

United States Department of the Interior

NATIONAL PARK SERVICE

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

To: Ashley Adams, Project Manager, Yosemite National Park

From: Superintendent, Yosemite National Park

Subject: NEPA and NHPA Clearance: 2015-009 Hetch Hetchy Meteorological Station Consolidation and

Automation (57322)

The Executive Leadership Team has reviewed the proposed project and completed its environmental assessment documentation, and we have determined the following:

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

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

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

Age of evaporation pan is unknown and should not be removed unless shown to be installed less than 50 years ago. Submit findings to the park cultural resource staff for review and approval of removal prior to removal work.

Recommendations for Conditions or Stipulations:

None

For complete compliance information see PEPC Project 57322.

//Don L. Neubacher//
Don L. Neubacher

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

Enclosure (with attachments)

cc: Statutory Compliance File

Letter of Compliance Completion - Hetch Hetchy Meteorological Station Consolidation and Automation - PEPC ID: 57322

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Project: 2015-009 Hetch Hetchy Meteorological Station Consolidation and Automation

PEPC Project Number: 57322

Categorical Exclusion Form

Project Description:

Air temperature and precipitation have been measured near O'Shaughnessy Dam since before construction of the dam, starting in 1919. While the location of measurements has not changed in this time, the individual gages have throughout the history of the site. Hetch Hetchy Water and Power (HHWP) is proposing to remove the manual precipitation and temperature gages and replacing them with automated gages that can be accessed online. National Oceanic and Atmospheric Administration (NOAA) did not support letting HHWP automate their existing precipitation gage on site.

Yosemite National Park

Date: 06/05/2015

The new precipitation gauge will be slightly larger than the current gauge (about the same size as the NOAA gauge nearby), but will occupy the same footprint. A small (12" x 12") solar panel mounted with the precipitation gage will power the radio, which will be collocated with the temperature probe inside the existing temperature gauge housing. The solar panel will be mounted on the stand holding the precipitation gauge. Installation of the precipitation gage will require digging a shallow hole and installing a base using hand tools. A small diameter (1") flexible jacketed steel conduit will run 60 feet from the precipitation gage to the temperature gage housing to transmit power and precipitation gage signal. The conduit will be buried in a shallow 4" deep trench dug by hand tools.

A radio, data logger, antennae and battery will be installed inside or attached to the existing temperature gage housing. The footprint of the housing will not change.

To ensure continuity of the long term data record, the existing manual precipitation gauge will need to remain on site for a period of time. Depending on precipitation conditions (drought, snow, rainy periods), this collocation may need to continue for 2-4 years. After we are assured that the new precipitation gauge matches the old, the old gauge will be removed. This will be performed using hand tools and will not require any additional ground disturbance.

The evaporation pan nearby is no longer in use, and will be removed during installation of the new precipitation gage. Removing the fence poles will require some digging using hand shovels. The pan itself is mounted on a small wooden platform, which will be removed by hand.

This work will also involve removing the current automated weather station that is located on a granite outcrop overlooking Evergreen Road at the Hetch Hetchy compound. The entire station will be removed during the installation of the new weather station.

The project also involves the removal of three trees that partially encroach on both the NOAA and HHWP precipitation gauges. Two of the trees are dead cedars (dbh = 43", height = 85'; and 48", height 90'; respectively) and the third tree is a dead oak (dbh of main stem = 15", height = 40').

Project Locations:

Categorical Exclusion Form - Hetch Hetchy Meteorological Station Consolidation and Automation - PEPC ID: 57322

Mitigations:

Age of evaporation pan is unknown and should not be removed unless shown to be installed less than 50 years ago. Submit findings to the park cultural resource staff for review and approval of removal prior to removal work.

Describe the category used to exclude action from further NEPA analysis and indicate the number of the category (see Section 3-4 of DO-12):

C.8 Replacement in kind of minor structures and facilities with little or no change in location, capacity or appearance.

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 (e.g. all boxes in the ESF are marked "no") or conditions in Section 3-6 apply, and the action is fully described in Section 3-4 of DO-12.

Superintendent:	//Don L. Neubacher//	Date: 6/15/15
	Don L. Neubacher	

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

Yosemite National Park Date: 06/05/2015

ENVIRONMENTAL SCREENING FORM (ESF)

DO-12 APPENDIX 1

Date Form Initiated: 06/05/2015

Updated May 2007 - per 2004 Departmental Manual revisions and proposed Director's Order 12 changes

A. PROJECT INFORMATION

Park Name: Yosemite National Park

Project Title: 2015-009 Hetch Hetchy Meteorological Station Consolidation and Automation

PEPC Project Number: 57322

Project Type: Equipment Replacement (EQR)

Project Location:

County, State: Tuolumne, California

Project Leader: Ashley Adams

Is project a hot topic (controversial or sensitive issues that should be brought to attention of Regional Director)? No

B. RESOURCE EFFECTS TO CONSIDER:

Identify potential effects to the following physical, natural, or cultural resources	No Effect	Negligible Effects	Minor Effects	Exceeds Minor Effects	Data Needed to Determine/Notes
1. Geologic resources – soils, bedrock, streambeds, etc.					A small trench (2-4 inches deep, 2 inches wide) would run from the new precipitation gage to the temperature gage housing.
2. From geohazards	No				
3. Air quality	No				
4. Soundscapes	No				
5. Water quality or quantity	No				
6. Streamflow characteristics	No				
7. Marine or estuarine resources	No				

Identify potential effects to the following physical, natural, or cultural resources	No Effect	Negligible Effects	Minor Effects	Exceeds Minor Effects	Data Needed to Determine/Notes
8. Floodplains or wetlands	No				
9. Land use, including occupancy, income, values, ownership, type of use	No				
10. Rare or unusual vegetation – old growth timber, riparian, alpine	No				
11. Species of special concern (plant or animal; state or federal listed or proposed for listing) or their habitat	No				
12. Unique ecosystems, biosphere reserves, World Heritage Sites	No				Yosemite National Park is a World Heritage Site.
13. Unique or important wildlife or wildlife habitat	No				
14. Unique or important fish or fish habitat	No				
15. Introduce or promote non-native species (plant or animal)	No				
16. Recreation resources, including supply, demand, visitation, activities, etc.	No				
17. Visitor experience, aesthetic resources	No				

Identify potential effects to the following physical, natural, or cultural resources	No Effect	Negligible Effects	Minor Effects	Exceeds Minor Effects	Data Needed to Determine/Notes
18. Archeological resources	No				
19. Prehistoric/historic structure	No				
20. Cultural landscapes	No				
21. Ethnographic resources	No				
22. Museum collections (objects, specimens, and archival and manuscript collections)	No				
23. Socioeconomics, including employment, occupation, income changes, tax base, infrastructure	No				
24. Minority and low income populations, ethnography, size, migration patterns, etc.	No				
25. Energy resources	No				
26. Other agency or tribal land use plans or policies	No				
27. Resource, including energy, conservation potential, sustainability	No				
28. Urban quality, gateway	No				

Identify potential effects to the following physical, natural, or cultural resources	No Effect	Negligible Effects	Minor Effects	Exceeds Minor Effects	Data Needed to Determine/Notes
communities, etc.					
29. Long-term management of resources or land/resource productivity	No				
30. Other important environment resources (e.g. geothermal, paleontological resources)?	No				

C. MANDATORY CRITERIA

Mandatory Criteria: If	Yes	No	N/A	Comment or Data Needed to Determine
implemented, would the				
proposal: 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		No		

Mandatory Criteria: If implemented, would the proposal:	Yes	No	N/A	Comment or Data Needed to Determine
unique or unknown environmental risks?				
E. Establish a precedent for future action or represent a decision in principle about future actions with potentially significant environmental effects?		No		
F. Have a direct relationship to other actions with individually insignificant, but cumulatively significant, environmental effects?		No		
G. Have significant impacts on properties listed or eligible for listing on the National Register of Historic Places, as determined by either the bureau or office?		No		
H. Have significant impacts on species listed or proposed to be listed on the List of Endangered or Threatened Species, or have significant impacts on designated Critical Habitat for these species?		No		
I. Violate a federal law, or a 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 (Executive Order 12898)?		No		
K. Limit access to and ceremonial use of Indian sacred sites on federal lands by Indian religious practitioners or significantly adversely affect the physical integrity of such sacred sites (Executive Order 13007)?		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,		No		

Mandatory Criteria: If	Yes	No	N/A	Comment or Data Needed to Determine
implemented, would the				
proposal:				
or expansion of the range of such species (Federal Noxious Weed Control Act and Executive Order 13112)?				

For the purpose of interpreting these procedures within the NPS, any action that has the potential to violate the NPS Organic Act by impairing park resources or values would constitute an action that triggers the DOI exception for actions that threaten to violate a federal law for protection of the environment.

