United States Department of the Interior

NATIONAL PARK SERVICE

Yosemite National Park
P. O. Box 577
Yosemite, California 95389

IN REPLY REFER TO:
L7615(YOSE-PM)

Memorandum

To: Kerstin Henry, Project Manager, Yosemite National Park

From: Superintendent, Yosemite National Park

Subject: NEPA and NHPA Clearance: 2018-011 Crane Flat Campground Septic Leach Fields Replacement (79120)

The Superintendent and park interdisciplinary team have reviewed the proposed project and completed an impact analysis and documentation, and have determined the following:

- There will not be any effect on threatened, endangered, or rare species and/or their critical habitat.
- There will be no adverse effect to historic properties.
- There will not be serious or long-term undesirable environmental or visual effects.

The subject proposed project, therefore, is now cleared for all NEPA and NHPA compliance requirements as presented above. Project plans and specifications are approved and construction and/or project implementation can commence.

For the proposed project actions to be within compliance requirements during construction and/or project implementation, the following mitigations must be adhered to:

- Archeological monitoring will be undertaken during ground disturbance activities of construction.
- Coordinate with park wildlife staff if work occurs in the spring during Great Grey owl nesting season.
- Ensure coordination with Campground Management to ensure proper closures are in place for work. Currently reservations are in place through September 2018. If work will occur in Spring 2019, Campground Management will need to be notified by December 2018.
- Ensure equipment is cleaned and inspected prior to entering the park. All aggregate should be weed-free from an approved source.
- Further design analysis is needed to see if the 48-inch and 32-inch white firs can be avoided.
- Revegetation strategy: topsoil and duff salvage and replacement by the contractor, with a natural resource monitor to ensure that they are doing this adequately.
- Invasive plant mitigation: survey and control by Resources Management and Science staff.

Recommendations for Conditions or Stipulations: None

For complete compliance information see PEPC Project 79120.

_____*/Michael T. Reynolds/*_____
Michael T. Reynolds, Superintendent

The signed original of this document is on file at the Environmental Planning and Compliance Office in Yosemite National Park.

Enclosure (with attachments)

cc: Statutory Compliance File

Categorical Exclusion Form

Project: 2018-011 Crane Flat Campground Septic Leach Fields Replacement
PEPC Project Number: 79120
Project Description:

The Crane Flat campground is comprised of five loops (loops 100 through 500, or alternately called loops "A" through "E") with a total of 160 camp sites. The campground has five comfort stations, currently each with its own septic tank and leach field. The comfort stations were constructed in sites that pose a challenge to design a septic system that would allow for gravity flows. The original leach fields were constructed in 1963 and were modified in the mid-1980s. The typical design life of a leach field, without relocation and large scale renewal of the surrounding soils, is typically 20-40 years. The age and the location of the current leach fields have resulted in multiple incidents of effluent surfacing in the leach field areas, indicating insufficient disposal capacity. Consistent visitor complaints about unacceptable levels of sewage odors are also indicative of a septic system that is not functioning correctly. Due to ongoing issues with surfacing effluent, and insufficient capacity, the septic system at comfort station building No. 3 (#6041) is completely nonfunctional and the comfort station has remained closed for several years. This area is currently being served with portable restroom facilities.
The project will replace all of the leach fields within the Crane Flat Campground. Actions include:

Comfort Station No. 1 (#6039) – Replace existing leach field with a pre-engineered leach field installed in the northwestern portion of the interior of the 200 loop, directly adjacent to the loop 200 campground road. Installation of this pre-engineered leach field would include the following activities:

- Excavation of a rectangular area, approximately 20 feet wide by 65 feet long, and an average depth of 5 feet.
- Installation (within the excavation) of the pre-engineered leach field. The leach field is approximately 2.5 feet in depth, and will be capped with the excavated soils. The area will then be graded to match natural existing grades to the greatest extent possible.
- The area will then be revegetated with native grasses including the use of natural materials (logs and boulders) to dissuade pedestrian and vehicle traffic.
- Approximately 150 feet of 4-inch diameter high-density polyethylene (HDPE) pipe will be installed, connecting the existing septic tank to the new leach field. The average depth of the trench is approximately 3 feet (minimum 2.5 feet, maximum 4.5 feet). The trench width will be minimized to the greatest extent possible, and will average about 2 feet. The trench will be backfilled using the excavated soils and revegetated with native grasses; where the trench crosses the campground road, the road will be repaired to match the existing road profile and section.
- A vent would be located adjacent to the Comfort Station No. 1 leach field, positioned to minimize visual intrusion and painted to blend with the surrounding vegetation and trees.

