



Hetch Hetchy Communication System Upgrade Project

Finding of No Significant Impact,
Assessment of Actions Having an Effect on Cultural Resources,
Tuolumne Wild and Scenic River Section 7 Determination,
Errata Sheets, and
Public Comment and Response Report

April 2008



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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)

Dear Friends of Yosemite National Park:

We are pleased to provide you with a copy of the Finding of No Significant Impact (FONSI) for the Hetch Hetchy Communication System Upgrade Project. This document records the decision of the National Park Service to implement the Hetch Hetchy Communication System Upgrade Project, as described under Alternative 2 in the Hetch Hetchy Communication System Upgrade Project Environmental Assessment/Preliminary Mitigated Negative Declaration and Initial Study (EA/PMND and IS). The purpose of the project is to: 1) vacate the 2 Gigahertz (GHz) band currently being used, per Federal Communications Commission requirements; 2) replace and upgrade the aging communications system with an improved system; 3) provide the video and radio bandwidth to allow for future installation of voice radio systems, which could expand system coverage to the O'Shaughnessy, Cherry Lake, and Lake Eleanor areas; 4) provide the foundation infrastructure for housing National Park Service and US Forest Service communications equipment associated with their individual communications systems; and 5) provide the foundation infrastructure that could be used in the future to integrate the Hetch Hetchy Water & Power communication system with National Park Service and US Forest Service communications.

Please note that this packet contains an Errata Sheet noting corrections for the Hetch Hetchy Communication System Upgrade Project EA/IS. This Errata Sheet should be retained with your copy of the EA/IS.

The National Park Service has determined that implementation of the Hetch Hetchy Communication System Upgrade Project will not have a significant effect on the environment; therefore, an environmental impact statement will not be prepared.

We thank you for your comments regarding the project. Public participation is a key element in the environmental review process at Yosemite National Park. Your participation helps to ensure that the National Park Service fully understands and considers your values and concerns.

Sincerely,

Michael J. Tollefson
Superintendent



Hetch Hetchy Communication System Upgrade Project

Finding of No Significant Impact

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Finding of No Significant Impact

Hetch Hetchy Communication System Upgrade Project

Yosemite National Park

April 2008

INTRODUCTION

This Finding of No Significant Impact (FONSI) documents the decision of the National Park Service (NPS) to for implement the Hetch Hetchy Communication System Upgrade Project; and the determination that no significant impacts on the human environment are associated with that decision. This decision pertains only to the portion of the system upgrade directly affecting Yosemite National Park, and neither constrains nor is constrained by separate decisions to be rendered by the City and County of San Francisco and the U.S. Forest Service.

PURPOSE AND NEED

The purpose of the Hetch Hetchy Communication Systems Upgrade Project is to: 1) vacate the 2 GHz band per Federal Communications Commission (FCC) requirements; 2) replace and upgrade the aging communications system with an improved system; 3) provide appropriate video and radio bandwidth to allow for future installation of voice radio systems, which could expand and improve system coverage in the O'Shaughnessy Dam, Cherry Lake, and Lake Eleanor areas; 4) provide the foundation infrastructure for housing NPS and USFS communications equipment associated with their individual communications systems; and 5) provide the foundation infrastructure that could be used in the future to integrate the Hetch Hetchy Water & Power (HHW&P) communication system with NPS, and USFS communications. These items are described in more detail below. In 1992, the FCC issued their First Report and Order and Third Notice of Proposed Rule Making, the "Redevelopment of Spectrum to Encourage Innovations in the Use of New Telecommunications Technologies (47 CFR Part 101.69 et seq.)." The FCC rule requires HHW&P to vacate use of their current operating frequencies in the 2 GHz band at such time that it is determined that the band is needed by an emerging technology licensee. Emerging technology licensees include wireless communication systems, such as personal communications services, mobile satellite services, and third generation (3G) mobile services. The demand to vacate the 2 GHz band used by HHW&P has not yet been issued by the FCC. However, the request could be issued at any time and HHW&P would then be required to vacate the frequency within six months. As this would be an insufficient period of time to implement permitting processes and installation of a new system, it is imperative that HHW&P voluntarily vacate the frequency in advance. Since the publication of the Hetch Hetchy Communication System Upgrade Project Environmental Assessment/Preliminary Mitigated Negative Declaration and Initial Study (EA/PMND and IS), operational rights to the 2GHz band has been granted to a communications company. The communications company has noticed HHW&P that it intends to occupy the frequency.

To limit the disruption associated with replacing the radio system under very short notice, HHW&P has initiated the process of voluntarily vacating the 2 GHz band and replacing their existing analog microwave system with a combination of 6 GHz and 11 GHz digital microwave radios and aerial fiber optic cable installed on electrical transmission lines. Radios operating at higher frequencies have higher

bandwidth, and can transmit more data than lower frequency radios, thus, the 6 GHz and 11 GHz bandwidths allow for greater data capacity than the current system.

Currently, microwave radio equipment is used to transmit voice and data communications essential to the operation and security of HHW&P electric and water supply utilities. The existing radio equipment is obsolete and no longer supported by its manufacturers. In this case, obsolete means the manufacturer no longer makes the equipment and does not provide support. Specifically, spare parts cannot be obtained from the manufacturer; however, the existing system is still operational. HHW&P has had difficulties in acquiring spare parts for system components. The proposed project would replace or update components of the current communications system located mostly throughout Tuolumne County, and one site in Stanislaus County.

In addition to the age and condition of the communications equipment and the insecure position of HHW&P's license to operate its communications system, HHW&P also has identified communications needs not served by the existing system. These needs include:

- Voice communications to protect the safety of staff working in remote areas as well as to develop improved safety of visitors (e.g. better response to emergency search and rescue). HHW&P currently depends on two-way mobile radios from their 24/7 control point (at Moccasin Powerhouse) to the O'Shaughnessy Dam and Cherry Lake areas, which have limited and unreliable coverage. The current USFS and NPS radio communications systems do not provide full radio coverage for the Stanislaus National Forest and O'Shaughnessy Dam and Lake Eleanor areas for Yosemite National Park.
- Currently the microwave system does not have sufficient capacity to provide the bandwidth required to support the voice, data, and video services required by HHW&P. Video and multiple-network needs are currently not supported on the existing system.
- Dam security is always a concern to HHW&P. Hetch Hetchy Reservoir, Cherry Lake, and Lake Eleanor are the keystones of the San Francisco water supply. An interruption of service from or loss of these reservoirs would impact this water supply system. The current method of communicating security information via two-way mobile radios is unreliable. Video, control, and data channels are needed to monitor the assets at O'Shaughnessy Dam and Cherry Lake. Current needs that are not addressed with the system at O'Shaughnessy Dam include improved two-way radio coverage, reliable telephone service, and the addition of the corporate Local Area Network (LAN) service to improve operational efficiency.
- Current needs not addressed with the system at Cherry Lake includes Supervisory Control and Data Acquisition (SCADA) monitoring and control of the Cherry Pump Station and Cherry Valvehouse and the domestic water system, two-way radio coverage, reliable telephone coverage, and the addition of the corporate LAN service to improve operational efficiency. Needs not addressed with the system at Lake Eleanor includes SCADA monitoring of the lake elevation and tunnel flow.
- The current system does not allow for data communications to support the next generation of protective equipment that will be needed to replace the aging equipment now providing power-line protection. The replacement communication system must be capable of providing the additional bandwidth required for video transmission. The current system's overall bandwidth provides for 48 voice channel capacity, but does not have sufficient capacity to accommodate current and additional bandwidth requirements.
- Access to the existing administrative and future control system networks at operational sites to enhance the productivity of HHW&P staff.

- In addition, HHW&P has a need to share information with the NPS dispatch in the future because NPS is the response force for security alarms at O’Shaughnessy Dam. The system upgrade would provide the foundation infrastructure and bandwidth to allow for future installation of voice radio systems. This would allow the USFS the possibility to expand and improve the future communication system in the Lake Eleanor and O’Shaughnessy Dam areas, and the Cherry Lake area for NPS. The Burnout Ridge tower and building would provide an additional location for USFS radio repeaters and associated equipment to be installed expanding the coverage of the existing USFS radio system and reducing the number of areas where a signal is not available.
- The communication system upgrade would provide the foundation system that permits improved radio communications vital to the operation of HHW&P’s utilities and would support USFS and NPS operational activities such as law enforcement, search and rescue, fire management, visitor and staff safety, and protection of forest and park resources.
- The communication system upgrade is subject to both CEQA and NEPA as it involves decisions by local and Federal agencies. The sites within Stanislaus County (Warnerville Switchyard and Moccasin Site) are located within Raker Act right-of-way. The HHW&P owns considerable land in fee at the Moccasin Powerhouse. Of the 32 total sites of the Hetch Hetchy Communication System Upgrade Project, 11 sites are within Yosemite National Park; 10 of those sites are on lands managed by the City and the County of San Francisco under the terms of the Raker Act. The Poopenaut Pass site is not within the Raker Act right-of-way and is therefore subject to NPS land use entitlement authority. Seventeen of the sites are within the Stanislaus National Forest boundary, 14 of which are on lands managed by the City and County of San Francisco under the terms of the Raker Act. Fifteen of the 17 sites within the Stanislaus National Forest boundary are existing facilities, while two new sites are proposed. The two newly proposed sites within Stanislaus National Forest are Cherry Tower Site on Cherry Lake Dam, managed by the City and County of San Francisco under the terms of the Raker Act; and Burnout Ridge, located on National Forest System lands and managed by the USFS. Duckwall Mountain and Jones Point are located outside of the Raker Act right-of-way and currently operating under a Special Use Permit from the USFS. In addition, all of the new communication towers are subject to FCC licensing.
- The Selected Alternative would provide the foundation infrastructure to expand and improve communication coverage in the Cherry Lake, Lake Eleanor, and O’Shaughnessy Dam areas. The Proposed Action would provide video and radio bandwidth to allow for future installation of voice radio systems to areas currently not served. This as a whole would improve communications between O’Shaughnessy Dam and the Warnerville Switchyard site, as well as the efficiency of the HHW&P staff. For example, currently HHW&P staff must make trips to many of the sites for data collection obtained from recorders (i.e., dam water level measurements). The system upgrade would serve to streamline and eliminate some manual tasks and automate data transmission to staffed sites in the future.

ALTERNATIVES ANALYZED

The Hetch Hetchy Communication System Upgrade Project EA/PMND and IS analyzed three alternatives. These include no action (Alternative 1), and two action alternatives (Alternatives 2 and 3). Based on this analysis, NPS identified Alternative 2 as the environmentally preferred alternative and has selected this alternative for implementation. There are no changes in the Selected Alternative from what is described in the EA.

Selected Alternative – Alternative 2

The Selected Alternative, Alternative 2, is the installation of new communication equipment and/or power sources at 26 previously developed locations, and the installation of three new facilities on previously undeveloped sites. In addition, the project includes the removal of FCC-licensed microwave communication equipment at three locations (Duckwall Mountain and Jones Point in the Stanislaus National Forest, and Moccasin Powerhouse Passive Reflector). The NPS action is defined by those facilities located only within the Yosemite National Park. The Selected Alternative for the NPS is to permit construction (through a right-of-way permit) and operation through the issuance of a land use entitlement for the proposed Poopenaut Pass site.

New communication towers would be installed at Warnerville Switchyard, Moccasin Peak, Moccasin Powerhouse, Burnout Ridge, Intake Radio Site, Poopenaut Pass, and Cherry Tower Site to support one or more parabolic microwave radio dishes (antennas). The parabolic dishes used for this project would vary in size up to a maximum of eight feet in diameter. Communication shelters (to house equipment) would also be installed at Burnout Ridge, Intake Radio Site, Poopenaut Pass, and Cherry Tower Site. Warnerville Switchyard, Moccasin Peak, and Moccasin Powerhouse have existing buildings where the equipment would be housed. O’Shaughnessy Stream Gauge, Cherry Lake Water Tanks, Cherry Pump Station, Lake Eleanor Dam Level Gauge, and Lake Eleanor-Cherry Lake Tunnel sites would require the installation of new rigid galvanized steel (RGS) conduit antenna masts to support a spread-spectrum Yagi radio antenna.

Upgrades to the fiber optic component include the installation of fiber optic cable on the transmission lines in the Early Intake Area, and on the distribution lines in the Cherry Lake Area. New optical ground wire (OPGW) fiber optic cable would be installed on the existing HHW&P transmission lines between Intake Switchyard and Intake Radio Site, Holm Powerhouse, and Kirkwood Powerhouse. The existing overhead static wire (OHSW) on the transmission line between Intake Switchyard and Intake Radio Site would be replaced with OPGW fiber optic cable.

The Selected Alternative locates the Poopenaut Pass site facility at “Site 9” (see Figure 1). This site is located at approximately 37°54’13” latitude and -119°49’59” longitude near an existing vehicular turnout at roadway marker H2, south of the O’Shaughnessy Dam access road between the Hetch Hetchy Entrance Station and O’Shaughnessy Dam. The 40-foot lattice style tower will have a black or battleship grey powdercoat finish to reduce visibility. The fence will be seven feet high and would be constructed of black, vinyl-coated chain link fencing topped with three strands of barbed wire on an outrigger. The communication shelter will be finished to blend into the park surroundings, consistent with NPS architectural standards. The Selected Alternative to be implemented by the NPS consists of issuance of a land use entitlement (right-of-way permit) for the Poopenaut Pass site. The overall operation and maintenance of the facilities in Yosemite National Park will be provided solely by HHW&P.

SUMMARY OF OTHER ALTERNATIVES CONSIDERED

Alternative 1 - No Action

Under the No Action Alternative, the replacement and upgrade of the aging communication system would not occur. This alternative would result in:

- Continued insecure position of HHW&P’s license to operate the communication system.
- Continued deterioration of the aging communication system and use of equipment no longer supported by its manufacturers.

