



United States Department of the Interior

NATIONAL PARK SERVICE
Pacific West Region
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IN REPLY REFER TO
L7617 (PWRO-PP)

17 DEC 2014

Memorandum

To: Superintendent, Great Basin National Park

From: Regional Director, Pacific West Region

Subject: Environmental Compliance for Stabilization Projects at Johnson Lake Mine Historic District

The *Finding of No Significant Impact* for this long anticipated cultural and natural resource stewardship initiative is approved. To complete this particular compliance effort, the park should send notice of the decision to all individuals and organizations who received the supporting Environmental Assessment.

Congratulations on your efforts to bring this element of the 1993 General Management Plan on line.

Christine S. Lehnertz

Attachment



**FINDING OF NO SIGNIFICANT IMPACT
JOHNSON LAKE MINE HISTORIC DISTRICT STABILIZATION**

National Park Service, U.S. Department of the Interior

Great Basin National Park

November, 2014

INTRODUCTION

The National Park Service has prepared this Finding of No Significant Impact (FONSI), in accordance with the National Environmental Protection Act (NEPA), for the selected alternative of the **Johnson Lake Mine Historic District Stabilization project**. The FONSI, along with the EA, comprise the complete record of environmental impact analysis for the project. This document describes the Selected Alternative and provides an explanation of why it will have no significant effects on the human environment

In reference to the 2006 Management Policies, a Determination of Non-Impairment (DNI) was also prepared and is attached to the FONSI.

PURPOSE AND NEED FOR ACTION

The purpose of the proposed project is to stabilize historic mining structures and enhance visitor experience within the 205 acre Johnson Lake Mine Historic District. This action is needed in accordance with the park's General Management Plan to protect the structures and associated resources from further deterioration from the influences of harsh winter weather conditions, erosion, and to minimize the risks of wildland fire.

ALTERNATIVES

Two alternatives were identified and analyzed in the EA. In addition to the selected alternative (detailed below), a non-action alternative was also evaluated; this alternative served as an environmental baseline with which to determine potential impacts that could result from project implementation.

Selected Action

The National Park Service selects **Alternative 2, Johnson Lake Mine Historic District Stabilization** for implementation. This alternative meets the purpose and need for the project. No changes to the preferred alternative (as described in the EA) are incorporated in the Selected Action.

The approved project will implement stabilization and maintenance activities that include structure stabilization, trail maintenance and construction, fuels reduction, site and visitor protection, archeological testing, and education and outreach within the Johnson Lake Mine Historic District.

Structure stabilization

There are six log cabin structures in various stages of deterioration located within the Johnson Lake Mine Historic District. The structures would be stabilized using the Secretary of Interior's Standards for the Treatment of Historic Properties (see References for website). Stabilization of structures would include replacement-in-kind of rotted logs, improvement of water drainage around structures, the application of borates to the logs of the structures, and the excavation of fill around the structures. Replacement-in-kind requires that logs of a similar size be used to replace the rotten logs located within the structures. All trees removed for structure protection and stabilization efforts would be flush cut with the ground. Improving the drainage of water around the structures will require some surface digging to channel the water around the structures. Borates will be applied to the logs of the structures in order to protect them from further deterioration caused by insects and humidity. The application of borates would only be performed by a certified pesticide applicator, contractor, or NPS staff, using NPS Integrated Pest Management (IPM) principles. Fill around the structures would be excavated to remove rotten logs that have been buried due to natural infilling. All fill would be screened, the general location recorded, and any artifacts found would be collected and catalogued by park CRM staff.

Trail Maintenance and Construction

There are approximately 4 miles of maintained trails located within the Johnson Lake Mine Historic District. Maintenance on all of these trails will take place during the project. Trail Maintenance would include tread work, replacement and installation of water bars, and removal of hazard trees. Rock and/or log water bars would be replaced or installed as needed to channel water off of the trail. A re-route of approximately 1 mile in length would be constructed between the beneficiation area and the residential area of the mine. The existing trail would be left in place with minor improvements. These improvements may include the installation of water bars to help keep this portion of the trail from further deterioration. The existing trail would remain in place to protect the historic integrity of the original access to the site.

Fuels Reduction

To effectively protect the historic district from potential damage by fire, fuels around the site would be thinned and removed. Deteriorated logs from the structures would be replaced with materials from dead and down, dead and standing, or live standing trees. Potentially hazardous trees near the structures would also be removed to alleviate the danger of trees falling and damaging the structures. All trees removed for fuels reduction or for stabilization efforts would be flush cut with the ground.