Comfort Station No. 2 (#6040) – Replace existing leach field with a pre-engineered leach field installed in the southwestern portion of the interior of the 200 loop, directly adjacent to the loop 200 campground road. Installation of this pre-engineered leach field would include the following activities:

- Excavation of a rectangular area, approximately 25 feet wide by 50 feet long, and an average depth of 5 feet.

- Installation (within the excavation) of the pre-engineered leach field. The leach field is approximately 2.5 feet in depth, and will be capped with the excavated soils. The area will then be graded to match natural existing grades to the greatest extent possible.
- Revegetation with natives grasses including the use of natural materials (logs and boulders) to dissuade pedestrian and vehicle traffic.
- Approximately 60 feet of 4-inch diameter HDPE pipe will be installed, connecting the existing septic tank to the new leach field. The average depth of the trench is approximately 3 feet (minimum 2.5 feet, maximum 3.5 feet). The trench width will be minimized to the greatest extent possible and will average about 2 feet. The trench will be backfilled using the excavated soils and revegetated with native grasses; where the trench crosses the campground road, the road will be repaired to match the existing road profile and section.
- A vent would be located adjacent to the Comfort Station No. 2 leach field, positioned to minimize visual intrusion and painted to blend with the surrounding vegetation and trees.

Comfort Station No. 3 (#6041) and Comfort Station No. 5 (#6043) – Replace existing leach fields with a single conventional leach field in the southern portion of the 500 loop. Installation of this conventional leach field would include the following activities:

- Excavation of an oblong area (following natural topography), approximately 10 feet wide by 240 feet long, and an average depth of 5 feet.
- Installation (within the excavation) of the leach field piping and gravel/sand media. The leach field media is approximately 4 feet in depth, and will be capped with the excavated soils. The area will then be graded to match natural existing grades to the greatest extent possible.
- Revegetation with native grasses including the use of natural materials (logs and boulders) to dissuade pedestrian and vehicle traffic.
- Approximately 280 feet of 4-inch diameter HDPE pipe will be installed, connecting the two existing septic tanks to the new leach field. The average depth of the trench is approximately 3 feet (minimum 2.5 feet, maximum 3.5 feet). The trench width will be minimized to the greatest extent possible and will average about 2 feet. The trench will be backfilled using the excavated soils and revegetated with native grasses; where the trench crosses the campground road (in two locations), the road will be repaired to match the existing road profile and section.

Comfort Station No. 4 (#6042) – Replace existing leach field with a conventional leach field, located in the eastern portion of the area between the 400 and 500 loops. Installation of this conventional leach field would include the following activities:

- Excavation of an oblong area (following natural topography and avoiding existing trees to the extent possible), approximately 10 feet wide by 100 feet long, and an average depth of 5 feet.
- Installation (within the excavation) of the leach field piping and gravel/sand media. The leach field media is approximately 4 feet in depth, and will be capped with the excavated soils. The area will then be graded to match natural existing grades to the greatest extent possible.
- Revegetation with native grasses including the use of natural materials (logs and boulders) to dissuade pedestrian and vehicle traffic.
- Approximately 280 feet of 4-inch diameter HDPE pipe will be installed, connecting the two existing septic tanks to the new leach field. The average depth of the trench is approximately 3 feet (minimum 2.5 feet, maximum 3.5 feet). The trench width will be minimized to the greatest extent possible, and will average about 2 feet. The trench will be backfilled using the excavated soils and revegetated with native grasses; where the trench crosses the campground road (in two locations), the road will be repaired to match the existing road profile and section.

The comfort stations are located in sites that pose a challenge to design a septic system that would allow for gravity flows. Because of these site constraints, the park is proposing to use a pre-engineered leach field system;

an in-ground passive treatment that does not require pumping or aeration. The design includes routing the sewage through pipes that have a vent-like connection to the atmosphere that allows the air to come into the Advanced Enviro-Septic (AES) pipe system and provide a mechanism for aerobic treatment.

