National Park Service
U.S. Department of the Interior

Lassen Volcanic National Park California



MINERAL HEADQUARTERS UTILITIES REPLACEMENT FINDING OF NO SIGNIFICANT IMPACT May 2013

INTRODUCTION

This Finding of No Significant Impact (FONSI) has been prepared in accordance with the National Environmental Protection Act (NEPA) for the Mineral Headquarters Utilities Replacement Environmental Assessment (April 2012) at Lassen Volcanic National Park in Mineral, California. This document describes the selected action and provides an explanation of why it will have no significant effects on the human environment. The FONSI, along with the environmental assessment (EA) and the errata prepared for the project as a technical attachment to the EA, constitutes a complete record of the environmental impact analysis process for this proposal.

BACKGROUND

The original utility system for the Lassen Volcanic National Park headquarters area was constructed in 1929. The park's Mineral headquarters was constructed in the 1920s and is an excellent example of National Park Service (NPS) rustic architecture. It is listed as a National Register district with 38 contributing historic structures (NPS 1993). Today, the headquarters area contains a combination of administrative, maintenance and residential structures. As the park headquarters expanded over the years, the utility system was expanded. The resulting system is a patchwork of utilities (power, water, wastewater, gas (propane), telecommunications, and site lighting) that is ineffective, inefficient, outdated, and difficult to repair.

The Mineral headquarters landscape is a picturesque collection of small-scale, rustic-styled houses and buildings encircling a meadow. Most of the buildings constructed after 1929 were situated according to a landscape plan prepared by the Landscape Engineering Division of the National Park Service, San Francisco Office. The headquarters area continues to fulfill its historic function as the main administrative and residential area for Lassen Volcanic National Park, and the majority of the landscape characteristics contribute to the district's integrity as a historic designed landscape.

PURPOSE AND NEED

The purposes of this project are to improve NPS staff and community safety, protect cultural resources that are listed or eligible for listing on the National Register for Historic Places (NRHP), and reduce labor and budgetary costs associated with the park's utility infrastructure. The utility system (electrical power, water, wastewater, gas (propane), telecommunications, and site lighting) is ineffective, inefficient, outdated, and difficult to repair. In particular, above-ground power lines are susceptible to frequent damage during winter storms, while water and wastewater pipes suffer from chronic leaking.

The project is needed because the utility system is not adequate to withstand current conditions. Prolonged power outages resulting from utility inadequacies compromise the health and safety of the park staff and resident community, as well as increase the risk of damage to buildings in the headquarters area.

The ineffectiveness, inefficiency, and repair difficulty associated with the current utility infrastructure places a burden on park operations. In addition, leaking water and wastewater pipes result in drafting of excessive water and potential contamination issues. The use of individual propane tanks at each building requires increased maintenance and involves greater risk of damage and subsequent explosions. The current telecommunications network and site lighting are outdated and unreliable and the existing on-site utilities require constant and costly repair.

SELECTED ACTION (PREFERRED ALTERNATIVE)

The NPS selects Alternative B, (the preferred alternative as described in the EA). The selected alternative will replace the existing overhead and underground utilities in the administrative and residential area of Lassen Volcanic National Park Headquarters (headquarters). The following utility systems will be replaced: potable and fire water, electrical, telephone/data/IT, propane, sanitary sewer, and site lighting. To the greatest extent possible, buried utilities will be consolidated to minimize trenching. Roads will be repaved where utility trenches are dug, and water testing and inspection of the sewer and water lines will also be completed. This will include the following:

Potable and Fire Water: Existing potable water mainline and service connections to buildings will be replaced. Fire water capacity will be provided within the new water mainline, fire sprinkler service will be connected to currently served buildings, and fire sprinkler stubs will be provided to buildings as appropriate. The fire hydrants will be replaced and relocated according to current fire protection code. Three new water sampling stations will be provided at strategic locations on site to allow for better water quality monitoring. The water lines will be located immediately adjacent to existing water lines. Single polyvinyl chloride (PVC) or high density polyethylene (HDPE) potable and fire water system would be routed predominantly in the existing roadways. Water mains will be primarily routed within the existing roadways to provide staff with maintenance access during heavy snow and to minimize impacts to natural and cultural resources. The pavement will be repaired above the trench, and the work will be coordinated with the other utility replacements which may warrant repaving of the entire street section. Existing water lines encountered during the installation of the new water lines will be removed for the width of new trenching activities, and existing water

- lines that run through the meadows and wetlands will be capped and filled to avoid disturbance of the natural environment.
- Electrical: The existing overhead electrical utilities will be replaced with underground electrical lines, beginning from the existing Pacific Gas & Electric (PG&E) 12,000 volt overhead electrical service pole located on the eastern side of the headquarters area and routed westward. PG&E will provide and install nine single phase transformers and service feeders to meters for administrative buildings and residences and will own and maintain the transformers, feeders, and meters. The park will provide and install transformer pads, hand holes approximately every 400 feet and at locations requiring wire splices, and conduits for PG&E equipment. For the seasonal staff housing area located across the highway, underground electrical lines would be installed beginning from an existing PG&E power pole located approximately 200 feet to the west of the seasonal staff housing area.
- <u>Telephone/Data/IT</u>: Underground fiber optic telecommunication lines will be installed beginning from the historic seismograph building #31 and routed westward. This building, which is a contributing structure to the Lassen Volcanic National Park Headquarters Historic District (Historic District), has not been in use since 1995 and will undergo minor internal upgrades to meet the standards, size and location specifications set forth by the telecommunications provider (Frontier Telecommunications). It is anticipated that a future connection for the telephone system is not required for the seasonal staff housing area. Because there is insufficient space in the administration building basement to mount and store the necessary telephone equipment, the provider (Frontier) will bring its telephone lines to the point of entry at Building #31. Cabling that services residents will be separated from cabling that services park offices. Frontier will own and assume responsibility for underground telephone and data lines to residential buildings.
- Propane: The 33 existing 500-gallon propane tanks will be removed and replaced with two centrally-located, 10,000-gallon propane tanks outside of the Historic District. Each tank would be approximately eight feet in diameter and 32 feet in length. A propane gas distribution loop would serve the buildings within the headquarters area. Each building will be internally metered to measure its propane use.
- Sanitary Sewer: The existing sanitary sewer system in the headquarters area north of Highway 36E will be replaced. The existing septic system and leach field located at the seasonal staff housing area on the south side of the highway will be removed and the system will be replaced with a sanitary sewer collection system that connects to the Tehama County sewer main via a lift station. The new system would include HDPE piping primarily routed through the existing roadways to provide ease of access during heavy snow. A small lift station will be required to tie the new seasonal staff housing area collection system to the existing Tehama County sewer main, which conveys flow to the Tehama County sewage treatment plant. Existing piping encountered during the installation of the proposed system will be removed, with the exception of piping

- passing through the wetlands, which will be capped and filled to avoid environmental impacts. The pavement would be repaired above all trenching.
- Site Lighting: Energy efficient (e.g., light emitting diode [LED]) lamps and fixtures may be installed to provide light for areas such as the administrative areas, maintenance facilities, drainage ditches, intersections, parking lots, and hazardous features while maintaining night sky protocols. Outdoor lighting fixtures will be installed at designated locations in order to meet the uses of safety, utility, security, and enjoyment while preserving the dark night sky. Existing lighting that is misdirected, repetitive, excessive or unnecessary will be removed, along with respective power poles, if appropriate. The location of the fixtures will take into account snow plow "push" areas. Further consultation will be completed with night sky experts, and additional information would be gathered on mandatory placement of lights to meet safety standards in order to develop a site lighting plan. These consultations may potentially reduce the number of total light poles proposed. It is anticipated that pole-mounted roadway light fixtures will be designed to meet NPS standard illumination levels of 0.1 foot candles and use proper photometric distribution. Controls will include a combination of photocells and timers. All roadway lighting, lamps and controls would be owned and maintained by the NPS.

OTHER ALTERNATIVES CONSIDERED

One other alternative was considered; the no action (continue current management) alternative would continue to use the park's existing utilities within the headquarters area, with no changes to the current infrastructure (overhead electrical lines; leaking water and wastewater lines; building-specific, aboveground propane tanks; unreliable telecommunications connections; and insufficient lighting). The systems would continue to be ineffective, inefficient, outdated, and difficult to repair.

ALTERNATIVES CONSIDERED BUT DISMISSED

Several alternatives were considered for project, but were ultimately dismissed from further analysis.

- <u>Dual Water system for potable water and fire suppression</u>: The original historic district has separate potable and fire water mains, while in the Mission 66 area, both potable and fire water use the same pipeline. Separating the two water sources could be advantageous because a potable water line would have a backflow preventer; a separate fire line would not influence pressure of the potable water line; and flushing of hydrants could occur without disturbing the drinking water main and causing water hammer. However, this aspect was dismissed because the value analysis found that the degree of increased project costs outweighed the associated advantages.
- <u>Dispersed below-grade installation of smaller propane tanks:</u> Installation of multiple
 propane tanks below grade was dismissed because of the difficulty associated with
 maintaining regulators and valves in a below-grade assembly. Installations of an array
 of smaller, but dispersed, tanks were discussed due to the potential visual impacts of
 10,000 gallon above-ground tanks. However, this was dismissed because the use of

fewer tanks would result in reduced maintenance, reduced risk for damage to tanks or appurtenances, and a more reliable propane source.

- Conversion of selected equipment from propane to electrical use to reduce number of tanks and/or propane required: Currently furnaces and hot water heaters are powered by propane. The advantage of electric is that the park could buy "green" electricity; it would be more stable; and pricing would be better regulated. However, this was dismissed due to the difficulty of converting large appliances to electricity and because the resulting power demand would exceed the capacity of the electric provider.
- Introduction of electric service in areas other than along the eastern boundary: PG&E
 has indicated that it would only provide service to the eastern area of the site.
 Participants in the value analysis did not believe that any other entry points provided
 advantages substantial enough to warrant negotiating this point with PG&E.
- Retain the communications room in the main administration building: The main communications room for the headquarters' data/IT network is currently located in the main administration building basement. This room is occasionally flooded and there is no direct access for Frontier (the provider); and therefore was dismissed.
- Alignments impacting natural or cultural resources: Any alternative elements that included alignments anticipated to impact wetlands, historic stone features, or that would require creek crossings, were dismissed from further consideration.

ENVIRONMENTALLY PREFERABLE ALTERNATIVE

The NPS has determined that the environmentally preferable alternative for this project is Alternative B, the Preferred Alternative. The environmentally preferable alternative is the alternative that will promote the National Environmental Policy expressed in the National Environmental Policy Act [NEPA; sec. 101(b))]. According to the Council on Environmental Quality (CEQ) regulations implementing NEPA (43 CFR 46.30), 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. In some situations, such as when different alternatives impact different resources to different degrees, there may be more than one environmentally preferable alternative."

Alternative B (the NPS Preferred Alternative) would increase protection of both natural and cultural resources and better fulfill the role of the park as trustee of the environment for future generations. Alternative B would result in a safer and more aesthetically pleasing headquarters area environment. Buried powerlines would substantially reduce the risk of fire to historic structures, and elimination of building-specific propane tanks and overhead powerlines would improve the viewshed of the cultural landscape. Replacing leaking sewer and water lines would reduce the potential to contaminate groundwater and would

improve water conservation. Improving site lighting technology would help protect the dark sky, an attribute of both natural and cultural resources. Alternative B would improve public health and safety for NPS staff and the residential community that use the headquarters area by eliminating the potential for potable water contamination and providing reliable utilities.

Alternative A (the no action alternative) was not selected as the environmentally preferable alternative because cultural and natural resources would continue to be adversely affected by the outdated and ineffective utility infrastructure. Structures contributing to the historic district would continue to be at risk of fire from downed powerlines as well as water damage from frozen pipes during lengthy power outages. The viewshed of the cultural landscape continue to be diminished due to visual clutter created by individual propane tanks and overhead powerlines. Leaking sewer and water lines would continue to pose risks for both groundwater and potable water contamination. Utility infrastructure deficiencies would continue to adversely affect park operations because of high rates of emergency repairs, operational interruptions during long-duration power outages, and poor telecommunications reliability.

MITIGATION MEASURES

The below resource protection measures would be implemented to avoid or minimize potential construction related impacts to natural and cultural resources.

Number	Mitigation	Responsible Party		
Cultural F	Resources – Historic Structures			
HS-1	Historic Civilian Conservation Corps (CCC)-era stonework, which contributes to the NRHP-listed Lassen Volcanic National Park Headquarters Historic District (Historic District), will be avoided.	Cultural Resource Program Manager/ Chief of Maintenance		
Cultural F	Resources – Cultural Landscapes			
CL-1	Curves will be incorporated (within the allowable pipe bending radius) in pipeline alignments to minimize damage to roots of mature trees that contribute to the cultural landscape.	Cultural Resource Program Manager/ Chief of Maintenance		
CL-2	The project will involve the reuse of the historic seismograph building #31, rather than the addition of a new structure to the Historic District.	Cultural Resource Program Manager/ Chief of Maintenance		
CL-3	During project setup and any necessary maintenance of the telecommunication system, an Argo 8x8 soft tire all- terrain vehicle or equivalent, and accompanying trailer if needed, will be utilized to access building #31, minimizing ground disturbance and eliminating the need for construction of a fill-based driveway.	Cultural Resource Program Manager/ Chief of Maintenance		
Cultural Resources – Archeological Resources				

ÅR-1	Underground duct design will be coordinated such that utilities are located in the same trench to the greatest extent possible, reducing total area of disturbance.	Cultural Resource Program Manager/ Chief of Maintenance
AR-2	An archeological monitor will be present during all ground-disturbing activities.	Cultural Resource Program Manager/ Chief of Maintenance
AR-3	If previously unknown archeological resources are discovered during construction, all work in the immediate vicinity of the discovery will be halted until the resources can be identified and documented by NPS staff. If the resources cannot be preserved in situ, an appropriate mitigation strategy will be developed in consultation with the California State Historic Preservation Officer and, as necessary, American Indian tribes. In the unlikely event that human remains, funerary objects, sacred objects, or objects of cultural patrimony are discovered during construction, provisions outlined in the Native American Graves Protection and Repatriation Act (25 USC 3001) of 1990 will be followed. If non-Indian human remains are discovered, standard reporting procedures to the proper authorities will be followed, as will all applicable federal, state, and local laws.	Cultural Resource Program Manager/ Chief of Maintenance
Water Re-	sources	
WR-1	Soil erosion best management practices such as sediment traps, erosion check screen filters, jute mesh, and hydro mulch (preapproved by the vegetation ecologist) will be used to prevent the entry of sediment into water-ways.	Chief of Resource Management/ Water Treatment Operations Mgr.
WR-2	Bentonite dams will be used in the construction of open- cut utility trenches to avoid providing a route for groundwater.	Chief of Resource Management/ Water Treatment Operations Mgr.
WR-3	Lateral/service connections will avoid crossing creeks.	Chief of Resource Management/ Water Treatment Operations Mgr.
WR-4	Abandoned pipes will be capped and/or filled as appropriate to avoid water intrusion and conveyance of water in wetlands.	Chief of Resource Management/ Water Treatment Operations Mgr.

General	Construction	
GC-1	Construction zones will be identified and fenced with construction tape, fencing, flags, stakes and/or other materials prior to any construction activity. The fencing will define the construction zone and confine activity to the minimum area required for construction. It will identify areas of special concern such as wetlands or archeological sites and provide a buffer zone for these areas.	Chief of Maintenance
GC-2	The areas of special concern will be labeled and marked with a different color of flagging to differentiate them from the construction zone. All protection measures will be clearly stated in the construction specifications and workers will be instructed to avoid conducting activities beyond the construction zone as defined by the construction zone fencing.	Chief of Maintenance
GC-3	Fugitive dust generated by construction will be controlled by spraying water on the construction site, if necessary.	Chief of Maintenance
GC-4	To reduce noise and emissions, construction equipment will not be permitted to idle for long periods of time and will follow guidelines in the park's Climate Friendly Action Plan on idling (3 minutes maximum where practicable).	Chief of Maintenance
GC-5	To minimize possible petrochemical and other leaks from construction equipment, the contractor will regularly monitor and check construction equipment to identify and repair any leaks. Leaking equipment will not be used. Repair oil leaks immediately on discovery. Have oil pans and absorbent material in place prior to beginning repair work. Sand or soil are not approved absorbent materials. Equipment found operating on the project that has not been inspected, or has oil leaks, will be shut down and subject to citation.	Chief of Maintenance
GC-6	All disturbed ground will be reclaimed using appropriate Best Management Practices (BMPs) that include planting with NPS approved species. Until the soil is stable and vegetation is established, erosion control measures will be implemented to minimize erosion and prevent sediment from reaching streams.	Chief of Maintenance/ Vegetation Ecologist
GC-7	To prevent the introduction of, and minimize the spread of, nonnative vegetation and noxious weeds, the following measures will be implemented during construction: soil disturbance will be minimized; all	Chief of Maintenance/ Vegetation Ecologist

•	construction equipment will be pressure washed and/or steam cleaned before entering the park to ensure that all equipment, machinery, rocks, gravel, and other materials are clean and weed free; all haul trucks bringing fill materials from outside the park will be covered to prevent seed transport; vehicle and equipment parking will be limited to within construction limits or approved staging areas; and all fill, rock, and additional topsoil obtained from sources outside the park will be taken from weed–free sources approved and visited by the vegetation ecologist.	
GC-8	As determined necessary by the vegetation ecologist, replace those removed for construction of the headquarters and associated facilities. Additional native vegetation will be used to revegetate all disturbed areas.	Chief of Maintenance/ Vegetation Ecologist
GC-9	Monitoring and follow-up treatment of exotic vegetation will occur after project activities are complete.	Chief of Maintenance/ Vegetation Ecologist

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

As defined in 40 CFR §1508.27, significance is determined by examining the following criteria:

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 environmental impact statement. Minor beneficial effects will result from decreased risk of loss from fire, propane explosion, and freezing water and flooding. Within the NEPA analysis, effects to cultural resources resulting from the selected alternative range from negligible to minor with localized, long-term beneficial impacts due to increased levels of fire prevention and protection attributed to structures that contribute to the historic district and cultural landscapes. Negligible to minor beneficial effects to archeological resources will result from the replacement of utility infrastructure and from eliminating visual intrusion on the cultural landscape in the project area. The NPS determined that there would be no adverse effect to historic properties in accordance with Section 106 of the National Historic Preservation Act of 1966 (16 U.S.C. 470f), as amended. The California State Historic Preservation Officer (SHPO) concurred with the NPS's Determination of No Adverse Effect to historic properties on January 7, 2013. Construction related impacts to water quality such as the mobilization of soil from disturbed surfaces will be minimized via the use of approved erosion and sediment control measures and not greater than short-term and minor. Beneficial impacts to water resources will result from elimination of leaks from the water and wastewater system. Overall improvements to the utility system will result in beneficial effects on public health and safety and park operations.

Degree of effect on public health or safety

The selected alternative will result in improvements to public health and safety. Buried power, propane, and telecommunication lines will result in fewer utility outages, which will therefore reduce instances of park staff or the resident community going without heat, light, and communication capabilities during inclement weather.

New water and wastewater lines will ensure safe and uncontaminated potable water, and a centralized propane source will reduce the risk for leaks and explosions. As a result, the selected alternative will have beneficial effects on public health and safety.

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 EA and above, the project will occur within the Historic District and will result in negligible to minor impacts to historic structures, cultural landscapes, and archeological resources as evaluated under NEPA. There are no prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas affected.

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

The effects on the quality of the human environmental are not anticipated to be highly controversial. Public scoping and comments on the proposal did not indicate any contentious issues and the environmental assessment did not identify significant impacts associated with the preferred alternative.

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

No highly uncertain effects or unique or unknown risks are anticipated to occur with implementation of the selected alternative. This action will include utility infrastructure changes intended to improve health and safety, visitor experience, and park operations. The selected alternative involves the use of proven, mature technologies. Standard construction and operation techniques, best management practices, and other mitigations will minimize risks.

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

Providing functional and efficient utility systems for park facilities is included in longestablished NPS policy to provide visitor and administrative facilities that are necessary and consistent with the conservation of park resources and values. The selected alternative will not set a precedent for future actions with significant effects, and it does not represent a decision in principal about any future consideration in Lassen Volcanic National Park or elsewhere in the national park system.

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

The environmental assessment considered the cumulative impacts of the selected action with several past, present and ongoing future projects. No major (significant) cumulative effects were identified in the EA.

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 EA and above, the project will occur within the Lassen Volcanic National Park Headquarters Historic District and will result in minor impacts to historic structures, cultural landscapes, and archeological resources under NEPA. Compliance with Section 106 of the National Historic Preservation Act (NHPA) was conducted for the proposed action, including full consultation with the California SHPO and preparation of a Section 106 Assessment of Effect Form (AEF) that was submitted to the SHPO. The Section 106 AEF was completed as a separate process from this EA. SHPO concurred with a Determination of No Adverse Effect to historic properties on January 7, 2013.

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

No threatened, endangered, or other species of concern are known to occur in the headquarters area; therefore, the NPS determined that there would be no effect to threatened or endangered species, in accordance with Section 7 of the Endangered Species Act (16 USC 1531, et seq.).

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

This action violates no federal, state, or local environmental protection laws. The park found no inconsistencies with any state or local plan, goal, or objective.

PUBLIC INVOLVEMENT

Public scoping was conducted between December 15, 2010 and January 15, 2011 and included letters announcing the project and a press release issued on December 15, 2010. Over 200 letters were sent to various individuals; businesses and federal, state, and local agencies such as the U.S. Fish and Wildlife Service (USFWS) and the California SHPO. The announcement was also posted on the NPS public comment website, and the park's website (http://www.nps.gov/lavo/index.htm). Responses were received from one member of the public, the Enterprise Rancheria, Estom Yumeka Maidu Tribe, the Shingle Springs Rancheria and the California Department of Transportation (CalTrans). Residents of the area inquired about the project schedule. CalTrans requested that any work conducted

within the state highway right of way be included in the analysis and meet state highway standards. Other comments provided tribal protocol for ground disturbing activities and requested regular project updates.

The EA was made available for public review and comment during a 30-day period ending May 3, 2012. As with scoping, over 200 notices announcing the availability of the EA and 40 copies of the EA were sent to various individuals; businesses; and federal, state, and local agencies including the Chester and Red Bluff Libraries. A press release was sent to the Red Bluff Daily News and the San Francisco Chronicle. The announcement was also posted for public review on the NPS's Planning, Environment, and Public Comment (PEPC; https://parkplanning.nps.gov/lavo). No public responses were received.

AGENCY CONSULTATION

The following agencies were contacted: USFWS, California SHPO, California Regional Water Quality Control Board and CalTrans.

Endangered Species

The NPS determined that there would be no effect on threatened or endangered species in accordance with Section 7 of the Endangered Species Act (16 USC 1531, et seq.) due to the absence of federally listed species, suitable habitat, and designated or proposed critical habitat within the project area. The NPS notified the USFWS of this determination via letter on December 15, 2010 and on April 4, 2012.