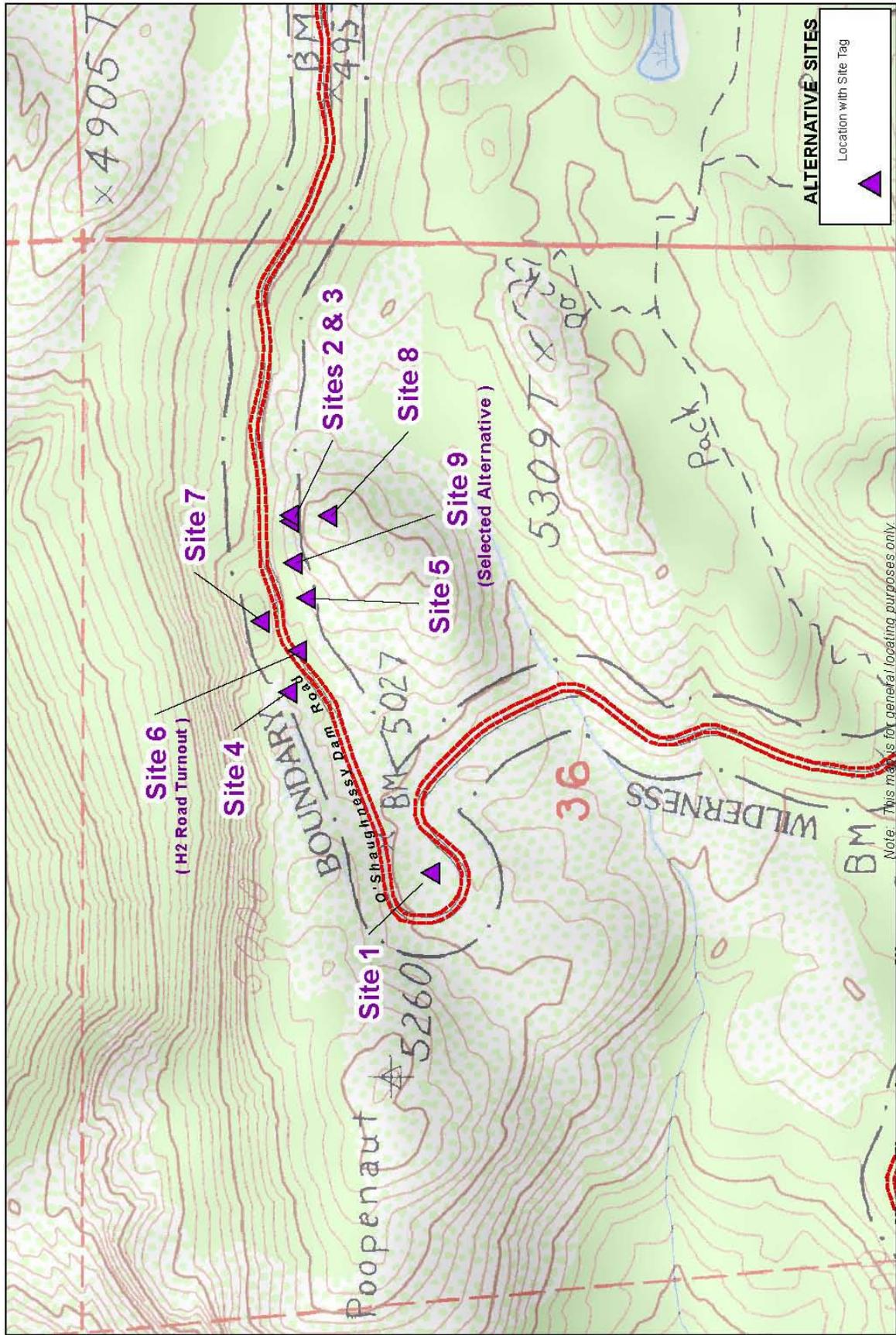


Figure 1 - Poopenaut Pass Alternatives

HETCH HETCHY COMMUNICATION SYSTEM UPGRADE PROJECT

FINDING OF NO SIGNIFICANT IMPACT
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- Continued need to upgrade the communication system and voice communications capabilities in very remote areas.
- Lack of video, control, and data channels to monitor and assess security, and no access to existing administrative and future control system networks.
- Continued need for improved radio communications vital to operation and security of HHW&P's utilities and support of USFS and National Park Service operational activities.
- No improved infrastructure to allow for possible future integration of HHW&P, NPS, and USFS communications.
- No installation of a communications tower or building.

Alternative 3 – Poopenaut Pass, Site 7

Alternative 3 proposes essentially the same system as the Selected Alternative (Alternative 2), except that the Poopenaut Pass facility would be located at Site 7. As described in Section 2.5.6 (of the EA/PMND and IS), nine possible sites were identified in the Poopenaut Pass area (see Figure 1). Site 7 was selected as an alternative location for the Poopenaut Pass facility. Site 7 is located northwest of Site 9 (the Preferred Poopenaut Pass location), on a flat rock outcrop area across O'Shaughnessy Dam Road. Site 7 is primarily a flat rock outcropping with sufficient flat areas for construction of both the communication shelter and tower foundations. As such, little site preparation would be necessary at this site. The foundation for the communication shelter would be slab on grade, piers, or a foundation curb and would be pinned to the rock outcroppings at the site. The tower and shelter sections would be delivered by truck to the existing H2 vehicular turnout and lifted by sky crane (helicopter) to the tower location where they would be assembled.

Helicopters would be used to transport a portable generator, air compressor, and other equipment and tools to the site for use in site preparation and construction.

ALTERNATIVES CONSIDERED BUT DISMISSED

During early planning stages, HHW&P had identified three candidate sites, in addition to Burnout Ridge, as potential repeater sites. The sites were considered but dismissed for one of the following reasons:

- The action does not satisfy the project's purpose and need;
- The site did not have line-of-sight visibility to other areas;
- Not accessible year around; and/or,
- Repeater sites did not have access to utility power.

The sites that were considered but dismissed are discussed individually below.

Duckwall Mountain

Duckwall Mountain is an existing microwave repeater site used by HHW&P and several other tenants. However, analysis indicated that the line of sight between Duckwall Mountain and the Cherry Tower Site and Lake Eleanor Dam Level Gauge are blocked and unusable. Therefore, Duckwall Mountain is not useful as a repeater into the Cherry and Eleanor areas. However, HHW&P equipment at Duckwall would remain in place and HH&WP would continue to act as site manager.

Burnout Ridge is the proposed site to replace Duckwall Mountain and provide coverage into the Cherry Lake and Lake Eleanor areas. This allows the selection of Intake Radio Site to replace Jones Point. These

selections allow HHW&P to abandon two solar powered, FCC-licensed microwave sites currently in use at Duckwall Mountain and Jones Point, in favor of the one site, Burnout Ridge. With this configuration, all of the repeater sites would be more accessible year-round, and would have utility power rather than solar power.

North Mountain

North Mountain has an existing lookout tower and is a prominent feature in the general area of interest. Because this site is already developed, further development as a repeater site was considered to have low impact on the environment. While North Mountain has line-of-sight to Poopenaut Pass, Intake Radio Site, and the Lake Eleanor area, it does not have line-of-sight to Cherry Tower Site. Therefore, North Mountain would not be useful as a repeater into the Cherry Lake area, and was dismissed from further consideration. Furthermore, North Mountain does not have line-of-sight to Moccasin Peak or O'Shaughnessy Dam, eliminating it from consideration for other paths.

Woods Ridge

Woods Ridge has an existing lookout tower and is a prominent feature in the general area of interest. While Woods Ridge has line-of-sight into Intake Radio Site and Moccasin Peak, it does not have line-of-sight into Cherry Tower Site or Lake Eleanor area; therefore, Woods Ridge would not be useful as a repeater into the Cherry and Eleanor areas, and was dismissed from further consideration.

Poopenaut Pass Alternative Sites

The project team considered nine potential sites in the Poopenaut Pass Project Area (PPP) for the communication tower and building. Siting criteria were based on the project purpose and need, and established with input from NPS expert staff, communication design engineers, and public input. The criteria included:

- Line-of-sight visibility to Burnout Ridge and O'Shaughnessy Dam;
- Outside of Yosemite National Park Wilderness Area;
- Large enough for a communication tower and equipment shelter;
- Limited visibility from public viewing locations;
- Proximity to existing electrical distribution line to avoid the need for further infrastructure; and
- Proximity to existing road and turnout to allow for easy maintenance access.

The project team conducted consultations and site visits with NPS staff, American Indians, design engineers, and the public. Stakes, weather balloons, and simulated photos helped the group to select the one site that would best meet the above criteria, have the least impact on park natural resources and no effect on cultural resources. PPP Site 1 was within the Raker Act boundary, however it was dismissed from consideration based on the obvious visibility of the extremely high tower and its potential effect to scenic values. PPP Sites 2 and 3 were dismissed from consideration based on the unacceptable challenges for construction and the unacceptable risks to health and safety associated with construction and operations. PPP Site 4 was dismissed from consideration due to the high visibility of the tower. HHW&P and NPS staff determined that there was little or no advantage to PPP Site 5 in comparison to PPP Site 9. PPP Site 9 was identified as having even less visibility from the road, which is the path of travel for most visitors, and therefore Site 5 was dismissed from further consideration. PPP Site 8 was dismissed due to its location within designated Wilderness. Although Site 9 is close to Wilderness, rock outcrops and trees partially conceal its view. PPP Site 6 was dismissed from further consideration due to the high visibility of the tower and its location within the existing H2 vehicular turnout.

Alternative Communication Systems/Technology

The use of fiber optics was considered a favored alternative by HHW&P at one point due to the high channel capacity provided by fiber optics. However, it was determined that the required channel capacity would be met with either microwave radios or fiber optics. Operational concerns about fire-related damage to aerial fiber optic cable were a factor in the selection between fiber optics and microwave systems based on life cycle cost. The use of underground fiber optics would be limited to short segments of the system where there is no option to install overhead fiber optic cables. The use of overhead fiber optic is also limited to routes that have transmission lines. This is due to the fact that transmission lines are kept clear of brush and provide the option of installing the fiber optic cable at a higher height than distribution lines.

Alternative Tower Designs

Alternative tower designs include lattice or monopole designs. Self-supporting lattice tower structures were identified to be preferable to monopoles in a planning and study phase report prepared by the contracted design engineer. Monopoles may be used at locations with footprint space limitations, but should be equipped with an external cable ladder to facilitate installation of antenna feed systems in the future. Several of the sites would require installation of a new tower. A monopole was selected for the Moccasin Powerhouse site because a lattice type tower structure would have a larger footprint and could not be located in the desired area without affecting vehicle traffic in the area. Cherry Tower Site, Burnout Ridge, and Poopenaut Pass are proposed to have lattice towers, as there is sufficient room to accommodate the structures.

ENVIRONMENTALLY PREFERRED ALTERNATIVE

In accordance with NPS Director's Order-12, Conservation Planning, Environmental Impact Analysis, and Decision-making and the Council on Environmental Quality (CEQ) requirements, NPS is required to identify the "environmentally preferred alternative" (NEPA Sec. 101(b)). This alternative meets the following criteria:

- Fulfills the responsibilities of each generation as trustee of the environment for succeeding generations,
- Assures for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings,
- Attains the widest range of beneficial uses of the environment without degradation, risk of health or safety, or other undesirable and unintended consequences,
- Preserves important historic, cultural and natural aspects of our national heritage and maintain, wherever possible, an environment that supports diversity and variety of individual choice,
- Achieves a balance between population and resource use which will permit high standards of living and a wide sharing of life's amenities, and
- Enhances the quality of renewable resources and approach the maximum attainable recycling of depletable resources.

This is the alternative that generally causes the least damage to the biological and physical environment and that best protects, preserves, and enhances historic, cultural, and natural resources (46 FR 18026 – 46 FR 18038).

The National Park Service has considered the alternatives in this analysis in accordance with NEPA and Council on Environmental Quality regulations (Section 1505.2) and has determined that the Selected Alternative, Alternative 2 as presented in the Hetch Hetchy Communication System Upgrade Project, is environmentally preferable based on its furtherance of the following National Environmental Policy Act goals as evaluated below:

- **NEPA Section 101 Requirement 1.** “Fulfill the responsibilities of each generation as trustee of the environment for succeeding generations.”

The Selected Alternative, Alternative 2 would fulfill the responsibilities of NPS as a trustee of the environment. The Selected Alternative would provide the communication system that could allow for improved public and resources protection related to radio communications into areas of Yosemite National Park currently not served, or adequately served. Construction at new sites, including Poopenaut Pass, would require implementation of BMPs and mitigation measures to reduce impacts to natural resources.

- **NEPA Section 101 Requirement 2.** “Assure for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings.”

Alternative 2 would provide improved communication systems that would support operational activities for Yosemite National Park. This in turn would provide for improved safety and voice communications in remote areas. Trails, interpretive exhibits, designated Wilderness or cultural resources would not be impacted by the Proposed Action. The Poopenaut Pass site in the Alternative 2 would be less visually intrusive than the Poopenaut Pass site in Alternative 3, since it would be located behind a popular viewpoint area and thus would not obstruct views.

- **NEPA Section 101 Requirement 3.** “Attain the widest range of beneficial uses of the environment without degradation, risk of health or safety, or other undesirable and unintended consequences.”

Alternative 2 would attain the widest range of beneficial uses of the environment. It is the least visually intrusive site at Poopenaut Pass, while providing an improved communication system that would protect the safety of visitors and staff.

- **NEPA Section 101 Requirement 4.** “Preserve important historic, cultural, and natural aspects of our national heritage and maintaining, wherever possible, an environment that supports diversity and variety of individual choice.”

Project actions for the Alternative 2 at the existing sites would occur within existing developed areas. Burnout Ridge, Poopenaut Pass (inside the boundary of Yosemite National Park), and Cherry Tower site would be new sites. Alternative 2 includes a cultural and biological resources study and the implementation of mitigation measures identified in the EA/PMND and IS which would reduce impacts to biological and cultural resources to less than significant levels.

- **NEPA Section 101 Requirement 5.** “Achieve a balance between population and resource use that will permit high standards of living and a wide sharing of life’s amenities.”

Alternative 2 would provide improved communication systems, which would support operational activities for Yosemite National Park, Stanislaus National Forest, and HHW&P. The Selected Alternative would allow for voice communications to protect the safety of staff in very remote areas, and data

communications to support the next generation of protective equipment. The support of operational activities include law enforcement, search and rescue, and fire management, which all play a role in visitor and staff safety and the protection of forest and park resources.

- **NEPA Section 101 Requirement 6.** “Enhance the quality of renewable resources and approaching the maximum attainable recycling of depletable resources.”

Alternative 2 would not result in the depletion of resources. Construction waste would be required to be separated into recyclable materials, green waste, and other debris. Other mitigation measures for the Selected Alternative would protect natural and cultural resource areas.

Alternative 2 would be the environmentally preferable alternative with the incorporation of mitigation measures. Alternative 2 would be less visually intrusive at the Poopenaut Pass site and therefore superior to the Alternative 3 Poopenaut Pass site.

In conclusion, upon full consideration of the elements of Section 101 of NEPA, Alternative 2 represents the environmentally preferable alternative for the Hetch Hetchy Communication System Upgrade Project.

ENDANGERED SPECIES ACT

Federal agencies must consult with the U.S. Fish and Wildlife Service (USFWS) to ensure its actions will not jeopardize the continued existence of any federally listed or proposed threatened or endangered species, or designated or proposed critical habitat [ESA, Sec. 7 (a)(2), 16 USC 1531 et seq.]. If listed species are present, the Federal agency must determine if the action will have “no effect,” “may effect, [but is] not likely to adversely affect,” or “may effect, [but is] likely to adversely affect” those species. The NPS made the determination of effect for the Selected Alternative based on the Biological Assessment, and following guidance outlined in the Endangered Species Act Consultation Handbook: Procedures for Conducting Section 7 Consultations and Conferences (1998 USFWS and National Marine Fisheries Service). NPS has determined that the Selected Action will have “no effect” on any federally listed, candidate or proposed species or their designated critical habitat with the implementation of mitigation measures outlined in “Measures to Avoid, Minimize, or Mitigate Impacts”.

WILDERNESS ACT (16 USC 1131)

There are two federal Wilderness Acts that apply to Yosemite National Park; the Wilderness Act which established the wilderness system and the California Wilderness Act of 1984 which designated lands to be included in the system. The Wilderness Act Section 4 (b) “Except as otherwise provided in this Act, each agency administering any area designated as wilderness shall be responsible for preserving the wilderness character of the area and shall so administer such area for such purposes for which it may have been established as also to preserve its wilderness character. Except as otherwise provided in this Act, wilderness areas shall be devoted to the public purposes of recreational, scenic, scientific, educational, conservation, and historical use.”

