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PACIFIC WEST REGIONAL OFFICE Memorandum

L7617 (PWRO-P)

OCT 05 2005

Memorandum

To: Superintendent, Joshua Tree National Park

From: Regional Director, Pacific West Region

Subject: Environmental Compliance for Fire Management Plan

The finalized *Finding of No Significant Impact* for the new fire management program is approved. To complete this particular conservation planning process, at the time when the park announces the decision, a copy of the attachment should be made available to all individuals and organizations that received the original supporting environmental assessment.

Patricia A. Newbacher

Jfo Jonathan B. Jarvis

Attachment

cc watch:
PWRO-DRR

EXPERIENCE YOUR AMERICA

The National Park Service cares for special places saved by the American people so that all may experience our heritage.

FINDING OF NO SIGNIFICANT IMPACT

Fire Management Plan

Joshua Tree National Park

Joshua Tree National Park is located in Southern California, 140 miles east of Los Angeles, in the counties of San Bernardino and Riverside. It lies along the east/west trending 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 and the Monument's north boundary is defined by the Morongo Basin. The north entrances to the park are located at Joshua Tree Village and the city of Twentynine Palms. The south entrance is at Cottonwood Spring, 25 miles east of Indio.

Of the park's current 794,000 acres, just over 765,155 acres are in Federal ownership administered by the National Park Service, while 26,750 acres are nonfederal lands. There are 585,000 acres of designated wilderness.

The park contains two desert ecosystems; the Mojave and Colorado Deserts. Below 3,000 feet, the Colorado Desert encompasses the eastern part of the park and features natural gardens of creosote bush, ocotillo, and cholla cactus. The higher, moister, and slightly cooler Mojave Desert is the special habitat of the Joshua tree. In addition to Joshua tree woodlands, the western part of the park also includes some of the most interesting geologic displays found in California's deserts. Five fan palm oases also dot the park, indicating those few areas where water occurs naturally and wildlife abounds.

A programmatic environmental assessment (EA) was prepared to evaluate the environmental effects associated with wildland fire suppression, manual/mechanical thinning to maintain defensible space around structures, and controlled burns for research purposes, while at the same time protecting employee and visitor safety during these fire management activities. Environmental issues identified during scoping and evaluated in the EA included soils, water resources, vegetation, wildlife, threatened and endangered species, air quality, visitor use and experience, park operations, human health and safety, cultural resources, and wilderness.

SELECTED ALTERNATIVE

The National Park Service-preferred alternative in the EA, Alternative 3, is the selected alternative. Overall fire management goals under this alternative include:

- Implement a comprehensive interagency fire management program
- Better understand the role of fire in desert ecosystems
- Maintain high elevation plant communities, including blackbrush, Joshua tree woodlands, and pinon-juniper-oak woodlands, at their current condition
- Monitor and evaluate the effects of fire on park ecosystems in order to further refine program objectives

- Manage wildland fires so that Park cultural resources are protected from damage by suppression actions and fire
- Ensure that each fire incident has a Resource Advisor present with expertise in cultural and natural resources

Under this alternative, the park will suppress all wildland fires, conduct research burns, and provide for manual/mechanical hazard fuel reduction treatments only for the purpose of maintaining defensible space around structures. Joshua Tree National Park will be managed as a single fire management unit (FMU) with two types of fire protection areas (FPAs) identified within the FMU (research and mechanical hazard fuel removal). Joshua Tree National Park FPAs are differentiated by management objectives, fuels, political boundaries, and values-to-be-protected.

Under the plan, all wildland fires in the park, regardless of origin, will be suppressed in a manner that minimizes adverse environmental and cultural impacts resulting from suppression activities. Suppression will be accomplished through the use of confinement, containment, or control tactics and will adhere to minimum impact suppression tactics (MIST) guidelines.

Hazard fuels reduction treatment areas will consist of manual/mechanical thinning up to a maximum distance of 100 feet around structures. Treatment will be accomplished through weed whacking and trimming of vegetation. There will be no ground disturbance, no removal of roots or burls and no use of pesticides. Manual/mechanical thinning is expected to be carried out in "wet" rain years, when there has been extensive plant growth. In "dry" rain years, it is expected that little vegetation growth would occur and no thinning or removal of vegetation will be required.