D. OTHER INFORMATION

- 1. Are personnel preparing this form familiar with the site? Yes
- 1.A. Did personnel conduct a site visit? No
- **2.** Is the project in an approved plan such as a General Management Plan or an Implementation Plan with an accompanying NEPA document? No
- 3. Are there any interested or affected agencies or parties? No
- 4. Has consultation with all affected agencies or tribes been completed? No
- 5. Are there any connected, cumulative, or similar actions as part of the proposed action? (e.g., other development projects in area or identified in GMP, adequate/available utilities to accomplish project) No

E. INTERDISCIPLINARY TEAM SIGNATORIES

Interdisciplinary Team	Field of Expertise
Don L. Neubacher	Superintendent
Kathleen Morse	Chief of Planning
Randy Fong	Chief of Project Management
Jeff Hilliard	Chief of Administration Management
Ron Borne	Chief of Facilities Management
Linda C. Mazzu	Chief of Resources Management & Science
Kris Kirby	Chief of Business and Revenue Management
Tom Medema	Chief of Interpretation and Education
Kevin Killian	Chief of Visitor and Resource Protection
Ashley Adams	Project Leader
Madelyn Ruffner	Environmental Planning and Compliance Program Manager
Renea Kennec	NEPA Specialist

F. SUPERVISORY SIGNATORY

Based on the environmental impact information contained in the statutory compliance file and in this environmental screening form, environmental documentation for this stage of the subject project is complete.

Recommended:

Compliance Specialists	Date
//Renea Kennec// Compliance Specialist – Renea Kennec	_6/5/15
//Madelyn Ruffner// Compliance Program Manager – Madelyn Ruffner	_6/9/15
//Randy Fong// Chief, Project Management – Randy Fong	_6/10/15

Approved:

Superintendent	Date
//Don L. Neubacher// Don L. Neubacher	<u>6/15/15</u>

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

PARK ESF ADDENDUM

Yosemite National Park

Date: 06/05/2015

Today's Date: June 5, 2015

PROJECT INFORMATION

Park Name: Yosemite National Park

Project Title: Hetch Hetchy Meteorological Station Consolidation and Automation

PEPC Project Number: 57322

Project Type: Equipment Replacement (EQR)

Project Location:

County, State: Tuolumne, California

Project Leader: Ashley Adams

PARK ESF ADDENDUM QUESTIONS & ANSWERS

ESF Addendum Questions	Yes	No	N/A	Data Needed to Determine/Notes
SPECIAL STATUS SPECIES CHECKLIST				1
Listed or proposed threatened or endangered species (Federal or State)?		No		
Species of special concern (Federal or State)?		No		
Park rare plants or vegetation?		No		
Potential habitat for any special-status species listed above?		No		
NATIONAL HISTORIC PRESERVATION ACT CHECKLIS	Т			
Entail ground disturbance?	Yes			A small trench (2-4 inches deep, 2 inches wide) would run from the new precipitation gage to the precipitation gage housing.
Are any archeological or ethnographic sites located within the area of potential effect?		No		The area in which the shallow ground disturbance is proposed was examined and monitored during deeper utility trenching in 2013. No cultural resources were observed.

ESF Addendum - Hetch Hetchy Meteorological Station Consolidation and Automation - PEPC ID: 57322

Entail alteration of a historic structure or cultural landscape?	No
Has a National Register form been completed?	No
Are there any structures on the park's List of Classified Structures in the area of potential effect?	No
WILD AND SCENIC RIVERS ACT CHECKLIST	
Fall within a wild and scenic river corridor?	No
Fall within the bed and banks AND will affect the free-flow of the river?	No
Have the possibility of affecting water quality of the area?	No
Remain consistent with its river segment classification?	No
Fall on a tributary of a Wild and Scenic River?	No
Will the project encroach or intrude upon the Wild and Scenic River corridor?	No
Will the project unreasonably diminish scenic, recreational, or fish and wildlife values?	No
WILDERNESS ACT CHECKLIST	
Within designated Wilderness?	No
Within a Potential Wilderness Addition?	No

ASSESSMENT OF ACTIONS HAVING AN EFFECT ON HISTORIC PROPERTIES

Yosemite National Park

Date: 06/05/2015

A. DESCRIPTION OF UNDERTAKING

1. Park: Yosemite National Park

2. Project Description:

Project Name: 2015-009 Hetch Hetchy Meteorological Station Consolidation and Automation **Prepared by:** Renea Kennec **Date Prepared:** 06/05/2015 **Telephone:** 209-379-1038

PEPC Project Number: 57322

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

There are archeological sites in the vicinity but not in the project area.