The Selected Alternative does not occur within designated Wilderness areas or near commonly used access points into designated Wilderness areas. Implementation of Mitigation Measure 1- Land Use as outlined in "Measures to Avoid, Minimize, or Mitigate Impacts" will limit the Poopenaut Pass site staging area and require the wilderness boundary to be marked to preserve the Wilderness area. In addition, care will be taken during construction such that the flight path of helicopters delivering the tower and construction materials and equipment at Poopenaut Pass to not pass over designated Wilderness areas. The NPS has determined that the Selected Alternative will have no adverse effect on Wilderness values.

NATIONAL HISTORIC PRESERVATION ACT (NHPA)

The NPS made the determination of effect of the Selected Alternative on historic properties pursuant to Section 106 of the NHPA in accordance with the 1999 Programmatic Agreement among the National Park Service at Yosemite, the California State Historic Preservation Officer and the Advisory Council on Historic Preservation Regarding Planning, Design, Construction, Operations and Maintenance, Yosemite National Park, California. The NPS has determined that the Selected Alternative will have no adverse effect on historic properties, as documented in the included Assessment of Actions Having An Effect on Cultural Resources ("XXX").

WHY THE SELECTED ALTERNATIVE WILL NOT HAVE A SIGNIFICANT EFFECT ON THE HUMAN ENVIRONMENT

The NPS has determined that the Selected Alternative can be implemented with no significant adverse effects on soils, water quality, vegetation, wildlife, special status species, historic properties (i.e. prehistoric and historical archeology, historic structures and cultural landscapes, American Indian traditional cultural properties), visitor experience, or park operations. NEPA requires that decision-making regarding the analysis of significance be based on analysis of the proposed action with respect to the following factors:

- The Selected Alternative has a wide range of beneficial and adverse effects (see “Measures to Minimize Environmental Harm” below),
- The Selected Alternative will not adversely affect public health or safety,
- The Selected Alternative will not impact the unique characteristics of the area, including prime farmlands, wetlands, wild and scenic rivers or ecologically critical areas,
- The effects on the human environment are known, and there were no controversial impacts or aspects of the proposed project that surfaced during the environmental analysis process,
- The Selected Alternative neither establishes an NPS precedent for future actions with significant effects, nor represents a decision in principle about a future consideration,
- The Selected Alternative will have no adverse effect on contributing features to historic properties,
- The Selected Alternative would have no effect on species listed or proposed for listing,
- No significant cumulative effects and no highly uncertain, unique or unknown risks were identified during preparation of the EA/PMND and IS or during the public review period, and
- The Selected Alternative will not violate any federal, state or local environmental protection laws.

NON-IMPAIRMENT OF PARK RESOURCES

Pursuant to the 1916 Organic Act, the NPS has a management responsibility “to conserve the scenery and the natural and historic objects and the wildlife therein and to provide for the enjoyment of future generations.” Therefore, the NPS cannot take an action that would “impair” park resources or values.

Based on the analysis provided in the Hetch Hetchy Communication System Upgrade EA/PMND and IS, the NPS concludes that implementation of Alternative 2 would have no major adverse impacts to a resource or value whose conservation is: (1) necessary to fulfill specific purposes identified in the establishing legislation or proclamation of Yosemite National Park; (2) key to the natural or cultural integrity of Yosemite National Park or to opportunities for enjoyment of the park; or (3) identified as a goal in the park’s General Management Plan or other relevant National Park Service planning documents. Consequently, implementation of the proposed action will not violate the NPS Organic Act.

MEASURES TO MINIMIZE ENVIRONMENTAL HARM

To ensure that implementation of the Selected Alternative protects natural and social resources, and that it minimizes and mitigates adverse effects to park natural and cultural resources, visitor use/experience and park operations, the following mitigation measures have been adopted for this project and will be incorporated into construction contractor requirements. The table below identifies each mitigation measure and assigns responsibility for ensuring the measures which minimize, eliminate, or avoid these impacts are implemented. All mitigation measures described in this section will be implemented.

Resource	Measures to Avoid, Minimize or Mitigate Impacts	Responsibility
Geology	<p>Mitigation Measure 1 – Geology – The San Francisco Public Utilities Commission (SFPUC) will review and approve the design for the foundations for the tower at Poopenaut Pass prior to the start of construction to ensure that the foundations will be located below the spalling surface layers for tower foundation stability.</p> <p>Mitigation Measure 2 – Geology – The SFPUC will review and approve the design for the communication shelter foundation for the Poopenaut Pass site prior to the start of construction to ensure that the foundations will be deeper on the west and northwest sides to reach firm rock for foundation stability.</p> <p>Mitigation Measure 3 – Geology – The SFPUC will review and approve the design for the communication shelter foundation for the Cherry Tower Site prior to the start of construction to ensure that the foundation will be deepened to reach firm rock for foundation stability.</p>	SFPUC Project Manager
Hydrology	<p>Mitigation Measure 1 – Hydrology – The SFPUC will review and approve the Oil and Hazardous Spill Prevention, Control, and Countermeasure Plan prepared by the construction contractor prior to the start of construction. The SFPUC will ensure that the plan addresses hazardous materials storage, spill prevention and response in the event of unexpected spills at the project sites during construction and operation. Spill response materials such as absorption materials shall be kept at each of the new sites.</p> <p>Mitigation Measure 2 – Hydrology – The SFPUC will review and approve the drainage plans prepared for the Poopenaut Pass, Burnout Ridge, Cherry Tower Site and Intake Radio Sites prior to the start of construction. The SFPUC will ensure that the design plans provide for the minimization of stormwater runoff so that the rate of stormwater runoff does not exceed above pre-project conditions. Specifications shall include design features that address how the gravel would be retained within each of the sites.</p> <p>Mitigation Measure 3 – Hydrology – The SFPUC shall ensure that the construction contractor implement the following Best Management Practices (BMPs) prior to the start of construction at Intake Radio Site, Cherry Tower Site, Poopenaut Pass, and Burnout Ridge: place straw rolls around stormwater inlets; install silt fences to prevent any construction water runoff from going off-site; use geotextile or plastic covers on stockpiled soil; and stabilize site ingress/egress locations to minimize erosion.</p>	SFPUC Construction Management Bureau
Vegetation	<p>Mitigation Measure 1 – Vegetation - SFPUC will review construction practices with its contractors to ensure that all off-road construction equipment, clothing, particularly footwear, and other equipment, including the transport vehicles be free of soil, mud (wet or dried), seeds, vegetative matter or other debris that could contain seeds in order to prevent new infestation of noxious weeds in the project area. Dust or very light dirt which would not contain weed seed is not a concern. The SFPUC will</p>	SFPUC Construction Management Bureau

Resource	Measures to Avoid, Minimize or Mitigate Impacts	Responsibility
	<p>convey the finding of the Weed Risk Assessment to contractors so that where possible, all on- or off-road construction equipment will be kept out of sites infested with noxious weeds. Where it is not possible to keep heavy equipment out of sites infested with noxious weeds, heavy equipment will be cleaned so that it is free of soil, seeds, vegetative matter or other debris prior to being moved from infested sites to un-infested sites and prior to being transported out of the project area. Following construction activities at the Burnout Ridge and Intake Radio Site, monitoring of the new facilities post construction is required to detect new occurrences of noxious weeds and non-native invasive pest plants of concern listed by the Stanislaus National Forest and remove them when detected.</p>	
<p>Rare, Threatened and Endangered Species</p>	<p>Mitigation Measure 1 – Rare, Threatened and Endangered Plants: Protect Known Occurrences of Special-status Plant Species – The SFPUC will notify NPS Resource Management staff two weeks in advance of construction activities at the Poopenaut Pass project site so that known occurrences of <i>Mimulus fillicaulis</i> at that site will be fenced by NPS staff. Any construction related activities shall be restricted to the outside of the fenced-off area, and the fencing shall remain present for the duration of the construction.</p> <p>Mitigation Measure 2 – Special Species Wildlife: Protect Active Spotted Owl and Northern Goshawk Nest Sites – Prior to implementation of the Proposed Action, the SFPUC will conduct surveys for California spotted owl and northern goshawk in the identified Protected Activity Centers (and other suitable habitat in the action area if necessary) to determine whether active nest sites associated with these PACs are located within 0.25 mile of project activities, including construction access routes. If the US Forest Service/National Park Service wildlife biologists determine that existing information is current and sufficient, these surveys may not be necessary.</p> <p>If active nest sites are determined to exist within 0.25 mile of project activities, the SFPUC will implement limited operating periods (LOPs) within 0.25 mile of active nest sites prior to commencement of any project construction activities to avoid construction or access-related disturbances to breeding activities and habitat of California spotted owl and northern goshawk. A Limited Operating Period constitutes a period during which project activities will not occur, and will be enforced in project implementation contracts as follows:</p> <ul style="list-style-type: none"> • An LOP between February 15 and September 15 will be imposed within 0.25 mile of an active nest site. The main access road to Cherry Lake passes within 0.5 mile of PAC 54-36 and 54-21; and the access road to some sites on Yosemite National Park lands (Lake Eleanor) passes through PAC 54-13. Although these sites will be accessed on existing roads, and potential effects of access-related disturbances to nesting attempts are expected to be minor, implementing the LOP within 0.25 mile of an active nest would avoid potential disturbances. • An LOP between March 1 and August 31 will be imposed within 0.25 mile of an active spotted owl nest site. The access road (1N07) to all of the Cherry Lake sites passes through PAC TL029. Although these sites will be accessed on existing roads, and potential effects of access-related disturbances to nesting attempts are expected to be minor, implementing the LOP within 0.25 mile of an active nest would avoid potential disturbances. 	<p>SFPUC Construction Management Bureau</p>
<p>Noise</p>	<p>Mitigation Measure 1 – Noise – The SFPUC will require all construction equipment to be properly maintained and equipped with noise controls, such as mufflers, in accordance with manufacturers' specifications</p>	<p>SFPUC Construction Management</p>

Resource	Measures to Avoid, Minimize or Mitigate Impacts	Responsibility
	<p>throughout the entire construction project.</p> <p>Mitigation Measure 2 – Noise – The SFPUC will require all construction activities to be limited to the hours of 7:00 a.m. to 7:00 p.m. Monday through Saturday. The SFPUC will designate a project liaison responsible for responding to noise complaints during the construction phases of the project. The name and phone number of the liaison will be conspicuously posted at construction areas and on all advanced notifications. This person shall take steps to resolve complaints, including periodic noise monitoring, if necessary.</p>	Bureau
Cultural Resources	<p>Mitigation Measure 1 – Undocumented Cultural Resources: The following mitigation measure is required to avoid any potential adverse effect from the proposed project on accidentally discovered buried or submerged cultural resources.</p> <p>The SFPUC shall distribute the Planning Department archeological resource “ALERT” sheet to the project prime contractor; to any project subcontractor, or utilities firm involved in soils disturbing activities within the project sites. Prior to any soils disturbing activities being undertaken each contractor is responsible for ensuring that the “ALERT” sheet is circulated to all field personnel including, machine operators, field crew, supervisory personnel, etc. The SFPUC shall provide the Environmental Review Officer (ERO) of the San Francisco Planning Department with a signed affidavit from the responsible parties (prime contractor, subcontractor(s), and utilities firm) to the ERO confirming that all field personnel have received copies of the Alert Sheet.</p> <p>Should any indication of an archeological resource, such as unusual amounts of bone, stone, or shell, be encountered during soils disturbing activity for the project, the project Head Foreman and/or project sponsor shall immediately notify the ERO and shall immediately suspend any soils disturbing activities within 50 feet of the discovery until the ERO has determined what additional measures should be undertaken.</p> <p>If the ERO and appropriate NPS and/or FS officials determines that a potentially significant archeological resource may be present within the project site, the SFPUC shall retain the services of a qualified archeological consultant. The archeological consultant shall advise the ERO as to whether the discovery is potentially significant under CEQA or NHPA. If a potentially significant resource is present, the archeological consultant shall identify and evaluate the archeological resource. The archeological consultant shall make a recommendation as to what action, if any, is warranted. Based on this information, the ERO may require, if warranted, specific additional measures to be implemented by the SFPUC.</p> <p>Measures might include: preservation in situ of the archeological resource; an archeological monitoring program; or an archeological testing program. If an archeological monitoring program or archeological testing program is required, it shall be consistent with the Major Environmental Analysis division of the Planning Department guidelines for such programs. The ERO may also require that the project sponsor immediately implement a site security program if the archeological resource is at risk from vandalism, looting, or other damaging actions.</p> <p>The project archeological consultant shall submit a Final Archeological Resources Report (FARR) to the ERO that evaluates the historical significance of any discovered archeological resource and describing the archeological and historical research methods employed in the archeological monitoring/data recovery program(s) undertaken. Information that may put at risk any archeological resource shall be</p>	SFPUC Construction Management Bureau

Resource	Measures to Avoid, Minimize or Mitigate Impacts	Responsibility
	<p>provided in a separate removable insert within the final report.</p> <p>Copies of the Draft FARR shall be sent to the ERO and appropriate NPS and/or FS officials for review and approval. Once approved, copies of the FARR shall be distributed in consultation with the ERO and appropriate NPS and/or FS officials and include the California Archeological Site Survey Central Coast Information Center (CCIC) which shall receive one (1) copy and the ERO shall receive a copy of the transmittal of the FARR to the CCIC. The Major Environmental Analysis division of the Planning Department shall receive three copies of the FARR along with copies of any formal site recordation forms (CA DPR 523 series) and/or documentation for nomination to the National Register of Historic Places/California Register of Historical Resources. In instances of high public interest or interpretive value, the ERO may require a different final report content, format, and distribution than that presented above.</p> <p>For inadvertent discoveries (undocumented cultural resources) on federal lands, the ERO and appropriate NPS and/or FS officials shall coordinate efforts. In the unexpected event that archeological deposits are exposed on NPS land during ground disturbing activities, all work will stop within 50 feet of the exposure, the area will be protected, and the Yosemite National Park Archeologist notified immediately. The Park Archeologist will evaluate the scene and determine the appropriate action in accordance with the 1999 PA, pursuant to Section 106 of the NHPA.</p> <p>Mitigation Measure 2 – Human Remains: If human remains are encountered all project-related construction activity will halt within 50 feet of the find. If the remains are discovered on Federal lands, the provisions of Native American Graves Protection and Repatriation Act (NAGPRA) shall be adhered to and implemented by the federal agency (NPS or Forest Service). If the remains are uncovered on non-federally owned land, the following process shall be implemented:</p> <p>In accordance with the California Health and Safety Code, if human remains are uncovered during ground-disturbing activities, the contractor and/or the SFPUC shall immediately halt potentially damaging excavation in the area of the burial and notify the County Coroner and a professional archeologist to determine the nature of the remains. The coroner is required to examine all discoveries of human remains within 48 hours of receiving notice of a discovery on private or state lands (Health and Safety Code Section 7050.5[b]). If the coroner determines that the remains are those of an American Indian, he or she must contact the Native American Heritage Commission (NAHC) by phone within 24 hours of making that determination (Health and Safety Code Section 7050[c]). Following the coroner's findings, the property owner, contractor or project proponent, an archeologist, and the NAHC-designated Most Likely Descendent (MLD) shall determine the ultimate treatment and disposition of the remains and take appropriate steps to ensure that additional human interments are not disturbed. The responsibilities for acting upon notification of a discovery of American Indian human remains are identified in California Public Resources Code Section (PRC) 5097.9.</p> <p>Upon the discovery of American Indian remains, the landowner shall ensure that the immediate vicinity (according to generally accepted cultural or archeological standards and practices) is not damaged or disturbed by further development activity until consultation with the MLD has taken place. The MLD shall have 48 hours to complete a site inspection and make recommendations after being granted access to the site.</p> <p>A range of possible treatments for the remains, including nondestructive removal and analysis, preservation in place, relinquishment of the remains</p>	

