Yosemite National Park
Project Management Division
Environmental Planning and Compliance

National Park Service
U.S. Department of the Interior

Categorical Exclusion

(Version: FEB06)

Compliance Tracking Number: 2006-084
PEPC Project Number: 16300

A. PROJECT INFORMATION

Title: Highway 120 Corridor Weather Station Installations and Upgrades

Location: Big Oak Flat Road and Tioga Road**,** Mariposa and Tuolumne Counties, California

Project Manager: Jim Roche, Resources Management and Science, Yosemite National Park

Project Partners: US Geological Survey, CA Cooperative Snow Surveys, & University of California, Merced

B. COMPLIANCE DETERMINATION

This project is an action that has been determined to result in no measurable environmental effects. It is therefore categorically excluded from further National Environmental Policy Act analysis under Categorical Exclusion: DO12 3.4 *C (5) - Installation of signs, displays, and kiosks.*

Necessary compliance coordination has been completed regarding the National Historic Preservation Act, the Wilderness Act, the Wild and Scenic Rivers Act, and the Endangered Species Act, as applicable. Environmental impacts will be minor or less when the project is implemented with the conditions stipulated under **Project Mitigations and Conditions** in **Section I** at the end of the attached *Environmental Screening Form.*

Additional supporting information for this determination and the stipulated conditions can be found in the following attachments (when checked):

- ☒ *Environmental Screening Form*
- ☒ *Cultural Resource Effects Assessment Form (XXX)*
- ☐ *Wilderness Minimum Requirement Analysis*
- ☐ *Wild and Scenic River Section 7 Determination*
- ☐ *Park Management Terms and Conditions*
- ☐ Other:

C. DECISION

On the basis of the environmental impact information in the statutory compliance file, with which I am familiar, I am categorically excluding the described project from further NEPA analysis. No exceptional circumstances or conditions in DO12 3.5 or 3.6 apply and the action is fully described in DO12, Section 3.4.

//MJTollefson// *8/11/06*

Michael J. Tollefson — Date

Original: Statutory Compliance File
cc: Project Proponent

Attachments (2)

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

United States Department of the Interior

NATIONAL PARK SERVICE
Yosemite National Park
P.O. Box 577
Yosemite, California 95389

IN REPLY REFER TO:
L7617 (YOSE-PM)

Memorandum

To: Jim Roche, Project Manager, Resources Management and Science, Yosemite National Park

From: Superintendent, Yosemite National Park

Subject: Notice to Proceed, 2006-084 Highway 120 Corridor Weather Station Installations and Upgrades

Your proposed project is an action that has been determined to result in no measurable environmental effects. It is therefore categorically excluded from further National Environmental Policy Act analysis under Categorical Exclusion: DO12 3.4 *C (5) - Installation of signs, displays, and kiosks.*

Necessary compliance coordination has been completed regarding the National Historic Preservation Act, the Wilderness Act, the Wild and Scenic Rivers Act, and the Endangered Species Act, as applicable. This project clearance is valid providing that you adhere to the conditions stipulated in the enclosed *Categorical Exclusion Form* and associated documents when implementing this project.

//MJTollefson// *8/11/06*
Michael J. Tollefson Date

Enclosure (with attachments)

cc: Statutory Compliance File

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

Environmental Screening Form

(Version: FEB06)

Compliance Tracking Number: 2006-084
PEPC Project Number: 16300

A. PROJECT INFORMATION

Title: Highway 120 Corridor Weather Station Installations and Upgrades

Location: Big Oak Flat and Tioga Roads**,** Mariposa and Tuolumne Counties, California

Project Manager: Jim Roche, Resources Management and Science, Yosemite National Park

Project Manager: US Geological Survey, CA Cooperative Snow Surveys, and University of California, Merced

B. PROJECT DESCRIPTION AND BACKGROUND

The purpose of this project is to upgrade 7 existing permanent weather stations and install 5 new permanent stations along the Highway 120 corridor in Yosemite National Park. In addition, each site would be seasonally instrumented with up to 20 temporary snow depth sensors to characterize the variability in snow depth at each site. Proposed locations may be adjusted to avoid impacts to cultural resources (review pending).

PERMANENT INSTALLATIONS:

All new and upgraded weather stations lie within non-wilderness along the Highway 120 road corridor. These instrument installations should be considered permanent installations. Five new weather stations would be installed at 1) 1.5 miles south of Big Oak Flat Entrance Station, 2) near the entrance to the road to the Rockefeller Grove, 3) At Smoky Jack Creek, 4) Near Olmstead Pit (preferred) or Hoffman Creek, and 5) Near Gaylor Pit or Gaylor Creek. The latter would replace an existing fire Remote Access Weather Station (RAWS) presently located in designated Wilderness. Upgraded stations would be 1) Crane Flat Lookout RAWS, 2) Dog House Meadow, 3) Gin Flat, 4) White Wolf RAWS, 5) Porcupine, 6) Tenaya Lake and 7) Tuolumne Meadows. See Location and Site figures.

New stations would consist of a 20 foot tall 3-inch in diameter galvanized metal mast pole set in a concrete footing approximately 4 feet deep and 18 inches in diameter (see figure). Attached to the pole would be two temperature and humidity sensors, radiometer, snow depth sensor, rain gauge, fuel moisture sensor, barometer, datalogger and battery pack, a solar panel, and satellite antenna for transmitting the data in near real-time. Associated with each station would be two soil temperature and moisture arrays, one next to the tower described above and one within 200 yards, and up to 6 dendrometer bands to measure tree growth. Installation of each soil temperature/moisture array would require the excavation of an 18 inch diameter hole up to 4 feet deep. Sensor wiring from each array would be placed in 1-inch PVC conduit extending from the instruments to the weather tower. Conduit would be buried in a trench 4-6 inches wide, 6-10 inches deep, and up to 200 meters from the weather tower. Dendrometer bands would be placed around selected trees and transmit information wirelessly to the weather tower. See instrumentation figures.

Upgrades for the seven existing stations would be the installation of two soil moisture / temperature arrays, up to six dendrometer bands, and one fuel moisture sensor per site as

described above. Crane Flat Lookout RAWS, would require the excavation of a footer for a new tower. The existing tripod structure has no foundation.

TEMPORARY INSTALLATIONS:

Each of the above sites would be instrumented seasonally with up to 20 snow depth sensors for a period of up to 10 years. These sensors would be mounted on T-posts driven into the ground and stand 10-15 feet in height (see photo). Most of these instruments would be removed following the end of snow melt each season to reduce their visual impact. Some would be left in place to reduce the burden of reinstalling all the instruments each season. These instruments would be put in place seasonally for up to ten years from 2006.

Stations would be maintained by California Cooperative Snow Surveys, National Interagency Fire Center (NIFC) personnel (for the RAWS network), and a consortium of researchers from the U.S. Geological Survey, Scripps Institute of Oceanography, and the University of California Merced. Many stations would broadcast data via satellite and the information made available in near real-time on the internet. Non-real-time data would be made available to the National Park Service (NPS) and the public.

Table B1 – Background Information

		Yes	No	N/A	Explanation/Notes
1.	Did NPS staff conduct a site visit? If yes, list attendees. If no, explain.	☒	☐	☐	Jim Roche, park Hydrologist.
2a.	Is the project providing compliance for an action associated with but not covered by an approved plan? (Identify the plan and provide a section or page citation.); OR	☐	☒	☐	
2b.	Is the project in an approved plan? (Identify the plan and provide a section or page citation.	☐	☒	☐	
2c.	Is the project consistent with that plan?	☐	☐	☒	
2d.	Is the Plan's CE, FONSI, or ROD current?	☐	☐	☒	
3a.	Are there any interested or affected parties?	☐	☒	☐	
3b.	Has a diligent effort been made to communicate with them?	☐			
4a.	Are there any affected agencies or tribes?	☒	☐	☐	Cooperating agencies.
4b.	Has consultation been completed?	☒			Cooperating agencies have been part of ongoing project development.

Table B2 – Environmental Screening Form Attachments (provide Attachment letter—A, B, etc.)

		Yes	No	N/A	Explanation/Notes
1.	Maps: 2 required (vicinity map & site map)	☒			Park map and site location maps; see Attachment A.
2.	Drawings (e.g., design, construction)	☒	☐	☐	Illustration of hypothetical site with a typical pole-mounted weather station installation.
3.	Site Plans	☐	☐	☐	
4.	Photographs	☒	☐	☐	Photos of a dendrometer band and a snow depth sensor installation.
5.	Non-NEPA/NHPA Approvals (Explain)	☐	☐	☐	
6.	Other (Explain)	☐	☐	☐	