3. Has t	he area of	potential	effects l	been surv	eyed to	identify	historic	properties?

	No
X	Yes
	Source or reference:

4. Potentially Affected Resources:

Historical Structures/Resources Notes: Age of evaporation pan is unknown and should not be removed unless shown to be installed less than 50 years ago. Submit findings to the Cultural Resource Branch for review and approval of removal prior to removal work.

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

Assessment of Effect Form - Hetch Hetchy Meteorological Station Consolidation and Automation - PEPC ID: 57322

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] Anthropologist Name: Mike Turek Date: 05/14/2015
Check if project does not involve ground disturbance [] Assessment of Effect: No Potential to Cause Effect No Historic Properties Affected X No Adverse Effect Adverse Effect Streamlined Review Recommendations for conditions or stipulations:
[X] Archeologist Name: Jun Kinoshita Date: 05/04/2015 Comments: The area in which the shallow ground disturbance is proposed was examined and monitored during deeper utility trenching in 2013 by this archeologist. No cultural resources were observed.
Check if project does not involve ground disturbance [] Assessment of Effect: No Potential to Cause EffectX_ No Historic Properties Affected No Adverse Effect Adverse Effect Streamlined Review Recommendations for conditions or stipulations:
[X] Historical Architect Name: Charles Tonetti Date: 05/01/2015 Comments: Age of evaporation pan is unkown and needs ot be verified.
Check if project does not involve ground disturbance [] Assessment of Effect: No Potential to Cause Effect No Historic Properties AffectedX No Adverse Effect Adverse Effect Streamlined Review Recommendations for conditions or stipulations: Age of evaporation pan is unknown and should not be removed unless shown to be installed less than 50 years ago. Submit findings to the Cultural Resource Branch for review and approval of removal prior to removal work.

Name: Kevin McCardle Date: 05/07/2015
Check if project does not involve ground disturbance [] Assessment of Effect: No Potential to Cause Effect No Historic Properties AffectedX No Adverse Effect Adverse Effect Streamlined Review Recommendations for conditions or stipulations: Age of evaporation pan is unknown and should not be removed unless shown to be installed less than 50 years ago. Submit findings to the Cultural Resource Branch for review and approval of removal prior to removal work.
Doc Method: Park Specific Programmatic Agreement
No Reviews From: Curator, Historian, 106 Advisor, Other Advisor
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:
[] 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. PLAN-RELATED UNDERTAKING
Consultation and review of the proposed undertaking were completed in the context of a plan review process, in accordance with the 2008 Servicewide PA and 36 CFR Part 800. Specify plan/EA/EIS:
[X] D. UNDERTAKING RELATED TO ANOTHER AGREEMENT The proposed undertaking is covered for Section 106 purposes under another document such as a statewide agreement established in accord with 36 CFR 800.7 or counterpart regulations.

Assessment of Effect Form - Hetch Hetchy Meteorological Station Consolidation and Automation - PEPC ID: 57322

1999 Programmatic Agreement as amended in 2014.

Document		A Document e preparation of an EA/FONSI or an EIS/Ruts of 36 CFR 800.3 through 800.6	OD has been developed and used
[] G. Me	mo to SHPO/THPO		
[] H. Me	mo to ACHP		
SHPO/TH	IPO Notes:		
3. Additional	Consulting Parties In	formation:	
Additiona	al Consulting Parties:	No	
4. Stipulation	s and Conditions:		
		ations or conditions necessary to ensure R Part 800 criteria of effect or to avoid o	
5. Mitigations	s/Treatment Measures	:	
	-	ze loss or impairment of historic/prehiston, and use may be relevant.)	oric properties:
to be	installed less than 50	of evaporation pan is unknown and shou years ago. Submit findings to the park corior to removal work.	
D. RECOMM	IENDED BY PARK S	ECTION 106 COORDINATOR:	
Historic Prese	ervation Officer:		
Kimball Koch	//Kimball Koch//	Date: 6/5/15	
E. SUPERIN	ΓENDENT'S APPRO	VAL	
	d I have reviewed and	e NPS <i>Management Policies</i> and <i>Cultural</i> approve the recommendations, stipulati	9
Superintende	nt: //Don L. Neubacher.	Date: 6/15/15	
_	Don L. Neubacher		<u> </u>
	Environme	original of this document is on file at the natural Planning and Compliance Office is	n
Assessment of I	affect For	Yosemite National Park.	nation - PEPC ID: 57322