Resource	Measures to Avoid, Minimize or Mitigate Impacts	Responsibility
	<p>and associated items to the descendents, or other culturally appropriate treatment may be discussed. PRC 5097.9 suggests that the concerned parties may extend discussions beyond the initial 48 hours to allow for the discovery of additional remains. The following is a list of site protection measures that the landowner shall employ:</p> <ol style="list-style-type: none"> (1) Record the site with the Native American Heritage Commission or the appropriate Information Center (2) Utilize an open-space or conservation zoning designation or easement (3) Record a document with the county in which the property is located <p>The landowner or their authorized representative shall rebury the American Indian human remains and associated grave goods with appropriate dignity on the property in a location not subject to further subsurface disturbance if the NAHC is unable to identify a MLD or the MLD fails to make a recommendation within 48 hours after being granted access to the site. The landowner or their authorized representative may also re-enter the remains in a location not subject to further disturbance if they reject the recommendation of the MLD, and mediation by the NAHC fails to provide measures acceptable to the landowner. Adherence to these procedures and other provisions of the California Health and Safety Code will reduce potential impacts to human remains to a less than significant level.</p> <p>Mitigation Measure 3 – Traditional Cultural Properties: As an outcome of NHPA Section 106 consultation, American Indian tribes associated with the Poopenaut Pass project area will continue to be consulted during project development and implementation to avoid impact to traditional cultural properties and resources to which American Indian tribes attach cultural and religious significance.</p>	
Land Use	<p>Mitigation Measure 1 – Land Use – The SFPUC shall limit the Poopenaut Pass site staging area to the H2 turnout area to the extent feasible. The wilderness boundary shall be clearly marked adjacent to the project site and no construction equipment or personnel shall be allowed past the boundary to preserve the wilderness area.</p>	SFPUC Construction Management Bureau
Visual	<p>Mitigation Measure 1 – Visual – The SFPUC shall ensure that the following measure is implemented prior to, during, and after construction at all sites where new construction is proposed at (Poopenaut Pass, Cherry Tower Site, and Burnout Ridge):</p> <p>To the extent feasible, the SFPUC will conduct construction activities on SFPUC-owned lands or Raker Act right-of-way lands and minimize the need for use of non-SFPUC-owned or Raker Act right-of-way land during construction. In cases where construction easement or staging areas are needed on non-SFPUC/Raker Act land, the SFPUC will restore these areas to their prior condition so that the owner may return them to their prior use, unless otherwise arranged with the property owner. The site will be maintained to be clean and orderly. Construction staging areas will be sited away from public view where possible. Upon project completion, the construction contractor will return the project site to its general preconstruction condition, including re-grading of the site and re-vegetation of disturbed areas.</p>	SFPUC Construction Management Bureau
Visitor Experience and Recreation	<p>Mitigation Measure 1 – Visitor Experience and Recreation – The SFPUC shall prepare a communication strategy which will inform visitors, and park and forest employees of the construction schedule of the new sites prior to the start of construction. This may include installing signage near construction sites and providing traffic detour information to visitors as they enter the park and forest. Fencing or barricades shall be used as necessary at the new construction sites as a safeguard for visitors in the</p>	SFPUC Project Manager

Resource	Measures to Avoid, Minimize or Mitigate Impacts	Responsibility
	area. The communication strategy shall be reviewed by National Park Service and the US Forest Service prior to construction.	
Transportation	<p>Mitigation Measure 1 – Transportation – The SFPUC will require the preparation of a transportation plan by the construction contractor that shall be reviewed and approved by the SFPUC prior to construction. The SFPUC will ensure that the transportation plan addresses how to route pedestrians and vehicles around construction areas for the Poopenaut Pass and Cherry Tower Site. The plan shall be submitted for National Park Service and US Forest Service review and approval prior to the start of project construction.</p>	SFPUC Construction Management Bureau
Hazards and Hazardous Materials	<p>Mitigation Measure 1 – Hazards and Hazardous Materials – The SFPUC will review the Health and Safety Plan prepared by the construction contractor prior to the start of construction to ensure that Occupational Safety and Health Administration (OSHA) standards and other relevant regulations are addressed. The Health and Safety Plan shall be submitted to the SFPUC, National Park Service, and US Forest Service for approval prior to construction.</p> <p>Mitigation Measure 2 – Hazards and Hazardous Materials – The SFPUC will review the Oil and Hazardous Materials Spill Prevention, Control, and Countermeasure Plan prepared by the construction contractor prior to the start of construction. The SFPUC will ensure that the plan will address appropriate hazardous materials storage, spill prevention and response. The Oil and Hazardous Materials Spill Prevention, Control, and Countermeasure Plan shall be submitted to the SFPUC, National Park Service, and US Forest Service for approval prior to construction.</p> <p>Mitigation Measure 3 – Hazards and Hazardous Materials – The SFPUC will require construction contractors to maintain secondary containment on site for all fuel storage to trap any leaking oil, fuel or hydraulic fluids to be inspected daily. The SFPUC will require routine oiling, lubrication, and refueling to be conducted with secondary containment and shall be prohibited adjacent to water courses.</p> <p>Mitigation Measure 4 – Hazards and Hazardous Materials – The SFPUC will require construction contractors to have spill response materials including absorbent pads, booms, and other materials to contain hazardous material spills shall be maintained at Burnout Ridge, Poopenaut Pass, Intake Radio Site, and Cherry Tower Site to ensure rapid response to spills.</p>	SFPUC Construction Management Bureau

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PUBLIC INVOLVEMENT AND COORDINATION

Public Scoping

The public was notified of the proposed project on the NPS Park Management website on February 9, 2006. The public scoping period was from February 21, 2006 to March 27, 2006. In addition, as part of the public involvement process, NPS and USFS held joint public Open Houses in Yosemite Valley at the Visitor Center Auditorium on Wednesday, February 22, 2006, and Wednesday, March 22, 2006 (from 2 PM to 6 PM). The Open Houses included exhibits about the proposed action and alternatives, environmental considerations, and design. Professional staff was available to introduce the project, give a presentation, answer questions, and to accept comments. The public was invited to attend a site tour of the NPS Poopenaut Pass project area, with park staff to review the proposed sites, to ask questions, and provide input, on March 10, 2006. The public was encouraged to submit scoping comments identifying key issues and potential alternatives that could be evaluated as part of the environmental analysis for the Proposed Action.

NPS received comments from 24 individuals, three organizations, one civic group, and one tribal group. The USFS received comments from five individuals, of which four were duplicate letters sent to NPS. A total of 30 separate comments were received (not including duplicates). The analysis of these comments generated 29 general concern statements, which were categorized and considered for incorporation in the planning process.

Comments relating to the planning process included:

- Demonstrate the necessity and benefit of the improved communication systems to the NPS and USFS.
- Clarify the relationship between the NPS, HHW&P, and whether Yosemite National Park and visitors would benefit from the proposed action.
- The NPS should cooperate with the people of Tuolumne County regarding the proposed action.
- Conduct a valid NEPA process.
- Ensure that the project is compliant with NPS and USFS regulations.

Comments relating to resource issues and concerns included:

- Consider the potential impacts to vistas and views and physical integrity to the landscape from the proposed action.
- Consider sites with the least short-term and long-term environmental impacts.
- Evaluate sites for special status plant and animal species.
- Address the history of the Paiute Indians in historical related context of Hetch Hetchy Valley.
- Consider impacts to public recreational uses.
- Do not consider expanding cell service because of impacts to Wilderness.

Comments regarding communication systems and design included:

- Clarify the locations of Burnout Ridge and/or Poopenaut Pass.
- Clarify the description of the existing and proposed communication systems.
- Place new communication hardware in areas that would not interfere with emergency helicopter landings.
- Present the analysis of the different communication systems.
- Trench for utility lines associated with the project along existing roadways.
- Preserve the designated Wilderness boundaries.
- Preserve the overlook and old trail.

Comments regarding alternatives included:

- Evaluate Site 6 and 7 as the preferred Poopenaut Pass location.

All of the above issues and concerns were considered in the planning process and/or are addressed in the EA/PMND and IS.

The following comments and concerns, however, were dismissed because they were either outside of the scope of the project, were not reasonable or feasible, and/or did not meet the project purpose and need:

- Stop spending taxpayer money on these environmental evaluations.
- Identify if the project is affected by the revised Merced River Plan litigation.
- Consider partnerships with private enterprises as a funding option for communications projects and not use NPS money targeted for other park programs.
- Consider abandoning the project.
- Consider removing O'Shaughnessy Dam and restoring the Hetch Hetchy Valley.
- Consider including cell or radio broadcasting service in this communications system.

The ideas generated in public scoping were incorporated with those generated from internal scoping, which included analysis from specialists such as historic landscape architects, wildlife biologists, botanists, and other staff from Yosemite National Park.

Public Review and Comment Period

The Hetch Hetchy Communication System Upgrade Project EA/PMND and IS was released for a 30-day public review period beginning on October 2, 2007, and closing on November 2, 2007. The EA/PMND and IS was mailed to over 400 individuals, organizations and agencies on the park's mailing list, and was posted on the National Park Service website. The EA/PMND and IS was also sent to the Mariposa County Public Library, Oakhurst Public Library, and the San Francisco City Public Library.

Comments received during the formal public comment period consisted of 10 letters representing one recreational group, seven individuals, and two organizations. From these letters, 52 individual comments were identified and 15 concern statements were generated. Some of the main concerns generated from the public comment period were:

Comments regarding alternatives included:

- Proceed with preferred alternative.
- Consider additional mitigation for implementation of Alternatives 2 and 3 including mitigation related to visual resources and wildlife.
- Present objective analysis of the alternatives including objective analysis of the environmentally preferable alternative.

Other general comments were:

- Correct description of the Moccasin Powerhouse Passive Reflector.
- Post public comments on the EA on the NPS website in a timely manner.
- Consider the significance of the cumulative impacts of the proposed action.

Comments regarding communication systems and design included:

- Consider cell phone service in this communication system.
- Do not consider expanding cell service within Yosemite National Park.
- Clarify the justification for siting communication towers at Lake Eleanor and Poopenaut Pass.
- Consider removal of infrastructure rather than providing more infrastructure to support O'Shaughnessy Dam.

Comments relating to resource issues and concerns included:

- Consider the impact of a new site on fire suppression and management efforts.
- Consider impacts to scenic, wildlife, and wilderness resources.
- Address the history of the Paiute Indian community in Hetch Hetchy Valley.
- Consider the intensity of impacts.

Comments relating to the planning process included:

- Consider impacts on federal lands independent of Raker Act authority and clarify the extent of intergovernmental immunity and discretionary authority held by the City and County of San Francisco.

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COORDINATION

U.S. Fish and Wildlife Service

The Endangered Species Act of 1973, as amended (16 USC 1531 et seq.), requires all federal agencies to consult with the U.S. Fish and Wildlife Service (USFWS) to ensure that any action authorized, funded, or carried out by the agency does not jeopardize the continued existence of listed species or critical habitat. On January 11, 2007 a list of federally listed and other sensitive species that may be affected by the project was acquired from the USFWS. The Biological Evaluation/Biological Assessment (BE/BA) and the species list retrieval described above initiated informal consultation on this proposed action. Based on this information, the NPS determined that this project will have “no effect” on any federally listed, candidate, or proposed threatened or endangered species or their critical habitat. Thus, no further consultation is required (50 CFR 402.14).

Native American Consultation

The NPS initiated consultation with American Indian tribes having cultural association with the project area on proposed actions under the Hetch Hetchy Communication System Upgrade Project. The NPS consultation with American Indian tribes included site visits regarding the preferred alternative for the Poopenaut Pass site.

Input has been received by the American Indian Council of Mariposa County (aka Southern Sierra Miwuk), the Tuolumne Band of Me-Wuk Indians, Mono Lake Kutzadikaa Tribe, Bridgeport Paiute Indian Colony, and the Bishop Paiute Community. Tribal comments assert that the Hetch Hetchy Communication System Upgrade Project area holds significant cultural properties. Consultation and information sharing has continued throughout the preparation of the EA. Consultation will continue throughout the planning and implementation of the Hetch Hetchy Communication System Upgrade Project.

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FINDING

On the basis of the information contained in the Hetch Hetchy Communication System Upgrade Project Environmental Assessment/Preliminary Mitigated Negative Declaration and Initial Study as summarized above, it is the determination of the National Park Service that the project is not a major federal action significantly affecting the quality of the human environment. Nor is it an action without precedent or similar to an action that normally requires an Environmental Impact Statement. The conclusions of non-significance are supported by the conservation planning and environmental impact analysis completed and the capability of listed mitigation measures to reduce or eliminate impacts, and input from other agencies and the public. No adverse effects to cultural or historical resources will occur; there are no unacceptable impacts, nor will any impairment of cultural or natural resources or park values occur. This determination also included due consideration of the minor nature of public comments. Therefore, in compliance with the National Environmental Policy Act, an Environmental Impact Statement will not be prepared. The Selected Alternative may be implemented as soon as possible.

Recommended:



Michael J. Tollerfson, Superintendent
Yosemite National Park

3/28/08
Date

Approved:



Jonathan B. Jarvis, Regional Director
Pacific West Region

4/1/08
Date



Hetch Hetchy Communication System Upgrade Project

Assessment of Actions Having an Effect on Cultural Resources

April 2008

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National Park Service

ASSESSMENT OF ACTIONS HAVING AN EFFECT ON CULTURAL RESOURCES

A. DESCRIPTION OF UNDERTAKING

1. Park: Yosemite NP Park district (optional) Mather

2. **Work/Project Description:**

a. Project name Hetch Hetchy Communication System Upgrade Project Date: March 10, 2008 park project no(s.) 20306

b. Describe project and area of potential effects (as defined in 36 CFR 800.2[c]); explain why work/project is needed.

This project is to upgrade Hetch Hetchy's existing communications system, including constructing a new communications tower and supporting structure on Park land near Poopenaut Pass. The Hetch Hetchy Water and Power (HHW&P) system is a water supply and power development comprised of dams and reservoirs, hydroelectric plants, penstocks, aqueducts, pipelines, tunnels, transmission lines and related facilities. The HHW&P system is owned by the City and County of San Francisco and operated by the San Francisco Public Utilities Commission (SFPUC). The existing communications system used for the operation of HHW&P's water supply and electric utility is a combination of microwave radios and fiber optics to transmit voice and data communications. A 2 gigahertz (GHz) microwave radio system is used to communicate between Warnerville Switchyard/Moccasin Powerhouse, and Intake Switchyard; and a fiber optic communications system is used to communicate between Intake Switchyard, Kirkwood and Holm Powerhouses. There are currently no communications structures in the O'Shaughnessy, Cherry Lake, and Lake Eleanor areas. The existing communications system provides basic services to support HHW&P's operations, but it is technologically obsolete and updates/upgrades of this system are no longer available from the manufacturer. The system also relies on outdated fiber optic terminal equipment. The purpose of the proposed project is to: 1) vacate the 2 GHz band per Federal Communications Commission (FCC) requirements; 2) replace and upgrade the aging communications system with an improved system; 3) expand system coverage to the O'Shaughnessy, Cherry Lake, and Lake Eleanor areas; 4) provide additional infrastructure for housing NPS and FS communications equipment associated with their separate communications systems; and 5) provide an infrastructure that could be used in the future to integrate HHW&P communication system with NPS, and FS communications. The infrastructure would be updated by replacing or updating components of the communication system throughout Tuolumne County, including potentially adding one new site within Yosemite National Park. A system upgrade would thus improve radio communication vital to park operational activities, such as law enforcement, search and rescue, and fire management. This will improve the capability to ensure

dam security, visitor and staff safety, and protection of park resources. Alternative 2 proposes the replacement and upgrade of the aging and obsolete communication system with an improved system; vacating the 2 GHz band per FCC requirements; expansion of system coverage in the O'Shaughnessy, Cherry Lake, and Lake Eleanor areas beyond existing coverage; and to improve infrastructure to allow for potential future integration of HHW&P, NPS and USFS communications.

The preferred Alternative 2 would locate the Poopenaut Pass site facility at Site 9. The Proposed Action of the NPS consists of issuance of a land use entitlement (right-of-way permit) for the Poopenaut Pass site. NHPA Section 106 review will be completed for that action when the entitlement document is prepared. The overall operation and maintenance of the facilities in Yosemite National Park will be provided solely by HHW&P.

Poopenaut Pass (PPP)

Poopenaut Pass is located within Yosemite National Park south of the O'Shaughnessy Dam access road between the Hetch Hetchy Entrance Station and O'Shaughnessy Dam (see Figures 2-1, 2-20, 2-21). The Poopenaut Pass site would have a line-of-sight to O'Shaughnessy Dam Gallery to the northeast, and Burnout Ridge to the northwest, thus allowing for communication between Moccasin Powerhouse and O'Shaughnessy Dam. A tower at this site would repeat the microwave signal from Burnout Ridge to the O'Shaughnessy area and provide the foundation system for NPS and HHW&P with the bandwidth needed to eventually expand communications into the O'Shaughnessy area. While cellular communications coverage is not part of the purpose and need, or Proposed Action of this project, the installation of a communication tower may in the future support cellular telephone communication equipment. This project would not promote or limit such a future use.

Two site locations at Poopenaut Pass are analyzed in this EA/IS. HHW&P and NPS staff identified several sites during the internal evaluation phase of the NEPA process (See Section 2.4 Alternatives Considered but Dismissed). Following the close of the public scoping process and review of comments from this process, HHW&P and NPS staff identified the sites that are formal alternatives for more detailed analysis: Poopenaut Pass Sites 7 and 9. Site 9 is identified as the preferred alternative for the Poopenaut Pass location, while Site 7 will be analyzed in this document as an alternate location.

Facilities

The Poopenaut Pass site would require the construction of a communication tower and communication shelter, utility power from a HHW&P distribution line, and all-season access. Because this is a new, previously undeveloped site, an access trail would be required. The proposed Poopenaut Pass site is located near an existing vehicular turnout at roadway marker H2 on the O'Shaughnessy Dam access road within the Park. The climb from the turnout to the site is an elevation change of approximately 115 feet. No formal trail exists, but a footpath is evident.

Construction

This site consists primarily of rock outcroppings on a relatively steep slope. Due to the slope and

topography of this site, there is not a flat location in which to place the communication shelter. As such, it would be necessary to create a flat shelf by excavating/blasting into the hillside. The removal of several trees would be required at this site, including a clump of oak trees located between the proposed communication shelter site and the Wilderness Boundary. The oak tree trunks are located entirely outside of the Wilderness Area Boundary and would be completely removed.

The foundations for the tower and communication shelter may be slab on grade, drilled piers, or foundation curbs as determined by the equipment manufacturers. Preparation of the foundation at the Poopenaut Pass site would likely be performed with a combination of blasting, air-powered jackhammers, and air-powered drills. A 40-foot lattice-type communication tower would be installed. The tower would have a black or battleship grey powercoat finish to reduce visibility. Several microwave dishes and small additional antennae would be mounted to the tower. In addition, small video camera units would be attached to the tower for security purposes. Due to the topography of this site, the foundation would not be a square concrete cap, but rather three individual circular piers (one for each leg of the tower). The maximum diameter of each of the circular piers would be two feet. The legs of the tower would likely vary in length to adjust for the site topography; and the maximum height of the piers would be no more than three feet above finished grade.

A 12-foot by 24-foot modular communication shelter with insulated walls and roof made of high-strength, light-weight, steel-reinforced concrete would be installed to house the communication equipment. Ground disturbance at this site would be approximately 2,238 sq. ft. for the communication site and tower area. The shelter would be finished such that it is "park-like" in order to be consistent with NPS architectural standards. There would be a three-foot wide maintenance footpath on the south side of the communication shelter. Steel grating steps/risers with handrails would be installed near the southwest corner of the communication shelter such that maintenance personnel can access the communication shelter. A retaining wall would be built south of the communication shelter. In addition, handrails would be installed along the entire length of the retaining wall for maintenance personnel safety. The communication shelter would be equipped with a manual transfer switch as a means of connecting to a portable emergency generator. An access trail, similar to a hiking trail would be established between the shelter and a point near but not visible from the parking area and the road. Ground disturbance for the access trail would involve approximately 6,303 sq. ft. for the access trail.

The site would be surrounded by security fencing. The fence would be seven feet high, and be constructed of black, vinyl-coated chain link fencing topped with three strands of barbed wire on an outrigger. The fence gates would be self-closing. An intrusion alarm system would be installed in the communication shelter to ensure site security in accordance with NPS guidance.

It is anticipated that the tower sections and shelter sections would be delivered by truck to the vehicular turnout at marker H2 below the site and lifted by helicopter to the tower location where they would be assembled. It is also anticipated that helicopters would be used to transport a portable generator, air compressor, and other equipment and tools to the site for use in site preparation and

construction.

A pole-mounted transformer would be installed on an existing electrical distribution line pole located east of the project site just off the O'Shaughnessy Dam Road. An underground secondary electrical service line would be extended west within the O'Shaughnessy Dam Road right-of-way. The line would continue from the existing H2 turnout and follow and be buried under the foot trail to the communication shelter at the site. Approximately 125 linear feet (approximately 1,250 sq. ft.) would be trenched from the H2 turnout to the proposed foot trail to install the secondary electrical line. This site would have batteries with capacity to allow operation in the event of prime power failure.

3. Has the area of potential effects been surveyed to identify cultural resources?

No

Yes Source or reference Historical Context and Archeological Survey Report for the Hetch Hetchy Communications System Upgrade Project City and County of San Francisco, California 2008

Check here if no known cultural resources will be affected. (If this is because area has been disturbed, please explain or attach additional information to show the disturbance was so extensive as to preclude intact cultural deposits.)

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

5. **The proposed action will:** (check as many as apply)

Destroy, remove, or alter features/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 (inc. terrain)

Add nonhistoric features/elements (inc. visual, audible, or atmospheric) to a historic setting or cultural landscape

Disturb, destroy, or make archeological resources inaccessible

Disturb, destroy, or make ethnographic resources inaccessible

Potentially affect presently unidentified cultural resources

Begin or contribute to deterioration of historic features, terrain, setting, landscape elements, or archeological or ethnographic resources

Involve a real property transaction (exchange, sale, or lease of land or structures)

Other (please specify)

6. Measures to prevent or minimize loss or impairment of historic/prehistoric properties:

(Remember that setting, location, and use may be relevant.)

- In the unexpected event that archeological deposits are exposed on NPS land during ground disturbing activities, all work will stop within 50 feet of the exposure, the area will be protected, and the Yosemite National Park Archeologist notified immediately. The Park Archeologist will evaluate the scene and determine the appropriate action in accordance with the 1999 PA, pursuant to Section 106 of the NHPA.
- American Indian tribes associated with the project area will continue to be consulted during project development and implementation to avoid impact to traditional cultural properties and resources to which American Indian tribes attach cultural and religious significance.

7. Supporting Study Data:

(Attach if feasible; if action is in a plan, EA or EIS, give name and project or page number.)

8. **Attachments:** Maps Archeological survey, if applicable Drawings Specifications
 Photographs Scope of Work Site plan List of Materials Samples
 Other _____

Prepared by Jeannette Simons **Date** 03-10-2008

Title: Historic Preservation Officer **Telephone** 209-379-1372

B. REVIEWS BY CULTURAL RESOURCE SPECIALISTS

The park 106 coordinator requested review by the park's cultural resource specialist/advisers as follows: Park Archeologist, Park Historical Landscape Architect, Park Native American Liaison

SPECIALISTS: Your comments here show that you have reviewed this proposal for conformity with requirements of Section 106, with the 1999 Park Specific PA, and applicable parts of the Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation, the NPS *Management Policies*, and the NPS *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.

[X] ARCHEOLOGIST

Name: Laura Kirn

Date:02/28/2008

Comments:

Check if project does not involve ground disturbance []

Assessment of Effect: No Historic Properties Affected No Adverse Effect Adverse Effect Programmatic Exclusion

Recommendations for conditions or stipulations:

[X] ANTHROPOLOGIST

Name: Jeannette Simons, Native American Liaison

Date:03/10/2008

Comments:

Assessment of Effect: No Historic Properties Affected No Adverse Effect Adverse Effect Programmatic Exclusion

Recommendations for conditions or stipulations: American Indian tribes associated with the project area will continue to be consulted during project development and implementation to avoid impact to traditional cultural properties and resources to which American Indian tribes attach cultural and religious significance.

[X] HISTORICAL LANDSCAPE ARCHITECT

Name: David Humphrey

Date:03/06/2008

Comments: None.

Check if project does not involve ground disturbance []

Assessment of Effect: No Historic Properties Affected No Adverse Effect Adverse Effect Programmatic Exclusion

Recommendations for conditions or stipulations: In light of the USDANFS decision to treat their towers with a powder coat finish, we (NPS) would like our tower to receive the same treatment. Our color preference is black, although a battleship grey would work too. We would like the mesh fence to receive the same treatment, a black powder coat finish or as an alternative a black vinyl coat finish as opposed to the hot-dip galvanized treatment.

C. PARK SECTION 106 COORDINATOR'S REVIEW AND RECOMMENDATIONS

1. Assessment of Effect:

_____ No Historic Properties Affected X No Adverse Effect _____ Adverse Effect

2. Compliance requirements:

A. STANDARD 36 CFR PART 800 CONSULTATION

Further consultation under 36 CFR Part 800 is needed.

B. PROGRAMMATIC EXCLUSION UNDER THE 1995 SERVICEWIDE PROGRAMMATIC AGREEMENT (PA)

The above action meets all conditions for a programmatic exclusion under Stipulation IV of the 1995 Servicewide PA for Section 106 compliance.

APPLICABLE EXCLUSION: Exclusion IV.B
(Specify 1-13 or IV.C addition to the list of exclusions.)

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 1995 Servicewide PA and 36 CFR Part 800.
Specify plan/EA/EIS: _____

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.
Specify: *1999 Programmatic Agreement Among the National Park Service at Yosemite, The California State Historic Preservation Officer, and the Advisory Council on Historic Preservation Regarding Planning, Design, Construction, Operations and Maintenance, Yosemite National Park, California*

E. COMPLIANCE REQUIREMENTS SATISFIED BY USE OF NEPA

Documentation is required for the preparation of an EA/FONSI or an EIS/ROD has been developed and used so as also to meet the requirements of 36 CFR 800.3 through 800.6

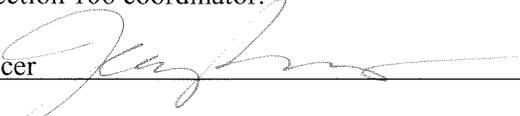
F. STIPULATIONS/CONDITIONS

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.

See Section 6, Measures to prevent or minimize loss or impairment of historic/prehistoric properties

Recommended by Park Section 106 coordinator:

Historic Preservation Officer



Date

3-14-08

D. 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.

Signature of Superintendent



Date

3/28/08



Hetch Hetchy Communication System Upgrade Project

Tuolumne Wild and Scenic River Section 7 Determination

April 2008

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Tuolumne Wild and Scenic River Section 7 Determination

The Section 7 evaluation for the Hetch Hetchy Communication System Upgrade Project is based on guidance provided in the Wild and Scenic Rivers Act: Section 7 Technical Report (Interagency Wild and Scenic Rivers Coordinating Council). The direct and adverse evaluation procedure is carried out for water resources projects licensed by the Federal Energy Regulatory Commission or other federally assisted water resources projects within the Wild and Scenic River Boundary of the designated river. The O’Shaughnessy Stream Gauge site, one of 32 sites that is part of the Proposed Action, is located within the banks of the Tuolumne River in Yosemite National Park within a segment of the river that holds scenic classification. Although the Tuolumne Wild and Scenic River Comprehensive Management Plan is still under development, this Section 7 determination process applies only to the O’Shaughnessy Stream Gauge site, as it is the only site that occurs in the bank of the Tuolumne River.

Section 7 Evaluation for the Hetch Hetchy Communication System Upgrade Project	
Evaluation Criteria	Project Data
<i>Define the Proposed Activity</i>	
Project Proponent	San Francisco Public Utilities Commission (SFPUC), National Park Service – Yosemite National Park, United States Forest Service – Stanislaus National Forest
Geographic location of the project	The project sites are located in Stanislaus and Tuolumne counties. The O’Shaughnessy Stream Gauge site is located within the Lake Eleanor United States Geological Survey (USGS) Quad and 01N 20E Township and Range.
Project Description	The purpose of the proposed Hetch Hetchy Communication Systems Upgrade Project is to: 1) vacate the 2 GHz band per Federal Communications Commission (FCC) requirements; 2) replace and upgrade the aging communications system with an improved system; 3) provide the video and radio bandwidth to allow for future installation of voice radio systems, which could expand system coverage in the O’Shaughnessy, Cherry Lake, and Lake Eleanor areas above existing coverage; 4) provide the foundation infrastructure for housing NPS and FS communications equipment associated with their separate communications systems; and 5) provide the foundation infrastructure that could be used in the future to integrate HHW&P communication system with NPS, and FS communications.
Duration of the proposed activities	The proposed upgrade at the O’Shaughnessy Stream Gauge will take approximately one week. The contractor’s initial survey of the site and end-of-project testing will not occur contiguously with the installation work, but may occur during the estimated 18-month construction period.
Magnitude and/or extent of the proposed activities	The O’Shaughnessy Stream Gauge site would involve the installation of a rigid galvanized steel conduit antenna mast that would support a solar panel and a Yagi antenna on top of the existing stream gauge structure. The work would occur on the exterior of the building and necessitate interior electrical work.
Mitigation	Mitigation is incorporated into the Proposed Action. Please refer to Section 4.0 for mitigation measures incorporated into the Proposed Action.
Relationship to past and future management activities	The Proposed Action is subject to the 1980 Yosemite General Management Plan and the Stanislaus Forest Plan, as Amended.