Other vegetation, such as smaller trees and bushes impacting the structural integrity of the buildings would also be removed. Measures would be taken, where possible, to keep vegetation from growing in and around the foundations of the structures. These methods may include the

installation of landscaping fabric or the treatment of plants with herbicide. Herbicide treatments would only be performed by or at the direction of a certified pesticide/herbicide applicator, contractor or NPS staff, using the NPS IPM principles (see References for website).

Site and Visitor Protection

Site and visitor protection would include signage and monitoring. Signs would be specially designed and installed to provide visitors with safety and etiquette messages for visiting historic mine sites. These low profile signs would be placed near mining features and in high visitor use areas. The signs would be designed to maintain the historic and visual integrity of the site. Park protection staff, CRM staff, and volunteers would periodically monitor the site throughout the timeframe of the project to discourage vandalism.

Archeological Testing

Archeological testing would take place at selected locations throughout the historic district. Testing may include up to 45 archeological test units being excavated within the historic district. Test units will vary in size and might include standard 1 meter square units, 2 meter square units, or a 1 meter by 2 meter trenches. Disturbance of the site due to archeological testing would not exceed 70 square meters which is less than 1/10th of 1% of the total historic district. Archeological testing would assist archeologists in interpreting the functions of features located throughout the site. This newly acquired information would be used in the development of interpretive materials.

Education and Outreach

Interpretive materials would be created and published in a variety of media, including: signs, brochures, the park website, and other social media produced by the park. Up to four interpretive wayside exhibit signs and a new trailhead sign would be produced as part of this project. The wayside exhibit signs would be low profile, placed at various locations throughout the district, and would be designed not to detract from the historic integrity of the site. The interpretive materials would describe the history and archeology of the mine, the archeological methods for recording and documenting the mine, and the historic preservation efforts to protect the mine from further deterioration.

ENVIRONMENTALLY PREFERRED ALTERNATIVE

The National Park Service (NPS) has determined that the environmentally preferred alternative for this project is Alternative 2, the Preferred Alternative. The environmentally preferred alternative is the alternative that will promote the national environmental policy expressed in NEPA (sec. 101 (b)). This includes alternatives that:

- Fulfill the responsibilities of each generation as a trustee of the environment for succeeding generations.
- Ensure for all Americans safe, healthful, productive, and esthetically and culturally pleasing surroundings.

- Attain the widest range of beneficial uses of the environment without degradation, risk of health or safety, or other undesirable and unintended consequences.
- Preserve important historic, cultural, and natural aspects of our national heritage and maintain, whenever possible, an environment that supports diversity and variety of individual choice.
- Achieve a balance between population and resource use that will permit high standards of living and a wide sharing of life's amenities.
- Enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.

The Council on Environmental Quality Regulations (CEQ) regulations implementing NEPA and the NPS NEPA guidelines require that "the alternative or alternatives which were considered to be environmentally preferable" be identified (Council on Environmental Quality Regulations, Section 1505.2). Ordinarily, this means the alternative that causes the least damage to the biological and physical environment; it also means the alternative that best protects, preserves, and enhances historic, cultural, and natural resources.

As documented in the EA, Great Basin National Park has determined that the environmentally preferred alternative for this project is **Alternative 2, Johnson Lake Mine Historic District Stabilization**, (which is selected for implementation).

Preliminary Options Considered and Dismissed

An alternative and action that was considered but dismissed was to not build a trail re-route above the Mill Site, but instead to install water bars along the historic road that is currently used as the main trail in order to minimize the effects of erosion. This alternative was dismissed after careful consideration because the trail re-route would be a more effective mitigation to erosion.

MITIGATION

The following mitigation measures are required for implementation of the selected action. These measures have been developed to minimize or reduce adverse effects of the selected action.

Table 1. Mitigations

Resource Area	Mitigation	Responsible Party
Soils	Trail to be constructed at grades required to minimize erosion and surface disturbance. Trail tread to be sloped outwardly to shed water. Water bars, turnouts, and/or steps to be installed on the trail as erosion controls.	Maintenance
Soils	Soil disturbance from historic stabilization work requires installation of silt fencing, wattles, or	Resource Management

	weed free straw as appropriate. Archeological testing will be back-filled as soon as feasible.	
Fuel Reduction	Stumps of trees felled in the project area as a result of project work will be flush cut. Stumps remaining as a result of historic activities will be left intact.	Resource Management

