



# FINDING OF NO SIGNIFICANT IMPACT

## PETRIFIED FOREST NATIONAL PARK GENERAL MANAGEMENT PLAN AMENDMENT ENVIRONMENTAL ASSESSMENT

### INTRODUCTION

The National Park Service (NPS) has prepared a *General Management Plan Amendment / Environmental Assessment* (GMP Amendment) for Petrified Forest National Park. The purpose of this GMP Amendment is to establish the overall management direction (for the next 15 to 20 years) for the park addition lands.

The park addition lands (125,000 acres) are within the expanded park boundary as authorized by the Petrified Forest National Park Expansion Act (Public Law 108-430). These lands include globally significant paleontological resources, nationally significant archeological resources, diverse flora and fauna, stunning high-desert scenery, and significant scientific resources that surpass those that were already in the park. The act directs the National Park Service to amend the park's 1993 *General Management Plan* to describe how the addition lands will be managed once they are acquired.

The GMP Amendment describes two alternatives for managing the park addition lands and the impacts on the environment from implementing each alternative. The no-action alternative describes continuation of existing management and serves as a basis of comparison for the action alternative. The action alternative describes what park management would be like once private parcels in the addition lands are acquired from willing sellers and the Park Service has acquired the state lands (or developed a cooperative agreement for managing state lands). The action alternative has been selected by the National Park Service as the preferred alternative. Public comments and suggestions received during scoping and preliminary alternatives were considered when developing the action alternative presented in the plan.

This finding of no significant impact (FONSI) and the environmental assessment (EA) constitute the record of the environmental impact analysis and decision-making process for the GMP amendment. This document records 1) a FONSI as required by the National Environmental Policy Act of 1969 (NEPA), and 2) a determination of no impairment as required by the NPS Organic Act of 1916.

## PREFERRED ALTERNATIVE

The preferred alternative takes a cautious approach to use of the park addition lands before resource inventories and condition assessments are complete. Although visitor opportunities will not happen immediately under the action alternative, they will be considered after evaluation of the addition lands has determined which areas can sustain recreational use without resource damage. As a whole, the preferred alternative provides the best combination of interim management approaches for protecting globally and nationally significant resources while considering the area for appropriate future uses.

Specific management strategies and actions under this alternative will include the following:

- The National Park Service will conduct comprehensive baseline inventories for paleontological resources, such as petrified wood and other fossils. Important fossils that are threatened by erosion and exposure will be collected for preservation and study.
- The National Park Service will also conduct comprehensive baseline inventories for other natural resources, such as vegetation, wildlife, streams, springs and seeps, and invasive exotic species. Condition assessments for specific resources (plant communities, riparian corridors, etc.) will also be conducted. High priority trouble spots that require immediate treatment and restoration, such as concentrations of invasive exotic species and severely disturbed sites, will be identified and addressed.
- Once they are no longer needed, fences that inhibit natural wildlife movements will be removed.
- The National Park Service will conduct baseline surveys and condition assessments for archeological sites and cultural landscapes on the addition lands. The agency will also inventory potential historic structures and cultural landscapes and evaluate structures, sites, and landscapes for eligibility to be listed in the national register. The agency will also work to identify ethnographic resources and allow tribal access to sites of traditional, religious, subsistence, or other significance according to NPS policies.
- Potential historic structures will be stabilized until they are evaluated for national register eligibility and decisions are made about their long-term treatment.
- The National Park will direct, conduct, and encourage research that expands park and public knowledge and understanding about park resources, with special emphasis on archeology and paleontology. Research that contributes to management decision-making will be promoted.
- The National Park Service will thoroughly inventory existing infrastructure (e.g., roads, buildings, fences, stock tanks) once management jurisdiction of the addition lands is acquired from willing sellers. Longer term infrastructure and development decisions will be made in a future comprehensive general management plan / wilderness study that addresses management of the pre-2004 park and the addition lands holistically. Pending completion of such a future plan, any new facilities developed by the Park Service will be minimal (e.g., restrooms, small patrol cabins, or entrance kiosks) and carefully sited to avoid rendering areas ineligible for wilderness consideration.
- Any new hiking trails will be carefully sited and use existing trails and ranch roads to the extent possible. Similarly, vehicular routes for administrative use will be unimproved, and existing ranch roads will be used as much as possible.
- The National Park Service will evaluate existing and potential routes to better understand opportunities for administrative access, and it will use such routes where resource, safety, cost, and legal considerations allow. Pending completion of a future wilderness study, administrative routes will remain unimproved and limited to those necessary for critical management activities.
- Following acquisition or attaining management jurisdiction, the National Park Service will evaluate existing routes and resource protection considerations to better understand opportunities for visitor access. Nonmotorized, nonmechanized, public access will be allowed on such routes where resource, safety, cost, and legal considerations allow. Pending completion of a future comprehensive general management plan / wilderness study, routes for public access will remain unimproved to avoid rendering areas ineligible for wilderness consideration.
- Initially, the National Park Service will identify areas that can sustain visitor use without resource damage. Visitor use will then be allowed and encouraged as appropriate given access, resource, and safety considerations, and without precluding wilderness eligibility. Recreational opportunities might include extended hiking and backcountry camping opportunities in designated areas and interpretive and educational programs.

- Visitor education and interpretive opportunities will be provided for visitors to learn about the addition lands. These will include self-guided and guided on-site opportunities and off-site opportunities.
- In accordance with valid existing rights and applicable laws, the National Park Service will allow continued livestock grazing in a manner that minimizes impacts on park resources and values. The agency will accept voluntary termination of grazing permits or leases, per the Petrified Forest National Park Expansion Act of 2004.
- Similarly, the agency will work with owners of mineral rights to avoid or mitigate impacts on park resources resulting from mining-related activities. If the agency determines that resource impacts cannot be avoided or mitigated, authorization will be sought to acquire mineral rights.
- Hunting will continue to be prohibited on NPS-owned lands.
- In general, hazardous materials will be identified and removed before NPS acquisition of land parcels.
- Many inventories, studies, assessments, mapping efforts, and future plans will be conducted.
- NPS staff will collaborate with park neighbors and the state to achieve common goals and to protect park resources and values, including viewsheds, night skies, and soundscapes.
- No commercial services will be provided within the addition lands during the life of this GMP Amendment.
- No boundary adjustments will be proposed; this GMP Amendment is focused exclusively on management of lands within the 2004 boundary expansion area.

As part of the National Park Service's commitment to implement user capacity, specific management strategies under this alternative will include the following:

- When considering where to provide for and encourage visitor use, the National Park Service will take into account the issues of legal access, risk of resource damage, and the need to preserve the land's wilderness character until the potential for wilderness eligibility is evaluated. Already disturbed areas, or areas where resources are less sensitive, will be considered first for new visitor opportunities. Given the sensitivity of resources on the addition lands, some new visitor opportunities may only be by park guide or permit (until resource conditions are further assessed). Over the longer term, as information is gathered and future planning efforts direct the appropriate placement of visitor facilities (if needed), more diverse visitor activities may be permitted. This overall strategy for allowing and managing visitor use on the addition lands is the most important implementation commitment for user capacity in this management plan.
- Potential indicators and standards and consideration for monitoring are included in the GMP Amendment to more clearly define and draw attention to potential user capacity-related concerns that may develop as visitors begin using the addition lands. Given the limited knowledge of resources and specific direction on how visitors will access the addition lands, highly specific and measurable indicators and standards were not developed as part of this management plan, but will be further defined as part of future planning efforts.
- Potential management strategies are also outlined in the GMP Amendment that will be considered to prevent or minimize key impacts from visitor use.

As part of the National Park Service's commitment to address climate change, the following scientific-based management principles will be incorporated to help guide park managers in addressing future climate change impacts on park resources and to reduce greenhouse gas emissions:

- Identify key resources and processes that are at risk from climate change.
- Establish baseline resource conditions, identify thresholds, and monitor for change.
- Assess, plan, and manage resources at multiple scales (i.e., site-specific and parkwide).
- Increase reliance on adaptive management to minimize risks to park resources.
- Form partnerships with other resource management entities to maintain regional habitat connectivity and refugia that allow species dependent on park resources to better adapt to changing conditions.

- Use best management practices to reduce human-caused stresses (e.g., park infrastructure and visitor-related disturbances) that hinder the ability of species or ecosystems to withstand climatic changes and events.
- Restore key ecosystem features and processes to increase their resiliency to climate change.
- Reduce or mitigate greenhouse gas emissions associated with park operations and visitor use (i.e., the park's carbon footprint).

## OTHER ALTERNATIVES

Under the no action alternative, the addition lands would remain a mix of private (59%), state (29%), and NPS (12%) ownership and management. The NPS proportion would remain relatively small, consisting of former BLM lands and recently acquired private lands. The no-action alternative is a continuation of current management and served as a basis of comparison for the action alternative.

### *Alternatives Considered But Dismissed*

During the planning process, other management concepts were considered for the addition lands,

including (a) a concept that focused on building stewardship and a park constituency through recreational opportunities, (b) a concept that emphasized research and science, and (c) a concept that would have maximized resource protection at the expense of other activities and visitor opportunities. Ultimately, the planning team decided to dismiss all of these concepts from detailed evaluation. The following provides a summary of each alternative concept and the team's rationale for dismissal.

Concept A would expand options for dispersed recreation use and visitor opportunities. This alternative would encourage first-hand experiences for visitors, such as camping, backpacking, hiking, horseback riding, and mountain biking. The park would focus on establishing and maintaining recreational facilities and other developments to support these opportunities. This concept was also dismissed because so little is known about the park addition land's resources. The planning team wanted to avoid making ill-advised decisions, such as recommending new access or developments in an unsuitable area or rendering areas ineligible for wilderness before a required wilderness study is conducted. As such, this concept could have caused unintended environmental impacts on sensitive park resources. The planning team also wanted to avoid raising unrealistic public expectations about visitor use on the addition lands when it may be some time before the National Park Service owns enough land that it can offer a range of visitor opportunities.

Concept B would emphasize scientific study to increase knowledge and understanding of the park addition land's resources. This alternative would focus on educating visitors about research efforts and new discoveries to enhance public appreciation. The park would offer limited access and infrastructure to meet research program goals. Few new recreational opportunities for the public would be provided. This concept was also dismissed because most actions under this alternative were a duplication of the preferred alternative's initial approach of conducting resource inventories, condition assessments, and other types of information gathering.

Concept C would be highly restrictive to ensure that park resources are preserved in the most pristine possible condition. There would be little to no tolerance for impacts, and few hands-on opportunities for visitors. The park would focus on stabilizing paleontological and archeological resources rather than collection for research purposes. Ecosystems would be restored. Concept C was also dismissed because it did not meet the park's purpose of providing opportunities for the public to experience the park's resources. Although visitor opportunities would not happen immediately under the preferred alternative, they would be considered after a determination of which areas could sustain visitor use without resource damage.

These alternative concepts were dismissed from detailed evaluation is because the National Park Service has full management responsibility for only 12% of the addition lands, and it could be a decade or more before most of the addition lands are under NPS ownership or management. The National Park Service recognizes private property rights, laws governing state lands, and other valid existing rights (e.g., mineral rights) on the remaining 78% of the addition lands, making implementation of these alternative concepts technically infeasible for the foreseeable future.

## THE ENVIRONMENTALLY PREFERABLE ALTERNATIVE

The environmentally preferable alternative is the alternative that promotes the national environmental policy expressed in the National Environmental Policy Act (Sec. 101(b)). This includes alternatives that

- (1) fulfill the responsibilities of each generation as trustee of the environment for succeeding generations;
- (2) assure 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.

The no-action alternative represents how the park is currently managed as a mix of privately owned ranchland, state lands, and a small proportion of recently acquired NPS land. This alternative is required and provides a baseline against which to compare the effects of the action alternative. The no-action alternative only minimally meets criteria 1 through 5 outlined above. Since a majority of the addition lands would remain in private ownership, this alternative would not be able to fully contribute to the responsibilities of each generation as a trustee of the environment for succeeding generations (criterion 1). The intermix of public ownership with private lands would also continue to limit public access to the addition lands. As a result, this alternative would not be able to assure all Americans safe, healthful, productive, and esthetically and culturally pleasing surroundings (criterion 2), or be able to attain the widest range of beneficial uses of the environment without degradation, risk of health or safety, or other undesirable and unintended consequences (criterion 3). Preservation of important aspects of our national heritage and support for a diversity and variety of individual choices would be limited due to a lack of cohesive ownership and management of the addition lands (criterion 4). The no-action alternative would only allow for minimal recreation use of the addition lands that contribute to high standards of living and a wide sharing of life's amenities (criterion 5). Rather, under this alternative, the emphasis would be on resource use, such as mining and ranching. Furthermore, it minimally meets the GMP Amendment's purpose and need.

Under the preferred alternative, the National Park Service will manage the addition lands cautiously while gathering as much information about them as possible during the next 15 to 20 years. By managing the addition in a cautious manner, by protecting natural and cultural resources and values, and by limiting new development until the addition lands are better understood, the preferred alternative surpasses the no-action alternative in meeting criteria 1 through 5. These criteria are satisfied primarily through the acquisition and management of the addition lands as a unit of the National Park system, which allows the Park Service to fulfill its responsibilities to protect the environment for future generations; assure for all Americans safe, healthful, productive, and esthetically and culturally pleasing surroundings; and eventually providing for the widest range of beneficial uses of the environment, such as paleontological research, resource preservation, and low-impact recreational activities—all of which provide for high standards of living and a wide sharing of life's amenities. The no-action and preferred alternatives do not differ much with respect to criterion 6.

After considering the environmental consequences of the two management alternatives, the National Park Service has concluded that the preferred alternative is also the environmentally preferable alternative. This alternative best achieves the range of national environmental policy goals as stated in Section 101 of the National Environmental Policy Act.



## **WHY THE PREFERRED ALTERNATIVE WILL NOT HAVE A SIGNIFICANT EFFECT ON THE HUMAN ENVIRONMENT**

As defined in 40 *Code of Federal Regulations* (CFR) Section 1508.27, significance is determined by examining the following criteria:

### ***Impacts that may be both beneficial and adverse***

The preferred alternative will result in both beneficial and adverse impacts. Moderate beneficial impacts were identified for paleontological resources (including petrified wood), water resources (including water quality, wetlands, floodplains, and streams), archeological resources, visitor use and experience, and park operations. Other beneficial impacts range from negligible to moderate in intensity and were identified for geological resources and soils, vegetation and wildlife, federal and state listed species, historic structures, and the socioeconomic environment. Beneficial impacts of the preferred alternative are primarily the result of reducing consumptive uses of the addition lands (such as livestock grazing and petrified wood mining); increasing proactive management and protection of resources (such as collecting exposed fossils, controlling the spread of invasive plant species, cleaning up dump sites, removing unnecessary fences, stabilizing potential historic structures, and partnering to protect viewsheds, night skies, and soundscapes); and seeking to provide some modest new visitor opportunities.

Negligible to minor adverse impacts of the preferred alternative were identified for paleontological resources (including petrified wood) and federal and state listed species. These impacts are the result of an increased potential for inadvertent and deliberate visitor-related impacts, such as trampling, disturbance, and collection.

### ***Degree of effect on public health or safety***

Visitor safety will remain a priority under the preferred alternative. None of the actions proposed in the preferred alternative will adversely affect public health or safety. Several of the actions will beneficially affect public health and safety, including cleaning up dump sites and providing some formalized visitor opportunities in designated areas, where appropriate.

### ***Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas***

As described in the GMP Amendment, the Petrified Forest National Park addition lands contain globally significant paleontological resources, nationally significant archeological resources, and significant scientific resources that surpass those that were already in the park. No adverse effects to historic or cultural resources, park lands, or wetlands were identified for the preferred alternative.

The park addition lands do not contain prime farmlands, designated wild and scenic rivers, or ecologically critical areas.

### ***Degree to which effects on the quality of the human environment are likely to be highly controversial***

None of the actions proposed in the preferred alternative have the potential to be highly controversial. At the conclusion of the public review and comment period on April 2, 2010, the Park Service had received 21 comments from the public and agencies. Given the substance of these comments, there is no evidence that the effect to the quality of the human environment will be highly controversial. Comments that were received were primarily focused on the public's concern with external threats to the park addition lands from non-NPS actions.

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

The anticipated effects on the human environment, as analyzed in the EA, are not highly uncertain or unique, nor were any unknown risks identified.

### ***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***

As described in the EA, implementation of the preferred alternative will neither result in significant adverse effects to the human environment nor set a precedent for future actions that could have significant effects.