Section 7 Evaluation for the Hetch Hetchy Communication System Upgrade Project	
Evaluation Criteria	Project Data
<i>Describe Whether the Proposed Activity Will Directly Alter Within-Channel Conditions</i>	
The position of the proposed activity relative to the streambed and streambanks	Proposed upgrades at each of the Hetch Hetchy Communication System Upgrade Project sites are out of the Tuolumne River streambed and streambanks with the exception of the existing O'Shaughnessy Stream Gauge, which is located on the bank of the Tuolumne River.
Navigation of the river	Due to restriction applied through Park policy, river navigation is not applicable to the O'Shaughnessy Stream Gauge area of the Tuolumne River.
<i>Any likely resulting changes in:</i>	
Active channel location	No.
Channel geometry (cross-sectional shape, width, depth characteristics)	No.
Channel slope (rate or nature of vertical drop)	No.
Channel form (straight, meandering, or braided)	No.
Relevant water quality parameters (turbidity, temperature, nutrient availability)	The proposed upgrade at the O'Shaughnessy Stream Gauge would not result in turbidity, temperature, or nutrient availability impacts to the river. The Stream Gauge itself would not be altered; the proposed upgrade involves the installation of a rigid galvanized steel conduit antenna mast that would support a solar panel and a Yagi antenna on top of the existing stream gauge structure. All work would take place above the water surface.
<i>Describe Whether the Proposed Activity Will Directly Alter Riparian and/or Floodplain Conditions</i>	
The position of the proposed activity relative to riparian area and floodplain	The O'Shaughnessy Stream Gauge site is located within the bed and banks of the Tuolumne River.
<i>Any likely resulting changes in:</i>	
Vegetation composition, age structure, quantity, or vigor	No vegetation would be removed at the O'Shaughnessy Stream Gauge site for the Proposed Action.
Relevant soil properties such as compaction or percent bare ground	The proposed action would not result in soil compaction or exposing bare ground.
Relevant floodplain properties such as width, roughness, bank stability, or susceptibility to erosion	The O'Shaughnessy Stream Gauge does not constrict the flow of the Tuolumne River. The proposed upgrade at this site would not result in changing the natural floodplain properties.
<i>Describe Whether the Proposed Activity Will Directly Alter Upland Conditions</i>	
The position of the proposed activity relative to the uplands	The Proposed Action is not located in the uplands and would not directly alter upland areas.
Relevant hydrologic properties such as drainage patterns or the character of surface and subsurface flows	The Proposed Action would not result in net new impermeable surfaces such that drainage patterns or the character of surfaces and subsurface flows would change. The proposed upgrade would result in the addition of an antenna to the existing stream gauge.
Potential changes in upland conditions that would influence archeological, cultural, or other identified significant scenic values	The O'Shaughnessy Stream Gauge site would involve the installation of a rigid galvanized steel conduit antenna mast that would support a solar panel and a Yagi antenna on top of the existing stream gauge structure. This would not influence archeological, cultural, or significant scenic values in uplands of the Tuolumne River.
<i>Any likely resulting changes in:</i>	
Vegetation composition, age structure,	No.

Section 7 Evaluation for the Hetch Hetchy Communication System Upgrade Project	
Evaluation Criteria	Project Data
quantity, or vigor	
Relevant soil properties such as compaction or percent bare ground	No.
<i>Evaluate and Describe Whether Changes in On-Site Conditions Can or Will Alter Existing Hydrologic or Biological Processes</i>	
The ability of the channel to change course, re-occupy former segments, or inundate its floodplain	The project would not have any affect on the ability of the channel to change course, re-occupy former segments, or inundate its floodplain.
Streambank erosion potential, sediment routing and deposition, or debris loading	The project would not have any affect on the streambank erosion potential, sediment routing and deposition, or debris loading.
The amount or timing of flow in the channel	The project would not affect the amount or timing of flow in the Tuolumne River.
Existing flow patterns	The project would not affect existing flow patterns in the Tuolumne River.
Surface and subsurface flow characteristics	The project would not change surface and subsurface flow characteristics.
Flood storage (detention storage)	The project would not have any measurable effect on river flood storage capability.
Aggregation and or degradation of the channel	The project is not expected to have a measurable effect on aggregation or degradation of the Tuolumne River channel properties.
Amphibian/mollusk needs	The project is not expected to have any measurable effect on amphibian/mollusk needs.
Species composition (diversity)	The project is not expected to have any measurable effect on species composition or diversity.
<i>Biological Processes Such As:</i>	
Reproduction, vigor, growth, and/or succession of streamside vegetation	There will be no brush clearing or removal of vegetation in the vicinity of the project site. The project is not expected to result in reduced streamside vegetation.
Nutrient cycling	The project is not expected to have an effect on the nutrient cycling process.
Fish spawning and/or rearing success	The project is not expected to have any effect on fish spawning and/or rearing success because the proposed upgrade occurs on land and on the existing stream gauge. All work would take place above the water surface.
Riparian-dependent avian species needs	The project is not expected to have any effect on riparian-dependent avian species needs.
<i>Estimate the Magnitude and Spatial Extent of Potential Off-Site Changes</i>	
<i>Consider and Document:</i>	
Changes that influence other parts of the river system	The project does not propose any actions that would change or influence other parts of the river system.
The range of circumstances under which off-site changes might occur (for example, as may be related to flow frequency)	The project does not propose any actions that would result in off-site changes.
The likelihood that predicted changes will be realized	There are no predicted off-site changes as a result of implementation of this project.
Specify processes involved, such as water and sediments, and the movement of nutrients.	Natural hydrologic processes along Tuolumne River would not be enhanced or degraded as a result of the Proposed Action.

Section 7 Evaluation for the Hetch Hetchy Communication System Upgrade Project	
Evaluation Criteria	Project Data
<i>Define the Time Scale Over Which the Above Effects Are Likely to Occur</i>	
Review the above effects, looking independently at the element of time. Define and document the time scale over which the effects will occur	As noted above, the Proposed Action would have no effect on the river system, banks, floodplain, or upland area. Installation of the new antenna would occur on one week day. The contractor’s initial survey of the site and end-of-project testing will not occur contiguously with the installation work, but may occur during the estimated 18-month construction period.

Effects of the Proposed Action on Outstandingly Remarkable Values

The Proposed Action, specifically the proposed upgrade at the O’Shaughnessy Stream Gauge would result in the installation of a new antenna on the existing stream gauge structure. The free-flowing character of the Tuolumne River would not be reduced as a result of the O’Shaughnessy Stream Gauge site upgrade. An assessment of the Proposed Action’s effects specific to the O’Shaughnessy Stream Gauge site on Outstandingly Remarkable Values is provided in the table below.

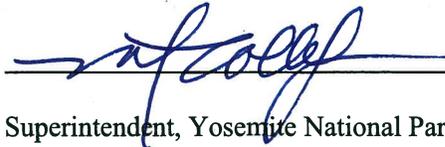
Effects of the Proposed Action on Outstandingly Remarkable Values in Segment 5 of the Tuolumne Wild and Scenic River Corridor	
Outstandingly Remarkable Value	Effects of the Proposed Action
<p><i>Ecologic</i> - From the alpine headwaters of the Tuolumne River, through the river’s steep descent into the Sierra Nevada foothills, interactions among geologic, hydrologic, and biologic processes sustain a rare diversity of robust, interrelated, and largely intact ecosystems. The entire river corridor is either within or surrounded by designated Wilderness, which protects the ecological integrity of these systems.</p> <p>The unusual extent and influence of glaciation in the Tuolumne River corridor has resulted in extensive low relief areas, primarily meadows, separated by steep sections of river flowing over bedrock. This stairstep morphology, in combination with exceptional water quality, a seasonal flood regime, and a largely undisturbed river corridor, sustains systems that are remarkable in their size and diversity:</p> <ul style="list-style-type: none"> • Tuolumne Meadows, Dana Meadows, and the meadows along the Lyell Fork comprise one of the largest and most extensive subalpine meadow/wetland complexes in the Sierra Nevada. In addition, the lower elevation meadow/wetland complex at Poopenaut Valley is unique in its relative lack of human impact and development compared to other low-elevation riparian areas in the Sierra Nevada. These meadow systems sustain an exceptional diversity of river-related habitat types. • Dramatic stairstep river morphology creates highly diverse river canyon communities below Tuolumne Meadows and below Hetch Hetchy Reservoir. Spectacular systems of falls, cascades, basins, riffles, and pools bounded by towering cliffs contribute to a remarkable diversity of largely intact habitat types. 	<p>The proposed upgrade at the O’Shaughnessy Stream Gauge site would have no effect on the ecological resources of the river. The upgrade involves the installation of an antenna on the existing stream gauge. All work would take place above the water surface. There would be no site disturbance or removal of vegetation.</p>
<i>Sociocultural</i> - The Tuolumne River’s unique combination	The proposed upgrade at the O’Shaughnessy

Effects of the Proposed Action on Outstandingly Remarkable Values in Segment 5 of the Tuolumne Wild and Scenic River Corridor	
Outstandingly Remarkable Value	Effects of the Proposed Action
<p>of prehistoric, historic, scenic, and recreational values distinguishes it from other rivers in the Sierra Nevada and throughout the nation. The sociocultural values of the Tuolumne River corridor extend back at least 6,000 years and span generations of diverse groups of people. Visible evidence testifies to the evolving importance of the river corridor as a seasonal hunting and gathering ground, a trans-Sierra trade and travel route, a destination for recreation and leisure, and a place to connect with nature in a wilderness setting.</p> <p>From prehistoric through modern times, people have developed powerful and enduring relationships with the Tuolumne River corridor. The corridor plays a significant role in maintaining cultural traditions among groups of American Indian people. In a contemporary context, the corridor engenders deep personal connections to the area and figures prominently in the lives, stories, and traditions of generations of visitors.</p>	<p>Stream Gauge site would have no effect on the sociocultural resources of the river.</p>
<p><i>Scientific</i> - The largely undisturbed river corridor provides invaluable opportunities to examine ecologic and sociocultural resources with high research value. The entire river corridor is either in or surrounded by designated Wilderness, which is critical to protecting the integrity and maintaining the scientific value of these resources.</p> <ul style="list-style-type: none"> • Relatively intact Sierra river ecosystems provide crucial baseline data and basic information on how components of such natural ecosystems interact and respond to perturbation (e.g., climate change, decline of special-status species). • Some of the best evidence of glacial processes in the Sierra Nevada occurs along the river corridor. • Well-preserved prehistoric and historic archeological resources within the river corridor provide outstanding opportunities to research trade, travel, subsistence, and technological change that occurred over thousands of years. 	<p>The proposed upgrade at the O’Shaughnessy Stream Gauge site would not disturb the river corridor and would have no effect on the scientific value of the river.</p>
<p><i>Segment 5: Prehistoric and American Indian Cultural</i> - Pre-contact archeological sites represent possible year-round use by groups of American Indian people and are contributing features to the Hetch Hetchy Archeological District. Prehistoric resources important to the oral traditional history of American Indian people affiliated with the Tuolumne River are also contained within this segment.</p>	<p>The proposed upgrade at the O’Shaughnessy Stream Gauge site does not include any ground disturbance that could potentially result in encountering archeological sites. Mitigation measures are incorporated into the Proposed Action in the event archeological sites or artifacts are encountered.</p>
<p><i>Segment 5: Historic</i> - Historic landscape features and structures provide evidence of early Euro-American settlement. Specific sites that are either eligible or potentially eligible for listing on the National Register of Historic Places include the Screech Trail and cabin ruins.</p>	<p>The proposed upgrade at the O’Shaughnessy Stream Gauge site would have no effect on historic landscape features and structures in the area.</p>

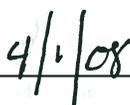
Section 7 Determination

The Proposed Action includes the installation of an antenna to the existing O'Shaughnessy Stream Gauge structure. Free flow and natural fluvial processes would not be impacted as a result.

Recommended:

 _____  _____
Superintendent, Yosemite National Park Date

Approved:

 _____  _____
Regional Director Pacific West Region, National Park Service Date



Hetch Hetchy Communication System Upgrade Project

Errata Sheets

April 2008

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Hetch Hetchy Communication System Upgrade Project

Yosemite National Park

ERRATA SHEETS

The Hetch Hetchy Communication System Upgrade Project Environmental Assessment/Preliminary Mitigated Negative Declaration and Initial Study (EA/PMND and IS) was available for public review and comment for a 30-day period from October 2, 2007 through November 2, 2007. The comments received were screened to determine whether any new issues, reasonable alternatives, potential for significant impacts, or mitigation measures were suggested. The comments received did not identify new issues, alternatives, or mitigation measures, nor did they correct or add substantially to the facts presented in or increase the level of impact described in the environmental assessment. Comments in favor of or against the proposed action or alternatives, or comments that only agree or disagree with the proposed project or proposed action are not considered substantive (i.e., they did not challenge the accuracy of the analysis, dispute information accuracy, suggest different viable alternatives, and/or provide new information that makes a change in the proposal). One comment, although not substantive, did result in a correction to the environmental assessment (see Item 1, below). Seven other changes are noted (Items 2 through 8, below) in order to correct minor errors in the EA/PMND and IS document. No modifications to the proposed project or Selected Alternative were made as a result of public comments on the EA/PMND and IS.

Changes to the Text and Graphics of the Hetch Hetchy Communication System Upgrade Project EA/PMND and IS

In each change, new language is double underlined, while deleted text is shown in ~~strike through~~. Changes to the EA/PMND and IS are outlined below:

- 1) Page 2-2, Composite Facilities Comprising the Proposed Project/Preferred Alternative, the following change has been made:

In addition, the proposed project would include the removal of FCC-licensed microwave communication equipment at three locations (Duckwall Mountain and Jones Point in the Stanislaus National Forest, and Moccasin Powerhouse Passive Reflector ~~in Yosemite National Park~~).

- 2) Page 3-97, Paragraph 3, Lines 9-11:

This requirement is incorporated as Mitigation Measure ~~32~~ – Rare, Threatened and Endangered Wildlife (Protect Active Spotted Owl and Northern Goshawk Nest Sites).

- 3) Page 3-209, Figure 3.10-2-11e:

Figure 3.10-2-11e in the EA/PMND was a duplicate of Figure 3.10-2-11d. Figure 3.10-2-11e has been updated and included as an attachment to this Errata Sheet (page 5).

4) Page 2-41, Paragraph 4, Line 4:

The following text is added to the project description to describe and clarify the construction materials for the proposed tower at the Poopenaut Pass site, and does not affect the impact analysis.

