FINDING OF NO SIGNIFICANT IMPACT

Dellenbaugh Water Pipeline Environmental Assessment
PMIS 230286

February 2020

Introduction

This Finding of No Significant Impact (FONSI) has been prepared in accordance with the National Environmental Policy Act (NEPA) for the project, Install Water Distribution Pipeline, in Grand Canyon-Parashant National Monument (GCPNM), in Mohave County, AZ.

The project will install an underground water pipeline from an existing well, managed jointly by the National Park Service (NPS) and the Bureau of Land Management (BLM) but on BLM Lands, to the NPS Dellenbaugh Administrative site within GCPNM. The project includes installation of a photovoltaic (PV) electrical system and well house at the wellhead. The pipeline would be installed through BLM Lands and connects with existing underground tanks and an existing pumphouse at Dellenbaugh Admin Site. A new water purification system will be built inside the existing pumphouse. The Monument is jointly managed under Service First Authority by NPS and BLM; the two agencies have collaborated on the project design, impact analysis, and mitigation.

The Environmental Assessment (EA) was prepared by the BLM. The NPS will adopt the EA as the basis for this FONSI. The Dellenbaugh Water Pipeline Environmental Assessment (EA), which describes the selected action and provides an explanation of why it will have no significant effects on the human environment. This FONSI, along with the EA, constitute the record of the environmental impact analysis and decision-making process for the project.

Purpose and Need

The purpose of the proposed action is to provide a reliable water supply to the Dellenbaugh Administrative Site for structural fire protection, wildland fire suppression and culinary use. The Dellenbaugh Administrative Site serves as the principle fire station for NPS lands within GCPNM and a staging location for wildland fire crews, backcountry ranger operations, various natural and cultural resource projects, contracted scientists, and other functions, providing overnight accommodations with supporting utilities. Depletion of stored water under the current situation poses fire safety and human safety risks.

The area around the administrative site is forested with ponderosa and pinyon pine and juniper. Fire records for the area surrounding the administrative site demonstrate an average of three to six wildfires annually. Water storage capacity is limited and even if full, would be quickly depleted in the case of a wildland fire in the vicinity of the Administrative Site, threatening the facilities and personnel stationed there.

The administrative site currently does not have an onsite potable water supply; therefore, water is hauled from St. George, Utah, over a network of unimproved roads that cover a distance of approximately 192 miles, round trip. In addition, this project would allow consistent capacity to better support park personnel stationed at the administrative site. Access to drinking water is a limiting factor in this dry environment, especially when staff is

engaged in projects that require extended stays in the remote portions of the Monument, including this area, which is over 90 miles from the closest potable water supply.

Selection of the Preferred Alternative

Of the two action alternatives evaluated in the EA, the NPS has selected Alternative A (Proposed Action) for implementation. This alternative was identified in the EA as the Preferred Alternative. The proposed action includes two primary actions: 1) construct, operate, and maintain a well house and solar array at the existing well; and 2) construct, operate, and maintain a 3 in. dia. underground water pipeline, approximately 2.3 miles in length from the existing NPS well south of Kelly Dam to the Dellenbaugh Administrative Site.

The vast majority of the pipeline (two miles) would be buried in the roadbed of Mohave County Road 103 and BLM Roads 1662 and 1664. Approximately 0.3 miles by 50 feet of construction would be outside of the roadbed in two areas (See Figures 2 and 3 -Appendix A of the EA). The water pipeline would connect to the existing wildland fire suppression underground water tank, two underground domestic water tanks and an ultraviolet water treatment system by a series of valves, fittings and pipes.

An off grid, photovoltaic (PV) electrical system would be installed at the Dellenbaugh well site (ROW grant AZA-035720) to provide power to the submersible well pump. A well house would be installed to protect the well piping, valves, pressure tank, and electrical components.

Alternative A was deemed preferable to Alternative B, which is continued hauling of water from the well to the administrative site.

Mitigation Measures

To minimize potential adverse impacts associated with the selected alternative, the following mitigation measures will be implemented as part of the selected alternative.