Minimal research burns may be conducted to further an understanding of the relationship between wildland fires, native, non-native vegetation, and the desert ecosystem. As part of a larger study, the Western Ecological Research Center of the U.S. Geological Survey proposes to conduct research burns (totaling 40 acres) at two study sites within the park to represent possible regional variation and to provide information for localized areas where fires are a recognized problem for land managers. The first research fire treatments will be applied in spring and summer 2005 or 2006, generally between May and September. A burn plan will be prepared in accordance with NPS standards prior to ignition. Sufficient fire suppression resources will be on-site to monitor the burn and to prevent escape of the fire into the surrounding area.

The presence of designated wilderness areas means that wilderness considerations must be integrated into the decision-making process, and will determine the most appropriate management strategies for wildland fire management. No fuel reduction projects or research burns will be planned or completed in wilderness unless they meet minimum requirement constraints, including a minimum tool analysis in advance with opportunity for public comment prior approving those projects. The park commits to completing additional environmental compliance in advance for all projects not specifically analyzed in the programmatic environmental assessment. Protection of human life remains of paramount concern during all wildland fire suppression activities.

OTHER ALTERNATIVES CONSIDERED BUT NOT SELECTED

Alternative 1: No Action Alternative

Under this alternative, fire management within the park would continue to follow the guidance of the 1992 Fire Management Plan. The fire management program would utilize wildland fire suppression, wildland fire use, prescribed fire, and manual/mechanical hazard fuels reduction to achieve fire management objectives. There are three FMUs designated under this plan: the Suppression Unit, the Prescribed Natural Fire Unit, and the Prescribed Fire Unit. Protection of human life and property would remain the highest priority associated with each individual FMU management scheme.

Alternative 2: Fire Management Plan to Include the Full Suppression of All Wildland Fires

Under this alternative, all wildland fires in the park, regardless of origin, would be suppressed in a manner that minimizes adverse environmental and cultural impacts resulting from suppression activities. Overall fire management objectives under this alternative would seek to limit fire spread and minimize acres affected by wildland fires, while ensuring public and firefighter safety, protecting the cultural, natural, and historic resources, and minimizing costs.

ENVIRONMENTALLY PREFERRED ALTERNATIVE

The preferred alternative is also the environmentally preferred alternative. The environmentally preferred alternative is the alternative that will promote the national environmental policy as expressed by §101 of the National Environmental Policy Act (NEPA). This includes alternatives that:

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

In essence, the environmentally preferred alternative would be the one(s) that “causes the least damage to the biological and physical environment; it also means the alternative which best protects, preserves, and enhances historic, cultural, and natural resources”.

In this case, Alternative 3 is the environmentally preferred alternative for Joshua Tree National Park since it best meets goals 1, 2, 3, and 4 described above. Under this alternative, suppressing wildland fires and creating defensible space around park structures would help protect park resources and adjacent lands and structures from the threat of wildland fires. Conducting research burns will provide future knowledge on how wildland fire affects both native and non-native vegetation in the park. This knowledge will prove essential in future fire management planning. Alternative 1 is not the environmentally preferred alternative because use of wildland fire and prescribed fire may not afford enough protection to park resources nor address public concerns about escaped fire. In addition, Alternative 1 does not meet goals 2, 3, and 4. Alternative 2 is not the environmentally preferred alternative because it lacks the benefit of providing important data on wildland fire effects and does not meet goals 3 and 4. Alternative 3 best protects and helps preserve the historic, cultural, and natural resources in the park for current and future generations.

THE SELECTED ALTERNATIVE AND SIGNIFICANCE CRITERIA

As defined at 40 CFR §1508.27, from the regulations of the Council on Environmental Quality that implement the provisions of NEPA, significance is determined by examining the following criteria:

Impacts that may be both beneficial and adverse. A significant effect may exist even if the Federal agency believes that on balance the effect will be beneficial.

There are potentially both beneficial and adverse impacts from the preferred alternative. None of the adverse impacts is significant. The preferred alternative will have minor benefits to soils, and long-term beneficial impacts to park operations and cultural resources.