C. ASSESSMENT OF POTENTIAL RESOURCE EFFECTS

Are any impacts possible on the following resources?	Yes	No	N/A	Data Needed to Determine/Notes
1. Geologic resources: soils, bedrock, streambeds, etc	☒	☐	☐	Negligible: 2 holes, each 4 feet deep, at 12 weather station sites.
2. From geohazards	☐	☒	☐	
3. Air quality	☐	☒	☐	
4. Soundscapes	☒	☐	☐	Negligible: temporary during construction.
5. Water quality or quantity	☐	☒	☐	
6. Stream flow characteristics	☐	☒	☐	
7. Marine or estuarine resources	☐	☐	☒	
8. Floodplains or wetlands	☐	☒	☐	
9. Land use, including occupancy, income, values, ownership, type of use	☐	☒	☐	
10. Rare or unusual vegetation – old growth timber, riparian, alpine	☐	☒	☐	
11. Species of special concern (plant or animal; state or federal listed or proposed for listing) or their habitat	☐	☒	☐	
12. Unique ecosystems, biosphere reserves, World Heritage Sites	☒	☐	☐	Yosemite National Park is a World Heritage site; no historic properties would be adversely affected by implementing this project; see Section F. National Historic Protection Act Checklist, below.
13. Unique or important wildlife or wildlife habitat	☐	☒	☐	
14. Unique or important fish or fish habitat	☐	☒	☐	
15. Introduce or promote non-native species (plant or animal)	☐	☒	☐	
16. Recreation resources, including supply, demand, visitation, activities, etc.	☐	☒	☐	
17. Visitor experience, aesthetic resources	☒	☐	☐	Negligible: the project proposal includes the seasonal removal of any of the 10-15 foot tall snow sensors and the stakes they are attached to, that might be seen from the roadway or parking areas along the road corridor; also, see Condition 1, below.
18. Cultural resources including cultural landscapes, ethnographic resources	☒	☐	☐	Mitigated: see Section F. National Historic Preservation Act Checklist, below.
19. Socioeconomics, including employment, occupation, income changes, tax base, infrastructure	☐	☒	☐	
20. Minority and low income populations, ethnography, size, migration patterns, etc.	☐	☒	☐	
21. Energy resources	☐	☒	☐	
22. Other agency or tribal land use plans or policies	☐	☒	☐	
23. Resource, including energy, conservation potential	☒	☐	☐	Weather station data will enhance resource and energy conservation efforts.
24. Urban quality, gateway communities, etc.	☐	☒	☐	
25. Long-term management of resources or land/resource productivity	☒	☐	☐	Weather station data will enhance long-term management of resources and land/resource productivity.
26 Other important environment resources (e.g. geothermal, paleontological resources)?	☐	☒	☐	

Comments, Mitigations and Conditions:

1. Remove, during the the "off" season (spring, summer, & fall), snow sensors and stakes when possible, even when not immediately visible (Management Team).

D. MANDATORY CRITERIA

If implemented, would the proposed action:	Yes	No	N/A	Data Needed to Determine/Notes
1. Have material adverse effects on public health or safety?	☐	☒	☐	
2. Have adverse effects on such unique 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; floodplains; or ecologically significant or critical areas, including those listed on the National Register of Natural Landmarks?	☐	☒	☐	Mitigated: see Section F. National Historic Preservation Act Checklist, below.
3. Have highly controversial environmental effects?	☐	☒	☐	
4. Have highly uncertain and potentially significant environmental effects or involve unique or unknown environmental risks?	☐	☒	☐	
5. Establish a precedent for future action or represent a decision in principle about future actions with potentially significant environmental effects?	☐	☒	☐	
6. Be directly related to other actions with individually insignificant, but cumulatively significant, environmental effects?	☐	☒	☐	
7. Have adverse effects on properties listed or eligible for listing on the National Register of Historic Places?	☐	☒	☐	Mitigated: see Section F. National Historic Preservation Act Checklist, below.
8. Have adverse effects on species listed or proposed to be listed on the List of Endangered or Threatened Species or have adverse effects on designated Critical Habitat for these species?	☐	☒	☐	
9. Require compliance with Executive Order 11988 (Floodplain Management), Executive Order 11990 (Protection of Wetlands), or the Fish and Wildlife Coordination Act?	☐	☒	☐	
10. Threaten to violate a federal, state, local, or tribal law or requirement imposed for the protection of the environment?	☐	☒	☐	
11. Involve unresolved conflicts concerning alternative uses of available resources (NEPA sec. 102(2)(E)?	☐	☒	☐	
12. Have a disproportionate, significant adverse effect on low-income or minority populations (EO 12898)?	☐	☒	☐	
13. Restrict access to and ceremonial use of Indian sacred sites by Indian religious practitioners or adversely affect the physical integrity of such sacred sites (EO 130007)?	☐	☒	☐	
14. Contribute to the introduction, continued existence, or spread of federally listed noxious weeds (Federal Noxious Weed Control Act)?	☐	☒	☐	
15. Contribute to the introduction, continued existence, or spread of non-native invasive species or actions that may promote the introduction, growth or expansion of the range of non-native invasive species (EO 13112)?	☐	☒	☐	
16. Require a permit from a federal, state, or local agency to proceed, unless the agency from which the permit is required agrees that a CE is appropriate?	☐	☒	☐	
17. Have the potential for significant impact as indicated by a federal, state, or local agency or Indian tribe?	☐	☒	☐	
18. Have the potential to be controversial because of disagreement over possible environmental effects?	☐	☒	☐	
19. Have the potential to violate the NPS Organic Act by impairing park resources or values?	☐	☒	☐	

Comments, Mitigations and Conditions:

1. See Condition 1, Section F. Nationa Historic Preservation Act Checklist, below.

E. SPECIAL STATUS SPECIES CHECKLIST

Within the area of potential effect, are there:	Yes	No	N/A	Data Needed to Determine/Notes
1. Listed or proposed threatened or endangered species (Federal or State)?	☐	☒	☐	
2. Species of special concern (Federal or State)?	☐	☒	☐	
3. Park rare plants or vegetation?	☐	☒	☐	
4. Potential habitat for any special-status species listed above?	☐	☒	☐	
If "yes" to any of the above questions, a Special-Status Species Checklist must be completed and attached.				

Comments, Mitigations and Conditions:

1. None

F. NATIONAL HISTORIC PRESERVATION ACT CHECKLIST

Within the area of potential effect:	Yes	No	N/A	Data Needed to Determine/Notes
1. Will there be ground disturbance?	☒	☐	☐	
2. Are there any archeological sites?	☒	☐	☐	
3. Are there any Native American Indian traditional cultural resources?	☐	☒	☐	
4. Is the project within the boundary of an archeological or historic landscape or district?	☒	☐	☐	Tioga Road Historic Landscape: see Condition 1, below, and the attached XXX.
5a. Is there a National Historic Landmark?	☐	☒	☐	
5b. Is there a structure(s) on the park's *List of Classified Structures*?	☐	☒	☐	
5c. Is there a historic property with a DOE and concurrence by the SHPO or a completed National Register form?	☐	☒	☐	
5d. Is there a cultural property requiring review under NHPA, Section 106?	☐	☒	☐	
6. Would there be alteration of a structure or cultural landscape covered by 5a-d, above?	☐	☒	☐	
If "yes" to any of the above, then an Assessment of Effects form (YOSE-XXX) must be completed and attached.				

Mitigations and Conditions:

1. Coordinate location of instrument installation with the park Archeologist (Laura Kirn, 209-379-1314) and the park Historic Cultural Landscape Architect (Steven Torgerson, 209-379-1295) to avoid impacts and ensure the "No Adverse Effect" determination.

G. WILDERNESS ACT CHECKLIST

Is the proposed project:	Yes	No	N/A	Data Needed to Determine/Notes
1. Within designated Wilderness?	☐	☒	☐	All sites are within the non-wilderness road corridor.
2. Within a Potential Wilderness Addition?	☐	☒	☐	
If "yes" to either of the above, then a Wilderness Minimum Requirements Analysis must be completed and attached.				

Mitigations and Conditions:

1. None

H. WILD AND SCENIC RIVERS ACT CHECKLIST

Does the proposed project:	Yes	No	N/A	Data Needed to Determine/Notes
1. Fall within a wild and scenic river corridor? If 'yes", name the river(s)	☒	☐	☐	Tuolumne River
2. Fall within the bed and banks AND affect the free-flow of the river?	☐	☒	☐	
3. Potentially affect water quality of the area?	☐	☒	☐	
4. Remain consistent with its river segment classification?	☐	☐	☒	At this time, segment classifications have not been established for the Tuolumne River; upgrading the weather station at Tuolumne Meadows, which is in non-wilderness, would be consistent with the likely river segment classification as either "Scenic" or "Recreational."
5. Protect and enhance river ORVs?	☐	☐	☒	At this time, river ORVs have not been established for the Tuolumne River; upgrading the weather station at Tuolumne Meadows would protect likely ORVs.
6a. Fall within the River Protection Overlay?	☐	☒	☐	
6b. If "yes", is it consistent with conditions of the River Protection Overlay?	☐	☐	☒	
7. Remain consistent with the areas Management Zoning?	☒	☐	☐	At this time, management zones have not been established for the Tuolumne River; upgrading the weather station at Tuolumne Meadows would be consistent with any likely management zoning.
8a. Fall on a tributary of a Wild and Scenic River?	☒	☐	☐	Several fall on tributaries to the Merced and Tuolumne Wild and Scenic Rivers.
8b. If 9a is "yes", will the project affect the Wild and Scenic River corridor?	☐	☒	☐	
8c. If 9a is "yes", will the project unreasonably diminish scenic, recreational, or fish and wildlife values?	☐	☒	☐	
If "yes" to questions 2, 9b, or 9c, then a WSRA Section 7 determination must be completed and attached.				

Mitigations and Conditions:

1. None

I. NEPA Analysis and Approval Conditions

When implemented as detailed in the project description and following all Project Mitigations and Conditions listed below, this project meets the terms and conditions of a categorical exclusion to NEPA.

Applicable Categorical Exclusion:

DO12 *C (5) - Installation of signs, displays, and kiosks.*

Project Mitigations and Conditions:

1. **Remove, during the "off" season (spring, summer, and fall), snow sensors and stakes when possible, even when not immediately visible. (Management Team)**
2. **Coordinate location of instrument installation with the park Archeologist (Laura Kirn, 209-379-1314) and the park Historic Cultural Landscape Architect (Steven Torgerson, 209-379-1295) to avoid impacts and ensure the "No Adverse Effect" determination. (Resources Management and Science)**

This project has been reviewed in accordance with the above criteria and it has been determined that the project will result in no or minimal environmental effects. Therefore, it is categorically excluded from further environmental review required under the National Environmental Policy Act. Additionally, the necessary compliance coordination has been completed with regard to the National Historic Preservation Act, the Wilderness Act, the Wild and Scenic Rivers Act, and the Endangered Species Act.