Noise and Air Quality	
Air-1	Both contractors and park staff will minimize noise from use of construction equipment (i.e. mufflers) and equipment will not be allowed to idle longer than necessary when not in use.
Air-2	Dust control (i.e., use of water as a dust suppressant) will occur, as needed, on active work areas where dirt or fine particles are exposed.
Vegetation	
Veg-1	Construction activities would be conducted in a manner that would minimize disturbance to existing vegetation by limiting vegetation thinning and restricting construction activities to a 15-foot wide path.
Veg-2	Ponderosa pine trees and pinyon pine trees, including seedlings and saplings, would not be removed or damaged unless they obstruct all reasonable approaches to the project area.
Veg-3	Top soil (soil taken from no more than 4 in. below ground level) from the vegetated project area would be piled separately during excavation and would be reapplied over the refilled trench to promote vegetative regeneration from the existing soil seed bank.
Veg-4	Vehicles and equipment would be power washed off-site before construction activities begin to minimize the risk of spreading noxious weeds. This would include cleaning all equipment before entering the Arizona Strip. BLM or NPS personnel would monitor the project areas for invasive plants and noxious weeds for a minimum of two years following completion of the project.
Veg-5	All operations would be confined to the construction site indicated on the plans for the project in order to protect natural resources and features and prevent damage to natural surroundings. The contractor would accomplish this by: o Placing temporary barriers to minimize the area of disturbance to existing plants and trees.

	o Not fastening ropes, cables, or guys to existing trees. o Carefully supervising excavating, grading, filling, and other construction operations near trees to prevent damage.
Veg-6	At no time would vehicle or equipment fluids (including motor oil and lubricants) be dumped on public lands. All accidental spills would be reported to the authorized officer and be cleaned up immediately, using best available practices and requirements of the law, and disposed of in an authorized disposal site. All spills of federally or state listed hazardous materials which exceed the reportable quantities would be promptly reported to the appropriate agency and the authorized officer.
Wildlife	
Wildlife-1	Construction would be limited to daylight hours to minimize impacts to wildlife.
Wildlife-2	Open trenches have the potential to trap and injure wildlife. During construction of the pipeline, these risks would be mitigated by minimizing the length of time trenches are left open, providing escape avenues (lateral trenches) for wildlife when left overnight, and inspecting the trenches prior to backfill activities.
Wildlife-3	The work crew chief must notify the NPS Contracting Officer and the BLM Wildlife Team Lead if California condors visit the worksite while construction is underway. Project activities would be modified or delayed where adverse effects to condors may result.
Wildlife-4	If an active bird nest is located within a project area, the GCPNM Manager (or designee) would be immediately notified in order to develop appropriate measures to avoid disturbance to the nesting birds.
Wildlife-5	No hazing or harassment of wildlife is permitted.
Wildlife-6	The project site would be cleaned up at the end of each day the work is being conducted (e.g., trash removed, scrap materials picked up); waste materials would be disposed of promptly at an appropriate waste disposal site. “Waste” means all discarded matter including, but not limited to, human waste, trash, garbage, refuse, oil drums, petroleum products, ashes, and equipment. “Waste” also includes the creation of micro-trash such as bottle caps, pull tabs, broken glass, cigarette butts, small plastic, food materials, bullets, bullet casings, etc. No micro-trash would be left at the project site in order to minimize the likelihood of condors visiting the site. NPS and BLM staffs may conduct site visits to the area to ensure adequate clean-up measures are taken.
Wildlife-7	Any hollow metal and/or plastic pipes and posts used or stored temporarily during construction or left permanently in place would be capped to prevent birds, small mammals, or reptiles from becoming entrapped.
Water Quality/Soils	
Water-1	Construction activities would be limited to periods when the soil and ground surface are not wet in order to avoid soil compaction.
Water-2	During construction, vehicular traffic would be restricted to existing roads or along the proposed ROW.
Water-3	To minimize impacts to biological soils crusts, care would be taken during construction activities to avoid disturbance of this resource to the greatest extent practicable. This may involve slight adjustments for construction equipment access and/or final locations, within the proposed ROW.
Water-4	At no time would vehicle or equipment fluids (including motor oil and lubricants) be dumped on public lands. All accidental spills would be reported to the authorized officer and be cleaned up immediately, using best available practices and requirements of the law, and disposed of in an authorized disposal site. All spills of federally or state listed hazardous materials which exceed the reportable quantities would be promptly reported to the appropriate agency and the authorized officer.