Negligible to minor, localized, and short-term adverse impacts to soils, vegetation, water resources, wildlife, air quality, visitor use and experience, park operations, human health and safety, and cultural resource landscapes are possible as the result of fire suppression activities. Minor to moderate impacts to threatened or endangered species and wilderness values are possible. None of the impacts rise to the level of significance.

The degree to which the proposed action affects public health or safety.

When conducting fire management activities, human health and safety is the primary concern. Under the preferred alternative, every precaution will be taken to protect the health and safety of firefighters and the public during fire management activities.

Activities that potentially could have the greatest threat to human health and safety would be those associated with wildland fire suppression and smoke inhalation. Strict adherence to

guidelines concerning firefighter accreditation, and equipment and procedure safety guidelines will minimize accidents.

Adverse impacts of smoke on public health will normally be minor and short-term, as the park is located in a rural area, without large concentrations of people. Park staff will pay close attention to projected fire behavior and weather conditions to determine the potential extended impacts on the public. Neighbor notification and public education and warnings will be utilized during episodes of heavy smoke. Use restrictions applied to areas of prescribed fires will minimize or eliminate public human health and safety concerns resulting from smoke exposure and fire injuries.

Unique characteristics of the geographic area such as proximity to historic or cultural resources, parklands, prime farmlands, and wetlands.

The park is culturally and ecologically diverse. It contains two desert ecosystems, and preserves some of the most interesting geologic displays found in California's deserts. It exhibits a continuum of cultural adaptation and includes a significant collection of prehistoric and historic American Indian artifacts and late 19th century and early 20th century non-Indian artifacts. The remnants of past human occupations illustrate the adaptations that different groups made to the arid desert environment.

As described in the EA, the preferred alternative protects and enhances the important cultural and natural resources of the park. The implementation of the preferred alternative will result in no significant adverse effects to these resources during fire management activities, as mitigation measures will be put in place to protect these resources.

The degree to which the effects on the quality of the human environment are likely to be highly controversial.

There were no controversial impacts identified during the analysis done for the EA, and no controversial issues were raised during the public review of the EA.

Degree to which the possible effects on the quality of the human environment are highly uncertain or involve unique or unknown risks.

There are no identified risks associated with the preferred alternative that are unique or unknown, and there are no effects associated with the preferred alternative that are highly uncertain identified during the analysis for the EA or during the public review of the EA.

The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.

The preferred alternative does not establish a precedent for any future actions that may have significant effects, nor does it represent decisions about future considerations. The purpose of this action is to develop a fire management plan and program that protects the natural and

cultural resources of the park from wildland fire, while minimizing the impacts from suppression tactics, and minimizing the fire danger to park resources from hazardous fuel accumulations.

Under the fire management plan, mechanical thinning activities will be conducted to protect park structures, and minimal research burns may be conducted to further understand the relationship between wildland fires and desert ecosystems. Aspects of the plan can be reassessed if necessary and modified or discontinued in the future if needed.

Whether the action is related to other actions with individually insignificant but cumulatively significant impacts.

The EA determined that there will be no significant cumulative impacts associated with the preferred alternative.

The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed on National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources.

The park currently protects over 15 cultural landscapes, 582 archeological sites, 95 historic structures, and houses 238,624 accessioned items in its museum collection. Protection of these cultural resources is an important part of the park's fire management goals. Minimum impact suppression tactics will be used to help ensure that known cultural resources are protected during fire suppression activities.

The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973.

A Biological Assessment (BA) was conducted for this project, which identified federally listed or candidate species or their habitat that could be affected by the proposed action and analyzed impacts on those affected species. The federally threatened Mohave Desert tortoise (*Gopherus agassizii*) is the only federally listed species likely to be affected by the activities under the preferred alternative. Joshua Tree National Park sent this BA and a letter requesting initiation of Section 7 consultation to the California Field Office of the U.S. Fish and Wildlife Service (USFWS). After reviewing the status of the tortoise, Environmental Baseline, Effects of the Proposed Action, and the Cumulative Effects, the USFWS issued a Biological Opinion, dated September 19, 2005, stating that: "the action, as proposed (excluding fire suppression), is not likely to jeopardize the continued existence of the tortoise or to adversely modify critical habitat. We reached these conclusions for the following reasons:

1. The proposed project incorporates numerous avoidance and minimization measures, as referenced in the Project Description and the BA that would reduce adverse effects.
2. Relative to the overall range of the tortoise, the proposed action would impact a small area of habitat. No critical habitat would be directly or indirectly affected by the activities covered herein.

