



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.

Letter of Compliance Completion

To: Catherine Fong, Project Manager, Yosemite National Park

From: Cicely Muldoon, Superintendent, Yosemite National Park

Subject: NEPA and NHPA Clearance: 2021-067 Install Weather Station at Henness Ridge (PEPC: 98111)

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

The subject proposed project, therefore, is now cleared for all National Environmental Policy Act (NEPA) and National Historic Preservation Act (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:

- The actions described in PEPC 98111 are approved for implementation; deviations from or changes to the described actions would require additional review and approval from Yosemite's Environmental Planning and Compliance office. The weather station is approved to be installed and remain in the park for up to 5 years, the project would require additional review and approval from the Environmental Planning and Compliance office if a longer duration is desired.
- The project is approved to install the weather station equipment in described locations only.
- Wildlife Protections:
 - Staff will follow posted speed limits and reduce speed by an additional 5 mph during dusk/dawn.
 - Food and trash must be stored in bear proof containers/receptacles at all times, in accordance with park regulations.
 - Trenches will be fitted with escape ramps if they cannot be closed each night to avoid entrapment of wildlife. Any temporary fencing will allow for the safe passage of fishers.

Resource Management personnel shall be notified/consulted when these, or any other wildlife, must be disturbed or handled. They will be available to assist with moving/relocating snakes or any other wildlife, when necessary; and/or to make recommendations for relocating any disturbed animals.

Superintendent:

Cicely Muldoon

Date:

2/24/2021

Cicely Muldoon, Superintendent

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Yosemite National Park.*



Categorical Exclusion Documentation Form (CE Form)

Project: Install Weather Station at Henness Ridge

PEPC Project Number: 98111

Description of Action (Project Description):

This project is being proposed by researchers Douglas Alden and Carolyn Ellis at Scripps Institute of Oceanography. This project is part of their research on how Atmospheric Rivers form, evolve, and then impact conditions over California. Research efforts will focus on further improving situational awareness of Atmospheric Rivers and the associated precipitation to enhance the resilience of California.

The project involves installation of a surface meteorological station, data acquisition system, and disdrometer at the NatureBridge Campus at Henness Ridge. These installations would be accompanied by an enclosure that houses a rugged computer, uninterruptible power supply (ups), and data telemetry system. The disdrometer measures the properties of falling precipitation and therefore differentiate between different forms of hydrometeors (rain, snow, hail, etc.). The weather station and disdrometer would be installed at an elevation of interest for determining when in the winter season and during which events rain transitions to snow. The weather station with disdrometer would remain in place for up to 5 years. Thereafter, it would require additional compliance review and approval to remain.

The surface meteorological station and data acquisition system would be installed on a pole. The disdrometer would be installed on a separate pole or free-standing base. Ground disturbance could range from minimal (~18 in stakes into the ground to secure tripod/instrument feet) to slightly more aggressive (~3-4 ft deep x ~1 ft wide holes to secure instrumentation pole w/concrete base). A combination of these methods could be used. Additional ground disturbance would be required to trench a 2-inch power/data conduit (120V AC/ 3 Amp power required). Three alternative site locations are currently being considered. These are (not in order of preference):

Option A: 37.64720, -119.70380

Option B: 37.647085, -119.70362

Option C: 37.64730, -119.70430

Shallow trenching (~8-inch depth) would occur from these locations to the nearest building, a distance of approximately 30ft at each location. The areas that would be trenched have already experienced ground disturbance. Installation would require a team of 2-3 people approximately two days to complete and would require maintenance and calibrations once or twice a year for the duration of the project.

Project Locations:

Location	
County:	Mariposa
State:	CA

Mitigation(s):

- The actions described in PEPC 98111 are approved for implementation; deviations from or changes to the described actions would require additional review and approval from Yosemite's Environmental Planning and Compliance office. The weather station is approved to be installed and remain in the park for up to 5 years, the project would require additional review and approval from the Environmental Planning and Compliance office if a longer duration is desired.
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- Trenches will be fitted with escape ramps if they cannot be closed each night to avoid entrapment of wildlife. Any temporary fencing will allow for the safe passage of fishers.
- Resource Management personnel shall be notified/consulted when these, or any other wildlife, must be disturbed or handled. They will be available to assist with moving/relocating any wildlife, when necessary; and/or to make recommendations for relocating any disturbed animals.

CE Citation: C.5 Installation of signs, displays, kiosks, etc.

CE Justification: Installation of the weather station is similar in impact to the actions listed in C.5.

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: Cicely Muldoon **Date:** 2/24/2021
Cicely Muldoon, Superintendent

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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?		not applicable per 2020 CEQ regulations and DOI direction.
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:	Install Weather Station at Henness Ridge
PEPC Project Number:	98111
Project Type:	Other Natural/Cultural Resource Activities (NCR)
Project Location:	
County, State:	Mariposa, California
Project Leader:	Catherine Fong

B. PROJECT DESCRIPTION

See Categorical Exclusion form.