This project includes the following approximate tree removal; 17 White firs (10 that are less than 8" diameter at breast height (dbh), five that are 16" - 24" dbh, one 48" dbh, and one 32" dbh) and two Western red cedars less than 20" dbh.

Project Locations:

Mariposa County, CA

Mitigations:

- Archeological monitoring will be undertaken during ground disturbance activities of construction.
- Coordinate with park wildlife staff if work occurs during Great Grey owl nesting season.
- Ensure coordination with Campground Management to ensure proper closures are in place for work. Currently reservations are in place through September 2018. If work will occur in Spring 2019, Campground Management will need to be notified by December 2018.
- Ensure equipment is cleaned and inspected prior to entering the park. All aggregate should be weed-free from an approved source.
- Further design analysis is needed to see if the 48-inch and 32-inch white firs can be avoided.
- Revegetation strategy: topsoil and duff salvage and replacement by the contractor, with a natural resource monitor to ensure that they are doing this adequately.
- Invasive plant mitigation: survey and control by Resources Management and Science staff.

CE Citation: C.15 Installation of underground utilities in previously disturbed areas having stable soils, or in an existing utility right-of-way.

Decision: I find that the action fits within the categorical exclusion above. Therefore, I am categorically excluding the described project from further NEPA analysis. No extraordinary circumstances apply**.**

Superintendent: *//Michael T. Reynolds//* **Date:** 06/21/18

Michael T. Reynolds

The signed original of this document is on file at the Environmental Planning and Compliance Office in Yosemite National Park.

Extraordinary Circumstances: If implemented, would the proposal...	Yes/No	Notes
A. Have significant impacts on public health or safety?	No	
B. Have significant impacts on such natural resources and unique geographic characteristics as historic or cultural resources; park, recreation, or refuge lands; wilderness areas; wild or scenic rivers; national natural landmarks; sole or principal drinking water aquifers; prime farmlands; wetlands (Executive Order 11990); floodplains (Executive Order 11988); national monuments; migratory birds; and other ecologically significant or critical areas?	No	
C. Have highly controversial environmental effects or involve unresolved conflicts concerning alternative uses of available resources (NEPA section 102(2)(E))?	No	
D. Have highly uncertain and potentially significant environmental effects or involve unique or unknown environmental risks?	No	
E. Establish a precedent for future action or represent a decision in principle about future actions with potentially significant environmental effects?	No	
F. Have a direct relationship to other actions with individually insignificant, but cumulatively significant, environmental effects?	No	
G. Have significant impacts on properties listed or eligible for listing on the National Register of Historic Places, as determined by either the bureau or office?	No	
H. Have significant impacts on species listed or proposed to be listed on the List of Endangered or Threatened Species, or have significant impacts on designated Critical Habitat for these species?	No	
I. Violate a federal, state, local or tribal law or requirement imposed for the protection of the environment?	No	
J. Have a disproportionately high and adverse effect on low income or minority populations (EO 12898)?	No	
K. Limit access to and ceremonial use of Indian sacred sites on federal lands by Indian religious practitioners or adversely affect the physical integrity of such sacred sites (EO 130007)?	No	
L. Contribute to the introduction, continued existence, or spread of noxious weeds or non-native invasive species known to occur in the area or actions that may promote the introduction, growth, or expansion of the range of such species (Federal Noxious Weed Control Act and Executive Order 13112)?	No	

ENVIRONMENTAL SCREENING FORM (ESF)

Updated Sept 2015 per NPS NEPA Handbook

A. PROJECT INFORMATION

Project Title: 2018-011 Crane Flat Campground Septic Leach Fields Replacement
PEPC Project Number: 79120
Project Type: Repair/Rehabilitation (REHAB)
Project Location:
County, State: Mariposa, California
Project Leader: Kerstin Henry