Archaeological Resources	Ground disturbing activities in the vicinity of archeological resources require archeological monitoring and testing; accepted archeological professional standards will be used during archeological testing.	Cultural Resources Staff
Historic Properties	Follow the Secretary of Interior's Standards for structure stabilization; provide archeological monitoring and testing for any ground disturbing activities in the vicinity of historic structures; and use accepted archeological professional standards during archeological testing.	Cultural Resources Staff
Cultural Landscapes	Follow the Secretary of Interior's Standards for structure stabilization, provide archeological monitoring and testing for any ground disturbing activities within the cultural landscape; and use accepted archeological professional standards during archeological testing.	Cultural Resources Staff

PUBLIC INVOLVEMENT AND AGENCY CONSULTATION

Scoping

Internal scoping was conducted on November 12, 2013 through an Interdisciplinary team of Great Basin National Park Staff who determined issues and impact topics through the use of the Environmental Screening Form in the Planning, Environment and Public Comment (PEPC) website.

The issues and impact topics identified for further analysis were:

- Geologic resources (soils)
- Stream flow characteristics
- Archeological resources
- Prehistoric/historic structures
- Cultural landscapes
- Long-term management of resources or land/resource productivity

The park conducted public scoping for issues from November 12, 2013 to December 12, 2013 by sending out a scoping brochure by mail or email to over 120 individuals, including parks, businesses and other agencies. The project proposal was also posted on the park website and the NPS PEPC website. In addition, a press release was emailed to 11 newspapers and television stations.

One letter was received during public scoping. The majority of the comments noted in that letter are similar to the impact topics identified for further analysis and impact topics considered but dismissed, some comments are addressed as part of the Alternative 2-Johnson Lake Mine Historic District Stabilization. One comment noted in the letter is addressed in Alternative 1-No-action, and one comment was outside the scope of the project and therefore was not analyzed.

The EA was uploaded to the PEPC website and was available for public review and comment from September 15, 2014 to October 14, 2014. One favorable comment was received through the PEPC website about the project. Additionally, 125 letters and 40 press releases were distributed to individuals, parks, businesses, organizations, and the media.

One printed copy of the EA was distributed to each of the following locations: White Pine County Library, Eskdale Center, Lehman Caves Visitor Center, and Great Basin Visitor Center.

Agency Consultation

Nevada State Historic Preservation Office

Great Basin National Park is consulting with the Nevada State Historic Preservation Office for Section 106 compliance.

Tribes

The National Park Service has consulted with Native American tribes and copies of the Johnson Lake Mine Historic District Stabilization EA will be forwarded to each respondent for review or comment. If subsequent issues or concerns are identified, appropriate consultations would be undertaken for specific identified locations.

U.S. Fish and Wildlife Service

There are no threatened or endangered animal species found in the park, therefore no consultation is necessary with the U.S. Fish and Wildlife Service.

Army Corps of Engineers

There was no consultation with the Army Corps of Engineers no construction would occur in waterways or wetlands, nor would any actions taken under this plan have the potential to release fill into waterways or wetlands.

WHY THE SELECTED ALTERNATIVE WILL NOT HAVE A SIGNIFICANT EFFECT ON THE QUALITY OF THE HUMAN ENVIRONMENT

The NPS used the following NEPA criteria and factors defined in 40 CFR §1508.27 to evaluate whether the Selected Alternative would have a significant impact on the environment.

Impacts that may have both beneficial and adverse aspects and which on balance may be beneficial, but that may still have significant adverse impacts that require analysis in an EIS. There were no significant impacts that were identified as part of the analysis for this project. The Selected Alternative – Johnson Lake Mine Historic District Stabilization should have beneficial short and long-term beneficial impacts to cultural resources within the historic district. These beneficial impacts are necessary to fulfill specific purposes identified in the establishing legislation and proclamation of Great Basin National Park; are key to the natural or cultural integrity of the Park; are identified as a goal in the Park's GMP or other relevant NPS planning documents.

Degree of effect on Public Health or Safety.

The Selected Alternative will not adversely impact public health and safety. The application of borates will be consistent with IPM Strategy protocols and all permitted state and federal guidelines. Only pesticides registered and approved by EPA's Office of Pesticide Programs would be used. NPS employees not applying borates and park visitors in the area will be asked to move to an area located away from the application sites during application. NPS employees applying borates will be furnished and will use personal protective equipment during application. Mitigations described above will further reduce potential human exposure.

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.

The project area is located within the Johnson Lake Mine Historic District and consists of six historic structures and many archeological and other cultural resources. The actions planned are to stabilize and protect these cultural resources.