Water-3	To minimize impacts to biological soils crusts, care would be taken during construction activities to avoid disturbance of this resource to the greatest extent practicable. This may involve slight adjustments for construction equipment access and/or final locations, within the proposed ROW.
Cultural Resources	
Cultural-1	Any cultural (historic/prehistoric site or object) or paleontological resource (fossil remains of plants or animals) discovered in the project areas would immediately be reported to the Grand Canyon Parashant National Monument Manager or their designee. All operations in the immediate area of the discovery shall be suspended until written authorization to proceed is issued. An evaluation of the discovery shall be made by a qualified archaeologist or paleontologist to determine appropriate actions to prevent the loss of significant cultural or scientifically important paleontological values.
Cultural-2	If in connection with this work any human remains, funerary objects, sacred objects, or objects of cultural patrimony as defined in the Native American Graves Protection and Repatriation Act (Public Law 101-601; 104 Stat. 3048; 25 U.S.C. 3001) are discovered, operations in the immediate area of the discovery would stop, the remains and objects would be protected, and the Arizona Strip Field Office Manager (or her designee) would be immediately notified. The immediate area of the discovery would be protected until notified by the Arizona Strip Field Office Manager (or her designee) that operations may resume.
Cultural-2	All ground-disturbing activity shall be monitored by an archeologist.
Visitor Resources	
Visitor-1	The well house building would be painted with standard environmental colors to blend with the color scheme of the overall landscape.
Visitor-2	The roofing material would be non-reflective.

Other Alternatives Considered

Alternative B - No Action alternative; current practices will continue no new pipeline or wellhouse constructed. Water would continue to be hauled via water truck to the site, as needed.

Alternatives Considered and Dismissed

As part of the analysis process, the BLM considered installing the pipeline wholly within the roadway of BLM road 1661, BLM road 1664 and Mohave County road 103. However, on BLM road 1661, the pipeline would be realigned to avoid a sensitive area. On Mohave County road 103, the pipeline location would be realigned to avoid crossing private property (Mathis Ranch). This realignment would place the pipeline in an abandoned roadway (old county road 103) to avoid the private property and permit pipeline installation in a previous disturbed area. Therefore, based on the aforementioned issues, this alternative would not meet the purpose and need for the proposed action.

Rationale for the Selected Alternative and Environmentally Preferable Alternative

The proposed action (preferred alternative) was selected for implementation because it meets the purpose and need of the project while preserving park resources to a greater degree than No Action. The rationale for the selected alternative is noted below in the discussion of how it meets the criteria in the Council on Environmental Quality (CEQ) NEPA regulations.

These guidelines require that the "agency in reaching its decision specify the alternative or alternatives which were considered to be environmentally preferable" (CEQ Regulations, section 1505.2). The environmentally preferable alternative is the alternative that causes the least damage to the biological and physical environment and best protects, preserves, and enhances historical, cultural, and natural resources. The environmentally preferable alternative is identified upon consideration and weighing by the Responsible Official of long-term

environmental impacts against short-term impacts in evaluating what is the best protection of these resources (40 CFR 1505.2(b)).

In accordance with the criteria outlined in NEPA and DO-12, an Environmentally Preferable Alternative meets the following criteria: (1) Fulfills the responsibilities of each generation as trustee of the environment for succeeding generations; (2) Ensures for all Americans, safe, healthful, productive, and aesthetically and culturally pleasing surroundings; (3) Attains the widest range of beneficial uses of the environment without degradation, risk of health or safety, or other undesirable and unintended consequences; (4) Preserves important historic, cultural, and natural aspects of national heritage and maintain, wherever possible, an environment that supports diversity and variety of individual choice; (5) Achieves a balance between population and resource use that will permit high standards of living and wide sharing of life's amenities; and (6) Enhances the quality of renewable resources and approach the maximum attainable recycling of resources.

