 19 in the appropriate offices of the National Park Service, 20 21 Department of the Interior. SEC. 405. WITHDRAWAL. 22 Subject to valid existing rights, all Federal lands within 23 24 the park are hereby withdrawn from all forms of entry, appropriation, or disposal under the public land laws; from 25 location, entry, and patent under the United States mining laws; 26 and from disposition under all laws pertaining to mineral and 27

othermal leasing, and mineral materials, and all amendments

28

- 1 thereto.
- 2 SEC. 406. UTILITY RIGHTS-OF-WAY.
- 3 Nothing in this title shall have the effect of terminating
- 4 any validly issued right-of-way or customary operation
- 5 maintenance, repair, and replacement activities in such
- f right-of-way, issued, granted, or permitted to the Metropolitan
- 7 Water District pursuant to the Boulder Canyon Project Act
- 8 (43 U.S.C. 617-619b), which is located on lands included in the
- 9 Joshua Tree National Park, but outside lands designated as
- 10 wilderness under section 601(a)(2). Such activities shall be
- 11 conducted in a manner which will minimize the impact on park
- 12 resources. Nothing in this title shall have the effect of
- 13 terminating the fee title to lands or customary operation,
- 14 maintenance, repair, and replacement activities on or under such
- 15 lands granted to the Metropolitan Water District pursuant to the
- 16 Act on June 18, 1932 (47 Stat. 324), which are located on lands
- 17 included in the Joshua Tree National Park, but outside lands
- designated as wilderness under section 601(a)(2). Such activities
- 19 shall be conducted in a manner which will minimize the impact on
- 20 park resources. The Secretary shall prepare within one hundred
- 21 and eighty days after the date of enactment of this Act, in
- 22 consultation with the Metropolitan Water District, plans for
- 23 emergency access by the Metropolitan Water District to its lands
- 24 and rights-of-way.
- 25 SEC. 407. JOSHUA TREE NATIONAL PARK ADVISORY COMMISSION.
- 26 (a) The Secretary shall establish an Advisory Commission of
- 27 no more than fifteen members, to advise the Secretary concerning
- 28 the development and implementation of a new or revised

i	comprehensive management plan for Joshua Tree National Park.
2	(b)(1) The advisory commission shall include an elected
3	official for each County within which any part of the park is
4	located, a representative of the owners of private properties
5	located within or immediately adjacent to the park, and other
6	members representing persons actively engaged in grazing and range
7	management, mineral exploration and development, and persons with
8	expertise in relevant fields, including geology, biology, ecology,
9	law enforcement, and the protection and management of National
10	Park resources and values.
11	(2) Vacancies in the advisory commission shall be filled by
12	the Secretary so as to maintain the full diversity of views
13	required to be represented on the advisory commission.
14	(c) The Federal Advisory Committee Act shall apply to the
15	procedures and activities of the advisory commission.
16	(d) The advisory commission shall cease to exist ten years
17	after the date of its establishment.
18	TITLE V - MOJAVE NATIONAL PRESERVE.
19	SEC. 501. FINDINGS.
20	The Congress hereby finds that
21	(1) Death Valley and Joshua Tree National Parks, as
22	established by this Act, protect unique and superlative

- established by this Act, protect unique and superlative desert resources, but do not embrace the particular ecosystems and transitional desert type found in the Mojave Desert area lying between them on public lands now afforded only impermanent administrative designation as a national scenic area;
  - (2) the Mojave Desert area possesses outstanding

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As the nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering sound use of our land and water resources; protecting our fish, wildlife, and biological diversity; preserving the environmental and cultural values of our national parks and historical places; and providing for the enjoyment of life through outdoor recreation. The department assesses our energy and mineral resources and works to ensure that their development is in the best interests of all our people by encouraging stewardship and citizen participation in their care. The department also has a major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration.