

National Park Service
U.S. Department of Interior

Lassen Volcanic National Park
California



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Drakesbad Wastewater Disposal Field
Finding of No Significant Impact
June 2019

Lassen Volcanic National Park, Plumas County, California

This Finding of No Significant Impact (FONSI) documents the decision of the National Park Service (NPS) to adopt the preferred alternative/proposed action in the Drakesbad Wastewater Disposal Field Environmental Assessment (EA), which is Alternative 2: *Construct New Drakesbad Disposal Field (Proposed Action/Preferred Alternative)*. This alternative was evaluated against Alternative 1: *No Action (Continue Current Management)*. These alternatives were described and analyzed in the EA. This FONSI documents the NPS determination that no significant impacts on the quality of the human environment will occur from implementation of this drain field and force main construction.

Selected Alternative and Rationale for the Decision

Based on the analysis presented in the EA, the NPS selected Alternative 2 the NPS proposed action/ preferred alternative as it best meets the project's purpose and need. The selected alternative consists of all actions described as the proposed action/preferred alternative in the EA; there are no modifications incorporated herein as result of public comment or agency scoping. The following discussion is a summary of key elements.

Under the selected alternative, the park will construct a new wastewater disposal system to service the Drakesbad facilities in the Warner Valley. The selected alternative will allow continued use and provide a similar visitor experience of the Drakesbad Historic District for the foreseeable future. The selected alternative best protects the area's natural resources, cultural resources, and human health and safety in the project area.

Purpose

The purpose of the proposed project is to replace the failing septic system disposal (leach) field, which serves the Drakesbad Guest Ranch in Lassen Volcanic National Park. The guest ranch is a popular destination for day use and overnight visitors, who enjoy the rustic retreat and access to outdoor recreational opportunities including hiking, horseback riding, and soaking in the natural hot springs pool. The Drakesbad Guest Ranch is part of the Drakesbad Guest Ranch Historic District (440 acres). Other facilities in the area are part of the Warner Valley Developed Area Historic District, which includes the Warner Valley Road and the Warner Valley Ranger Station.

Need

The existing leach field that serves the Drakesbad Guest Ranch began to fail during summer 2017. Efforts to repair the deficiencies have been unsuccessful. Therefore, a new leach field is needed to serve this existing visitor facility. The new leach field cannot be located in the same direction as the current leach field. Therefore, a new force main is also needed. Without repair or replacement, the current failing disposal field would be abandoned in place upon notification from Plumas County. If the field fails completely, the NPS would receive a notice of violation of public health codes for improper treatment and disposal of human waste.

Selected Alternative (Alternative 2): Expand Opportunities for Visitor Use

The selected alternative includes the following actions described in the EA: Under the selected alternative, the park will construct a new wastewater disposal field 0.75 miles east of the Drakesbad lift station and 0.55 miles west of the Warner Valley Ranger Station on the south side of Warner Valley Road near an existing campground/day use area (Figure 1). The new wastewater system has been designed for a capacity of 8,000 gallons per day. The proposed location for the wastewater disposal field was selected for its suitable terrain, accessibility from the road, avoidance of a fen (wetland) and meadow and historic properties, and for its acceptable results from percolation tests and ability to meet the regulatory requirements for a suitable disposal field.

The proposed site is located in a white fir (*Abies concolor*)-Jeffrey Pine (*Pinus jeffreyi*) woodland, with a mixed grass understory and infrequent shrubs. The site is generally open with sparse vegetation. The area was logged prior to establishment of the park and efforts to reduce fuel loads have recently been completed (Buckley pers. comm. 2018). The project will include the removal of approximately 45 trees that range in diameter from 11-35 inches and include one 27" snag. Any fallen logs that can be relocated will be removed either outside of the disposal field or to the burn pile, any logs too large to be relocated will be cut into maximum lengths of 15-20 feet, side cast and dispersed in a natural-looking manner, outside the disposal field area.

To access the disposal field, a sewer force main will be constructed within Warner Valley Road. Under the proposed project, a 4-inch high density polyethylene (HDPE) or C900 Polyvinyl Chloride (PVC) force main for wastewater (sewage) will

be placed within 2-feet of the northern edge of the road. The sewer line will be located with required setbacks from a waterline that also runs down the south side of the road.

The force main will extend approximately 0.75 miles from the Drakesbad Ranch sewage lift station to the proposed disposal field in a trench up to 4-feet deep, 30 inches wide and 4,200-feet long. There will be approximately three combo air vacuum-release valves and boxes with iron lids and approximately three pressurized clean-outs with traffic-rated iron boxes and covers along the route. To avoid placement in the roadway and additional effects on the Warner Valley Historic District, these will be located off of the northern edge of the roadway and hidden from view.

There are approximately 12 culverts along the section of roadway where the force main will be installed. Their sizes and types are listed in Table 1. Where there are existing historic culverts (four) and/or culvert headwall/footwalls (three) (those not changed since road construction), the utility trench will be dug underneath them, providing a minimum 6-inch clearance, so as not to disturb them in place. Construction around non-historic culverts will also likely be similar. Removing and resetting them would require cutting and banding them, a more difficult installation.

Table 1: Existing Culverts in Area of Potential Effects on Warner Valley Road

Size Inches	Type	Sheet	Size Inches	Type	Sheet
72	Corrugated metal pipe (CMP)	Co3	24	CMP	Co8
24	CMP	Co3	20	CMP	Co8
24	Unknown	Co4	15*	CMP	Co9
15*	CMP	Co5	18	CMP	Co9
15*	CMP	Co5	18	Corrugated Plastic Pipe (CPP)	Co9
18	unknown	Co6			
18	CMP	Co8			

* denotes historic culvert

The trench will be filled with clean backfill consisting of sand, free from clay, frozen lumps, rocks or roots larger than 3-inches. The backfill will also be free from moisture in excess of that permitting required compaction to meet specifications for the roadway. Under the current specifications, use of native excavated material may also be used for backfill if approved by the contracting officer. The last layer will be 8-inches of ¾-inch minus road gravel to match the existing road surface.

The leachfield is located approximately 0.8-miles from Drakesbad Ranch sewage lift station on the south side of the road. To reach the leachfield, the force main trench will extend from the roadway approximately 365-feet to the leachfield, where a flow splitter basin will be installed. Effluent will then flow by gravity to the leachfield gravelless chambers. As required by Plumas County, a second leachfield area has been identified, but will not be disturbed or constructed as part of the current project.

An area of approximately 7,120 square feet will be used for the disposal field. The disposal field itself will be comprised of 4-beds, each having 4 rows of gravelless disposal laterals. Each bed will be 14-feet wide by 77-feet long. Opposite beds will be located approximately 15 feet apart (Figure 2). Each lateral will be a trench excavated to a depth of approximately 3-feet and will include, rodent exclusion wire fabric, infiltrator chambers, and 4-inch PVC capped pipes serving observation and piezometer monitoring portals. The comprehensive disposal field will be suitable for processing up to 8,000 gallons per day of wastewater. Leach field laterals could be constructed using a small backhoe or similar equipment.

Staging for the proposed project will occur in a previously disturbed unpaved parking area near the Drakesbad lift station. Another area identified for staging, if needed, would be at the existing burn pile, an area that has also been previously disturbed and is projected to be used again for a controlled burn.

Under the selected alternative, visible infrastructure associated with the current leach field will also be removed. This will include visible aeration ports in the leach field. The abandoned leach field area will also be allowed to undergo passive restoration, which could also include planting.

Other Alternatives Considered

Alternative 1: No Action

The existing Drakesbad Lodge wastewater system uses a pump to move effluent through a 4-inch force main to a disposal field located southeast of the lodge complex. Vault toilets or portable chemical toilets serviced on a regular basis could partially address transient public wastewater needs if the septic system failed, but would not be suitable for overnight accommodations, shower and sink wastewater, etc. If the facility continued to operate, this wastewater would have to be collected and hauled to a sanitary receiving station qualified to accept human waste.

The current septic system leach field was last replaced in 2009, while the pump distribution system was replaced in 2004. The existing disposal field has five zones, each with three lines of infiltrator pipes. Each zone has a shutoff valve to allow alternating use of the areas. The length of the infiltration lines is approximately 2,260 linear feet, with about 5,650 square feet of disposal area. The existing field was designed for wastewater production of approximately 5,500 gallons per day.

Summary of Preliminary Options Considered and Dismissed

A few options were considered for the project, but were ultimately dismissed from further analysis.

- *Construct the Leach Field Closer to the Existing Leach Field.*

This alternative was explored in preliminary analysis. The most suitable area close to the existing septic system, however, was found to have previously disturbed archeological resources, constructability issues because it was more remote (with limited access for construction equipment and materials staging), potential effects from stream crossings with sewer main, close proximity to a water course, the potential for recurring wastewater surfacing and improper treatment, and the likely need for more intensive construction monitoring and maintenance operations.

- *Construct the Leach Field in another Area*

Other areas investigated had more rock outcrops, other unsuitable site conditions (such as surface water resources), were not previously disturbed, or were further away than the proposed site. County and state requirements for on-site wastewater disposal fields require minimum distances to surface water courses, wet soils, depth to bedrock, maximum allowable cross slopes, and other factors. Another site was dismissed because it was an area thought to have previously been used as a disposal field in the past.

- *Close Drakesbad Visitor Use Facilities*

This alternative was briefly considered, however, existing facilities provide a unique park experience, result in few other resource impacts, and are under contract for another 10 years. In addition, in 2010, the park reaffirmed its commitment to preserving facilities that are part of the Drakesbad Guest Ranch Historic District and the Warner Valley Developed Area Historic District through the Warner Valley Comprehensive Site Plan Final Environmental Impact Statement.

- *Substantially Modify the Historic District Facilities with Vault Toilets and a Tank-pumped Disposal System*

This alternative was rejected due to the adverse effect it would have on the Drakesbad Guest Ranch Historic District and visitor use (see also the explanation associated with closing the Drakesbad facilities above). This alternative would also result in heavy vehicle traffic from frequent hauling on the historic gravel road.

Mitigation Measures Incorporated in the Selected Alternative

Mitigation Measure	Responsible Party
Soils	
The project construction areas would be narrowly defined to minimize disturbance outside building footprints.	Project Manager
Existing roads, trails and established pathways would be used to access construction areas.	Project Manager
Spill-response materials would be provided on site during construction.	Project Manager

Soil disturbance would be minimized and re-seeding or revegetating disturbed areas would occur as soon as practicable.	Project Manager
Any equipment brought to the site would be pressure washed clean of mud, weed, seed, etc.	Project Manager
Equipment used would be inspected for compliance prior to entering the park, including recommending repeat cleaning at the contractor's expense, if needed.	Project Manager
Water Resources	
Temporary sediment control devices such as filter fabric fences, or sediment traps would be used as needed during work near water.	Project Manager
Completion of the project would include naturalizing disturbed areas by adding rocks, soil, or duff to areas without vegetation or needing restoration.	Terrestrial Ecologist
Staging areas would be located well away from places where runoff could affect nearby water bodies.	Project Manager
The close confines of the project area would minimize the amount of disturbed earth and the duration of soil exposure to rainfall.	Project Manager
Swales, trenches or drains would be used to divert stormwater runoff away from disturbed areas.	Project Manager
Vegetation	
The limits of construction would be established narrowly to avoid impacting adjacent vegetation.	Terrestrial Ecologist
Fill materials imported from outside the park would be from approved sources and would be inspected and/or approved by NPS staff prior to importation into the park to avoid inadvertent importation of invasive species.	Terrestrial Ecologist
Materials used in project work would be transported and stored so as not to acquire noxious weed seeds from adjacent areas.	Terrestrial Ecologist
The project area would be monitored for undesirable plant species (exotics) and control strategies implemented if such species occur.	Terrestrial Ecologist
Revegetation would use only native species, appropriate to the site.	Terrestrial Ecologist
Cultural Resources	
Should unknown archeological resources be uncovered during construction, work would be halted in the discovery area, the park Cultural Resources Program Manager contacted, the site secured, and the Inadvertent Discovery Plan implemented, including consultation with SHPO and Tribal entities, and provisions of the Native American Graves Protection and Repatriation Act (NAGPRA) of 1990 implemented. If necessary or possible, relocation of the work to a non-sensitive area would occur to enable more site testing and documentation. Every effort would be made to avoid further disturbance to the site. If relocation could not occur, then mitigation would include exhaustive documentation of the site to appropriate standards based on consultation with the State Historic Preservation Officer and other experts as applicable.	Project Manager Cultural Resources Program Manager
All project-related ground-disturbing activities will be monitored by an NPS archeological technician with oversight by a professional archaeologist qualified under the Secretary of Interior Standards.	Project Manager Cultural Resources Program Manager

Identified isolates within the project area will be flagged and avoided.	Cultural Resources Program Manager
Historic culverts and headwalls will be flagged and avoided. All excavation around and under culverts will be done by hand, using shovels. Work adjacent to historic stonework will be monitored by cultural resource staff.	Project Manager Cultural Resources Program Manager
Disturbance within the existing road corridor will be limited to the existing width to prevent inadvertent widening of the road way. Excavations will be back filled and compacted when work is complete.	Project Manager
All project area trenches outside of the roadbed will be filled and soil mounded to allow for settling and to eliminate any future erosion.	Project Manager
Native grasses will be planted in disturbed areas to quickly facilitate soil stabilization.	Terrestrial Ecologist
Visitor Experience	
Press releases to local media and signs in the park would inform visitors about conditions in the park during the project.	Chief of Interpretation
During construction, signs would inform visitors of the construction activities and of potential closures or delays. Barriers and barricades, signs and flagging, as necessary or appropriate, would be used to clearly delineate work areas and provide for safe pedestrian travel through the construction area.	Chief Ranger

Why the Selected Action Will Not Have a Significant Effect on the Human Environment

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

Impacts that may be both beneficial and adverse. A significant effect may exist even if the Federal agency believes that on balance the effect will be beneficial: No major adverse or beneficial impacts were identified in the environmental assessment that require analysis in an environment impact statement.

The primary impact topics identified in the environmental analysis and documented in the environmental assessment included: soils, water resources (hydrology and water quality), vegetation, cultural resources, and visitor experience.

Degree to which the proposed action affects public health or safety: Without the replacement of the drain field, the Drakesbad Historic District facilities would be unsafe for visitors, resulting in potential adverse effects on public health and safety. The proposed action would allow continued safe use of area visitor facilities.

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 analyzed in the environmental assessment, there will be no significant effects on park lands, including prime

farmlands, wetlands, wild and scenic rivers, or ecologically critical areas. The Drakesbad Historic District is listed on the NRHP and all work proposed in the selected alternative has been analyzed under National Historic Preservation Act regulations. State Historic Preservation Officer (SHPO) consultation has been completed, with concurrence that no adverse effect will occur.

Degree to which the effects on the quality of the human environment are likely to be highly controversial: No highly controversial effects were discovered during the preparation of the environmental assessment.

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 or unique or unknown risks were discovered during the preparation of the environmental assessment.

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

Whether the action is related to other actions with individually insignificant, but cumulatively significant, impacts. Significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment. Significance cannot be avoided by terming an action temporary or breaking it down into small component parts: The selected alternative is not related to other actions with individually insignificant, but cumulatively significant impacts.

Degree to which the action may adversely affect districts, sites, highways, structures, or objects listed or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources: The selected alternative will not adversely affect any historic districts, sites, highways, structures, or objects listed or eligible for listing in the National Register of Historic Places or which may cause loss or destruction of significant scientific, cultural, or historical resources. Consultation with the California SHPO has been completed. The SHPO concurred that no adverse effects on historic properties will occur under the selected alternative.

Degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973: There will be no adverse effects to endangered or threatened species or critical habitat because these do not exist within the project area or the park.

Whether the action threatens a violation of federal, state, or local environmental protection laws: As demonstrated by the analysis in the environmental

assessment, the selected alternative is compliant with all federal, state, and local environmental protection laws.

Public Involvement

Internal scoping began in summer 2017, with the suspected failure of the leach field. Archeological surveys were completed in 2001 and 2018, followed shortly thereafter by leach field test pits to determine percolation rates (2018). The park worked with regional NPS, State Historic Preservation Office, and county staff during the development of the proposal for the selected alternative.

Public Scoping

A 30-day public scoping period was conducted from March 11, 2019 to April 11, 2019. One comment was received regarding a building that used to be located in the Drakesbad meadow, which was visible from the guest ranch. The building was moved adjacent to the road about 15 years ago to improve the view from the guest ranch. Another pumphouse is located near the pool and would be unchanged by this project. The Red Bluff Daily news ran an article announcing the public scoping period on April 11.

Public Comments on EA

The public comment period on the Drakesbad Wastewater Disposal Field Environmental Assessment was open from April 29, 2019 through May 30, 2019. The opportunity for public review was advertised via the park's webpage and social media, through an official press release, and through the PEPC website. In each of these instances, the public was directed to use PEPC for submitting comments. The Red Bluff Daily News covered the public comment period announcement in an article on May 6. The park received one comment, in support of the project, throughout the entirety of the review period.

Agency and Tribal Consultation

Prior to public scoping, scoping was conducted with Native American Indian tribes affiliated with the park. The park sent a letter about the proposed Drakesbad septic system modifications on May 17, 2018 to the following tribes: Greenville Rancheria of Maidu Indians, Mooretown Rancheria (Maidu), Susanville Indian Rancheria, Pit River Tribe, Redding Rancheria, Berry Creek Rancheria, Enterprise Rancheria, Shingle Springs Rancheria, and United Auburn Indian Community. No responses were received from any of the tribes.

Follow-up consultation (in-person meetings) with the Redding Rancheria occurred on August 27, 2018 and with the Susanville Indian Rancheria occurred on October 17, 2018. No objections or changes to the proposal were made. Additional follow-up letters were sent to each tribe indicated above upon the determination of the Section 106 Assessment of Effect and will be sent upon approval of implementation.

California State Historic Preservation Office

In accordance with Section 106 of the National Historic Preservation Act, the National Park Service provided the State Historic Preservation Officer (SHPO) of the California State Department of Archaeology and Historic Preservation an opportunity to comment on the proposed undertaking and the area of potential effects associated with this project (Ref: NPS_2018_0613_001) (SHPO response to June 8, 2018 NPS letter to initiate consultation dated June 14, 2018; SHPO response to September 27, 2018 NPS letter to describe Area of Potential Effects dated December 3, 2018).

As evaluated herein, proposed actions associated with the selected action would have no adverse effect on resources listed or eligible for listing in the National Register of Historic Places or on other historic or cultural resources in the park. Concurrence with the determination of No Adverse Effect was received on May 1, 2019.

U.S. Fish and Wildlife Service / National Marine Fisheries Service

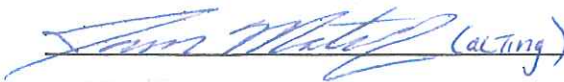
In accordance with the Endangered Species Act, the NPS contacted the USFWS database to confirm that no federally listed species and no habitat occurs in the park. Because there are no federally listed species that occur in the park, there would be no effect on listed species or their habitat and there is no requirement for additional consultation under the Endangered Species Act.

Finding

On the basis of the information contained in the EA as summarized above, the NPS has determined that implementing the selected alternative is not a major federal action nor is it an action without precedent or similar to an action that normally requires an Environmental Impact Statement (EIS). The conclusions of non-significance are supported by the conservation planning and environmental impact analysis completed and the capability of listed mitigation measures to reduce or eliminate impacts. No adverse effects to cultural or historical resources will occur; and there are no unacceptable impacts. This determination also included due consideration of the minor nature of agency and public comments.

Therefore, in compliance with the National Environmental Policy Act, an EIS will not be prepared, and the project may be implemented immediately.

Recommended:

 (at Ting) 06/03/2019

James Richardson Date
Superintendent, Lassen Volcanic National Park

Approved:

 6/7/19

Stan Austin Date
Regional Director, Pacific West Region