Cultural Resources

In accordance with the NHPA, the NPS conducted consultation with the California SHPO and prepared a Section 106 AEF that was submitted to the SHPO. The AEF was completed as a separate process from the EA. SHPO concurred with a Determination of No Adverse Effect to historic properties on January 7, 2013.

Water Quality

The California Regional Water Quality Control Board commented on the jurisdictional and non-jurisdictional wetlands and waters that exist at the project site. The NPS would acquire the appropriate permits from the California Regional Water Quality Control Board for minor channel crossings that may be required for the replacement of utilities under the selected alternative prior to commencement of construction. The NPS will acquire any relevant permits from the U.S. Army Corps of Engineers prior to construction.

TRIBAL CONSULTATION

The following tribes were contacted: Greenville Rancheria Pit River Tribal Council, Redding Rancheria Berry Creek Rancheria, Enterprise Rancheria Susanville Rancheria, Mooretown Rancheria United Auburn Indian Community, and Shingle Springs Rancheria.

Two tribes, Enterprise Rancheria and Shingle Springs Rancheria, responded to external scoping letters. Each asked for continued consultation so that they may be kept abreast of the project and that the NPS should provide project updates and completed environmental, archaeological and cultural reports. Each also requested work stoppage

and subsequent notification of any discovery of cultural resources during ground disturbance. The EA was provided to the tribes for their review and comment, and the NPS will continue to keep the tribes informed of the project's progress.

CONCLUSION

Implementation of the selected alternative for the Mineral Headquarters Utilities Replacement 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 impacts. Adverse environmental impacts resulting from this project are negligible to minor in intensity, duration, and context, and are therefore, less than significant. As documented above, 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 approved project will be implemented as soon as practicable.

Recommended:		
Rarlene M. Koonts	4/30/13	
Superintendent, Lassen Volcanic National Park	Date	
Approved:		
Audranie Brydon J	5/17/13	
Regional Director, Pacific West Region	Date	

Appendix 1. Determination of Non-Impairment Mineral Headquarters Utilities Replacement

The National Park Service's *Management Policies, 2006* require analysis of potential effects to determine whether or not actions will impair park resources. The fundamental purpose of the national park system, established by the Organic Act and reaffirmed by the General Authorities Act, as amended, begins with a mandate to conserve park resources and values. NPS managers must always seek ways to avoid, or to minimize to the greatest degree practicable, adversely impacting park resources and values.

However, the laws do give the NPS the management discretion to allow impacts to park resources and values when necessary and appropriate to fulfill the purposes of a park, as long as the impact does not constitute impairment of the affected resources and values. Although Congress has given the NPS the management discretion to allow certain impacts within park, that discretion is limited by the statutory requirement that the NPS must leave park resources and values unimpaired, unless a particular law directly and specifically provides otherwise. The prohibited impairment is an impact that, in the professional judgment of the responsible NPS manager, would harm the integrity of park resources or values, including the opportunities that otherwise would be present for the enjoyment of those resources or values. An impact to any park resource or value may, but does not necessarily, constitute an impairment. An impact would be more likely to constitute an 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;
- key to the natural or cultural integrity of the park; or
- identified as a goal in the park's General Management Plan or other relevant NPS planning documents.

An impact would be less likely to constitute impairment if it is an unavoidable result of an action necessary to pursue or restore the integrity of park resources or values and it cannot be further mitigated. 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. The description of the park's purpose and significance is found below and is subject to the no-impairment standard.

Description of Park Purpose and Significance

Lassen Volcanic National Park was established in 1916 "as a public park or pleasuring ground for the benefit and enjoyment of the people of the United States." Legislation establishing the park also aimed at ensuring the "preservation from injury or spoliation of all timber, mineral deposits, and natural curiosities or wonders" within the park. Lassen Volcanic National Park encompassed two areas that were designated as

National Monuments in 1907 by President Theodore Roosevelt, Cinder Cone National Monument and Lassen Peak National Monument, both of which were established to preserve their "special importance in tracing the history of the volcanic phenomena" in the vicinity (35 Stat. 2131-2132). Cinder Cone National Monument was designated especially for its "great scientific interest" (35 Stat. 2131) and Lassen Peak National Monument for being the "southern terminus of the long line of extinct volcanoes in the Cascade Range from which one of the greatest volcanic fields in the world extends" (35 Stat. 2132). Ironically, in May 1914, this volcano that was once thought to be extinct, began erupting again, in a series of dramatic eruptions that lasted until 1921.