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

As noted in the GMP Amendment, the actions proposed under the preferred alternative will contribute a slight amount to the overall adverse cumulative impacts on the park addition lands. The majority of these cumulative impacts will result from non-NPS actions, including reasonably foreseeable future potash exploration and mining and residential, commercial, and energy developments.

Non-NPS actions will result in negligible to major adverse impacts on geologic and soil resources, paleontological resources (including petrified wood and other fossils), water resources, vegetation and wildlife, federal and state listed species, archeological resources, historic structures, and visitor use and experience—depending on the proximity and extent of mining operations and other developments. The beneficial effects of the actions proposed under the preferred alternative will off-set some of these adverse effects. The preferred alternative will add an appreciable amount to the beneficial cumulative impacts by increasing resource protection, restoration efforts, and modest new visitor opportunities. Partnership efforts under the preferred alternative will also help to minimize adverse impacts on the park addition lands.

***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.***

As described in the GMP Amendment, no significant scientific, cultural, or historical resources will be lost or destroyed as a result of implementing the preferred alternative. After applying Advisory Council on Historic Preservation criteria of adverse effects (36 CFR Part 800.5, Assessment of Adverse Effects), the NPS concluded that implementation of the Preferred Alternative will have no adverse effect on cultural or historical resources listed or potentially eligible for listing on the National Register of Historic Places (NRHP). The Arizona State Historic Preservation Office concurred with the NPS determination of effect by letter dated March 31, 2010.

***Degree to which the action may adversely affect an endangered or threatened species or its critical habitat***

The National Park Service concluded that the preferred alternative may affect, but is not likely to adversely affect federally listed threatened or endangered species or their critical habitat. This is based on minor to moderate beneficial impacts that will likely result from habitat improvement efforts and a reduction in livestock use on the park addition lands, and minor adverse impacts that may result from an increased potential for visitor-related impacts. However, it is important to note that no federally threatened or endangered species have been documented within the park addition lands. A number of species are suspected to occur or historically occurred within the area. An increased emphasis on vegetation and wildlife inventories under the preferred alternative will improve the Park Service's ability to identify and protect these species. Because of the broad, strategic nature of the GMP Amendment, the preferred alternative does not call for any site-specific developments. As a result, the National Park Service will consult with the U.S. Fish and Wildlife Service in the future on a project-by-project basis. The U.S. Fish and Wildlife Service concurs with this approach, as stated in their letter dated May 6, 2010.

***Whether the action threatens to violate Federal, state, or local environmental protection laws***

The actions under the preferred alternative will not violate any federal, state, or local environmental protection laws.

## **APPROPRIATE USE, UNACCEPTABLE IMPACTS, AND IMPAIRMENT**

Sections 1.5 and 8.12 of NPS *Management Policies* underscore the fact that not all uses are allowable or appropriate in units of the national park system. Actions under the preferred alternative were screened to determine consistency with applicable laws, executive orders, regulations, and policies; consistency with existing plans for public use and resource management; actual and potential effects to park resources; total costs to the Park Service; and whether the public interest would be served. Based on this evaluation, the preferred alternative is considered an appropriate use of the park addition lands.

Many actions under the preferred alternative focus on resource inventories and condition assessments to ensure the best possible protection of park resources and to determine which areas can sustain low-impact recreational use without resource damage. As a whole, the action alternative provides the best combination of interim management approaches for protecting park resources while considering the area for appropriate future uses

that are consistent with NPS *Management Policies*, applicable federal and state laws, and the park's 1993 *General Management Plan* and 2004 *General Management Plan Revision*. Furthermore, the preferred alternative is consistent with the park's purpose as stated in its enabling legislation. Therefore, the Park Service finds that the preferred alternative is an appropriate use. Because the application of mitigating measures is expected to be successful in ensuring that no major adverse impacts will occur, implementation of the preferred alternative will not result in any unacceptable impacts.

In analyzing impairments in the environmental assessment for this GMP Amendment, the National Park Service took into account that if an impairment were likely to occur, such impacts would be considered to be major or significant under the Council for Environmental Quality's (CEQ) regulations. Taking this into consideration, the National Park Service's *Interim Technical Guidance on Assessing Impacts and Impairment to Natural Resources* states that "not all major or significant impacts under a National Environmental Policy Act (NEPA) analysis are impairments. However, all impairments to NPS resources and values would constitute a major or significant impact under NEPA. If an impact results in impairment, the action should be modified to lessen the impact level. If the impairment cannot be avoided by modifying the proposed action, that action cannot be selected for implementation." (National Park Service, Natural Resource Program Center, July 2003).