3. Relative to the overall population size of the tortoise, the proposed action would potentially affect only a small number of individuals.”

USFWS further issued an Incidental Take Statement, by which the NPS will avoid and minimize take of tortoises and assess the effectiveness of the conservation measures for avoiding and minimizing take of tortoises. The USFWS expects the following forms of take:

1. Accidental direct injury to or death of no more than one (1) tortoise as a direct or indirect result of fire research and non-fire fuel treatments.
2. Harassment by relocation of no more than one (1) tortoise from the fire research area and (1) tortoise from the non-fire fuel treatment areas.

Given the tortoise densities reported within Joshua Tree National Park and the implementation of avoidance and minimization measures, the USFWS anticipates that the proposed Fire Management Plan would directly lead to 1 tortoise mortality over the 11 years of the plan. Given the presence of tortoises within the park, Joshua Tree National Park may have to move tortoises during the implementation of the Fire Management Plan. Such relocation may lead to mortality, even if monitors implement all safety precautions, due to ecological complications associated with tortoises adapting to potentially unfamiliar terrain. This threat will be minimized due to tortoises being moved the minimum distance possible to ensure their safety.

To be exempt from the prohibitions of Section 9 of the Endangered Species Act, the Joshua Tree National Park must comply with the terms and conditions listed in the Biological Opinion on the Proposed Joshua Tree Fire Management Plan (September 19, 2005), which implement the reasonable and prudent measures described in the Biological Opinion. These reasonable and prudent measures, with the implementing terms and conditions, are designed to minimize the impact of incidental take that might otherwise result from the proposed action. If, during the course of the action, this level of incidental take is exceeded, such incidental take represents new information requiring re-initiation of consultation with the USFWS and review of the reasonable and prudent measures provided. Joshua Tree National Park must immediately provide an explanation of the causes of the taking and review with the USFWS the need for possible modification of the reasonable and prudent measures.

Whether the action threatens a violation of Federal, state, or local law or requirements imposed for the protection of the environment.

This action violates no Federal, State, or local environmental protection laws.

IMPAIRMENT

In addition to reviewing the list of significance criteria, the National Park Service has determined that implementation of the proposal will not constitute an impairment to the critical resources and values of the Park. This conclusion is based on a thorough analysis of the environmental impacts described in the Fire Management Plan and its EA, public comment, relevant scientific studies, and the professional judgment of the decision-maker guided by the direction in NPS *Management Policies 2001*. The plan under the preferred alternative will not impair natural or

cultural resources or values that are (1) necessary to fulfill specific purposes identified in the enabling legislation of the park, (2) key to the natural or cultural integrity of the park or opportunities for enjoyment of the park, and (3) identified as a goal in the park's general management plan or other National Park Service planning documents.

PUBLIC INVOLVEMENT AND AGENCY COORDINATION

During the last week of June, 2002, the park distributed scoping letters to a mailing list of a number of individuals and organizations. The park also placed a press release in the local newspaper. The scoping letters and press release described the fire management activities outlined in the proposed Fire Management Plan and encouraged the public to provide their comments and concerns regarding the plan to the park via e-mail, telephone calls, or written correspondence. The public was also welcomed to visit the park office and speak personally with the appropriate staff members about the plan. In total, 15 comments were received during the scoping period.

The major issues and concerns that came from internal scoping meetings and other public input (*e.g.*, email, written correspondence) were evaluated. Issues determined to be important were those related to the effects of the proposed action, and those not already adequately addressed by laws, regulations, and policies. Important issues were considered in developing and evaluating the alternatives to the Proposed Action discussed in this EA.