A 40-foot lattice-type communication tower would be installed. The tower would have a black or battleship grey powdercoat finish to reduce visibility.

5) Page 2-42, Paragraph 2, Line 1-2:

The following text is added to the project description to specify the appearance of the security fencing at the proposed Poopenaut Pass site, and does not affect the impact analysis.

The fence would be seven feet high and would be constructed of black, vinyl-coated chain link galvanized fencing ~~fabrie~~ topped with three strands of barbed wire on an outrigger.

6) Page 3-174, 3-175, and Page 4-3, 4-4:

“Mitigation Measure 1 – Undocumented Cultural Properties” was revised to clarify coordination between the San Francisco Planning Department, the National Park Service and the Forest Service and the process in the event unexpected cultural resources are discovered.

Mitigation Measure 1 – Undocumented Cultural Resources: The following mitigation measure is required to avoid any potential adverse effect from the proposed project on accidentally discovered or submerged cultural ~~historical~~ resources ~~(CEQA) or historic properties (NHPA).~~

The SFPUC shall distribute the Planning Department archeological resource “ALERT” sheet to the project prime contractor; to any project subcontractor, or utilities firm involved in soils disturbing activities within the project sites. Prior to any soils disturbing activities being undertaken each contractor is responsible for ensuring that the “ALERT” sheet is circulated to all field personnel including, machine operators, field crew, supervisory personnel, etc. The SFPUC shall provide the Environmental Review Officer (ERO) of the San Francisco Planning Department with a signed affidavit from the responsible parties (prime contractor, subcontractor(s), and utilities firm) to the ERO confirming that all field personnel have received copies of the Alert Sheet.

Should any indication of an archeological resource, such as unusual amounts of bone, stone, or shell, be encountered during soils disturbing activity for the project, the project Head Foreman and/or project sponsor shall immediately notify the ERO and shall immediately suspend any soils disturbing activities within 50 feet ~~in the vicinity~~ of the discovery until the ERO has determined what additional measures should be undertaken.

If the ERO and appropriate NPS and/or FS official determine that a potentially significant archeological resource may be present within the project site, the SFPUC shall retain the services of a qualified archeological consultant. The archeological consultant shall advise the ERO as to whether the discovery is potentially significant under CEQA or National Historic Preservation Act (NHPA). If a potentially significant resource is present, the

archeological consultant shall identify and evaluate the archeological resource. The archeological consultant shall make a recommendation as to what action, if any, is warranted. Based on this information, the ERO may require, if warranted, specific additional measures to be implemented by the SFPUC.

Measures might include: preservation in situ of the archeological resource; an archeological monitoring program; or an archeological testing program. If an archeological monitoring program or archeological testing program is required, it shall be consistent with the Major Environmental Analysis division of the Planning Department guidelines for such programs. The ERO may also require that the project sponsor immediately implement a site security program if the archeological resource is at risk from vandalism, looting, or other damaging actions.

The project archeological consultant shall submit a Final Archeological Resources Report (FARR) to the ERO that evaluates the historical significance of any discovered archeological resource and describing the archeological and historical research methods employed in the archeological monitoring/data recovery program(s) undertaken. Information that may put at risk any archeological resource shall be provided in a separate removable insert within the final report.

Copies of the Draft FARR shall be sent to the ERO and appropriate NPS and/or FS officials for review and approval. Once approved ~~by the ERO~~, copies of the FARR shall be distributed in consultation with the ERO and appropriate NPS and/or FS officials and include the as follows: California Archeological Site Survey Central Coast Information Center (CCIC) which shall receive one (1) copy and the ERO shall receive a copy of the transmittal of the FARR to the CCIC. The Major Environmental Analysis division of the Planning Department shall receive three copies of the FARR along with copies of any formal site recordation forms (CA DPR 523 series) and/or documentation for nomination to the National Register of Historic Places/California Register of Historical Resources. In instances of high public interest or interpretive value, the ERO may require a different final report content, format, and distribution than that presented above.

For inadvertent discoveries (undocumented cultural resources) on federal lands, the ERO and appropriate NPS and/or FS officials shall coordinate efforts. In the unexpected event that archeological deposits are exposed on NPS land during ground disturbing activities, all work will stop within 50 feet of the exposure, the area will be protected, and the Yosemite National Park Archeologist notified immediately. The Park Archeologist will evaluate the scene and determine the appropriate action in accordance with the 1999 PA, pursuant to Section 106 of the NHPA.

- 7) Page 3-175, and Page 4-4, first paragraph of Mitigation Measure 2 – Human Remains:

Mitigation Measure 2 – Human Remains: ~~The following mitigation measure is required to avoid any potential adverse effect from the proposed project on uncovered human remains.~~ If human remains are encountered all project-related construction activity will halt within 50 feet of the find. If the remains are discovered on Federal lands, the provisions of Native American Graves Protection and Repatriation Act (NAGPRA) shall be adhered to and implemented by the federal agency (NPS or Forest Service).

8) Page 3-177, and Page 4-5

“Mitigation Measure 3 – Traditional Cultural Properties” was revised to reflect the NHPA Section 106 consultation process. The Section 106 consultation was completed prior to the signing of the NPS FONSI. As a result, the language in Mitigation Measure 3 was updated to reflect continued consultation during project development and implementation.

Mitigation Measure 3 – Traditional Cultural Properties: ~~Prior to construction at Poopenaut Pass, the Section 106 consultation process shall be completed. If Poopenaut Pass is determined to be a Traditional Cultural Place as defined in National Register Bulletin #38, any necessary documentation or agreements regarding amelioration of effects shall also be completed prior to construction.~~ As an outcome of NHPA Section 106 consultation, American Indian tribes associated with the Poopenaut Pass project area will continue to be consulted during project development and implementation to avoid impact to traditional cultural properties and resources to which American Indian tribes attach cultural and religious significance.

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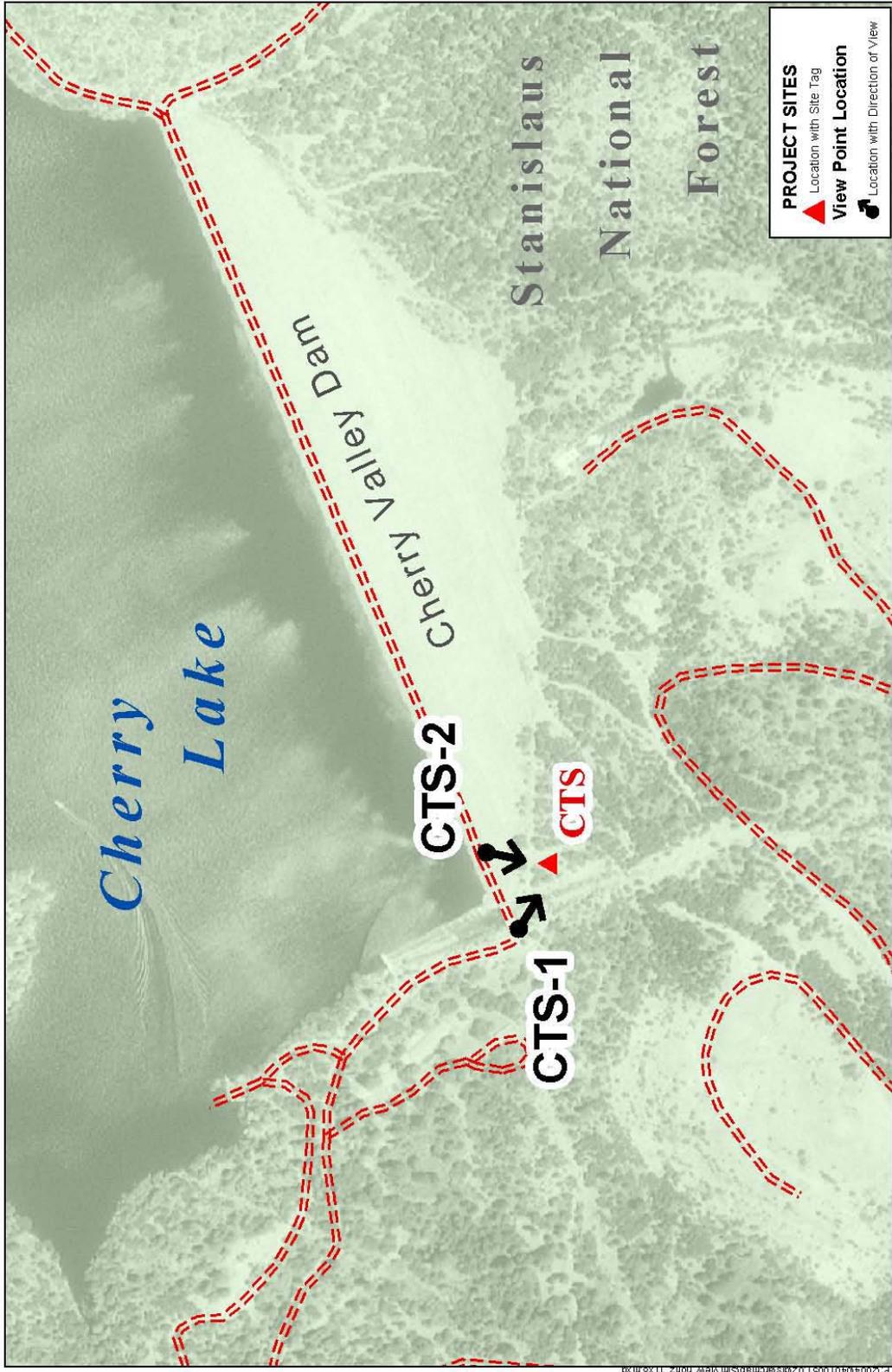


Photo Simulation Viewpoints

CTS -- Cherry Lake Tower Site
Figure 3.10.2-11e

HEITCH HETCHY COMMUNICATION SYSTEM UPGRADE PROJECT EA/IS

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Hetch Hetchy Communication System Upgrade Project

Public Comment and Response Report

February 2008

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United States Department of Agriculture
Forest Service
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INTRODUCTION

This report summarizes public comments submitted on the *Hetch Hetchy Communication System Upgrade Project Environmental Assessment/Preliminary Mitigated Negative Declaration and Initial Study* (EA/PMND and IS). The EA/PMND and IS was released for public review on October 2, 2007, and the National Park Service accepted comments through November 2, 2007. A total of 12 written public comments were received by email, and U.S. mail. During the comment period, 10 public comment letters were received by the National Park Service. Two public comment letters were received by the Forest Service, which were duplicates of letters sent to the National Park Service. This report provides (1) a summary of public concerns expressed in the public comments received; and (2) a specific response to each identified concern. Two public comment letters were received by the City and County of San Francisco Planning Department. These letters were not included in the National Park Service Comment Analysis and Response Database (CARD) system, as they are related to CEQA. However, a summary and response for these letters are included at the end of this report.

METHODOLOGY

Public comments received during the public comment period were reviewed and analyzed using the CARD system. Analysis of public comment letters is performed in a series of stages which require review by staff and members of the management team during review and processing. Initially, each letter received is reviewed to determine the discrete points the author is expressing. Each sentence or paragraph in the letter is then “coded” in order to associate that comment with a particular resource topic or element of the plan (such as air quality or the plan’s relationship to other projects).

Once all letters have been coded for individual comments, similar comments are grouped together and a “concern statement” is generated, which is intended to capture the main points of what the comments are addressing. Concern statements are worded in a way that affords the agencies the opportunity to respond to a requested action. Concern statements are then screened to determine whether or not further clarification is need to be made in the document or whether they call for a modification of the proposed action. In the case of the latter, these types of concerns would be brought to park management for deliberation. Finally, the planning team prepares responses presenting the National Park Service’s reasoning as to how and why public concerns will be incorporated into the planning process.

As a direct result of public input, all comments are made available for review on the Yosemite National Park web site. The posting of public comments is a result of requests made during the scoping process for this planning effort, and will continue for future planning efforts. The Comment Analysis and Response Report generated through the comment analysis and response process is included in this report.

HOW TO USE THIS DOCUMENT

This Response to Public Comments summary is divided into sections based upon the topics identified in the Table of Contents.

Each section includes one or more statements of public concern. These public concerns present common themes identified from comments in a statement that captures what action the public feels the agencies should undertake. Because all public concerns are presented, sometimes these statements may offer contradictory direction. Each public concern is, in turn, followed by supporting quotes from public comments referenced to original letters.

Each supporting quote is followed by an attribute which identifies the number assigned to the original letter it came from, whether the comment was made by an individual or an organization, a general description of the organization type, and a reference to the letter number and the comment number within the letter. This information appears as a parenthetical clause in the following format: organization or individual, relevant planning effort – letter number. For example, “(Individual, #7-3)” is a letter from an individual, and assigned the letter number 7; the supporting quote is from the third coded comment in the letter. Letter #3 and #10 are the letters received by both the Forest Service and National Park Service.

Finally, each public concern statement, and its supporting quote, is followed by the National Park Service, Forest Service, or City and County of San Francisco Response.

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COMMENTS AND RESPONSES

PLANNING PROCESS AND POLICY

Concern #1: The City and County of San Francisco should correct the description of the Moccasin Powerhouse Passive Reflector.

"We also note that on the bottom of page 2-2 the document appears to erroneously describe the location of the Moccasin Powerhouse Passive Reflector to be in Yosemite National Park, rather than in its actual location near Moccasin. This should be corrected in the revised final document."

(Conservation Organization, Comment #10-5)

Response: An errata sheet indicating this correction will accompany the Finding of No Significant Impact and the Mitigated Negative Declaration.

Concern #2: The National Park Service and U.S. Forest Service should consider impacts on federal lands independent of Raker Act authority and should clarify the extent of intergovernmental immunity and discretionary authority held by the City and County of San Francisco.

"The document authors allege that the Raker Act authorization somehow gives the City and County of San Francisco a broad right to create impacts on federal lands and that the City and County have intergovernmental immunity and the discretionary authority claimed by the City and County of San Francisco....Nevertheless, we do not agree that the applicants have such broad authority to create impacts without an assessment of significance and appropriate mitigation."

(Conservation Organization, Comment #10-4)

Response: The Hetch Hetchy Communication System Upgrade Project EA/IS considers impacts at all of the communication sites regardless of whether they are within Raker Act lands or not. Page 1-14 of the EA/IS describes the Raker Act, which authorizes the City and County of San Francisco to occupy federal lands in Tuolumne and other counties for purposes relating to the construction and operation of HHW&P facilities, including communication facilities. Furthermore, as stated on page 1-15 of the EA/IS, the SFPUC receives intergovernmental immunity from the planning and building laws of other cities and counties in which those lands are located. The purpose of the discussion related to the Raker Act and Intergovernmental Immunity is to provide the reader the planning context for the project. As stated in the EA/IS on page 1-14, the project must comply with requirements of NEPA and CEQA, but also within the parameters of other legislation that governs land use within the City and County of San Francisco, Yosemite National Park and the Stanislaus National Forest. Therefore, impact analyses for the sites that are within Yosemite National Park or Stanislaus National Forest are subject to both NEPA and CEQA regulations, which are considered in this document in Section 3.0 Affected Environment and Environmental Consequences.

Concern #3: The National Park Service should post public comments on the EA on the NPS website in a timely manner.