B. RESOURCE IMPACTS TO CONSIDER:

Resource	Potential for Impact	Potential Issues & Impacts
Air Air Quality	Potential	Leach field replacement includes ground disturbance that will produce some dust. Temporary air emissions will be minimized to the greatest extent possible.
Biological Nonnative or Exotic Species	Potential	Equipment will be cleaned prior to entering into the park. All aggregate will be acquired from a weed-free source.
Biological Species of Special Concern or Their Habitat	None	
Biological Vegetation	Potential	This project includes some tree removal; 17 White firs (10 that are less than 8" diameter at breast height (dbh), five that are 16" - 24" dbh, one 48" dbh, and one 32" dbh) and two Western red cedars less than 20" dbh.
Biological Wildlife and/or Wildlife Habitat including terrestrial and aquatic species	Potential	Work will be coordinated with park wildlife staff to avoid Great Grey owl nesting season.
Cultural Cultural Landscapes	None	
Cultural Ethnographic Resources	None	Tribes and groups associated with the park have been consulted. No comments were received as of June 18, 2018.

Cultural Museum Collections	None	
Cultural Prehistoric/historic structures	None	
Geological Geologic Features	Potential	Project will include ground disturbance to install the new leach fields. Archeological investigations have been conducted to inform trench locations. No significant archeological deposits found during investigations outside of recorded archeological site boundary. Archeological monitoring will be undertaken during ground disturbance activities of construction.
Geological Geologic Processes	None	
Lightscapes Lightscapes	None	
Other Human Health and Safety	Potential	A properly functioning leach field will prevent visitors from coming into contact with surfacing effluent.
Other Operational	Potential	The Crane Flat Campground will be closed during the leach field replacement. Reservations will be adjusted to accommodate the work.
Socioeconomic Land Use	None	
Socioeconomic Minority and low-income populations, size, migration patterns, etc.	None	
Socioeconomic Socioeconomic	None	
Soundscapes Soundscapes	Potential	Temporary construction equipment noises will occur during the work.
Viewsheds Viewsheds	None	
Visitor Use and Experience Recreation Resources	None	
Visitor Use and Experience Visitor Use and Experience	Potential	The visitor experience will be improved by upgrading the leach field, with less surfacing effluent and offensive smells.
Water	None	

Floodplains		
Water Marine or Estuarine Resources	None	
Water Water Quality or Quantity	None	
Water Wetlands	None	
Water Wild and Scenic River	None	
Wilderness Wilderness	None	

ASSESSMENT OF ACTIONS HAVING AN EFFECT ON HISTORIC PROPERTIES

A. DESCRIPTION OF UNDERTAKING

1. Park: Yosemite National Park

2. Project Description:

Project Name: 2018-011 Crane Flat Campground Septic Leach Fields Replacement
Prepared by: Renea Kennec **Date Prepared:** 06/18/2018 **Telephone:** 209-379-1038
PEPC Project Number: 79120
Locations:
County, State: Mariposa, CA

Area of potential effects (as defined in 36 CFR 800.16[d])
The APE for this undertaking is defined as the Crane Flat Campground. The vertical APE above grade would not exceed the 4 foot high (6" diameter) vents needed for the pre-engineered leach field system. Below grade, the vertical APE would vary due to the design constraints of the systems being installed. The pre-engineered leach fields to be installed for Comfort Stations Nos. 1 and 2 must be installed level in order to ensure proper functioning. The actual subsurface depth of each leach field will vary based upon the existing, sloped surface topography at each location. Similarly, the high density polyethylene (HDPE) pipes connecting the existing septic tanks to the new leach fields at each location must be installed at a consistent slope to ensure proper gravity flow of the conveyed liquids, resulting in variable depths from the ground surface to the pipe depending on the topography of the existing ground surface above the pipe. At Comfort Station No. 1, the minimum depth of the leach field will be 2.5 feet at the northeast corner and the maximum depth will be 6.5 feet on the southwest corner, and the minimum depth of the HDPE pipe from the septic tank to the leach field will be 3 feet with a maximum depth of 6 feet. At Comfort Station No. 2, the minimum depth of the leach field will be 5 feet at the southeast corner and the maximum depth will be 6 feet on the northwest corner, and the minimum depth of the HDPE pipe from the septic tank to the leach field will be 3 feet with a maximum depth of 6 feet. At Comfort Stations Nos. 3 and 4, the individual leach lines will be installed so as to traverse the sloped ground at a consistent depth with a consistent maximum depth to bottom of excavation of 5 feet. At Comfort Station No. 3, the minimum depth of the HDPE pipe from the septic tank to the leach field will be 3 feet with a maximum depth of 6 feet. At Comfort Station No. 4, the minimum depth of the HDPE pipe from the septic tank to the leach field will be 2 feet with a maximum depth of 6 feet.