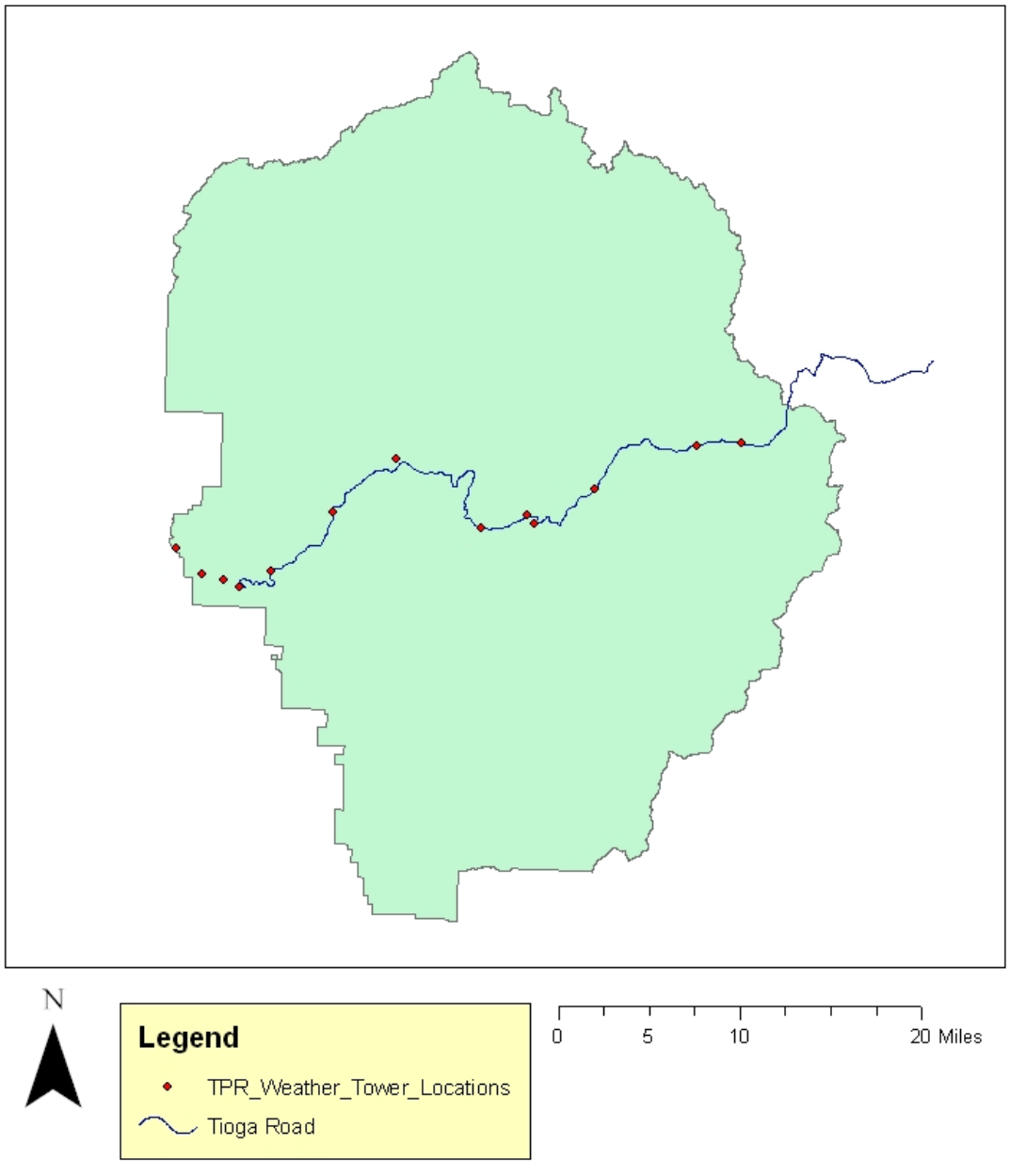
//GWColliver//	*8/7/06*
Compliance Specialist	***Date***
//Mark Husbands, Acting//	*8/7/06*
Compliance Program Manager	***Date***
//Bill Delaney//	*8/9/06*
Chief, Project Management	***Date***

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

Attachment A

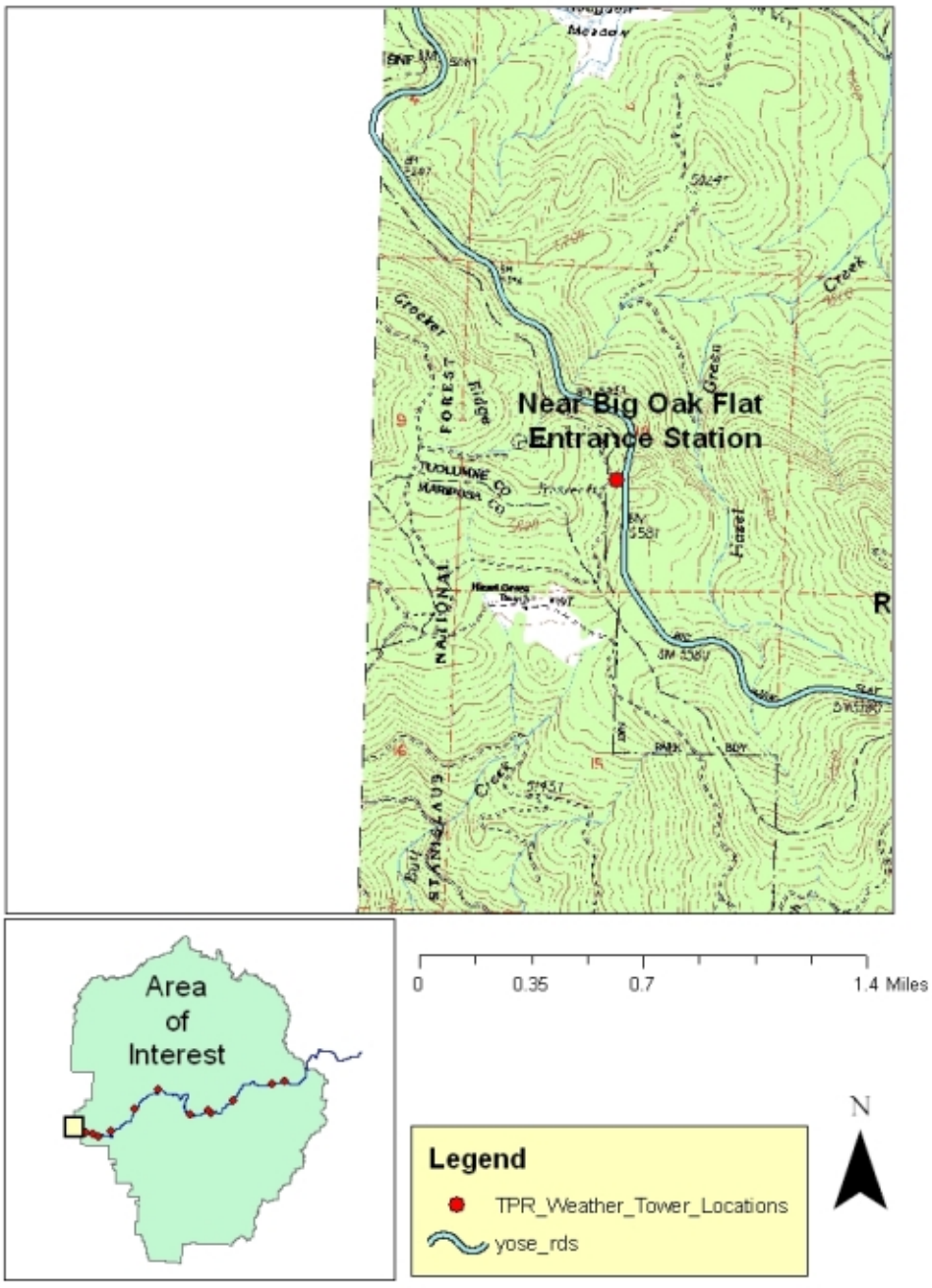
Highway 120 Corridor Weather Station Transect

Yosemite National Park
Project Location Map



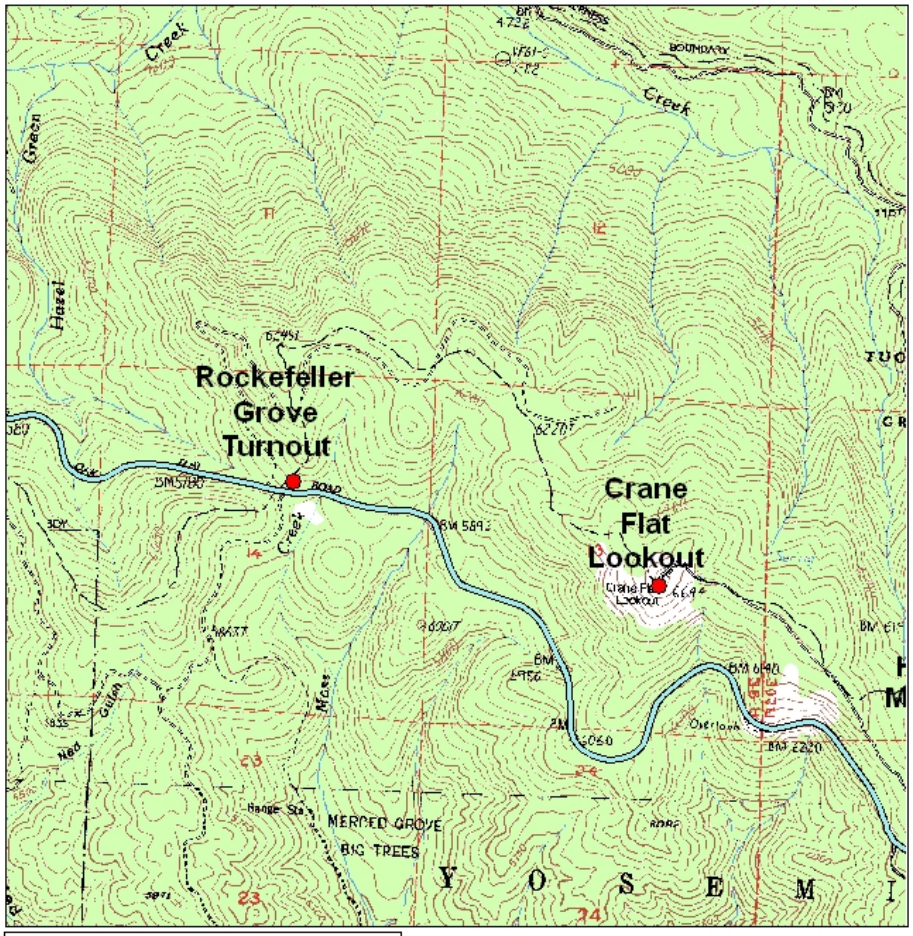
Highway 120 Corridor Weather Station Site Locations