Several design components will be integrated into the project to reduce the impact on the scenic viewshed as seen from that location, including: (1) the wellhouse to have non-reflective paint with color selected from the BLM Standard and Supplemental Environmental Color Chart guidelines to blend in with the surrounding environment; (2) the solar array site and the well house-building site would be fenced with a wildlife compatible four-strand barbwire fence constructed to BLM and Arizona Game and Fish (AGFD) fence standards.

Why the Selected Alternative will not have a Significant Effect on the Human Environment

Using the ten significance criteria as defined in the Council on Environmental Quality's NEPA regulations (Section 1508.27), the NPS has determined that Alternative A can be implemented with no significant adverse impacts. The following criteria were used to determine the significance of each impact.

1. Impacts that may be both beneficial and adverse. A significant effect may exist even if the federal agency believes that on balance the effect may be beneficial.
All potential impacts were identified in the EA and none rise to the level of significance. The selected alternative benefits the area by reducing required equipment use and providing reliable water supply for fire suppression and culinary use. The negative effects to wildlife, vegetation, cultural resources, geology and wilderness are minimal, and adverse effects will be far below the level of significance, especially with mitigation and best management practices.

2. The degree to which the Selected Alternative affects public health and safety.
The selected action will improve the safety of visitors by improving resources for fire suppression.

3. Unique characteristics of the area (proximity to historic or cultural resources, wild and scenic rivers, ecologically critical areas, wetlands or floodplains, and so forth).
No wetland, floodplains, wild and scenic rivers, unique animal habitat or vegetation communities are present. The pipeline follows the existing road, so impact to the area is small and insignificant.

4. Degree to which impacts are likely to be highly controversial.
Neither the project nor its effects are highly controversial. During the public review of the EA, no issues were raised.

5. Degree to which impacts are highly uncertain or involve unique or unknown risks.
There were no highly uncertain, unique, or unknown risks identified for park resources.

6. Whether 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 neither establishes a precedent for future actions with significant effects, nor represents a decision in principle about a future consideration.

7. Whether the action is related to other actions that may have individual insignificant impacts but cumulatively significant effects.

The impacts of the selected alternative on each impact topic were identified in the EA. Cumulative impacts to each resource were also identified and none will have cumulatively significant effects.

8. Degree to which the action may adversely affect historic properties in or eligible for listing in the National Register of Historic Places, or other significant scientific, archeological, or cultural resources.

Class III inventory completed for project area. The project would not affect any properties eligible for the National Register. Pipeline installation as described in the proposed action and design would have no impact on limiting access to any ceremonial or sacred use sites or substantially adversely affect the physical integrity of sacred sites.

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

No federally threatened, endangered or candidate plant species are known to exist within the project area after a review of ESA listed species and prior surveys of the area. The only listed wildlife species that may occur in the project area is the California condor. Project design features included in the proposed action eliminate the possibility of impact to this species.

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

The selected alternative does not violate any federal, state, or local law, or requirements imposed for protection of the environment.

Conclusion

Based on the environmental impact analysis contained in the Environmental Assessment, the mitigation measures designed to avoid, reduce, or eliminate potential impacts, and the results of public review and agency coordination, the National Park Service has determined that the selected alternative does not constitute a major federal action that will significantly affect the quality of the human environment. The selected alternative is not without precedent, nor is it similar to an action which normally requires an environmental impact statement. No connected actions with potential significant impacts were identified. Therefore, in accordance with the National Environmental Policy Act of 1969 and regulations of the Council on Environmental Quality, an Environmental Impact Statement will not be prepared.