In addition to reviewing the definition of "significantly" under the NEPA regulations, the National Park Service has determined that implementation of the preferred alternative will not constitute an impairment to the integrity of Petrified Forest National Park's resources or values as described by NPS *Management Policies* (NPS 2006 Section 1.4). This conclusion is based on the environmental assessment of the preferred alternative, public comments received, relevant scientific studies, and the professional judgment of the decision-maker guided by the direction in 2006 NPS *Management Policies*. The environmental assessment identified less than major adverse impacts on geologic and soil resources, paleontological resources (including petrified wood and other fossils), water resources, vegetation and wildlife, federal and state-listed species, archeological resources, historic structures, and visitor use and experience. Overall, the plan results in benefits to park resources and values and opportunities for their enjoyment, and it does not result in their impairment.

## PUBLIC INVOLVEMENT

The GMP Amendment was made available for public review during a 6-week period, from February 19 to April 2, 2010. A public meeting was held in Holbrook, Arizona, on March 15, 2010. The purpose of the meeting was to present the GMP Amendment to the public and to record their comments. Twelve people attended the meeting. In addition, nine other written comments were received during the public comment period.

The public submitted no substantive comments on the plan, although several people expressed concerns about non-NPS impacts to the park addition lands, especially related to potash mining, surrounding wind and solar energy developments, and other potential commercial developments. One commenter, in favor of the preferred alternative, stated that the map in appendix C of the GMP Amendment that illustrates the potential impact of surrounding wind and solar energy developments on the park's viewshed did not take into account that wind turbines and solar towers could in fact be much taller, which would lead to greater adverse impacts on the visual resources of the park. As stated in the document, the map only serves as one example of these types of potential impacts (based on an existing energy development proposal submitted to Navajo County). The National Park Service will complete a more detailed viewshed study as part of the preferred alternative and continue to review and comment on all development proposals submitted to Apache and Navajo counties that may impact the park.

Other commenters expressed concern that Congress has not allocated enough funding for land acquisitions or authorized the National Park Service to acquire subsurface mineral rights with the surface ownership. As a result, one ranch that has not been acquired by the National Park Service is now being leased for potash exploration and mining. Furthermore, questions were raised about whether or not the boundary expansion captured all of the surrounding paleontological and archeological resources. The 2004 Act expanded the park boundary to capture a majority of these resources; however, portions of the Chinle escarpment and other key resources remain outside the expanded boundary.

In addition to public comments, the National Park Service received letters from the Hopi Tribe, the Arizona State Historic Preservation Office, the Arizona Game and Fish Department, the Arizona Department of Environmental Quality, and the U.S. Fish and Wildlife Service. A few minor changes were made in the text of the GMP Amendment as a result of their comments and are included in the attached errata sheet.



## CONCLUSION

As described above, the preferred alternative does not constitute an action meeting the criteria that normally require preparation of an environmental impact statement (EIS). The preferred alternative will not have a significant effect on the human environment. Environmental impacts that could occur are limited in context and intensity, with generally adverse impacts that range from localized to widespread, short- to long-term, and negligible to moderate. There are no unmitigated adverse effects 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 laws.

Based on these findings, it has been determined that an EIS is not required for this GMP Amendment and thus will not be prepared.

Recommended:



Superintendent

June 14, 2010

Date

Approved:

Acting   
Intermountain Regional Director

6/17/10

Date

## **ATTACHMENT 1: MITIGATIVE MEASURES**

The National Park Service defines mitigation as a modification of the preferred alternative that lessens the intensity of its impact on a particular resource. NPS staff routinely evaluate and implement mitigative measures whenever conditions occur that could adversely affect the sustainability of national park system resources. To ensure that implementation of the action alternative protects natural and cultural resources and the quality of the visitor experience, a set of mitigative measures will be applied to actions proposed under this alternative.