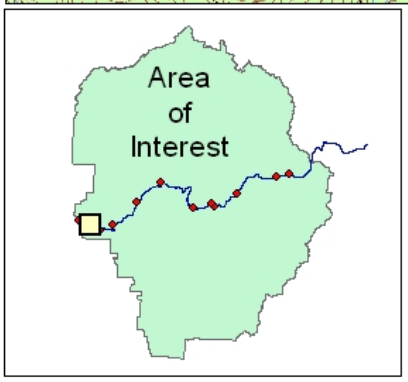
Big Oak Flat Road Weather Station Transect Site:
Near Big Oak Flat Entrance Station



Big Oak Flat Road Weather Station Transect Site:

Rockefeller Grove turnout and Crane Flat Lookout





0 0.35 0.7 1.4 Miles

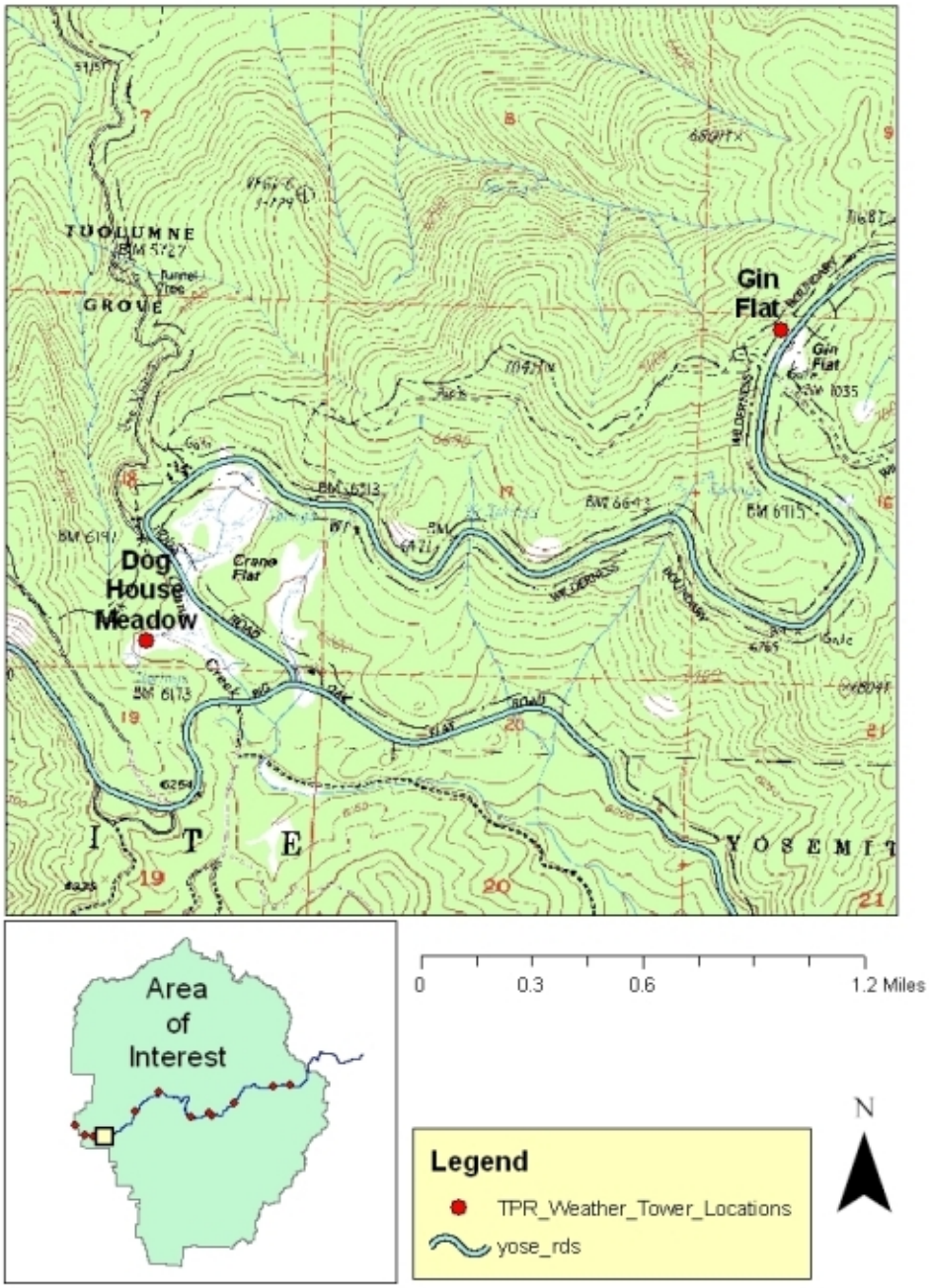
N

Legend

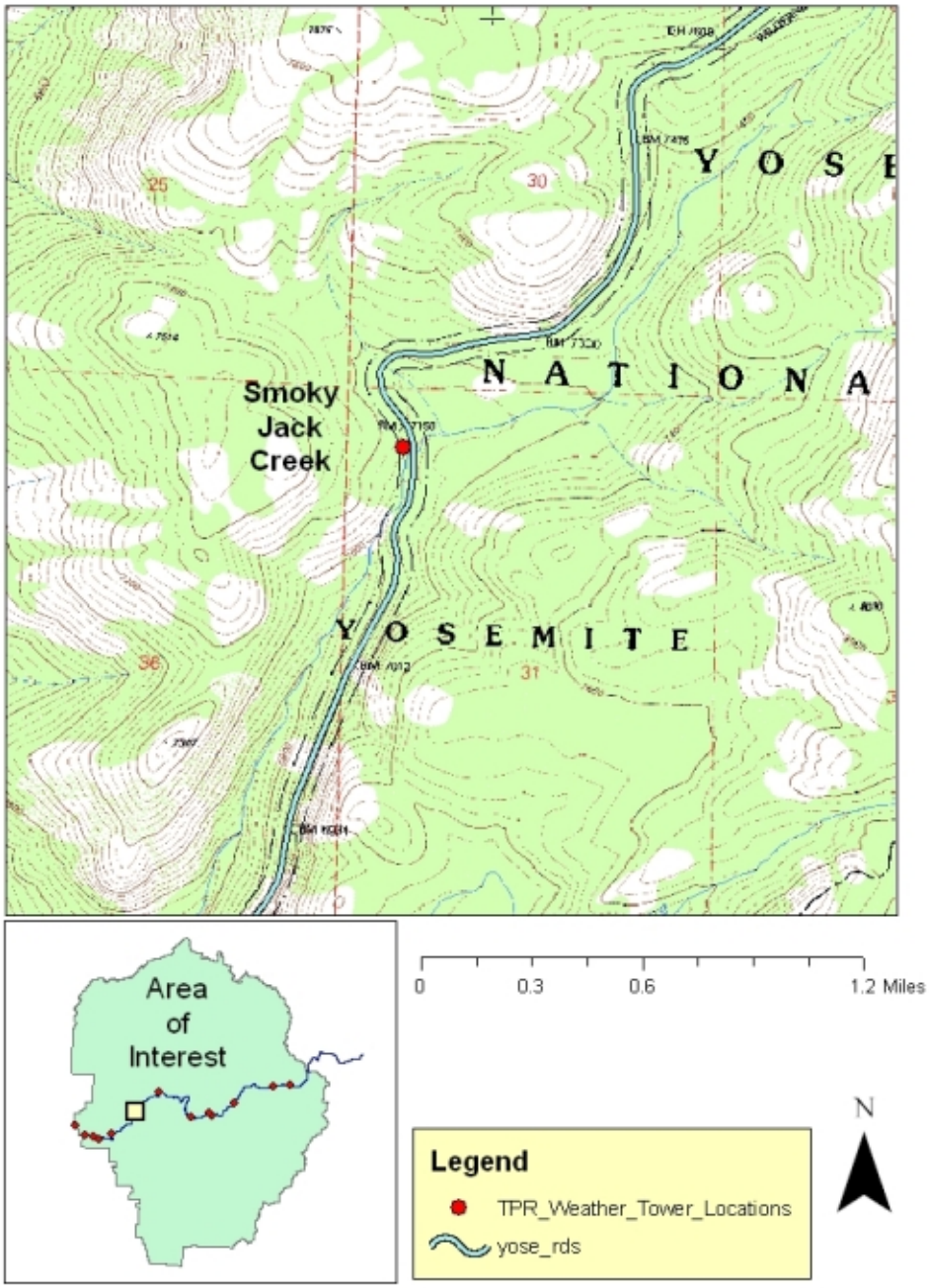