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

Issues raised during public scoping through one letter were impacts to cultural landscapes, construction of new trails, fuel reduction, monitoring, camping and stocking of fish. The latter two issues have been dismissed as they are outside the scope of the Environmental Assessment. The remaining issues are not likely to be highly controversial because they are designed to enhance the visitor experience at the historic district.

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 highly uncertain or unknown risks that are anticipated to occur. The proposed action of applying borates to logs under the selected alternative is anticipated to pose little risk to the human environment if application protocols and use are consistent with labeling.

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 selected alternative will result in significant beneficial effects, but are consistent with current management methods and directives and therefore would not establish any precedent for future actions.

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

The Environmental Assessment analyzed cumulative effects of the plan and no significant impacts were identified.

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 stabilization project site is located within the 205 acre Johnson Lake Mine Historic District. The Johnson Lake Mine Historic District was listed in the National Register of Historic Places in 1995 because of its archeological significance. After completion of a Cultural Inventory in 2009 it was further recognized for its association with important patterns in history on a local level. Implementation of the Selected Alternative should not adversely affect or cause loss or destruction of scientific, cultural or historic resources. Long-term benefits to objects listed on the National Register of Historic Places will likely occur.

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

There are no endangered or threatened species within in the park. Therefore, no species or any critical species habitat would be adversely affected.

Whether the action threatens a violation of Federal, state, or local environmental protection law

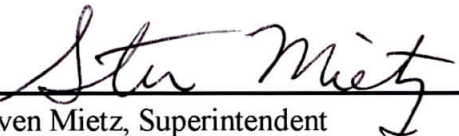
The Selected Alternative will not violate Federal, state or local environmental protection law. The application of borates will follow all protocols and labeling use instructions all treatments will be applied or supervised by licensed applicators.

CONCLUSION

Implementation of the Selected Alternative for the Johnson Lake Mine Historic District Stabilization will not have significant impacts on the human environment. The determination is sustained by the analysis in the EA, agency consultations, the inclusion and consideration of public


review, and the capability of mitigations to reduce or avoid potential impacts. Adverse environmental impacts that could occur are negligible to minor in intensity, duration, and context and less-than-significant; and there would be no unacceptable impacts. As described in the EA, there are no highly uncertain or controversial impacts, unique or unknown risks, significant cumulative effects, or elements of precedence. There are no previous, planned, or implemented actions, which in combination with the selected alternative would have significant effects on the human environment. Requirements of the National Environmental Policy Act have been satisfied and preparation of an Environmental Impact Statement is not required. The park will implement the Selected Alternative as soon as practical.

Recommended:


Steven Mietz, Superintendent
Great Basin National Park

12/5/14
Date

Approved:


Christine S. Lehnertz Regional Director
Pacific West Region, National Park Service

12/12/14
Date

Attachment 1

DETERMINATION OF NON-IMPAIRMENT JOHNSON LAKE MINE HISTORIC DISTRICT STABILIZATION GREAT BASIN NATIONAL PARK

While Congress has given the National Park Service (NPS) management discretion to allow impacts within parks, that discretion is limited by the statutory requirements, generally enforceable by the federal courts, that the NPS must leave park resources and values unimpaired unless a particular law directly and specifically provides otherwise. This cornerstone of the Organic Act establishes the primary responsibility of the NPS; to ensure that park resources and values will continue to exist in a condition that will allow the American people to have present and future opportunities to enjoyment of them.

The impairment of park resources and values may not be allowed by the NPS unless directly and specifically provided for by legislation or by the proclamation establishing the park. The relevant legislation or proclamation must provide explicitly (not by implication or inference) for the activity, in terms that keep the Service from having the authority to manage the activity so as to avoid the impairment.

The impairment that is prohibited by the Organic Act and the General Authorities Act is an impact that, in the professional judgment of the responsible NPS manager, would harm the integrity of the park resources or values, including the opportunities that otherwise would be present for the enjoyment of those resources or values. Whether an impact meets this definition depends on the particular resources and values that would be affected; the severity, duration, and timing of the impact; the direct and indirect effects of the impact; and the cumulative effects of the impact in question and other impacts.

An impact to any park resource or value may, but does not necessarily, constitute impairment. An impact would be more likely to constitute impairment to the extent that it affects a resource or value whose conservation is:

- necessary to fulfill specific purposes identified in the establishing legislation or proclamation of the park, or
- key to the natural or cultural integrity of the park or to opportunities for enjoyment of the park, or
- identified in the park's general management plan or other relevant NPS planning documents as being of significance.