Because of the action alternative's emphasis on the inventory and interim protection of park resources, standard mitigation associated with proposed developments does not apply. Rather, the following mitigative measures and best management practices have been developed to avoid or lessen the impacts associated with ongoing or potential future activities on NPS lands.

### **NATURAL RESOURCES**

#### **General**

Livestock grazing allotments (if not voluntarily terminated by the lessees) will be managed using best management practices to minimize impacts on the natural resources of the park addition lands— including fossil-rich geologic strata and soils; vegetation and wildlife; streams, water quality, wetlands, and riparian areas; and federal and state listed species if present. Comprehensive rangeland condition assessments will be used to determine which areas are most susceptible to livestock impacts — such as compacting and eroding soils, trampling of rare plants, erosion of streambanks, and exposed fossils; spreading invasive plants; and overgrazing areas during drought conditions. To mitigate these impacts, livestock will be temporarily or permanently fenced out of certain areas, as needed. The duration and intensity of use by livestock will also be periodically adjusted, as needed, to lessen these adverse effects.

Public use of the park addition lands will be closely monitored to detect adverse impacts on natural resources — such as the loss or damage of petrified wood and other fossils, vegetation trampling, and disturbances to wildlife. Although most visitor opportunities will be nonmotorized, limited to designated areas, and/or guided by park staff, there is still a potential for inadvertent or deliberate visitor-related impacts. To mitigate these impacts, techniques such as educational programs, restricting certain visitor activities, and ranger patrols will be used.

#### **Geologic Resources and Soils**

Best management practices to prevent soil erosion will be used, such as the use of silt fences during the maintenance or removal of stock tanks. These techniques will mitigate potential impacts on water resources, including the degradation of adjacent wetlands.

The National Park Service will work with owners of mineral rights to avoid or minimize potential adverse effects on natural resources resulting from mining activities. Such measures could include assisting with the placement of mining operations to avoid fossil-rich geologic strata and advising on effective reclamation techniques after mining has occurred.

#### **Paleontological Resources**

Best management practices will be used during the collection of exposed fossils to ensure that they are not damaged during excavation. General mitigation described above will also help avoid adverse impacts on paleontological resources.

NPS staff will design any future public access routes away from fossil-rich areas, which will help minimize these impacts. As part of this cautious approach, paleontological inventories will be necessary before appropriate public access routes are determined.

#### **Water Resources**

To prevent water pollution during cleanup efforts of existing dump sites, best management practices will be followed, such as techniques to contain hazardous materials. Mitigation described for many of the previous natural resource topics will also benefit water resources, such as best management practices during the maintenance or removal of stock tanks and efforts to control of livestock use.

## Vegetation and Wildlife

Special attention will be devoted to preventing the spread of invasive plant species. Standard operating procedures could include ensuring that vehicles entering the park addition lands are free of mud or other seed-bearing material, certifying that all hay used for cattle feed is free of weeds, and using appropriate native plant species during restoration work. Also, see the general natural resource discussion above for other mitigative measures to minimize impacts associated with livestock and visitor use.

## Federal and State Listed Species

The mitigative measures listed above for vegetation and wildlife and for general natural resources will also benefit federal and state listed species. Additional conservation measures will include the following actions.

- Surveys will be conducted for special status species before deciding to take any action that may cause harm. In consultation with the U.S. Fish and Wildlife Service and Arizona Game and Fish Department, appropriate measures will be taken to protect any sensitive species whether identified through surveys or presumed to occur.
- If breeding or nesting areas for special status species were observed in the park addition lands, these areas will be protected from disturbance.
- Management actions will occur in locations that avoid adverse effects on special status species. If avoidance was infeasible, appropriate conservation measures will be taken in consultation with the appropriate agencies.
- Restoration and monitoring plans will be developed as warranted to assist in the recovery of special status species. Plans will include methods for implementation, performance standards, monitoring criteria, and adaptive management techniques.
- Measures will be taken to reduce the adverse effects of invasive species on special status species.

## CULTURAL RESOURCES

Actions outlined in the alternatives identified in this document are subject to the requirements identified in the *NPS Management Policies 2006* and Director's Order 28 and its accompanying "Cultural Resources Management Guideline."

### Archeological Resources

If an archeological resource is in danger of being destroyed on NPS-owned or managed lands within the addition lands, park staff will stabilize the site and, if necessary, data will be recorded and the resource recovered in consultation as outlined above.