TPR_Weather_Tower_Locations

yose_rds

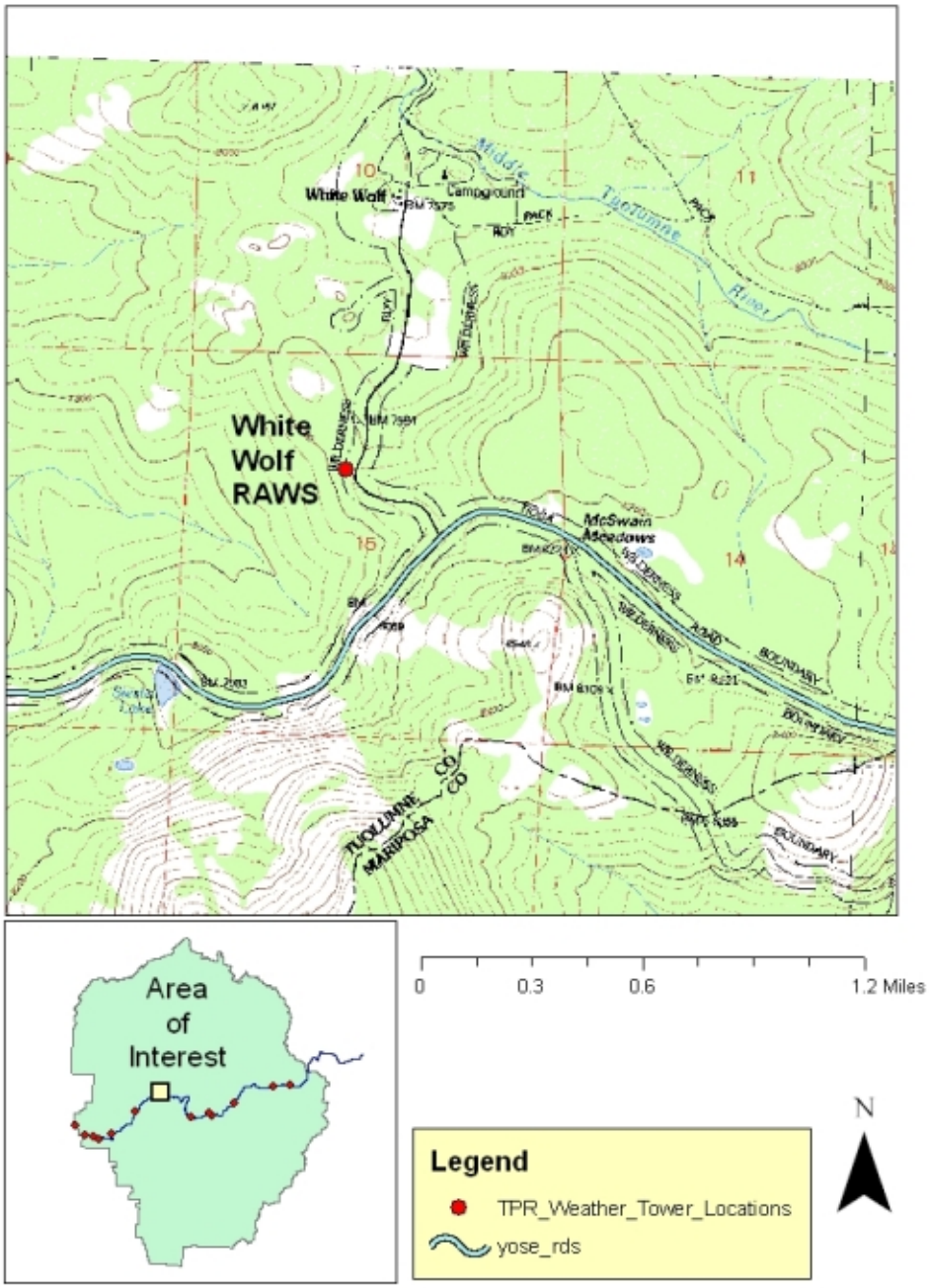
Tioga Road Weather Station Transect Sites:
Dog House Meadow and Gin Flat



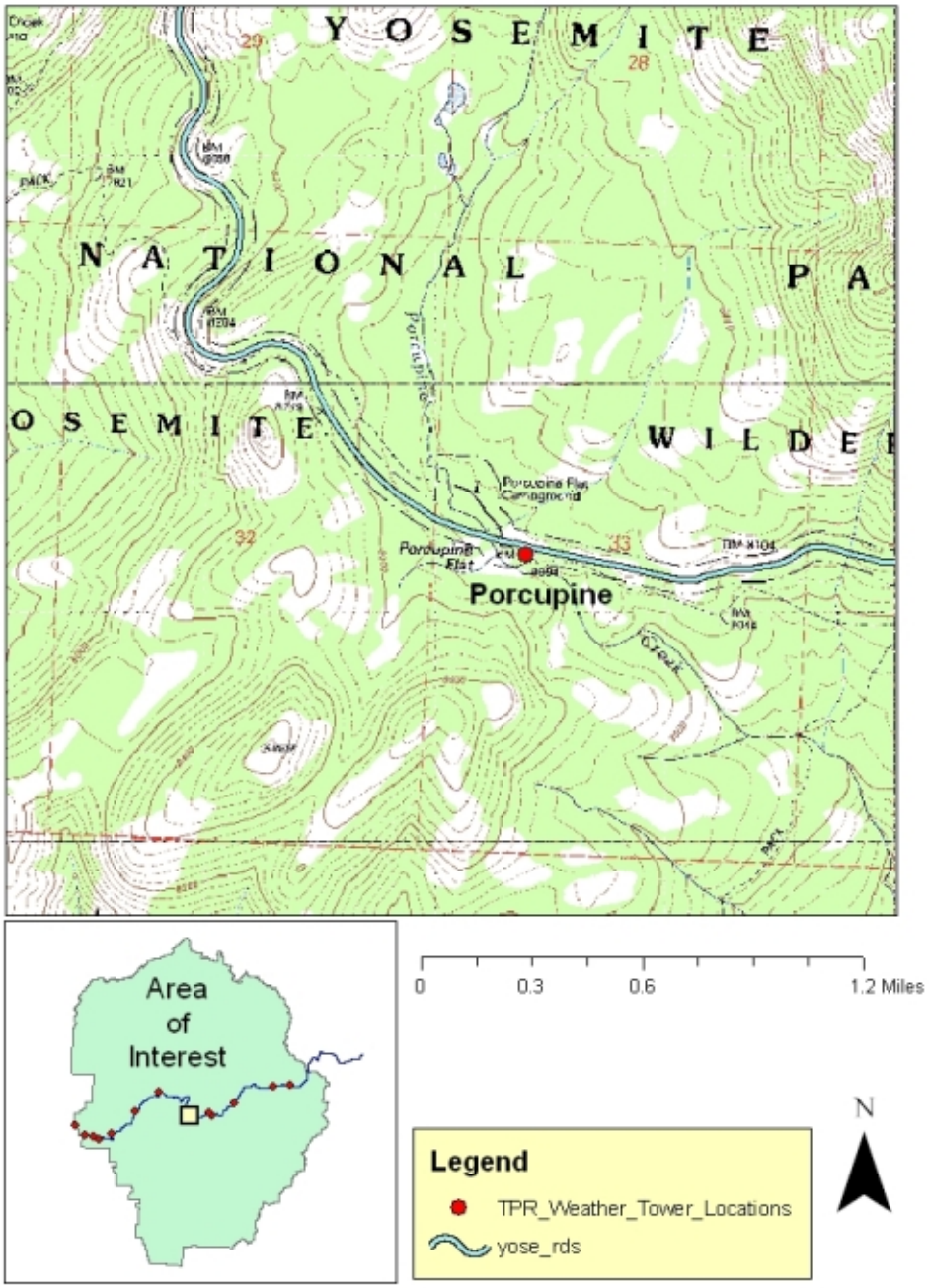
Tioga Road Weather Station Transect Sites:
Smoky Jack Creek



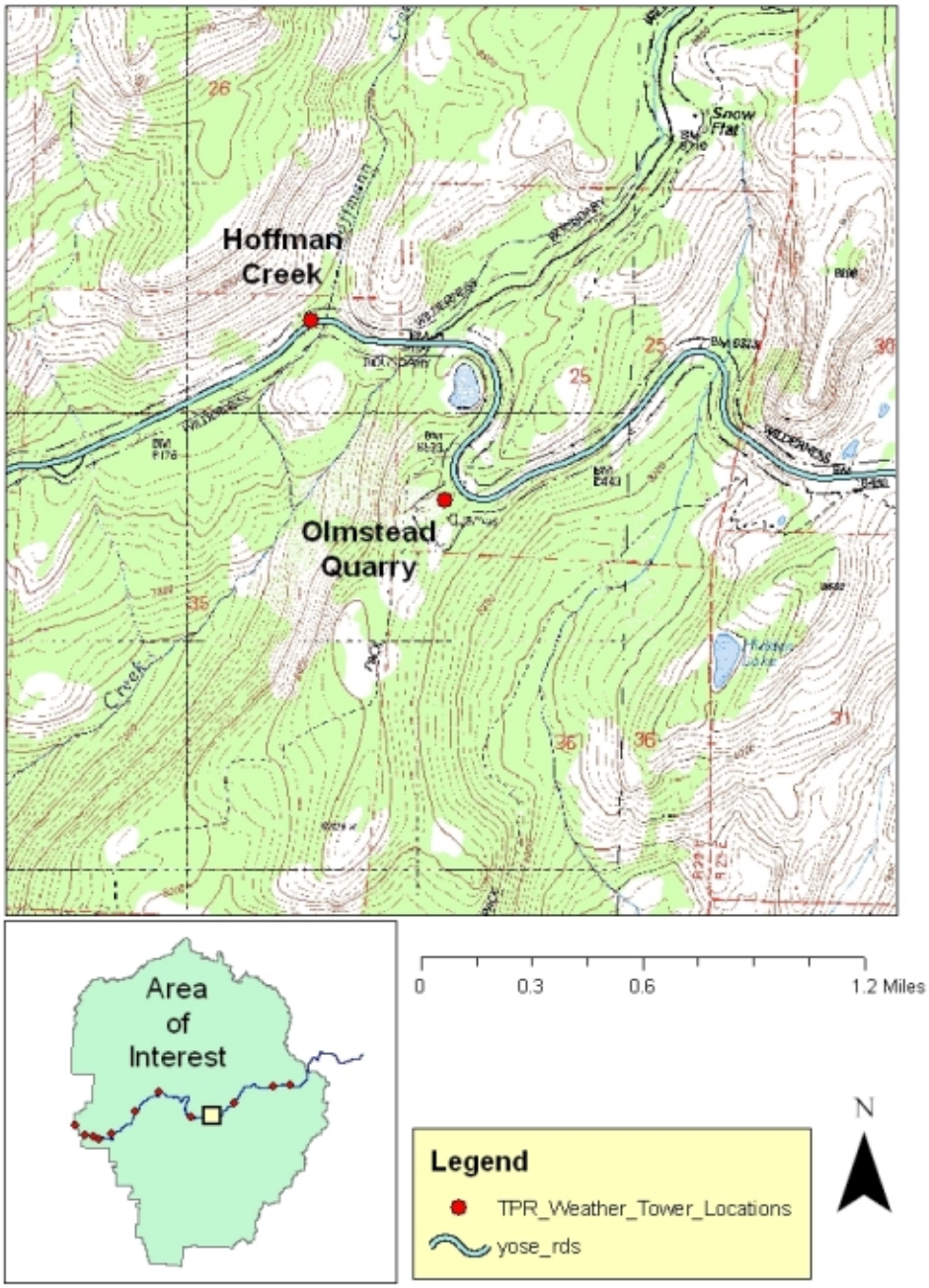
Tioga Road Weather Station Transect Sites:
White Wolf RAWS