In 1972, Congress designated 75 percent of the park as the Lassen Volcanic Wilderness, and in addition to natural resources, the park preserves nationally significant cultural resources including 84 historic buildings that are on the List of Classified Structures, over 70 Native American archeological sites, and portions of the Nobles Emigrant Trail.

The park's mission as stated in the General Management Plan (GMP, 2002) is to "conserve, preserve, and protect Lassen Volcanic National Park and its geological, biological, and cultural resources for the enjoyment, education, and inspiration of present and future generations." The goals associated with this mission are:

- -Natural, cultural, and wilderness resources and associated values are protected, restored, and maintained in good condition and managed within their broader ecosystem and cultural context.
- -The park contributes to knowledge about cultural and natural resources and associated values; management decisions about resources and visitors are based on adequate scholarly and scientific information.
- -Visitors safely enjoy and are satisfied with the availability, accessibility, diversity, and quality of park facilities, services, and recreational opportunities.
- -The park uses current and sustainable management practices, systems, and technologies to accomplish its mission.
- -The park increases its managerial capabilities through initiatives and support from other agencies, organizations, and individuals.

The park resources and values addressed in the EA and which are subject to the noimpairment 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 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 addressed in the EA and for which the park was established.

Impairment may result from NPS activities in managing the park, visitor activities, or activities undertaken by concessioners, contractors, and others operating in the park. 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. Impairment may result from visitor activities; NPS administrative activities; or activities undertaken by concessioners, contracts, and others operating in the park. Impairment may also result from sources or activities outside the park. The description of the park's purpose and significance is found above and is subject to the no-impairment standard.

Impairment Determinations for the Selected Alternative

Impairment determinations are not necessary for visitor use and experience, socioeconomics, public health and safety, environmental justice, land use, and park operations, because impairment findings relate back to park resources and values. These impact topics are not generally considered to be park resources or values according to the Organic Act, and cannot be impaired the same way that an action can impair park resources and values. After dismissing the above topics, topics evaluated in the EA remaining to be evaluated for impairment include cultural resources and water resources.

Fundamental resources and values for the park are identified in its General Management Plan. According to that document, of the impact topics carried forward in this EA, only cultural resources and water resources are considered necessary to fulfill specific purposes identified in the establishing legislation or proclamation of the park; are key to the natural or cultural integrity of the park; and/or are identified as a goal in the park's General Management Plan or other relevant NPS planning document.

Cultural Resources - Implementation of the selected alternative would occur within the Lassen Volcanic National Park Headquarters Historic District, which is listed on the National Register of Historic Places as a historic district and has also been identified as a cultural landscape. Further, there are two previously recorded archeological sites identified within the proposed project area which have not been evaluated for eligibility for the NRHP. Because the selected alternative will result in only minor impacts under NEPA and no adverse effect to historic structures, cultural landscapes, and

archeological resources under Section 106 of the NHPA, there will be no impairment to cultural resources.

Water Resources - Leakage resulting from deterioration of the water and wastewater systems within the project area has increased the potential for contamination of water resources in the park. In addition, ground disturbance from the proposed project could increase sediment erosion into nearby Battle Creek and into the surface waters within the wetland that occurs within the project area, although this is unlikely. Because impacts resulting from conducting repairs to existing water and wastewater systems would be long-term and beneficial, and adverse impacts associated with construction activities would only be minor and short-term, the selected alternative would not result in impairment to water resources.

In conclusion, as guided by this analysis, good science and scholarship, advice from subject matter experts and others who have relevant knowledge and experience, and the results of public involvement activities, it is the Superintendent's professional judgment that there will be no impairment of park resources and values from implementation of the selected alternative.