3. Has the area of potential effects been surveyed to identify historic properties?

___ **No**
_X_ **Yes**
Source or reference:

4. Potentially Affected Resource(s):

Archeological Resources Affected: Yes

Property Name: Crane Flat Archeological District **LCS:**

Historical Structures/Resources Affected: No

Cultural Landscapes Affected: No

Ethnographic Resources Affected: No, tribes and groups associated with the park have been consulted. No comments were received as of June 18, 2018.

Ethnographic Resources Notes: An archeological investigation has been conducted.

5. The proposed action will: (check as many as apply)

No Destroy, remove, or alter features/elements from a historic structure

No Replace historic features/elements in kind

No Add non-historic features/elements to a historic structure

No Alter or remove features/elements of a historic setting or environment (inc. terrain)

No Add non-historic features/elements (inc. visual, audible, or atmospheric) to a historic setting or cultural landscape

No Disturb, destroy, or make archeological resources inaccessible

No Disturb, destroy, or make ethnographic resources inaccessible>

Yes Potentially affect presently unidentified cultural resources

No Begin or contribute to deterioration of historic features, terrain, setting, landscape elements, or archeological or ethnographic resources

No Involve a real property transaction (exchange, sale, or lease of land or structures)

Other (please specify): _____

6. Supporting Study Data:
(Attach if feasible; if action is in a plan, EA or EIS, give name and project or page number.)

B. REVIEWS BY CULTURAL RESOURCE SPECIALISTS

The park 106 coordinator requested review by the park's cultural resource specialist/advisors as indicated by check-off boxes or as follows:

[X] 106 Advisor
Name: Kimball Koch
Date: 06/18/2018
Comments: The Crane Flat Campground was assumed eligible for listing on the National Register for the purposes of completing Section 106 compliance. The property is potentially eligible as a Mission-66 era campground. The CRM team determined that there would no adverse effect to the campground since the utilities are underground and the ground plain would be restored to its original appearance. Archeological investigations determined that the project would have no significant effects to archeological resources. Archeological monitoring will be undertaken during ground disturbance activities.

The park initiated consultation with the SHPO's office on April 3, 2018 (steps 1 and 2). On May 8th, the SHPO responded to the NPS initiation letter. The park sent an assessment of no adverse effect (step 3) letter to SHPO on May 18, 2018. On June 8, 2018, the park sent an email requesting concurrence with the finding of no adverse effect for the project. No response has been received from as of June 18, 2018. On June 19th, the park sent a second email requesting immediate review of the project and concurrence with the finding of no adverse effect.

Check if project does not involve ground disturbance **[ ]**
Assessment of Effect: ___No Potential to Cause Effect ___No Historic Properties Affected __X__No Adverse Effect ___Adverse Effect ___Streamlined Review
Recommendations for conditions or stipulations:

Doc Method: Standard 4-Step Process

[X **] Anthropologist**
Name: Scott Carpenter
Date: 06/18/2018
Comments: No comments received from tribes regarding project.

Check if project does not involve ground disturbance **[ ]**
Assessment of Effect: ___No Potential to Cause Effect ___No Historic Properties Affected __X__No Adverse Effect ___Adverse Effect ___Streamlined Review
Recommendations for conditions or stipulations:

[X **] Archeologist**
Name: Scott Carpenter
Date: 06/18/2018
Comments: No significant archeological deposits found during recent investigations outside of recorded archeological site boundary. Archeological monitoring will be undertaken during ground disturbance activities of construction.

Check if project does not involve ground disturbance **[ ]**
Assessment of Effect: ___No Potential to Cause Effect ___No Historic Properties Affected __X__No Adverse Effect ___Adverse Effect ___Streamlined Review
Recommendations for conditions or stipulations: Archeological monitoring will be undertaken during ground disturbance activities of construction.