RECOMMENDED:

Mark Wimmer (Acting Superintendent) 6 March 2020

Superintendent, Grand Canyon-Parashant National Monument Date

APPROVED:

CINDY ORLANDO Digitally signed by CINDY ORLANDO
Date: 2020.03.25 16:35:28 -07'00'

Regional Director, Pacific West Region Date

Appendix A: Determination of Non-Impairment

The Prohibition on Impairment of Park Resources and Values

NPS *Management Policies 2006*, §1.4.4, explains the prohibition on impairment of park resources and values: "While Congress has given the Service management discretion to allow impacts within parks, that discretion is limited by the statutory requirement (generally enforceable by the federal courts) that the Park Service must leave park resources and values unimpaired unless a particular law directly and specifically provides otherwise. This, the cornerstone of the 1916 Organic Act, establishes the primary responsibility of the National Park Service. It ensures that park resources and values will continue to exist in a condition that will allow the American people to have present and future opportunities for enjoyment of them. The impairment of park resources and values may not be allowed by the Service unless directly and specifically provided for by the 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."

What is Impairment?

NPS *Management Policies 2006*, §1.4.5, What Constitutes Impairment of Park Resources and Values, and §1.4.6, What Constitutes Park Resources and Values, provide an explanation of impairment. "Impairment is an impact that, in the professional judgment of the responsible NPS manager, will harm the integrity of park resources or values, including the opportunities that otherwise will be present for the enjoyment of those resources or values." §1.4.5 of *Management Policies 2006* states:

"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 as a goal in the park's general management plan or other relevant NPS planning documents as being of significance."

An impact would be less likely to constitute an 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 NPS activities in managing the park, visitor activities, or activities undertaken by concessioners, contractors, and others operating in the park. Impairment may also result from sources or activities outside the park."

Per §1.4.6 of *Management Policies 2006*, park resources and values at risk for being impaired include:

- "the park's scenery, natural and historic objects, and wildlife, and the processes and condition 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, structure, 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 role 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 project area is located in Mohave County, Arizona and the proposed action is consistent with the Mohave County General Plan (adopted September 21, 2015).

Impairment Determination for the Selected Alternative

Based on the evaluation of potential impacts identified in the EA, the topics evaluated for impairment include air, vegetation, wildlife, water / soils, cultural resources and visitor.

Air

Typical mitigation measures for construction activities remediate impacts to air quality.

Vegetation

Typical mitigation measures for construction activities remediate impacts to vegetation.

Wildlife

Typical mitigation measures for construction activities remediate impacts to wildlife. Personnel will be notified if any California Condors are observed during construction.

Water and Soils

Typical mitigation measures for construction activities remediate impacts to water and soils.

Cultural Resources

Excavation to be monitored by an archeologist.

Visitor Resources

Building materials chosen to minimize the visual impact to the landscape.

Summary

As described above, adverse effects and environmental impacts anticipated as a result of implementing the selected alternative on a resource or value whose conservation is necessary to fulfill specific purposes identified in the establishing legislation or proclamation of the monument, key to the natural or cultural integrity of the monument or to opportunities for enjoyment of the monument, or identified as significant in the monument general management plan or other relevant NPS planning documents, will not rise to levels that will constitute impairment of monument values and resources in Grand Canyon-Parashant National Monument.

Appendix B.
Errata, Dellenbaugh Water Pipeline Environmental Assessment (October 2019)

Introduction

The Dellenbaugh Water Pipeline Environmental Assessment (EA) was posted on the ePlanning website on October 18, 2019. This Errata clarifies text of the EA to match the complete scope of the project. These corrections and clarifications do not change the project activities or increase the degree of impact described in the EA.

The Errata should be attached to the EA to complete the environmental impact analysis. The EA, Errata, and Finding of No Significant Impact (and its appendices) comprise the full and complete record of the environmental impact analysis.

Edits to the Environmental Assessment

The original EA did not explicitly state that the new pipeline will cross into NPS lands for the final 400' to connect with the Dellenbaugh admin site. At the site, the pipeline will connect to existing underground tanks and to a new water treatment system. The water treatment system will be installed within an existing pumphouse. All impacts and determinations discussed in the EA are still equally applicable to this portion of the project.