Hetch Hetchy Meteorological Station Replacement

Air temperature and precipitation have been measured near O'Shaughnessy Dam since before construction of the dam, starting in 1919. While the location of measurements has not changed in this time, the individual gages have throughout the history of the site. We are proposing removing the manual precipitation and temperature gages and replacing them with automated gages that can be accessed online. NOAA was unwilling to let us automate their existing precipitation gage on site. This work will also involve removing the current automated weather station that is located on a granite outcrop overlooking Evergreen Road at the Hetch Hetchy compound, as well as an evaporation pan and fence that are no longer in use (Figure 1).

Project Details

Installation of precipitation gage, solar panel and conduit: The new precipitation gage will be slightly larger than the current gage (about the same size as the NOAA gage nearby - Figure 2), but will occupy the same footprint. A small (12 inch X 12 inch) solar panel mounted with the precipitation gage will power the radio, which will be collocated with the temperature probe inside the existing temperature gage housing. The solar panel will be mounted on the stand holding the precipitation gage. Installation of the precipitation gage will require digging a shallow hole and installing a base using hand tools. A small diameter (1 inch) flexible jacketed steel conduit will run 60 feet from the precipitation gage to the temperature gage housing to transmit power and precipitation gage signal. The conduit will be buried in a shallow, 4 inch deep trench dug by hand tools.

Installation of radio, battery and thermometer: A radio, data logger, antennae and battery will be installed inside or attached to the existing temperature gage housing (Figure 3). The footprint of the housing will not change. No ground disturbance will be needed for this installation.

Removal of existing precipitation gage: To ensure continuity of the long term data record, the existing manual precipitation gage (Figure 2) will need to remain on site for a period of time. Depending on precipitation conditions (drought, snow, rainy periods), this collocation may need to continue for 2-4 years. After we are assured that the new precipitation gage matches the old, the old gage will be removed. This will be performed using hand tools and will not require any additional ground disturbance.

Removal of fence and evaporation pan: The evaporation pan nearby (Figure 2) is no longer in use, and will be removed during installation of the new precipitation gage. Removing the fence poles will require some digging using hand shovels. The pan itself is mounted on a small wooden platform, which will be removed by hand. The disturbed soil will be smoothed.

Removal of secondary weather station: Parts from the secondary weather station (Figure 4) will be repurposed for the new weather station, including the solar panel, radio, antennae and radio box. The entire station will be removed during installation of the new weather station. No disturbance of soils or geologic features are anticipated.

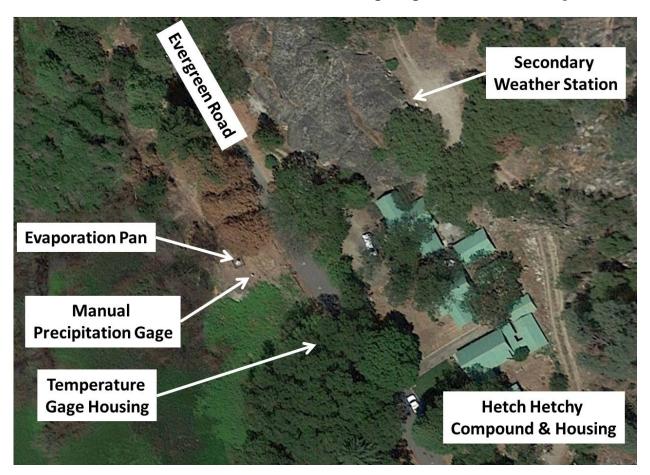


Figure 1: Current locations of precipitation and temperature gages and evaporation pan. The new precipitation gage will be installed near the current manual precipitation gage. Conduit will run from the new precipitation gage to the temperature gage housing. The secondary weather station and evaporation pan will be removed.



Figure 2: Manual precipitation gage (to be replaced, foreground), NOAA precipitation gage (will remain) and evaporation pan and fence (to be removed). The new precipitation gage and solar panel will occupy the same footprint as the old precipitation gage.



Figure 3: Temperature gage housing (will remain). A battery and radio will be added to box.



Figure 4: Existing weather station overlooking Evergreen Road (to be removed). Solar panel, radio and box will be repurposed for new station. A new precipitation gage will be purchased.