[X **] Historian**
Name: Scott Carpenter
Date: 06/18/2018
Comments: Crane Flat Campground is being investigated and documented as part of the Mission 66 parkwide study. Construction of leach lines will not adversely affect any potentially eligible M-66 structures or features. No historical architect review required because no historic buildings are affected by the project.

Check if project does not involve ground disturbance **[ ]**
Assessment of Effect: ___No Potential to Cause Effect ___No Historic Properties Affected __X__No Adverse Effect ___Adverse Effect ___Streamlined Review
Recommendations for conditions or stipulations:

[X] Historical Landscape Architect
Name: Kimball Koch
Date: 06/18/2018

Check if project does not involve ground disturbance **[ ]**
Assessment of Effect: ___No Potential to Cause Effect ___No Historic Properties Affected __X__No Adverse Effect ___Adverse Effect ___Streamlined Review
Recommendations for conditions or stipulations:

No Reviews From: Curator, Historical Architect, Other Advisor

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C. PARK SECTION 106 COORDINATOR'S REVIEW AND RECOMMENDATIONS

1. Assessment of Effect:

_____ No Potential to Cause Effects
_____ No Historic Properties Affected
X____ No Adverse Effect
_____ Adverse Effect

2. Documentation Method:

[X] A. Standard 36 CFR Part 800 Consultation
Further consultation under 36 CFR Part 800 is needed.

[ ] B. Streamlined Review Under the 2008 Servicewide Programmatic Agreement (PA)
The above action meets all conditions for a streamlined review under section III of the 2008 Servicewide PA for Section 106 compliance.

Applicable Streamlined Review Criteria
(Specify 1-16 of the list of streamlined review criteria.)

[ ] C. Undertaking Related to Park Specific or Another Agreement
The proposed undertaking is covered for Section 106 purposes under another document such as a park, region or statewide agreement established in accord with 36 CFR 800.7 or 36 CFR 800.14.

[ ] D. Combined NEPA/NHPA Process
Process and documentation required for the preparation of an EA/FONSI or an EIS/ROD to comply with Section 106 is in accord with 36 CFR 800.8.c.

[ ] E. Memo to Project File

3. Consultation Information

SHPO Required: Yes, see notes.

THPO Required: Yes
THPO Sent: Mar 2, 2018, no comments were received.

SHPO/THPO Notes: The park initiated consultation with the SHPO's office on April 3, 2018 (steps 1 and 2). On May 8th, the SHPO responded to the NPS initiation letter. The park sent an assessment of no adverse effect (step 3) letter to SHPO on May 18, 2018. On June 8, 2018, the park sent an email requesting concurrence with the finding of no adverse effect for the project. No response has been received from as of June 18, 2018. On June 19th, the park sent a second email requesting immediate review of the project and concurrence with the finding of no adverse effect.

Advisory Council Participating: No
Additional Consulting Parties: No

4. Stipulations and Conditions: Following are listed any stipulations or conditions necessary to ensure that the assessment of effect above is consistent with 36 CFR Part 800 criteria of effect or to avoid or reduce potential adverse effects.

5. Mitigations/Treatment Measures: Measures to prevent or minimize loss or impairment of historic/prehistoric properties: (Remember that setting, location, and use may be relevant.)

- Assessment of Effect - Archeological monitoring will be undertaken during ground disturbance activities of construction.

6. Assessment of Effect Notes:

The Crane Flat Campground was assumed eligible for listing on the National Register for the purposes of completing Section 106 compliance. The property is potentially eligible as a Mission-66 era campground. The CRM team determined that there would no adverse effect to the campground since the utilities are underground and the ground plain would be restored to its original appearance. Archeological investigations determined that the project would have no significant effects to archeological resources. Archeological monitoring will be undertaken during ground disturbance activities.

D. RECOMMENDED BY PARK SECTION 106 COORDINATOR:

Kimball Koch *//Kimball Koch//* **Date:** 06/20/18

E. SUPERINTENDENT'S APPROVAL

The proposed work conforms to the NPS *Management Policies* and *Cultural Resource Management Guideline*, and I have reviewed and approve the recommendations, stipulations, or conditions noted in Section C of this form.

Superintendent: *//Michael T. Reynolds//* **Date:** 06/21/18

Michael T. Reynolds

The signed original of this document is on file at the Environmental Planning and Compliance Office in Yosemite National Park.