An impact would be less likely to continue to constitute impairment if it is an unavoidable result of an action necessary to preserve or restore the integrity of park resources or values and it cannot be further mitigated. An impact that may, but would not necessarily, lead to impairment may result from visitor activities; NPS administrative activities; or activities undertaken by

concessioners, contractors, and others operating in the park. Impairment may also result from sources or activities outside the park.

National Park Service's *Management Policies 2006* requires analysis of potential effects to determine whether or not actions would impair park resources. The park resources and values that are subject to the no-impairment standard include:

- the park's scenery, natural and historic objects, and wildlife, and the processes and conditions that sustain them, including, to the extent present in the park; the ecological, biological, and physical processes that created the park and continue to act upon it; scenic features; natural visibility, both in daytime and at night; natural landscapes; natural soundscapes and smells; water and air resources; soils; geological resources; paleontological resources; archeological resources; cultural landscapes; ethnographic resources; historic and prehistoric sites, structures, and objects; museum collections; and native plants and animals;
- appropriate opportunities to experience enjoyment of the above resources, to the extent that can be done without impairing them;
- the park's roles in contributing to the national dignity, the high public value and integrity, and the superlative environmental quality of the National Park System, and the benefit and inspiration provided to the American people by the National Park System; and
- any additional attributes encompassed by the specific values and purposes for which the park was established.

The authorizing legislation for Great Basin National Park ("the park") was signed on October 27, 1986 "to preserve for the benefit and inspiration of the people a representative segment of the Great Basin of the Western United States possessing outstanding resources and significant geological and scenic values." It further stated that the NPS is to "protect, manage and administer the Park in such a manner as to conserve and protect scenery, the natural, geologic, historic, and archeological resources of the Park, including fish and wildlife and to provide for the public use and enjoyment of the same in such a manner as to perpetuate these qualities for future generations."

Lack of action could preclude the Park from maintaining its purposes and values as established in the Park's enabling legislation. The Park's 1993 General Management Plan (GMP) calls to protect and interpret the park's archeological, historical, and ethnographic resources.

TOPICS INCLUDED IN IMPAIRMENT ANALYSIS

The topics which were considered in the EA and which are subject to impairment analysis are as follows:

Geologic resources-soils, bedrock, streambeds, etc.

The effects to soil resources would be short-term minor adverse, and long-term negligible adverse.

Implementation of the Selected Alternative would result in no impairment to geologic resources and is consistent with §1.4.7.1 of NPS *Management Policies* 2006.

Stream flow characteristics

Effects to stream flow characteristics would be long-term, minor, and beneficial.

Implementation of the Selected Alternative would result in no impairment resulting from introduction or promotion of non-native plant species and is consistent with §1.4.7.1 of NPS *Management Policies* 2006.

Archeological resources

The selected alternative would produce short-and long-term minor to major beneficial impacts on archeological resources located within the Area of Potential Effect.

Implementation of the Selected Alternative would result in no impairment to archeological resources and is consistent with §1.4.7.1 of NPS *Management Policies* 2006.

Prehistoric/Historic structures

Impacts to historic structures located within the Area of Potential Effect would be short- and long-term, minor to major, and beneficial and would help maintain its eligibility on the National Register of Historic Places.

Implementation of the Selected Alternative would result in no impairment historic structures and is consistent with §1.4.7.1 of NPS *Management Policies* 2006.

Cultural Landscapes

There would be short-and long-term minor to major beneficial impacts on the cultural landscapes located within the Area of Potential Effect.

Implementation of Selected Alternative, with appropriate monitoring and mitigation, would result in no impairment to cultural resources and is consistent with §1.4.7.1 of NPS *Management Policies* 2006. There would be no impairment.

Long-term Management of Resources or Land/Resource Productivity

The Selected Alternative would produce short-and long-term minor to moderate beneficial impacts on the long-term management of cultural resources located in the Area of Potential Effect.

Implementation of the Selective Alternative would result in no impairment to long-term management of resources or land/resource productivity and is consistent with §1.4.7.1 of NPS *Management Policies* 2006.

CONCLUSION

The impact analyses summarized above demonstrate that the Selected Alternative will not result in major adverse impacts on a resource or value whose conservation is (1) necessary to fulfill specific purposes identified in the establishing legislation of Great Basin National Park; (2) key

to the natural or cultural integrity of the park; or (3) identified as a goal in the park's 1993 General Management Plan or other relevant National Park Service planning documents. Effects to park resources other than those discussed above have been determined to have no or negligible adverse impacts from the activities to be implemented. There will be no unacceptable impacts to park resources or values from implementing the Selected Alternative.