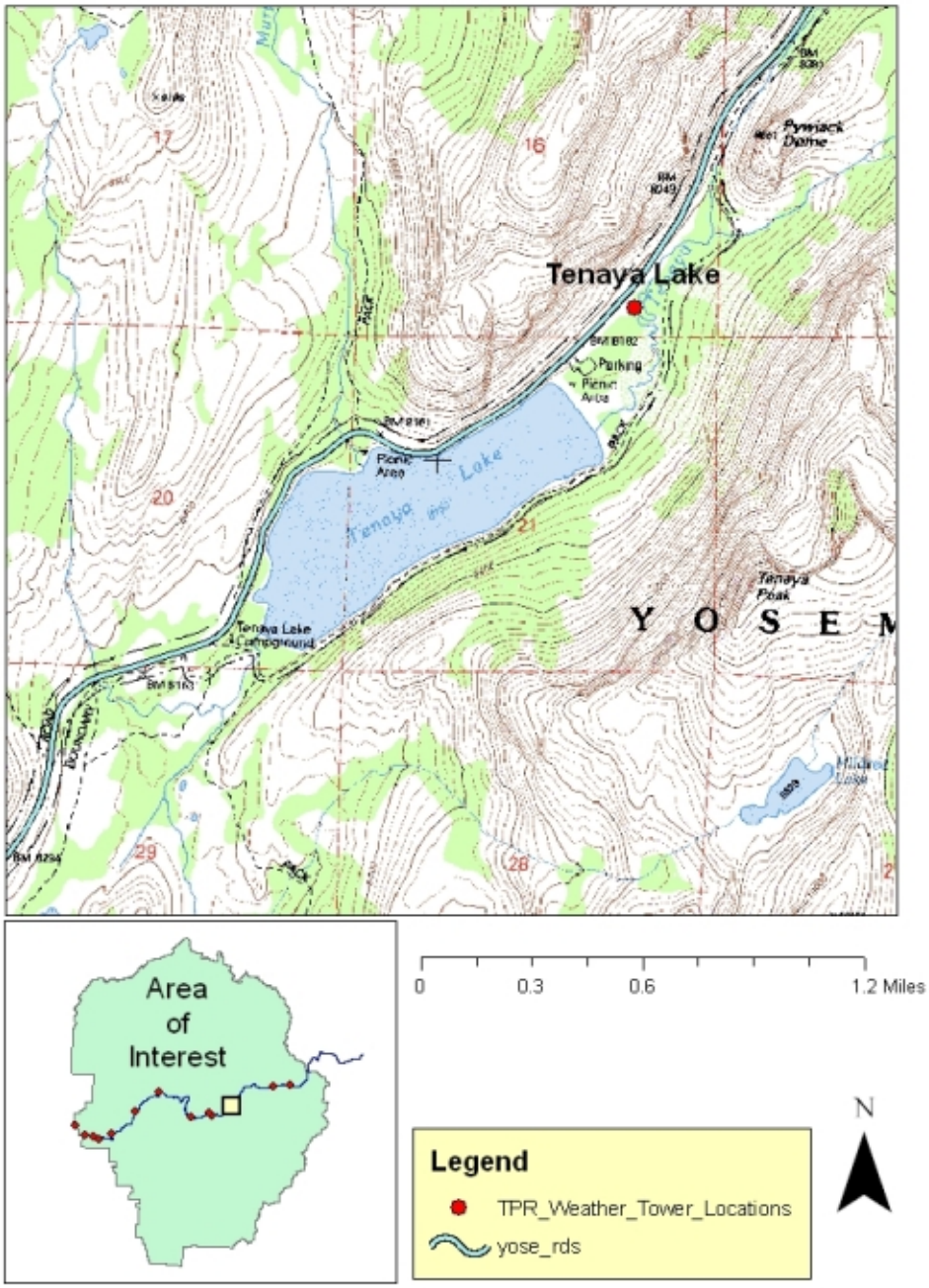
Tioga Road Weather Station Transect Sites:
Porcupine



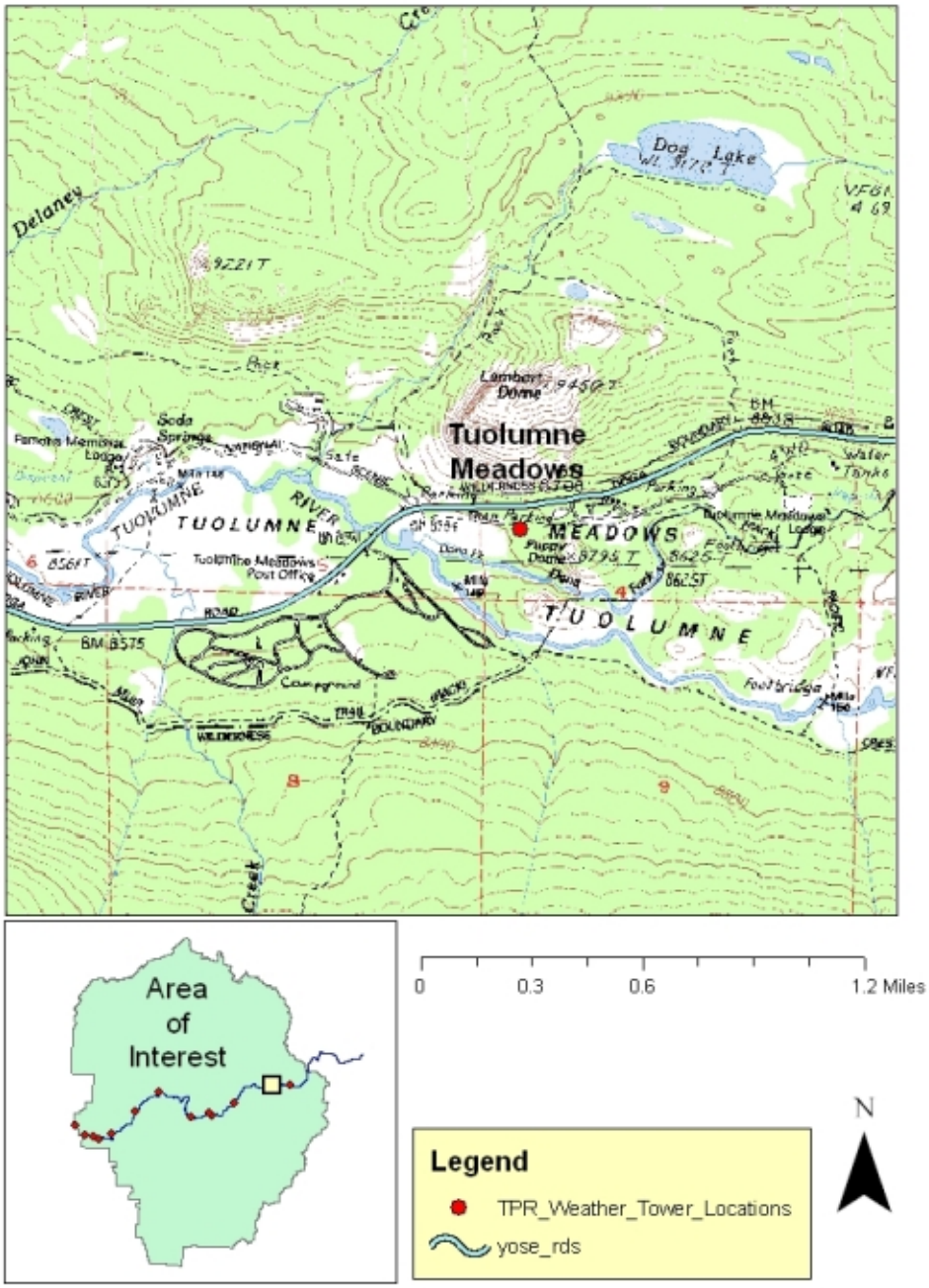
Tioga Road Weather Station Transect Sites:
Hoffman Creek or Olmstead Quarry