As appropriate, archeological surveys and/or monitoring will precede any ground disturbance. Known archeological resources will be avoided to the greatest extent possible during construction. If national register eligible or listed archeological resources cannot be avoided, an appropriate data recovery plan will be developed in consultation with the Arizona state historic preservation officer and, if appropriate, any associated Indian tribes. If during construction previously unknown archeological resources were discovered, all work in the immediate vicinity of the discovery will be halted until the resources can be identified and documented and, if the resources cannot be preserved *in situ*, an appropriate mitigation strategy will be developed in consultation with the state historic preservation officer and, if appropriate, any associated Indian tribes.

If human remains are discovered, either because of park staff activities or through natural erosion, the park superintendent and other appropriate park staff will be notified. Measures will be instituted to protect the remains, and the superintendent will notify appropriate state and local officials, including tribes and the Arizona state historic preservation officer. Any artifacts found in association with the remains, such as funerary objects, sacred objects, and objects of cultural patrimony, will be left in place. If the remains were determined to be of American Indian origin, the superintendent will act according to the provisions of the Native American Graves Protection and Repatriation Act and its implementing regulations, current agreements with affiliated tribes, and the Archeological Resources Protection Act.

## Historic Structures

To appropriately preserve and protect national register listed or eligible historic structures, all stabilization, preservation, and rehabilitation efforts will be undertaken in accordance with the *Secretary of the Interior's Standards for the Treatment of Historic Properties* (1995). Any materials removed during rehabilitation efforts will be evaluated to determine their value to the park's museum collections and/or for their comparative use in future preservation work at the sites.

To assist in future management decisions for landscapes and associated resources, both cultural and natural, cultural landscape inventories will be conducted to identify landscapes potentially eligible for listing in the national register.

The management of cultural landscapes will focus on preserving the landscape's physical attributes, biotic systems, and use when that use contributes to its historical significance.

The preservation and rehabilitation of cultural landscapes will be undertaken in accordance with the *Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes*.

## ATTACHMENT 2: ERRATA SHEET

Comments on the *General Management Plan Amendment / Environmental Assessment* resulted in minor changes to the text of the document. These revisions do not result in substantial changes to the preferred alternative or require additional environmental analysis.

### **Page 41. Under the “Natural Resource Management” section.**

After the last sentence of this section, add the following statements: “As an interim step, fences would be evaluated to determine if they have been constructed to wildlife compatible specifications, particularly for pronghorn. If it is determined that fences are not wildlife compatible, those fences/fence segments would be prioritized for modification, such as the installation of crossing structures or removal of the bottom wire to achieve minimum bottom-wire height to accommodate pronghorn movement.”

### **Page 50. Under the “Federal and State Listed Species” section.**

The first bullet states that “surveys would be conducted for special status species before deciding to take any action that may cause harm.” Change the word “harm” to “any action that may cause take of a listed species.” The definition of take, Section 3(18) of the Endangered Species Act, means to harass, harm, pursue, hunt, shoot, kill, trap, capture, or collect, or to attempt to engage in any of these activities.

### **Page 86. Table 8. Federal and State Listed Species That May Exist on Park Addition Lands**

Change the federal status of the Mexican wolf and California condor from “endangered” to “threatened.” These species are afforded protection under Section 10j of the Endangered Species Act on National Park Service lands due to their “experimental nonessential” designation. As a result, they are treated as “threatened” on park addition lands that have been acquired by the National Park Service, rather than as “endangered.”

### **Page 87. Under the “Federal Status” section.**

Remove the term and definition for “species of concern.” This is an informal term that describes the entire realm of taxa whose conservation status may be of concern to the U.S. Fish and Wildlife Service, but it does not have official status under the Endangered Species Act. As a result, the gladiator milkvetch, paper-spined cactus, and giant sand treader cricket, listed in table 8 (p.86) are not under federal protection. The gladiator milkvetch and paper-spined cactus are still afforded protection under Arizona state law.

### **Page 126. Under the “Methods and Assumptions for Analyzing Impacts” section.**

The first sentence of the second paragraph states, “It is important to note that gladiator milkvetch (a federal listed species of concern) is the only special status species documented in the park addition lands. Change “a federal listed species of concern” to “an Arizona state listed species.”



