

A PDF text file of the project's approved environmental compliance package containing the letter of compliance completion, categorical exclusion form, environmental screening form, and any other associated environmental clearance forms, as applicable (e.g., Wilderness Minimum Requirement Analysis, Wild and Scenic River Section 7 Analysis). The signed originals of the package are on file in the Environmental Planning and Compliance Office at Yosemite National Park.

**Yosemite National Park** 

Date: 02/03/2021

# **Letter of Compliance Completion**

To: Russell Mitchell, Project Manager, Yosemite National Park

From: Cicely Muldoon, Superintendent, Yosemite National Park

**Subject:** NEPA and NHPA Clearance: 2021-059 Prescribed Burn- Yosemite Valley Units 11, 13, 15, and 16 (PEPC: 97856)

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

- The project is not likely to adversely affect 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.

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

### General

• Coordinate and consult with Park resources staff (wildlife, archeology, vegetation etc.), concessioners, facilities, and other affected stakeholders at least 1 week ahead of burning to identify sensitive areas, allow for operational planning, and ensure the implementation of applicable mitigation measures.

### Wildlife- Amphibians

- There is a BO in place for California Red-legged Frogs. Please follow mitigations specific to prescribed burning:
  - 1. A Resource Advisor will be on staff for all prescribed fires or wildfires in the Valley. Please regularly update Heather Mackey and Rob Grasso on plans (allowing a minimum of a week ahead of time to enable assignment of a READ).
  - 2. For prescribed fires, a biological monitor will conduct pre- and post- surveys for CRLF.
  - 3. Slash piles will be burned as soon as possible to prevent potential colonization from red-legged frogs.

- 4. All wood piles in frog habitat will be lit from the top or from one side to allow for frogs or other animals at the bottom of pile to escape.
- 5. No lighting of wood piles will be allowed directly in meadow or wetland habitat, or 25 feet from standing or flowing water.
- 6. No direct application of petroleum fuel are allowed within 25 feet of standing water; the use of a propane torch is allowed to the water's edge, but drip torches are not.
- 7. The lighting strategy will require minimal passes in known occupied areas.
- 8. If possible, conduct burning of 'burn piles' one day before broadcast burns to allow frogs to move out of the area.
- California red-legged frog mitigations common to all projects:
  - 1. Park biologists will facilitate education and outreach activities with associated YNP work teams prior to project implementation, including CRLF identification, CRLF habitat, and best practices for minimizing impacts to the species and habitat.
  - 2. YNP will encourage employees to drive slowly on rainy, warm nights (nights where CRLF dispersal is likely)
  - 3. Workers will avoid working at night and during/ shortly after rain events to the greatest extent possible.
  - 4. If pits or trenches are excavated, NPS or the Contractor shall maintain routes of escape for CRLF (ramps or inclines) or pits/ trenches will be covered.
  - 5. If dewatering occurs, intakes will be completely screened with wire mesh not larger than 5 millimeters to prevent CRLF from entering the pump system. Water will be released or pumped downstream at an appropriate rate to maintain downstream flows during construction.
  - 6. Work crews will follow BMPs to reduce sediment and erosion.

### Wildlife- Fisher

- There is a BO in place for fisher. Please follow mitigations specific to prescribed burning:
  - o Emphasize low-intensity broadcast burning, especially in areas with heavy fuel loads.
  - o Rake or pre-burn around high quality trees and snags where fuel conditions threaten their retention.
  - o Consult with Park wildlife staff (Heather Mackey, (209) 379-1454) during planning to avoid and/or enhance suitable habitat and corridors to the greatest extent possible.
  - Avoid tree-cutting or other pre-burning prep-work that involves habitat modification or disturbance within potential or high-quality denning habitat from March 1 to May 31 or within den clusters from March 1 to June 30. This limited operating period (LOP) within den clusters can be lifted on June 1 if pre-project surveys document absence of fisher (Tucker et al. 2020). This LOP within den clusters may otherwise be waived or modified if the Park Biologist determines that the project is unlikely to result in breeding disturbance due to the intensity, duration, timing, and specific location of the activity (e.g., activities that will affect only ten acres of denning habitat along a high traffic road for a period of three days after May 1 and will not remove any large trees).
  - Avoid prescribed understory burning in potential denning habitat from March 1 to April 30.
  - Leave slash piles and downed trees where possible to provide resting sites and habitat for prey, while still meeting project goals of fuel reduction. If they must be burned, avoid burning from March 15 to April 30.
  - o If understory burning must be conducted from March 1 to April 30, use topography to limit smoke buildup in potential or high quality denning habitat.
- Please follow fisher mitigations common to all projects:
  - To the extent feasible, maintain all high quality trees (i.e., trees with broken tops, cavities, large branches, or other deformities that occur in high quality habitat, especially live hardwoods >20 inches in dbh, live conifers >30 inches in dbh, dead hardwoods >27 inches in dbh, and dead conifers >35 inches in dbh).

- o To the extent feasible, maintain all potential natal and maternal den trees and resting sites.
- o Maintain and enhance desired stand-level characteristics in suitable habitat.
- o Maintain and enhance habitat heterogeneity within and between core habitat areas.
- o To the extent feasible, maintain and enhance cover between habitat patches to allow for connectivity.
- o To the extent feasible, avoid habitat modifications or disturbance-causing activities within potential or high-quality denning habitat during the denning season.
- Store food and anthropogenic garbage in Park-approved containers so fishers cannot obtain it.
- o Ensure construction fencing allows for the safe passage of fishers and does not cause entrapment.
- Teach work crews how to identify a fisher and den trees before work begins. Instruct them to contact the Park Wildlife Biologist immediately if a fisher is seen in or near the project site. If a fisher is spotted within a construction site, work will cease until the animal moves on without harassment. If a fisher is spotted in a potential den tree, work will cease, and the Park Wildlife Biologist will be contacted. The wildlife biologist will contact the Service for further guidance.

### Wildlife- General

• Compliance with food-storage and garbage disposal requirements must be achieved at all times.

### Meadows/Wetlands/Vegetation

- When igniting prescribed fire in open meadows in Yosemite Valley, VER prefers multiple spot ignitions and jackpotting at meadow edges/areas of conifer encroachment, allowing fire to spread on its own into the interior of open meadows. We request that fire staff avoid lining out ignitions through meadow interiors and avoid trying to burn entire meadow interiors. While native meadow vegetation benefits from fire (along with thinning conifers/maintaining open conditions), VER prefers a mosaic of burned and unburned conditions in meadow interiors that they hope will mitigate the invasive plant spread that happens after fire in meadows that currently have many small patches of invasive plants, as for YV-15. Please work with VER staff to discuss this in more detail ahead of the burn.
- Please place containment lines in upland vegetation, not within the meadow. If possible, use a wet line at meadow edges and don't use tools to scratch out every last ember in perennial herbaceous vegetation in the meadow edge during mop up. (This is from the following observations: there can be some excessive disturbance during mop up to scratch out every bit of smoldering vegetation. Scratching the plants over and over leads to a lot of disturbance and unintentionally killing perennial vegetation. Many native perennials will re-sprout after burning, but if they get raked with tools over and over, it kills the living roots, and they don't re-sprout. The disturbed soil, where perennial vegetation has been killed off and won't be able to quickly re-establish, is basically freshly cultivated and fertilized soil, and perfect habitat for non-native plants to quickly invade into.)
- There is one special status plant species, Mimulus laciniatus, in YV-15. The species benefits from fire, but consult with Plant Ecologist (Kimiora Ward, (209) 379-3293) to avoid rare and invasive plant populations when constructing containment line.

### **Cultural Resources**

- Assessment of no adverse effect is contingent on the following stipulations. Consult with Fire
  Archeologist (Kendra Owenby, (209) 379-1317) to identify sites and ensure site preparations ahead of the
  burn:
  - Remove fuels from features in CA-MRP-0066/H, CA-MRP-0068/1806/H, CA-MRP-0069, CA-MRP-0075, CA-MRP-0076/H, CA-MRP-0158/309, CA-MRP-0159, CA-MRP-0160, CA-MRP-0320/H, CA-MRP-0817, CA-MRP-1196/1751H, CA-MRP-1425H, CA-MRP-2519H.
  - o Heavy equipment use within sites should be reviewed by the fire archeologist.
  - o Avoid mop-up in all sites, except for CA-MRP-1425H as mop up is highly unlikely to damage this mostly paved trail. If mop-up is necessary within a site, must have archeological monitor.

- Keep burn piles created during mechanical thinning outside of site boundaries or within non-sensitive areas.
- o All new handlines will be cleared and monitored by an archeologist.
- o An archeological monitor will be present during firing operations and mop-up.
- If concealed archeological resources are encountered during project activities, ensure protection measures are taken and initiate consultation with SHPO and traditionally associated tribes, as necessary.
- o If additional containment lines become necessary, ensure that archeological sites will be avoided unless previously constructed lines are utilized.
- o Integrate cultural resource awareness and protection into daily fire briefings during implementation of the prescribed burn.
- o Conduct post-burn assessments at archeological sites following prescribed burning to document fire effects to cultural resources and assess potential post-fire treatment needs.
- Please be mindful of the potential for culturally significant black oak groves within burn area. Fire staff have made inquiries about tribal cultural burning practices within the black oak groves. The black oak groves in Yosemite Valley are listed as cultural Outstandingly Remarkable Values in the Merced River Plan. Please advise the tribal liaison when this project might be implemented.

### **Air Quality**

• The Project Manager should work with the appropriate Air Resource District to register the burn and secure any necessary Smoke Management Plan permits prior to ignition to minimize any adverse smoke impacts to air quality. Project Manager will refer to procedures noted in the 2004 Final Yosemite Fire Management Plan EIS for mitigation of potential air quality impacts.

Superintendent: Cicely Muldoon Date: February 8. 2021

Cicely Muldoon

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



# **Categorical Exclusion Documentation Form (CE Form)**

Project: Prescribed Burn- Yosemite Valley Units 11, 13, 15, and 16

**PEPC Project Number: 97856** 

**Description of Action (Project Description):** 

The National Park Service is proposing to initiate prescribed burns as early as fall 2020 in the Yosemite Valley outer Wildland-Urban Interface (WUI) area. The proposed burn would cover an area of approximately 222 acres of the park within four of the Yosemite Valley burn units (YV-11, YV-13, YV-15, and YV-16) north and south of the Merced River between El Capitan to the west and Yosemite Village to the east. This project will build on past prescribed fire activities and recent thinning and pile burning work in the area with the goal of reducing fuel loading within the Yosemite Valley outer WUI buffer.

The segments will be burned in two phases with the units north of the Merced River (YV- 13 and YV-15) being burned in one phase and the segments south of the river (YV-11 and YV-16) being burned in a separate phase. The north segments will be held to the north by Northside Drive and to the south by the river. The western holding line will be the Valley Loop trail where it passes through the meadow just west of the El Capitan Picnic Area. The eastern holding line will be the Valley Loop Trail where it meets the road just west of Leidig Meadow. The segments south of the river will be held to the north by Southside Drive and to the south by the Valley Loop Trail. The western holding line will be where the trail meets the road, across the river from the El Capitan Picnic Area. The eastern holding line will follow the section of the Four Mile Trail that runs from the Valley Loop Trail to Southside Drive.

The burn will be conducted by hand ignition using drip torches. Unmanned Aerial Vehicles (UAVs) may be used to assist with igniting the burn if needed. The holding lines for YV-11, YV-13, YV-15, and YV-16 are all currently maintained roads, trails, or natural barriers and no additional ground disturbance is expected. If additional control lines are deemed necessary to facilitate safe burning and to protect resources, they will be reviewed by an interdisciplinary team and approved by the deciding official prior to implementation. The interdisciplinary team is made up of NPS fire staff as well as cultural and natural resources staff (including archaeologists, historians, and cultural anthropologists/tribal liaisons). Avoidance of cultural sites will be necessary and additional survey may be needed. All recommendations for cultural resource preparations listed will be completed prior to ignition.

The Yosemite Valley Unit has a long history of prescribed fire, with the majority of the four segments (YV-11, YV-13, YV-15, and YV-16) having been burned multiple times over the last 50 years. The eastern portion of YV-11 was burned in 1995 and in 2015 most of the segment was burned, with the exclusion of the far western tip. The eastern half of YV-16 was burned in 1993 with the western half burned in 1995. The entirety of YV-16 was last burned in 2015. Segment YV-13 was first burned in 1971 with the western half again burned in 1976. A smaller 10-acre area was burned in the central part of YV-13 in 1990 and again in 2001. The western half was last burned in 2002. The entirety of Segment YV-15 was first burned in 1979 with the last burn occurring in 2008. The 2008 burn covered all but the far northern corner of the segment.

### **Mitigation(s):**

See Letter of Compliance Completion Form for mitigations.

CE Citation: B.1 Changes or amendments to an approved plan when such changes would cause no or only minimal environmental impact.

### **CE Justification:**

Action is generally covered by the 2017 Fire Management Plan amendment (PEPC 41967) and 2004 Fire Management Plan. New impacts not covered by the FMP amendment are addressed in the Mitigations and Other Compliance/Consultations section.

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.

<b>Superintendent:</b>	Cicely Muldoon	Date:	February 8. 2021
	Cicely Muldoon		
0	nal of this document is on file at the Planning and Compliance Office in		
Yos	emite National Park		

### **Extraordinary Circumstances:**

Extraordinary Circumstances.		
If implemented, would the proposal	Yes/No	Notes
A. Have significant impacts on public health or safety?	No	
<b>B.</b> Have significant impacts on such natural resources and unique geographic	No	
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?		
C. Have highly controversial environmental effects or involve unresolved conflicts	No	
concerning alternative uses of available resources (NEPA section 102(2)(E))?		
<b>D.</b> Have highly uncertain and potentially significant environmental effects or involve	No	
unique or unknown environmental risks?		
E. Establish a precedent for future action or represent a decision in principle about	No	
future actions with potentially significant environmental effects?		
F. Have a direct relationship to other actions with individually insignificant, but		No longer applicable
cumulatively significant, environmental effects?		per the updated 2020
		CEQ NEPA regulations
		and DOI direction.
<b>G.</b> Have significant impacts on properties listed or eligible for listing on the National	No	
Register of Historic Places, as determined by either the bureau or office?		
H. Have significant impacts on species listed or proposed to be listed on the List of	No	
Endangered or Threatened Species, or have significant impacts on designated		
Critical Habitat for these species?		
I. Violate a federal, state, local or tribal law or requirement imposed for the	No	
protection of the environment?		
J. Have a disproportionately high and adverse effect on low income or minority	No	
populations (EO 12898)?		
K. Limit access to and ceremonial use of Indian sacred sites on federal lands by	No	
Indian religious practitioners or adversely affect the physical integrity of such sacred		
sites (EO 130007)?		
L. Contribute to the introduction, continued existence, or spread of noxious weeds or	No	
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)?		



# **ENVIRONMENTAL SCREENING FORM (ESF)**

**Updated Sept 2015 per NPS NEPA Handbook** 

### A. PROJECT INFORMATION

<b>Project Title:</b>	Prescribed Burn- Yosemite Valley Units 11, 13, 15, and 16
PEPC Project Number:	97856
<b>Project Type:</b>	Fire - Prescribed Burn (PB)
<b>Project Location:</b>	
County, State:	Mariposa, California
Project Leader:	Russell Mitchell

### **B. PROJECT DESCRIPTION**

See Categorical Exclusion form.

# C. RESOURCE IMPACTS TO CONSIDER:

Resource	Potential for Impact	Potential Issues & Impacts
Air Air Quality	Potential	Issue: Prescribed fire project anticipated to generate smoke and air quality impacts.  Impact: Air quality impacts are anticipated to be minor, and much smaller than those produced in large, catastrophic fires (which could result by not taking action).  Project manager will refer to procedures noted in the 2004 Final Yosemite Fire Management Plan EIS for mitigation of potential air quality impacts.
Biological Nonnative or Exotic Species Introduction of noxious plants	Potential	Issue: If fire trucks, bulldozers, or other heavy equipment are staged for fire contingencies, they may act as vectors that could introduce non-native plants.  Impact: Follow resource protections outlined with regard to heavy equipment cleaning and inspection.
Biological Species of Special Concern or Their Habitat CA Red-Legged Frog	Potential	Issue: The project overlaps with habitat for the Federally listed California Red-Legged Frog. Helicopter use may disturb wildlife, especially nesting birds.  Impact: Follow resource protections with regard to special status species. Impacts from this action are expected to be minor and much smaller than those posed by catastrophic fire, which could result from not taking action. Disturbance caused by helicopters may be minimized by performing the burn in the fall or winter.
Biological Vegetation	Potential	Issue: The forest and associated vegetation in the vicinity are fire-adapted and will be impacted by this action.

	I	
		Impact: Impacts from this action are expected to be beneficial to forest health and intended to thwart the potential negative, extensive impacts from large, catastrophic fire, which could result from not taking action.
Biological Wildlife and/or Wildlife Habitat including	Potential	Issue: Fire may have impacts to wildlife communities and habitat (though these ecosystems are fire-adapted); wildlife behavior is impacted by human-caused food conditioning.
terrestrial and aquatic species		Impact: Impacts from this action are expected to be beneficial to forest habitat health and intended to thwart the potential negative, extensive impacts from large, catastrophic fire, which could result from not taking action. Workers will follow resource protections with regard to food/trash storage outlined to prevent food conditioning in wildlife.
Cultural Archeological Resources	Potential	Issue: 10 known archeological sites are located in the project area. See Assessment of Effect for details.
Yosemite Valley Archeological District		Impact: Follow cultural resource protections outlined to avoid impacts to archeological resources.
Cultural Cultural Landscapes	Potential	Issue: The project is located within the Yosemite Valley Historic District and Yosemite Valley Archeological District.
Yosemite Valley Historic District and Yosemite Valley Archeological District		Impact: The goal of the project is to protect the Yosemite Valley outer WUI and its associated cultural resources from the devastating effects of catastrophic wildfire.
Cultural Ethnographic Resources	Potential	Issue: There are seven known ethnographic resources, including villages and gathering areas, located within the project area. See Assessment of Effect for details.
Villages, Gathering Areas		Impact: Follow protection measures to minimize impacts to ethnographic resources.  The Park may involve tribal partners on fire crews to accomplish this burn.
Cultural Museum Collections	None	Issue: Several historic dump sites in the burn area contain potential artifacts.  Impact: Artifacts are not abundant on the surface of the historic dump sites and thus
		the prescribed burn is not anticipated to affect these resources.
Cultural Prehistoric/historic structures Southside Drive, Northside Drive,	None	Issue: Portions of Southside Drive, Northside Drive, the Four Mile Trail, and the Valley Loop Trail will be used as holding lines for this prescribed burn.  Impact: The proposed project is not anticipated to impact these structures with
Northstae Drive, Four Mile Trail, Valley Loop Trail		protection measures in place.
Geological Geologic Features	None	

Geological Geologic Processes	None	
Lightscapes Lightscapes	None	
Other Human Health and Safety	Potential	Issue: Fire operations pose inherent risks to human health and safety. Large, catastrophic fires (which could result from not taking action) also pose risks to human health and safety.  Impact: Follow NPS and Park protocols to safely carry out prescribed burning activities and have contingency plans in place. Overall impacts to human health and safety are improved by decreasing the risk of large, catastrophic fire in the outer WUI that could result from not taking action.
Other Operational Roads, Concessioner operations	Potential	Issue: Prescribed fire may impact NPS and concessioner operations in Yosemite Valley, including delays on the roads serving as holding lines for the prescribed burn.  Impact: Communicate and coordinate project actions well ahead of project implementation, refer to the 2004 Final Yosemite Fire Management Plan EIS for mitigations and procedures regarding communication and coordination.
Other Other	None	
Socioeconomic Land Use	None	
Socioeconomic Minority and low- income populations, size, migration patterns, etc.	None	
Socioeconomic Socioeconomic	None	
Soundscapes Soundscapes Helicopters	Potential	Issue: Helicopters produce a lot of noise.  Impact: Noise from helicopters may disturb wildlife. See Species of Special Concern or Their Habitat, above. This burn occurs in a highly visited area of the park, however the burn is expected to be implemented during a period of low visitation.
Viewsheds Viewsheds Forest Structure	Potential	Issue: The project will clear excessive growth and vegetation from the project area, complementing a recent scenic vista project.  Impact: The project is expected to positively impact the iconic views in the area by creating a more open, park-like forest structure.
Visitor Use and Experience Recreation Resources	Potential	Issue: Areas where prescribed fire activities are planned for implementation, including the popular El Capitan Picnic Area and portions of the Four Mile and Valley Loop Trails, will be temporarily closed to visitation to protect visitor safety.

is a high-use area but the prescribed burning activities will take place in the low-visitation season. Refer to mitigations in the 2004 Final Yosemite Fire Managem Plan EIS to reduce potential visitor impacts.  Visitor Use and Experience Visitor Use and Experience Visitor Experience-Views  Water Marine or Estuarine Resources  Water Water Quality or Quantity  Water Water Water Water Water Water Wild and Scenic River Water W			
Experience Visitor Use and Experience Visitor Experience-Views  Water Horizon Water Wild and Scenic River Merced Wild and Scenic River Merced Wild and Scenic River  Issue: The project area is mainly in Segment 2B (West Yosemite Valley) of the Merced Wild and Scenic River Merced Wild and Scenic River Impact: The project area is mainly in Segment 2B (West Yosemite Valley) of the Merced Wild and Scenic River Merced Wild and Scenic River Impact: The project is not expected to adversely impact the scenic and recreation values of these river segments.	Valley Loop Trail, El Capitan Picnic		area.  Impact: Minor, temporary negative impact to recreation resources. The project area is a high-use area but the prescribed burning activities will take place in the low-visitation season. Refer to mitigations in the 2004 Final Yosemite Fire Management
Floodplains  Merced River.  Impact: The proposed project is expected to diminish flooding hazards by remove potentially damaging vegetative debris from the floodplain.  Water Marine or Estuarine Resources  Water Water Quality or Quantity  Water Wetlands  None  Water Wild and Scenic River  Merced Wild and Scenic River  Impact: The project area is mainly in Segment 2B (West Yosemite Valley) of the Merced Wild and Scenic River, with small portions of YV-15, 16, and 30A in Segment 2A (East Yosemite Valley). These segments are classified as "recreation and "scenic", respectively.  Impact: The project is not expected to adversely impact the scenic and recreation values of these river segments.	Experience Visitor Use and Experience Visitor	Potential	Issue: See Viewsheds, above.
Marine or Estuarine Resources  Water Water Quality or Quantity  None Wetlands  Potential Wild and Scenic River Merced Wild and Scenic River Merced Wild and Scenic River  Wilderness  None  Wilderness  None  None  Water Wild and Scenic River Merced Wild and Scenic River Merced Wild and Scenic River More Wilderness None		Potential	Merced River.  Impact: The proposed project is expected to diminish flooding hazards by removing
Water Quantity  Water Wetlands  Potential Wild and Scenic River Merced Wil	Marine or Estuarine	None	
Water Wild and Scenic River Merced Wild and Scenic River Impact: The project is not expected to adversely impact the scenic and recreation values of these river segments.  Wilderness None	Water Quality or	None	
Wild and Scenic River  River  Merced Wild and Scenic River, with small portions of YV-15, 16, and 30A in Segment 2A (East Yosemite Valley). These segments are classified as "recreation and "scenic", respectively.  Scenic River  Impact: The project is not expected to adversely impact the scenic and recreation values of these river segments.  Wilderness  None		None	
	Wild and Scenic River Merced Wild and	Potential	Merced Wild and Scenic River, with small portions of YV-15, 16, and 30A in Segment 2A (East Yosemite Valley). These segments are classified as "recreational" and "scenic", respectively.  Impact: The project is not expected to adversely impact the scenic and recreational
Wilderness	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:** Prescribed Burn- Yosemite Valley Units 11, 13, 15, and 16

Prepared by: Daniel Sharon Date Prepared: 10/09/2020 Telephone: (209) 379-1038

PEPC Project Number: 97856

**Locations:** 

County, State: Mariposa, CA

### **Describe project:**

See Categorical Exclusion Form.

### Area of potential effects (as defined in 36 CFR 800.16[d])

The APE is limited to the immediate vicinity of the proposed prescribed burn within the Yosemite Valley outer WUI area. The project will occur in an area of approximately 222 acres across four burn units: YV-11, YV-13, YV-15, and YV-16.

Planned containment lines are mainly modern infrastructure or natural barriers. The holding lines for YV-11, YV-13, YV-15, and YV-16 are all currently maintained roads and trails and no additional ground disturbance is expected. The north segments will be held to the north by Northside Drive and to the south by the river. The western holding line will be the Valley Loop trail where it passes through the meadow just west of the El Capitan Picnic Area. The eastern holding line will be the Valley Loop Trail where it meets the road just west of Leidig Meadow. The segments south of the river will be held to the north by Southside Drive and to the south by the Valley Loop Trail. The western holding line will be where the trail meets the road, across the river from the El Capitan Picnic Area. The eastern holding line will follow the section of the Four Mile Trail that runs from the Valley Loop Trail to Southside Drive. Preparation of holding lines will be limited to clearing brush by hand from the immediate area along the trails.

The vertical APE is expected to be limited to the surface and near-surface soils. However, based on burn intensity the heat generated from the fire can cause disturbance to buried archeological materials to a depth of approximately 3 feet below surface. The proposed burn is in a high-use public area and encompasses several popular recreational resources, however the project is anticipated to occur in the spring or the fall when visitation is typically lower. Visible smoke impacts will be temporary for the duration of the burn.

### 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 Present:** Yes

**Property Name:** Yosemite Valley Archeological District LCS:

**Archeological Resources Notes:** CA-MRP-0066/H, CA-MRP-0067/307, CA-MRP-0075, CA-MRP-0076/H, CA-MRP-0308, CA-MRP-0320/H, CA-MRP-1196H/1751H, CA-MRP-1425H, CA-MRP-2098H, CA-MRP-2518H.

Historical Structures/Resources Present: Yes

**Property Name:** Yosemite Valley Historic District LCS:

**Historical Structures/Resources Notes:** Southside Drive, Northside Drive, the Four Mile Trail, and the Valley Loop Trail are all contributing structures of the Yosemite Valley Historic District.

**Cultural Landscapes Present:** Yes

Property Name: Yosemite Valley Archeological District LCS:

**Property Name:** Yosemite Valley Historic District LCS:

**Ethnographic Resources Present:** Yes

Ethnographic Resources Notes: There are seven known ethnographic resources located within the project area including villages and gathering areas. These include the villages of Hakkiah, Kisse, Kompompasah, Soosemmooah, and Loiyah. These villages are thought to be represented by archeological sites in the area. The gathering areas are for snakeroot and mushrooms. The park's American Indian Liaison has provided traditionally associated tribal partners with the project plans including a description of the undertaking through the August 2020 tribal spreadsheet. Comments and concerns were limited to a stressed interest in reducing fuel accumulation in designated traditional black oak gathering areas and groves, particularly to reduce fuels near the roots of the trees. No identified black oak groves are in these locations, but fire management has been informed of this concern and will implement it into their practices.

### 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: Hope Schear Date: 10/27/2020 Comments: No HA/HLA review requested. Tribal consultation is complete, SHPO consultation is complete. Concurrence with No Adverse Effect received 1/27/2020.
Check if project does not involve ground disturbance [ ]  Assessment of Effect:No Potential to Cause EffectNo Historic Properties AffectedX_No Adverse EffectAdverse EffectStreamlined Review  Recommendations for conditions or stipulations: Follow all Tribal Liaison and Park Archaeologist recommendations.
<b>Doc Method:</b> Standard 4-Step Process
[X] Anthropologist Name: Liz Williams Date: 10/27/2020 Comments: Please be mindful of the potential for culturally significant black oak groves within APE. Fire staff has made inquiries about tribal cultural burning practices within the black oak groves. The black oak groves in YV are listed as cultural ORVs in the Merced River Plan. Please advise tribal liaison when this project might be implemented.
Check if project does not involve ground disturbance [ ]  Assessment of Effect:No Potential to Cause EffectNo Historic Properties AffectedX_No Adverse EffectAdverse EffectStreamlined Review  Recommendations for conditions or stipulations:
Doc Method: Standard 4-Step Process
[X] Archeologist Name: Wesley Wills Date: 10/27/2020 Comments: The entire project area has been surveyed using modern techniques. It is within the Yosemite Valley Archeological District. Associated sites include CA-MRP-0066/H, -0067/307, -0075, -0076/H, -0308, -0320/H, -

1196H/1751H, -1425H, -2098H, and -2518H.

Check if project does not involve ground disturbance [ ]

**Assessment of Effect:** No Potential to Cause Effect \_\_\_No Historic Properties Affected \_\_\_Streamlined Review \_\_\_Adverse Effect

Recommendations for conditions or stipulations: Assessment of no adverse effect is contingent on the following stipulations:

- Remove fuels from features in CA-MRP-0066/H, CA-MRP-0068/1806/H, CA-MRP-0069, CA-MRP-0075, CA-MRP-0076/H, CA-MRP-0158/309, CA-MRP-0159, CA-MRP-0160, CA-MRP-0320/H, CA-MRP-0817, CA-MRP-1196/1751H, CA-MRP-1425H, CA-MRP-2519H.
- Heavy equipment use within sites should be reviewed by the fire archeologist.

- Avoid mop-up in all sites, except for CA-MRP-1425H as mop up is highly unlikely to damage this mostly paved trail. If mop-up is necessary within a site, must have archeological monitor.
- Keep burn piles created during mechanical thinning outside of site boundaries or within non-sensitive areas. All new handlines will be cleared and monitored by an archeologist.
- An archeological monitor will be present during firing operations and mop-up.
- If concealed archeological resources are encountered during project activities, ensure protection measures are taken and initiate consultation with SHPO and traditionally associated tribes, as necessary.
- If additional containment lines become necessary, ensure that archeological sites will be avoided unless previously constructed lines are utilized.
- Integrate cultural resource awareness and protection into daily fire briefings during implementation of the prescribed burn.
- Conduct post-burn assessments at archeological sites following prescribed burning to document fire effects to cultural resources and assess potential post-fire treatment needs.

**Doc Method:** Standard 4-Step Process

No Reviews From: Curator, Historical Architect, Historian, Other Advisor, Historical Landscape Architect

### 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 SHPO Sent: Jan 14, 2021 SHPO Received: Jan 27, 2021

**THPO Required:** Yes **THPO Sent:** Aug 26, 2020

**THPO Received:** No tribal comments received after 30 days

SHPO/THPO Notes: SHPO concurrence with finding of no adverse effect received 1/27/2021.

**Advisory Council Participating: No** 

**Advisory Council Notes:** 

**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.)

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

- Please be mindful of the potential for culturally significant black oak groves within burn area. Fire staff have made inquiries about tribal cultural burning practices within the black oak groves. The black oak groves in Yosemite Valley are listed as cultural Outstandingly Remarkable Values in the Merced River Plan. Please advise the tribal liaison when this project might be implemented.
- Assessment of no adverse effect is contingent on the following stipulations. Consult with Fire Archeologist (Kendra Owenby, (209) 379-1317) to identify sites and ensure site preparations ahead of the burn:
  - Remove fuels from features in CA-MRP-0066/H, CA-MRP-0068/1806/H, CA-MRP-0069, CA-MRP-0075, CA-MRP-0076/H, CA-MRP-0158/309, CA-MRP-0159, CA-MRP-0160, CA-MRP-0320/H, CA-MRP-0817, CA-MRP-1196/1751H, CA-MRP-1425H, CA-MRP-2519H.
  - o Heavy equipment use within sites should be reviewed by the fire archeologist.
  - o Avoid mop-up in all sites, except for CA-MRP-1425H as mop up is highly unlikely to damage this mostly paved trail. If mop-up is necessary within a site, must have archeological monitor.
  - Keep burn piles created during mechanical thinning outside of site boundaries or within non-sensitive areas.
  - o All new handlines will be cleared and monitored by an archeologist.
  - o An archeological monitor will be present during firing operations and mop-up.
  - o If concealed archeological resources are encountered during project activities, ensure protection measures are taken and initiate consultation with SHPO and traditionally associated tribes, as necessary.
  - If additional containment lines become necessary, ensure that archeological sites will be avoided unless previously constructed lines are utilized.
  - o Integrate cultural resource awareness and protection into daily fire briefings during implementation of the prescribed burn.
  - Conduct post-burn assessments at archeological sites following prescribed burning to document fire
    effects to cultural resources and assess potential post-fire treatment needs.

### 6. Assessment of Effect Notes:

D. RECOMMENDED 1	BY PARK SECTION 106 COOR	DINATOR:	
NHPA			
Specialist	Hope Schear	Da	te: February 3, 2021
	Hope Schear		
E. SUPERINTENDEN	Γ'S APPROVAL		
	orms to the NPS <i>Management Police</i> approve the recommendations, stips		aral Resource Management Guideline onditions noted in Section C of this
Superintendent:	Cicely Muldoon	Date:	February 8, 2021
	Cicely Muldoon		
Environmental Plan	of this document is on file at the uning and Compliance Office in ite National Park.		



# **Other Compliance/Consultations Form**

Park Name: Yosemite National Park PEPC Project Number: 97856

Project Title: Prescribed Burn- Yosemite Valley Units 11, 13, 15, and 16

Project Type: Fire - Prescribed Burn

**Project Location:** 

County, State: Mariposa, CA Project Leader: Russell Mitchell

### **ESA**

Any Federal Species in the project Area? Yes

If species in area: Not Likely to Adversely Affect Was Biological Assessment prepared? No

If Biological Assessment prepared, concurred?

Formal Consultation required? No

**Formal Consultation Notes:** 

This project is in CA Red-Legged Frog habitat. It is covered by the programmatic BO for that species. This burn will be a broadcast, controlled burn in the fall, winter, or spring. The main concern is pile burning- see mitigation measures to avoid impacts.

### **Formal Consultation Concluded:**

Any State listed Species in the Project Area? No

**Consultation Information:** 

**General Notes:** 

Data Entered By:	Daniel Sharon	Date	Dec 1, 2020
Data Pilitered DV.	i Danici Sharun	Date.	1700 1. 2020

### **ESA Mitigations**

No ESA mitigations are associated with this project.

### Floodplains/Wetlands/§404 Permits

Question	Yes	No	Details
A.1. Is project in 100- or 500-year floodplain or flash flood hazard area?	Yes		Determined to be exempt from compliance with Director's Order #77-2 and no Floodplain Statement of Findings required.
A.2. Is Project in wetlands as defined by NPS/DOI?	Yes		Determined to be exempt from compliance with Director's Order #77-1 and no Wetland Statement of Findings required.

B. COE Section 404 permit needed?	No	No placement of fill in waters of the	e United Sta	ates.
C. State 401 certification?	No			
D. State Section 401 Permit?	No	Issue Date: Expiration Date:		
E. Tribal Water Quality Permit?	No			
F. CZM Consistency determination needed?		N/A		
G. Erosion & Sediment Control Plan Required?	No			
H. Any other permits required?	No	Permit Information:		
Other Information:		The project overlaps with the 1% chance of annual flooding zone of the Merced River. The proposed project is expected to diminish flooding hazards by removing potentially damaging vegetative debris from the floodplain. A meadow area is located at the edge of YV-15. Project managers should follow mitigation measures to avoid degradation of wetlands.		
<b>Data Entered By:</b>	Daniel Sh	aron	Date:	Dec 1, 2020

# Floodplains & Wetlands Mitigations

No Floodplains & Wetlands mitigations are associated with this project.

### Wilderness

Question	Yes	No	
A. Does this project occur in or adjacent to Designated, Recommended, Proposed, Study, Eligible, or Potential Wilderness?		No	
B. Is the only place to conduct this project in wilderness?			
C. Is the project necessary for the administration of the area as wilderness?			
D. Would the project or any of its alternatives adversely affect (directly or indirectly) Designated, Recommended, Proposed, Study, Eligible, or Potential Wilderness? (If Yes, Minimum Requirements Analysis required)			
E. Does the project or any of its alternatives involve the use of any of the Wilderness Act Section 4(c) prohibited uses: commercial enterprise, permanent road, temporary road, motor vehicles, motorized equipment, motorboats, landing of aircraft, mechanical			

transport, structure, or installation? (If Yes, Minimum Requirements Analysis required)			
If the answer to D or E above is "Yes" then a Minimum Requirements Analysis is required. Describe the status of this analysis in the column to the right.			Initiation Date: Completed Date: Approved Date:
Other Information:			
Data Entered By: Daniel Sharon	Date:	e: Dec 1, 2020	

### **Other Permits/Laws** *Questions A & B are no longer used.*

Question	Yes	No
C. Wild and scenic river concerns exist?		No
D. National Trails concerns exist?		No
E. Air Quality consult with State needed?	Yes	
F. Consistent with Architectural Barriers, Rehabilitation, and Americans with Disabilities Acts or not Applicable? (If N/A check Yes)	Yes	
G. Other:		No

### Other Information:

Project Manager should work with the appropriate Air Resource District to register the burn and secure any necessary Smoke Management Plan permits prior to ignition to minimize any adverse smoke impacts to air quality.

Data Entered By:	Daniel Sharon	Date:	Dec 1, 2020
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