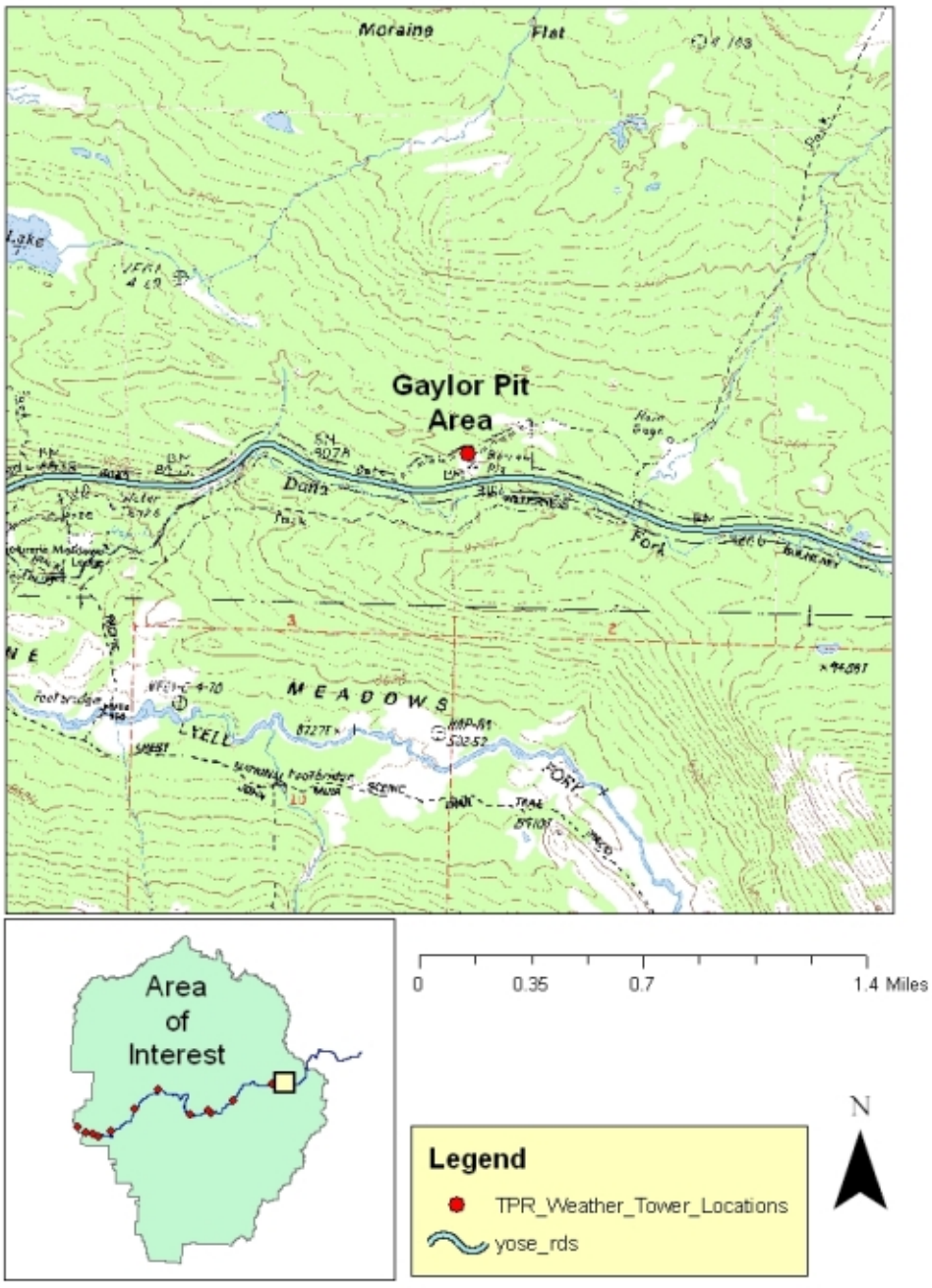
Tioga Road Weather Station Transect Sites:
Tenaya Lake



Tioga Road Weather Station Transect Sites:
Tuolumne Meadows



Tioga Road Weather Station Transect Sites:
Gaylor Pit and Helipad Area



Attachment B

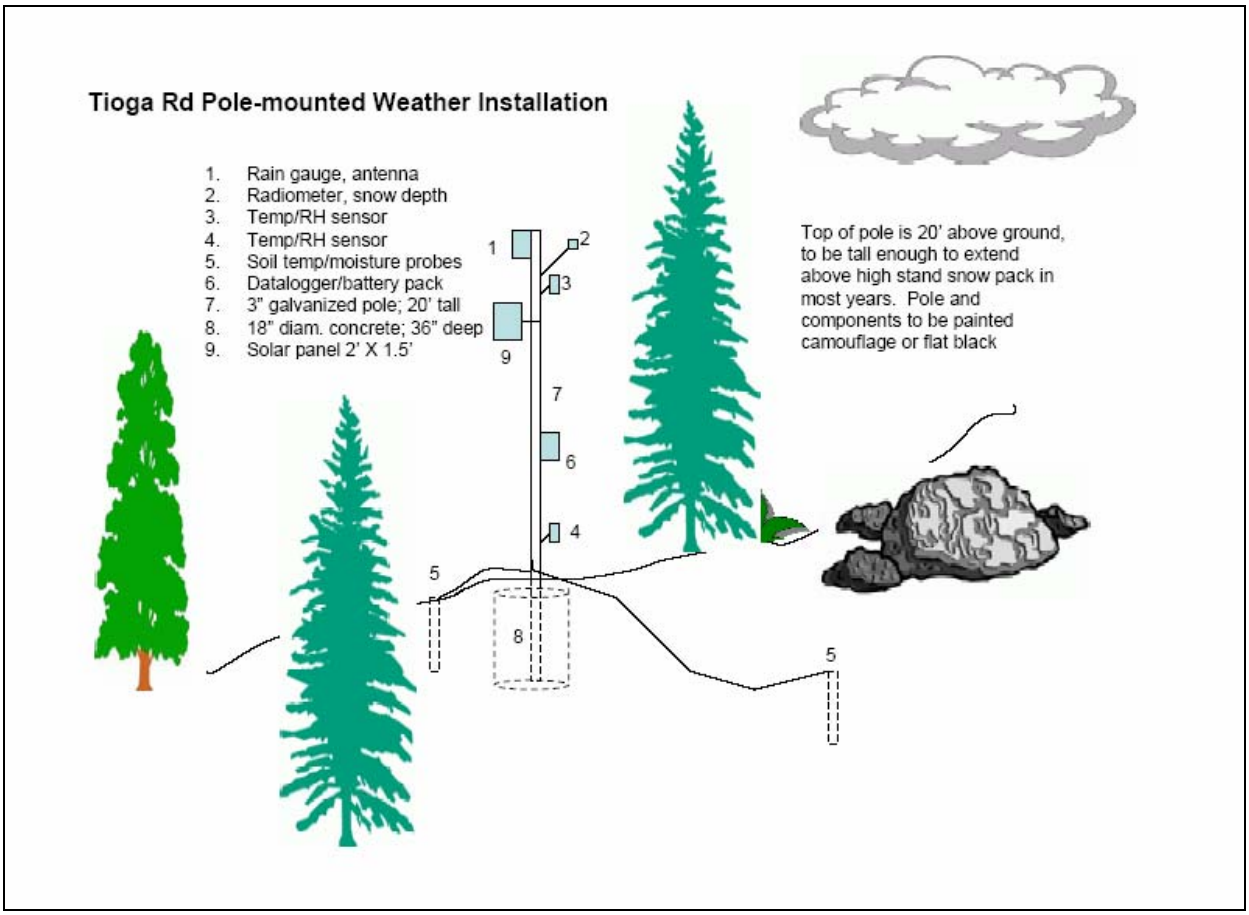


Figure 1 Hypothetical Site with Typical Pole-Mounted Weather Station.

Attachment C

Photo 1 Typical Dendrometer Band Installation.

Photo 2 Temporary Snow Depth Sensor Installation with T-Post to which it would be attached.

Preservation Assessment Form (YOSE XXX)

(Version: FEB06)

Compliance Tracking Number: 2006-084
PEPC Project Number: 16300

A. DESCRIPTION OF UNDERTAKING

Title: Highway 120 Corridor Water Station Installations and Upgrades

Project Location and Area of Potential Effect:

Big Oak Flat Road and Tioga Road, Mariposa and Tuolumne Counties, California

NTE 200 Feet each side of Highway 120 corridor.

Project Manager: Jim Roche**,** Resources Management Science, Yosemite National Park

Project Description: The purpose of this project is to upgrade 7 existing permanent weather stations and install 5 new permanent stations along the Highway 120 corridor in Yosemite National Park. In addition, each site would be seasonally instrumented with up to 20 temporary snow depth sensors to characterize the variability in snow depth at each site. Proposed locations may be adjusted to avoid impacts to cultural resources (review pending).

PERMANENT INSTALLATIONS:

All new and upgraded weather stations lie within non-wilderness along the Highway 120 road corridor. These instrument installations should be considered permanent installations. Five new weather stations would be installed at 1) 1.5 miles south of Big Oak Flat Entrance Station, 2) near the entrance to the road to the Rockefeller Grove, 3) At Smoky Jack Creek, 4) Near Olmstead Pit (preferred) or Hoffman Creek, and 5) Near Gaylor Pit or Gaylor Creek. The latter would replace an existing fire Remote Access Weather Station (RAWS) presently located in designated Wilderness. Upgraded stations would be 1) Crane Flat Lookout RAWS, 2) Dog House Meadow, 3) Gin Flat, 4) White Wolf RAWS, 5) Porcupine, 6) Tenaya Lake and 7) Tuolumne Meadows. See Location and Site figures.