C. RESOURCE IMPACTS TO CONSIDER:

Resource	Potential for Impact	Potential Issues & Impacts
Air Air Quality	None	
Biological Nonnative or Exotic Species	None	
Biological Species of Special Concern or Their Habitat <i>Fisher</i>	Potential	Issue: Project area is Fisher habitat. Impact: Project should have no effect on Fisher due to the very limited period it would take to install the equipment, adjacency to existing buildings, and lack of extended, additional noise or other disturbance posed by the weather station.
Biological Vegetation	None	
Biological Wildlife and/or Wildlife Habitat including terrestrial and aquatic species	None	
Cultural Archeological Resources <i>Archeological sites</i>	Potential	Issue: Project area is located in an archeological site. Impact: The project will be located in a previously disturbed area and the archeological site was determined ineligible for listing on the National Register; no adverse impacts to archeological resources are anticipated.

Cultural Cultural Landscapes	None	
Cultural Ethnographic Resources	None	
Cultural Museum Collections	None	
Cultural Prehistoric/historic structures	None	
Geological Geologic Features	None	
Geological Geologic Processes	None	
Lightscares Lightscares	None	
Other Human Health and Safety	None	
Other Operational	None	
Other Other <i>Scientific Research</i>	Potential	<p>Issue: The project would collect scientific data to understand weather patterns.</p> <p>Impact: The project would benefit the scientific communities understanding of atmospheric river events and other weather patterns.</p>
Socioeconomic Land Use	None	
Socioeconomic Minority and low-income populations, size, migration patterns, etc.	None	
Socioeconomic Socioeconomic	None	
Soundscapes Soundscapes	None	
Viewsheds Viewsheds <i>Views</i>	Potential	<p>Issue: The weather station equipment would be visible from the Nature Bridge Henness Ridge Campus.</p> <p>Impact: The weather station equipment, while visible from the NatureBridge Campus, would not be an eyesore and would be in-alignment with the campus' promotion of science and learning. The weather station would not impact views from historic resources and is not located in an iconic view.</p>
Visitor Use and Experience Recreation Resources	None	

Visitor Use and Experience Visitor Use and Experience <i>NatureBridge student experience</i>	Potential	<p>Issue: The weather station would provide an opportunity for NatureBridge students to engage with concepts related to the study of weather patterns.</p> <p>Impact: The weather station would have a beneficial impact on NatureBridge student visitors.</p>
Water Floodplains	None	
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: Install Weather Station at Henness Ridge

Prepared by: Ninette Daniele **Date Prepared:** 11/09/2020 **Telephone:** (209) 379-1457

PEPC Project Number: 98111

Locations:

County, State: Mariposa, CA

Describe project: See Categorical Exclusion form.

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

The project area is the Henness Ridge NatureBridge campus. The weather station would be temporarily installed for up to 5 years in a previously disturbed area near the building or the parking lot. Trenching to provide an electric line to power the weather station would involve a 4 inch-wide and 6-inch deep trench to support a 2-inch diameter conduit. The trench will be approximately 20 feet long and connect to a modern building in the NatureBridge campus.

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

<input type="checkbox"/>	No
X	Yes
<input type="checkbox"/>	Source or reference:

4. **Potentially Affected Resource(s):**

Archeological Resources Present: Yes

Archeological Resources Notes: The project area has been surveyed in 1990, 1998, 2004, 2007, 2008, and 2009. Trenching would occur within site CA-MRP-1484/H, which was sampled through a combination of controlled subsurface survey, test excavation, and construction monitoring and was determined ineligible for listing on the National Register of Historic Places with concurrence received from SHPO.

Historical Structures/Resources Present: No

Cultural Landscapes Present: No

Ethnographic Resources Present:

Ethnographic Resources Notes: Project has been included on the December 2020 Tribal Spreadsheet, which has been shared with the traditionally associated American Indian tribes for their review and comment.

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: 01/28/2021

Comments: No HA/HLA required. YOSE(2020) PA Streamlined category (7) Installation of monitoring units.

Check if project does not involve ground disturbance []

Assessment of Effect: ___No Potential to Cause Effect X No Historic Properties Affected ___No Adverse Effect ___Adverse Effect ___Streamlined Review

Recommendations for conditions or stipulations:

Doc Method: Park Specific or Other Programmatic Agreement

[X] Anthropologist

Name: Wesley Wills

Date: 12/08/2020

Comments: The tribes were provided information on this project on the December 2020 tribal project spreadsheet and no comments or concerns or identification of properties of traditional religious and cultural significance were received.