The environmental assessment was made available for public review and comment during a 30-day period ending May 17, 2005. Public announcements were published in the Desert Trail on April 21, 2005 and in the High Desert Star on April 16, 2005. Copies of the EA were made available at park headquarters and on the park's website. No public comments were received.

The NPS initiated informal consultation on threatened and endangered species by contacting the USFWS on April 2004. Formal consultation on the desert tortoise was initiated on October 13, 2004, when the park sent the USFWS office a Biological Assessment (BA). Consultation was concluded on September 19, 2005 with issue of a Biological Opinion by the USFWS, which determined that the action, as proposed (excluding fire suppression) with conservation measures, is not likely to jeopardize the continued existence of the tortoise or to adversely modify critical habitat.

The NPS initiated consultation with the State Historic Preservation Officer (SHPO). On March 15, 2005 the park notified the SHPO's office that it was using the EA to fulfill its responsibilities under NHPA Section 106. A letter dated September 29 (NPS050519A) was received from the SHPO that indicated concern about the Area of Potential Effect. The SHPO withheld concurrence with a 'no adverse impact' findings because of this issue. Based on this position, the NPS will consult with the SHPO in accordance with 36 CFR Part 800 prior to each project planned in the programmatic environmental assessment – including designating an Area of Potential Effect for projects proposed.

MITIGATION

Minor impacts to natural resources and cultural resources are possible during wildland fire containment activities, and in some cases from hazard fuels reduction. Minor impacts are also possible during research burns. Impacts will be mitigated as discussed below. Mitigation is the responsibility of the assigned Fire Management Officer and the park Superintendent.

Impact	Mitigation
Damage to vegetation from trampling or use of heavy equipment	Follow MIST guidelines, including limiting size of mechanized equipment and prohibiting off-road driving.
Damage to soils from compaction and/or erosion during or following fire management activities	Follow MIST guidelines, including limiting size of mechanized equipment and prohibiting off-road driving.
Destruction of habitat; displacement or mortality of wildlife species from fire management activities or fuels reduction	Follow MIST guidelines, including limiting size of mechanized equipment and prohibiting off-road driving. Habitat of nesting birds will be avoided when conducting hazardous fuels reduction or prescribed burns during breeding season.
Damage to water quality.	Unlikely due to lack of perennial streams. Comply with Clean Water Act and MIST guidelines; use of fire retardant will be avoided.
Short-term adverse impacts to air quality from prescribed fire	Comply with Clean Air Act and State and local regulations in determining appropriate conditions for burning.
Damage to undiscovered artifacts during fire suppression	Follow MIST guidelines, including limiting size of mechanized equipment and prohibiting off-road driving.
Adverse effects on health and safety of park personnel, firefighters and the public in the course of fire management activities	Monitor smoke and post signs; close part or all of park if necessary; use only fully qualified personnel for fire-fighting; conduct safety briefings before fire management activities. Notify public before prescribed burns are conducted.
Adverse impacts to wilderness during fire suppression activities.	Minimum requirement will help minimize impacts from suppression activities
Adverse impacts to Threatened & Endangered Species (desert tortoise)	Implement conservation measures as outlined in the Biological Opinion, FWS-ERIV-4478.1.
Adverse impacts to cultural resources	Conduct site level surveys and consult with SHPO on a project by project basis.

CONCLUSION

The preferred alternative does not constitute an action that normally requires preparation of an environmental impact statement (EIS). The preferred alternative will not have a significant effect on the human environment. Negative environmental impacts that could occur are negligible or minor in intensity. There are no significant impacts on public health, public safety, threatened or endangered species, sites or districts listed in or eligible for listing in the National Register of Historic Places, or other unique characteristics of the region. No highly uncertain or controversial impacts, unique or unknown risks, significant cumulative effects, or elements of precedence were identified. Implementation of the action will not violate any federal, state, or local environmental protection law.

Based on the foregoing, it has been determined that an EIS is not required for this project and thus will not be prepared and projects included in the environmental assessment may be implemented as soon as practicable.

Recommended:



Superintendent

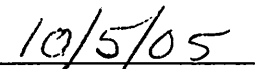


Date

Approved:



Pacific West Regional Director
acting



Date