New stations would consist of a 20 foot tall 3-inch in diameter galvanized metal mast pole set in a concrete footing approximately 4 feet deep and 18 inches in diameter (see figure). Attached to the pole would be two temperature and humidity sensors, radiometer, snow depth sensor, rain gauge, fuel moisture sensor, barometer, datalogger and battery pack, a solar panel, and satellite antenna for transmitting the data in near real-time. Associated with each station would be two soil temperature and moisture arrays, one next to the tower described above and one within 200 yards, and up to 6 dendrometer bands to measure tree growth. Installation of each soil temperature/moisture array would require the excavation of an 18 inch diameter hole up to 4 feet deep. Sensor wiring from each array would be placed in 1-inch PVC conduit extending from the instruments to the weather tower. Conduit would be buried in a trench 4-6 inches wide, 6-10 inches deep, and up to 200 meters from the weather tower. Dendrometer bands would be placed around selected trees and transmit information wirelessly to the weather tower. See instrumentation figures.

Upgrades for the seven existing stations would be the installation of two soil moisture / temperature arrays, up to six dendrometer bands, and one fuel moisture sensor per site as described above. Crane Flat Lookout RAWS, would require the excavation of a footer for a new tower. The existing tripod structure has no foundation.

TEMPORARY INSTALLATIONS:

Each of the above sites would be instrumented seasonally with up to 20 snow depth sensors for a period of up to 10 years. These sensors would be mounted on T-posts driven into the ground and stand 10-15 feet in height (see photo). Most of these instruments would be removed following the end of snow melt each season to reduce their visual impact. Some would be left in place to reduce the burden of reinstalling all the instruments each season. These instruments would be put in place seasonally for up to ten years from 2006.

Stations would be maintained by California Cooperative Snow Surveys, National Interagency Fire Center (NIFC) personnel (for the RAWS network), and a consortium of researchers from the U.S. Geological Survey, Scripps Institute of Oceanography, and the University of California Merced. Many stations would broadcast data via satellite and the information made available in near real-time on the internet. Non-real-time data would be made available to the National Park Service (NPS) and the public.

1. Attached Sensitive Information**	Yes	No	Explanation/Source/Notes
a. Maps	☒	☐	CR GIS
b. Drawings	☐	☒	
c. Site Plans	☐	☒	
d. Photographs	☐	☒	
e. Sample	☐	☒	
f. List of Materials	☐	☒	
g. Other (Explain)	☐	☒	

**** Sensitive documents not for duplication or distribution beyond park management, subject matter experts, and the project statutory compliance file.**

B. DESCRIPTION OF EFFECTS

	Yes	No	N/A	Explanation/Notes
1.				
2. Has the Area of Potential Effect been surveyed to identify historic properties? If Yes, provide reference for the Survey (s).	☒	☐	☐	Numerous surveys and historic districts in the APE
a. Would the proposed action affect a known historic property?	☒	☐	☐	Cultural Landscapes, archeological sites, traditional cultural resources.

2. List all Historic Properties in the Area of Potential Effect:	**Affected? Yes**	**No**	**Explanation/Notes**
a. See CR GIS Map	☐	☐	
b.	☐	☐	
c.	☐	☐	

3. List resources in the Area of Potential Effect to which American Indians attach cultural and religious significance:	**Affected? Yes**	**No**	**Explanation/Notes**
a. Specific resources unknown	☒	☐	
b.	☐	☐	
c.	☐	☐	

4. The proposed action will:	**Yes**	**No**	**N/A**	**Explanation/Note**
• Destroy, remove, or alter features or elements from a historic structure	☐	☒	☐	
• Replace historic features/elements in kind	☐	☒	☐	
• Add nonhistoric features/elements to a historic structure	☐	☒	☐	
• Alter or remove features/elements of a historic setting or environment (including terrain)	☒	☐	☐	
• Add nonhistoric features/elements (including visual, audible, or atmospheric) to a historic setting or cultural landscape	☒	☐	☐	
• Disturb, destroy, or make archeological resources inaccessible, or alter associated terrain	☐	☒	☐	Will avoid impact to known resources
• Disturb, destroy, or make ethnographic resources inaccessible, or alter associated terrain	☐	☒	☐	
• Begin or contribute to the deterioration of historic fabric, terrain, setting, landscape elements, or archeological or ethnographic resources	☐	☒	☐	
• Involve a real property transaction affecting historic cultural properties (i.e., the exchange, sale, or lease of land or structures)	☐	☒	☐	
• Potentially affect presently unidentified historic resources	☒	☐	☐	Ground disturbance
• Other	☐	☐	☐	

Checklist prepared by: Jeannette Simons **Date:** 7/10/06
Title: Historic Preservation Officer

C. SPECIALIST SECTION

Specialists: Your comments here (or attached) show that you have reviewed this proposal for conformity with requirements of *National Historic Preservation Act, Section 106*; with the 1995 *Servicewide Programmatic Agreement* (if applicable); with applicable parts of the *Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation*; with the NPS *Management Policies* and *Cultural Resource Management Guideline*; and have given your best professional advice about this project and the issues relevant to the Section 106 process, including identification and evaluation of historic properties and further consultation needs.

Archeologist Name: **Laura Kirn** Date: n/d

Comments:

Ground Disturbance Involved Yes: ☒ No: ☐

Assessment of Effect: **"No Adverse Effect"**

Recommended Conditions: Coordinate with Yosemite Archeology Office for instrument placement at Hodsdon, Rocherfeller Grove, White Wolf, Porcupine, Tuolumne Meadows and Gaylor Pit.

Signature of Archeologist: *//Laura Kirn//* (signed original on file)

Cultural Anthropologist Name: **Sonny Montague** Date:

Comments:

Assessment of Effect:

Recommended Conditions:

Signature of Cultural Anthropologist: _____

Curator Name: **Jonathan Bayless** Date:

Comments:

Assessment of Effect:

Recommended Conditions:

Signature of Curator: _____

Historian Name: **Charles Palmer** Date: 7/12/06

Comments:

Assessment of Effect: **"No Adverse Effect"**

Recommended Conditions:Follow conditions stipulated by ARacheologist, consult with Historic Landscape Arachitect regarding location and visual impact.

Signature of Historian: *//Charles Palmer//* (signed original on file)

Historic Architect Name: **Sueann Brown** Date: 7/31/06

Comments:

Assessment of Effect: **"No Adverse Effect"**

Recommended Conditions: Follow conditions by archeologist and HLA

Signature of Historic Architect: *//Sueann Brown//* (signed original on file)

Historic Landscape Architect Name: **Steven Torgerson** Date: 7/20/06

Comments:

Assessment of Effect: **"No Adverse Effect"**

Recommended Conditions: Final locations to be approved by Historical Landscape Architect.

Signature of Historic Landscape Architect: *//Steven D Toregerson//* (singed original on file)

Preservation Specialist Name: **Doug Martin** Date:

Comments:

Assessment of Effect:

Recommended Conditions: Recommended Conditions

Signature of Preservation Specialist: _____

Native American Liaison Name: **Jeannette Simons** Date:

Comments:

Assessment of Effect:

Recommended Conditions:

Signature of Native American Liaison: _____

D. RESOURCES MANAGEMENT AND SCIENCE DIVISION AND PARK 106 COORDINATOR REVIEWS AND RECOMMENDATIONS

1. Review by specialists: The appropriate subject-matter experts have reviewed the project and entered their comments and recommendations in Section C, above.

The foregoing assessment is adequate: the proposed action is consistent with all applicable NPS management policies, standards, guidelines, or US DOI standards and guidelines, Rehabilitation of Historic Buildings, or others, and incorporates measures to avoid Adverse Effects.

Reviewed and Accepted by:

Signature: *//Niki Stephanie Nicholas//* (signed original on file) **Date:** *7/26/06*
Chief of Resources Management & Science Division

2. Assessment of Effects: No Adverse Effect

3. Compliance Requirements: The following is the park's assessment of Section 106 process needs and requirements for this undertaking.

☐ **Standard 36 CFR Part 800 Consultation**

Consultation under 36 CFR is needed subsequent to the preparation of this form and its review by appropriate historic resource management advisors.

☒ **Undertaking related to the 1995 NPS Programmatic Agreement**

The above action meets all conditions for a programmatic exclusion under Stipulation IV. A of the 1995 NPS programmatic agreement, and is listed in Stipulation IV. B (3)

☐ **Plan-Related Undertaking**

Consultation and review of the proposed undertaking were completed in the context of a plan review process, in accordance with the 1995 NPS programmatic agreement and 36 CFR Part 800.

☐ **Undertaking Related to Another Agreement**

The proposed undertaking is covered for Section 106 purposes under a document such as a statewide agreement written in accordance with 37 CFR Part 800.7 or counterpart regulations.

Agreement:

☐ **Flood-Recovery Related Undertaking**

The proposed undertaking is covered for Section 106 purposes under the letter-based agreement between the NPS, the State Historic Preservation Office, and the Council for Historic Preservation for "Highwater 97" flood repair and recovery

☐ **Undertaking Related to the 1999 Yosemite Programmatic Agreement**

The proposed undertaking is covered for Section 106 purposes under the park's 1999 programmatic agreement for planning, design, construction, operations and maintenance; the undertaking meets the stipulations identified in Article VII.C.2.

4. Project Stipulations and Conditions

Following are listed any stipulations or conditions necessary to ensure that the assessment of effects above is consistent with 36 CFR 800 criteria of effect or to mitigate potential adverse effects:

a. No adverse effect determination is contingent on coordinating location of instrument installation with Park Archeology office and Park Historic Cultural Landscape Architect to avoid impact.

Recommended by Park Section 106 Coordinator:

Name: **Jeannette Simons**

Title: **Historic Preservation Officer**

Signature: *//Jeannette Simons//* Date: *7/31/06*

E. SUPERINTENDENT'S APPROVAL

The proposed work conforms to NPS Management Policies and NPS-28 and I approve the recommendations, stipulations, and conditions noted in Section B of this form.

Signature of Superintendent: *//MJTollefson//* **Date:** *8/11/06*

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