Check if project does not involve ground disturbance []

Assessment of Effect: ___No Potential to Cause Effect X No Historic Properties Affected ___No Adverse Effect ___Adverse Effect ___Streamlined Review

Recommendations for conditions or stipulations:

Doc Method: Park Specific or Other Programmatic Agreement

[X] Archeologist

Name: Wesley Wills

Date: 11/10/2020

Comments: The project area has been surveyed in 1990, 1998, 2004, 2007, 2008, and 2009. Trenching would occur within site CA-MRP-1484/H, which was sampled through a combination of controlled subsurface survey, test excavation, and construction monitoring and was determined ineligible for listing on the National Register of Historic Places with concurrence received from SHPO. No intact or significant archeological deposits would be encountered during minor trenching for this undertaking and no additional archeological work is recommended.

Check if project does not involve ground disturbance []

Assessment of Effect: ___No Potential to Cause Effect ___X___No Historic Properties Affected ___No
Adverse Effect ___Adverse Effect ___Streamlined Review

Recommendations for conditions or stipulations:

Doc Method: Park Specific or Other Programmatic Agreement

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
X	No Historic Properties Affected
	No Adverse Effect
	Adverse Effect

2. Documentation Method:

[] 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.)

[X] 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: No
SHPO Sent: NA
SHPO Received: NA

THPO Required: Yes
THPO Sent: 12/24/2020
THPO Received: No comments received

SHPO/THPO Notes: NA

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:

- The project is approved to install the weather station equipment in described locations only.
- The actions described in PEPC 98111 are approved for implementation; deviations from or changes to the described actions would require additional review and approval from Yosemite's Environmental Planning and Compliance office. The weather station is approved to be installed and remain in the park for up to 5 years, the project would require additional review and approval from the Environmental Planning and Compliance office if a longer duration is desired.

6. Assessment of Effect Notes: 2020 YOSEMITE PA (7)

D. RECOMMENDED BY PARK SECTION 106 COORDINATOR:

NHPA Specialist _____ **Hope Schear** **Date:** 2/25/2021
Hope Schear

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: _____ **Cicely Muldoon** **Date:** 2/24/2021
Cicely Muldoon

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Yosemite National Park.*



Other Compliance/Consultations Form

Park Name: Yosemite National Park

PEPC Project Number: 98111

Project Title: Install Weather Station at Henness Ridge

Project Type: Other Natural/Cultural Resource Activities : Research

Project Location:

County, State: Mariposa, CA

Project Leader: Catherine Fong

ESA

Any Federal Species in the project Area? No			
If species in area: No Effect			
Was Biological Assessment prepared?			
If Biological Assessment prepared, concurred?			
Formal Consultation required? No			
Formal Consultation Notes: Fisher and Yosemite Toad may occur in the project area, as long as mitigations are followed there will be no effect to these species (see attached fisher and roads BO attached in PEPC).			
Formal Consultation Concluded:			
Any State listed Species in the Project Area? Yes			
Consultation Information: Great gray owls occur near the project site, no effect will occur to this species.			
General Notes:			
Data Entered By:	Heather Mackey	Date:	Nov 23, 2020

ESA Mitigations

- Staff will follow posted speed limits and reduce speed by an additional 5 mph during dusk/dawn.
- Trenches will be fitted with escape ramps if they cannot be closed each night to avoid entrapment of wildlife. Any temporary fencing will allow for the safe passage of fishers.
- Resource Management personnel shall be notified/consulted when these, or any other wildlife, must be disturbed or handled. They will be available to assist with moving/relocating snakes or any other wildlife, when necessary; and/or to make recommendations for relocating any disturbed animals.

Floodplains/Wetlands/§404 Permits

Question	Yes	No	Details
A.1. Is project in 100- or 500-year floodplain or flash flood hazard area?		No	Not in floodplain or flash flood hazard area.
A.2. Is Project in wetlands as defined by NPS/DOI?		No	Not in wetland as defined by NPS/DOI.
B. COE Section 404 permit needed?		No	No placement of fill in waters of the United States.

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?		No	Date Review Requested: Date Reply Received: Date State Concurred:
G. Erosion & Sediment Control Plan Required?		No	
H. Any other permits required?		No	Permit Information:
Other Information:			
Data Entered By:	Ninette Daniele		Date: Jan 29, 2021

Flood Plains & Wetlands Mitigation

No Flood Plains & 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?		No	
C. Is the project necessary for the administration of the area as wilderness?		No	
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)		No	
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)		No	
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:	Ninette Daniele		Date: Jan 29, 2021

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

Question	Yes	No
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C. Wild and scenic river concerns exist?		No
D. National Trails concerns exist?		No
E. Air Quality consult with State needed?		No
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:

Data Entered By:	Ninette Daniele	Date:	Jan 29, 2021
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