



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.

## Categorical Exclusion Form

**Project:** 2018-018 White Wolf And Tenaya Lake Snow Sensors Installation

**PEPC Project Number:** 80972

**Project Description:**

The California Department of Water Resources (DWR) installed thirteen remote snow sensors in Yosemite National Park, located 6,000 - 10,000 feet in elevation, to provide hourly real time data. Beginning in 2016, these stations are being modernized and maintained collaboratively by DWR and Yosemite National Park personnel. These stations measure water content of the snow pack, snow depth, air temperature, relative humidity, solar radiation, soil moisture, and wind speed.

Of these stations, only two (Gin Flat and Tuolumne Meadows) currently measure total precipitation (rain and snow); thus, gaps in precipitation data exist for large areas of the park where most precipitation occurs. Additionally, warmer winter storms that deliver rain to higher elevations are becoming more frequent and make data from snow sensors less representative of hydrological conditions. Installing total precipitation gages at the existing snow sensors located at Tenaya Lake and White Wolf will fill in total precipitation data gaps in Yosemite's high country and accurately represent hydrologic conditions under warmer climate conditions.

Installed in 1998, the Tenaya Lake snow sensor is located on the Tenaya Lake snow course, approximately 0.25 miles from the Tenaya Lake east beach, outside of designated Wilderness. Installed in 2007, the White Wolf snow sensor is a Remote Automated Weather Station site that is collaboratively operated by the Yosemite Fire program and DWR, it is located 150 feet west of White Wolf Road, outside of designated Wilderness.

Primary actions needed to complete project:

1. All tools and materials will be carried to the site by hand. Hole and trench will be dug using hand tools.
2. Dig hole that is 3 feet in diameter and 3 feet deep that is 20 feet from existing snow pillows.
3. Install concrete footing in hole.
4. Install storage precipitation gage on footing.
5. Connect precipitation gage sensor to existing snow sensor datalogger via a 1 foot wide and 1 foot deep trench from storage precipitation gage to existing snow sensor tower.
6. Storage precipitation gage is 20 - 23 ft tall, 1 - 3 ft wide, has a three foot diameter base, and has a 4 foot diameter wind screen at the top of the precipitation gage.

The accumulation precipitation gages use a non-toxic, biodegradable recharge-solution (propylene glycol and denatured ethanol) to prevent accumulated precipitation from freezing. Operation of these gages requires removal of the precipitation-water/recharge-fluid mixture annually. This volume ranges from 25 - 75 gallons. All recharge fluid will be collected, removed from the sites, and disposed of at RV dump stations.

**Project Locations:**

Tuolumne County, CA

**Mitigations:**

- The precipitation gage tower will be painted a flat black to reduce the shiny surfaces and possible visual impacts to surrounding high points.

**CE Citation:** C.6 Installation of navigation aids.

**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:**

8/20/2018

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
<b>A.</b> Have significant impacts on public health or safety?	No	
<b>B.</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	
<b>C.</b> Have highly controversial environmental effects or involve unresolved conflicts concerning alternative uses of available resources (NEPA section 102(2)(E))?	No	
<b>D.</b> Have highly uncertain and potentially significant environmental effects or involve unique or unknown environmental risks?	No	
<b>E.</b> Establish a precedent for future action or represent a decision in principle about future actions with potentially significant environmental effects?	No	
<b>F.</b> Have a direct relationship to other actions with individually insignificant, but cumulatively significant, environmental effects?	No	
<b>G.</b> 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	
<b>H.</b> 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	
<b>I.</b> Violate a federal, state, local or tribal law or requirement imposed for the protection of the environment?	No	
<b>J.</b> Have a disproportionately high and adverse effect on low income or minority populations (EO 12898)?	No	
<b>K.</b> 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	
<b>L.</b> 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

<b>Project Title:</b>	2018-018 White Wolf and Tenaya Lake Snow Sensors Installation
<b>PEPC Project Number:</b>	80972
<b>Project Type:</b>	Inventory and Monitoring (IM)
<b>Project Location:</b>	
<b>County, State:</b>	Tuolumne, California
<b>Project Leader:</b>	Harrison Forrester

### B. RESOURCE IMPACTS TO CONSIDER:

Resource	Potential for Impact	Potential Issues & Impacts
<b>Air</b> Air Quality	None	
<b>Biological</b> Nonnative or Exotic Species	None	
<b>Biological</b> Species of Special Concern or Their Habitat	None	
<b>Biological</b> Vegetation	None	
<b>Biological</b> Wildlife and/or Wildlife Habitat including terrestrial and aquatic species	None	
<b>Cultural</b> Cultural Landscapes	None	The tower would not be visible from adjacent roadways (Tioga and White Wolf Roads).
<b>Cultural</b> Ethnographic Resources	None	Information regarding project was provided to traditionally associate tribes and groups on the June 2018 Tribal Spreadsheet. No information pertaining to traditional properties was received from tribes within the 30 day review period. No ethnographic information for project areas listed in the park ethnographic database.
<b>Cultural</b> Museum Collections	None	
<b>Cultural</b> Prehistoric/historic structures	None	

<b>Geological</b> Geologic Features	None	Archeological surveys completed for both areas in June 2018. No historic properties found.
<b>Geological</b> Geologic Processes	None	
<b>Lightscares</b> Lightscares	None	
<b>Other</b> Human Health and Safety	None	
<b>Other</b> Operational	None	
<b>Other</b> Other	Potential	A spill prevention plan has been developed for hazardous material transportation.
<b>Socioeconomic</b> Land Use	None	
<b>Socioeconomic</b> Minority and low-income populations, size, migration patterns, etc.	None	
<b>Socioeconomic</b>	None	
<b>Soundscapes</b>	None	
<b>Viewsheds</b> Viewsheds	Potential	The precipitation gage tower will be painted a flat black to reduce the shiny surfaces and possible visual impacts to surrounding high points.
<b>Visitor Use and Experience</b> Recreation Resources	None	
<b>Visitor Use and Experience</b> Visitor Use and Experience	None	
<b>Water</b> Floodplains	None	
<b>Water</b> Marine or Estuarine Resources	None	
<b>Water</b> Water Quality or Quantity	None	
<b>Water</b> Wetlands	None	
<b>Water</b> Wild and Scenic River	None	
<b>Wilderness</b> Wilderness	None	