"We request that the NPS post all public comments for the Hetch Hetchy Communication System EA on the NPS web site in an accessible and timely manner."

(Conservation Organization, Comment #8-1)

Response: It is standard practice for the National Park Service to post the Comment and Response document on the NPS website.

ALTERNATIVES

Concern #4: The National Park Service, U.S. Forest Service, and City and County of San Francisco should proceed with the preferred alternative.

"CSERC respects the judgment of project designers and Park Service officials who recommend Site 9 as being preferable to Site 7 because it would have reduced visibility. We agree that the less that the public sees of this development, the better. Accordingly, we support Alternative 2, the preferred alternative, over Alternative 3."

(Conservation Organization, Comment #10-25)

"Our Center recognizes the valid need and desirability for the Hetch Hetchy Communication System to be upgraded, to make it functional for new technology and for expanded coverage, and to bolster security through enhanced communications. CSERC does not oppose the proposed additions that, collectively, would affect 29 sites at existing facilities, along with new proposed sites (Cherry Tower site, Burnout Ridge site, and Poopenaut Pass site)."

(Conservation Organization, Comment #10-1)

"On behalf of the Sierra Club the Yosemite Committee of the Sierra Club supports the new and preferred alternative, site 9, for the relocation of the Hetch Hetchy Communication System. Site 9 is the least intrusive of the sites considered for the project."

(Conservation Organization, Comment #7-1)

"A new preferred alternative (site 9) located in an obscure area south of the Hetch Hetchy road has been identified as the most desirable of the 9 studied. The previous selected (site 7) located on a ridge north of Hetch Hetchy road could be more easily seen from a larger area within the surrounding back country wilderness. We support (site 9) as the preferred alternative."

(Individual, Comment #6-2)

"I see no problem with communication equipment inside the Park. Let's remember who pays the ranger salaries at Tuolumne Meadows. NOT the Park Service."

(Individual, Comment #4-1)

"Alternate Poopenaut Pass, Site 7 Similar to the Site 9 location, this alternate location would have the same general development, although the site preparation would be less due to the fact that this site would be on a flat rock outcrop area. Yosemite Park staff recommended against the selection of this site due to its higher visibility."

(Conservation Organization, Comment #10-10)

Response: Following a Finding of No Significant Impact (FONSI) under NEPA, adoption of the Mitigated Negative Declaration under CEQA, and other approvals by the appropriate agencies, the preferred alternative would be implemented.

Concern #5: The National Park Service, U.S. Forest Service, and City and County of San Francisco should consider additional mitigation for implementation of action Alternatives 2 and 3 including mitigation related to visual resources and wildlife.

"Additional mitigation needed for Poopenaut Pass site

- 4) *Similar to the recommended mitigation for Burnout Ridge, CSERC recommends that there be mitigation for the direct loss of wildlife habitat at the Poopenaut Pass site. We recommend that*

the City and County of San Francisco be required to provide wildlife enhancement elsewhere within Yosemite Park to benefit the diversity of wildlife species that would otherwise, over time, make some use of that lost habitat. CSERC's suggests that the enhancement be conditioned to either provide Restoration/rehabilitation of a degraded site, or that simple wildlife enhancement be conditioned on a suggested mitigation project developed in coordination with Yosemite Park biologists."

(Conservation Organization, Comment #10-28)

"We suggest the following additional mitigation measures if Alternative 2 or 3 is adopted:

- 2) *Require that the modular building and tower on Burnout Ridge be painted in a camouflage pattern with colors that most mimic the natural colors of the surrounding landscape (over the majority of the year)."*

(Conservation Organization, Comment #10-21)

"CSERC also finds that the proposed construction of three new towers and communication shelters at new locations does provide a number of significant environmental impacts. After careful review of the document, combined with our staff's personal knowledge of all three new sites, CSERC does not oppose the approval and implementation of the preferred alternative as now laid out in the document. However, we strongly believe that additional important mitigation measures must be designed and adopted as part of any approval process, in order for the applicants to be given approval for a project that is consistent with both CEQA and NEPA."

(Conservation Organization, Comment #10-3)

"Those additional mitigation measures are relatively inexpensive in comparison to the overall value of the Hetch Hetchy system and its annual economic and social benefits, but those additional mitigation measures would help to compensate for the clear and obvious environmental impacts that would be created - especially at the three new sites."

(Conservation Organization, Comment #10-33)

"The additional measures recommended for Burnout Ridge and Poopenaut Pass should be considered on a site-specific basis for possible application to sites that are authorized under the Raker Act, but where such mitigation would reduce the overall cumulative effects of the total project, as proposed."

(Conservation Organization, Comment #10-30)

"If our staff was simply looking at biological, recreational, and scenic impacts without consideration for communication needs and security enhancement, CSERC obviously would prefer to see the application for approval of Alternative 2 denied. However, respecting the legitimate needs and desires of the City and County of San Francisco to have a high tech, dependable, effective, and expanded communication system, CSERC recommends that a modified Alternative 2 be approved - but only with the additional mitigation measures requested in this comment letter."

(Conservation Organization, Comment #10-32)

"Despite the major significance of the visual impact and the wildlife habitat that will, at least at the actual site [Poopenaut Pass], be lost for countless years, CSERC believes that Alternative 2 could be approved IF the City and County of San Francisco was required to adopt the following additional mitigation measures.

- 1) *The 40' tower and modular shelter should be required to be painted in a camouflage pattern mimicking to the extent feasible the natural colors of the surrounding landscape (we note that there are so many Patterns these days for blending clothing and gear with the landscape that utilizing such patterns would end up with a far different appearance*

than some sort of blatantly military camouflage from old school patterns from the World War II era);

- 2) *We agree that, even with the natural camouflage paint pattern, any building; in the Park should be constructed so as to appear to be "park-like" to those who end up close to the structure as they walk across the local area. This could be done with roofing material that, while fire resistant, appears as slate or wood shake material to the casual viewer who does not immediately recognize its nonflammable composition. We encourage any other structural features that could provide a sense of "park-like" architectural design.*
- 3) *As with the Burnout Ridge site, CSERC believes it is prudent and easy to require that native landscape plants be planted and maintained as screening to reduce the visual impacts of the security fence, as well as to provide partial screening of the building."*

(Conservation Organization, Comment #10-27)

"Additional mitigation needed for Burnout Ridge

We suggest the following additional mitigation measures if Alternative 2 or 3 is adopted:

3) *Require that there be screening landscaping planted, watered, and maintained around the security fence to minimize the visual impact of the overall development on the site."*

(Conservation Organization, Comment #10-22)

"All materials used in constructing the facilities should blend in with the surroundings as much as Possible. The types of materials used and their colors should make the structures almost invisible, if feasible, to Park visitors.

We are opposed to including security features such as fences. Anyone who seriously wanted to sabotage the facility in such a remote location would not be stopped by a fence."

(Conservation Organization, Comment #7-2)

"Points to Consider:

1. *Construct a 12 X 24 foot equipment and battery shelter with field rock (granite) common to the Poopenaut Pass area. Materials should be acquired outside Park boundary to minimize site disturbance. Roofing should be constructed with natural appearing materials, i.e. a tile, shake like in appearance with a color similar to the granite surroundings. A metal roof would not be appropriate. Cover the microwave drum with material emulating lichens covered granite, and take other measures to make both building and tower as inconspicuous as possible.*
2. *The perimeter security fence being considered for this facility is totally inappropriate and contrary to efforts to make this communication complex as obscure as possible. Further, fencing would not protect against serious vandals or terrorists and would be less affective than "hardening" the primary structure in the original design. Measures other than fencing could be used to keep vandals "off the tower" and fencing would not prevent bad people with serious intentions from disabling the tower (drum) from the surrounding area with both legal and illegal weapons widely distributed in American society."*

(Individual, Comment #6-3)

"Additional mitigation for Burnout Ridge

We suggest the following additional mitigation measures if Alternative 2 or 3 is adopted:

1) *Analyze the potential for reducing the height of the tower from 120' down to 80' or lower. Any significant reduction in height would result in a corresponding reduction in bird strike mortality..."*

(Conservation Organization, Comment #10-20)

"Additional mitigation needed for Burnout Ridge

We suggest the following additional mitigation measures if Alternative 2 or 3 is adopted:

- 1) *Analyze the potential for reducing the height of the tower from 120' down to 80' or lower. Any significant reduction in height would result in a corresponding reduction in...visual impacts."*
(Conservation Organization, Comment #10-19)

"Failure of "Mitigation Measure 1 - Visual" to be adequate

Despite the language in Mitigation Measure 1 - Visual on page 4-6, there is no adequate mitigation for visual impacts - either on SFPUC-owned lands, Raker Act right of way lands, or other lands proposed for development in this project application. The fact that the SFPUC will conduct construction activities on lands authorized for such activities does not in any way eliminate or even reduce the significance of visual impacts that the developed areas will create for viewers looking onto those lands from outside the authorized areas. This Mitigation Measure fails to require natural colors to blend with the landscape, naturalized camouflage patterns to reduce visual impacts at the sites with highest visibility, or landscape planting to be done to screen buildings or to partially screen towers from those seeking natural views."
(Conservation Organization, Comment #10-29)

"Additional mitigation needed for Burnout Ridge

We suggest the following additional mitigation measures if Alternative 2 or 3 is adopted:

- 5) *For the direct loss of wildlife habitat at the fenced site, require that the City and County of San Francisco provide wildlife enhancement elsewhere within the Groveland District to benefit the diversity of wildlife species that would otherwise, over time, make some use of that lost habitat. CSERC's suggests that the enhancement be conditioned to either provide restoration/rehabilitation of a highly degraded site, or that simple wildlife enhancement be conditioned on A suggested mitigation project developed in coordination with the Groveland District wildlife biologist."*
(Conservation Organization, Comment #10-24)

"We suggest the following additional mitigation measures if Alternative 2 or 3 is adopted:

- 4) *To compensate for the creation of 1,500' of a "new" road that will likely be longterm in terms of both an impact on wildlife and on visual resources, require that the City and County of San Francisco coordinate with the Groveland District Of the Stanislaus National Forest to identify at least 3,000' of unneeded road that the District would like to put to bed - naturalize. At a 2 to 1 ratio, the City and County of San Francisco's implementation of "putting to bed" and naturalization of 3,000' of unneeded road elsewhere in the Forest could be considered reasonable mitigation for the creation of 1,500' of new road."*
(Conservation Organization, Comment #10-23)

"Additional mitigation needed for Burnout Ridge

...CSERC does not believe that the current level of mitigation appropriately reduces the visual impact, wildlife impact, and land management impact of allowing this new site to be developed as proposed in both of the action alternatives."
(Conservation Organization, Comment #10-13)

"Hopefully, ideas developed through this process [site visit] will help minimize impacts of the microwave structure on the visual quality of YNP."

(Individual, Comment #6-1)

Response: The EA/IS evaluates impacts related to Visual/Scenic Resources and Wildlife in sections 3.10.2 and 3.8.4, respectively. The Visual/Scenic Resources analysis concluded that with the implementation of Mitigation Measure 1 – Visual, no significant impacts to visual resources would occur. While the new structures would be visible, the EA/IS concluded that they would not substantially alter the existing visual character of the area. In addition, simulated views of the proposed towers and/or communication shelters were prepared for Warnerville Switchyard, Lake Eleanor Dam Level Gauge, Lake Eleanor-Cherry Lake Tunnel, Poopenaut Pass, Cherry Pump Station, Cherry Tower Site, Intake Radio Site, and Burnout Ridge and included in the visual impact analysis. The heights of the proposed towers were determined by their lines of sight to other sites in the communication system. Section 3.8.4.3 includes discussion with regard to tower heights and bird strike mortality. Based on current information regarding communication towers and bird strikes, the proposed towers meet the USFWS guidelines for siting and design to minimize effects on birds. With implementation of Mitigation Measure 2 - Special Species Wildlife, no impacts to rare, threatened or endangered wildlife species are expected to occur.

Concern #6: The National Park Service, U.S. Forest Service, and City and County of San Francisco should present an objective analysis of the alternatives including objective analysis of the environmentally preferable alternative.

"Alternatives 2 and 3 would result in three new sites being cleared or altered to create pads or locations for towers, three new buildings, and accessory equipment. Alternatives 2 and 3 would result in @1,500' of a naturalized, abandoned logging skidroad to be converted into a maintained road. Alternatives 2 and 3 would result in areas being converted from natural habitat into fenced off, inaccessible areas. Alternatives 2 and 3 would result in long-term scenic impacts that will intrude on immediate vicinity of the affected areas, but would also result in some level of visual effect from more distant viewing sites. For all of these reasons, the cumulative impacts of both alternatives would clearly be far more harmful for the affected environment than Alternative 1, the no action alternative.

That doesn't mean that the impact would not be justified by the benefits of the enhanced communication systems. But it does mean that the City and County of San Francisco and the document authors should openly and honestly acknowledge that Alternative 1 is undeniably the Environmentally Preferable Alternative. CSERC accepts the fact that the overall document provides sufficient rationale to select Alternative 2 (with increased mitigation) as the final choice for action, but we strongly believe in having accurate, honest evaluations in any environmental assessment. To be correct, the final document should acknowledge that Alternative 1 is the Environmentally Preferable Alternative. Once that is acknowledged, then the analysis can then explain why Alternative 2 is still desirable and needed."

(Conservation Organization, Comment #10-12)

"CSERC finds that the EA/Preliminary Mitigated Neg Dec and Initial Study is detailed, full of valuable information, well written, and highly readable. However, in our judgment we also find that the environmental document is written to bolster the preferred alternative action, rather than to provide neutral, unbiased analysis of the environmental impacts of the project and to describe feasible, reasonable mitigation measures to reduce the significance of impacts."

(Conservation Organization, Comment #10-2)

"Environmentally Preferable Alternative

First and foremost, any environmental analysis must be logical, reasonable, and unbiased. That measure of acceptability is not met when it comes to analysis of the Environmentally Preferable Alternative. The

document authors chose Alternative 2 as the environmentally preferable alternative, a judgment that we believe is clearly incorrect."

(Conservation Organization, Comment #10-11)

Response: NPS Director's Order 12 (DO-12) requires that an Environmental Assessment analyze alternatives and identify the "environmentally preferable alternative." There is no such requirement for an IS/MND under CEQA. In accordance with DO-12, the EA/IS provides an objective analysis of alternatives, including an objective analysis of the "environmentally preferable alternative." As discussed in Section 2.7 of the EA/IS, DO-12 defines the "environmentally preferable alternative" as "the alternative that will promote the national environmental policy as expressed in Section 101 of NEPA." This means the alternative that causes the least damage to the biological and physical environment; it also means the alternative that best protects, preserves, and enhances historic, cultural, and natural resources (DO-12 Section 2.7d).

It is recognized that the identification of the "environmentally preferable alternative" is subjective, particularly when one environmental value must be balanced against another. As detailed in Section 2.7 of the EA/IS, when considering the specific guidance provided by Section 101 of NEPA, the "environmentally preferable alternative" was determined to be Alternative 2 because this alternative would fulfill the responsibilities of NPS and USFS (the NEPA lead agencies) as trustees of the environment by providing the foundation system that could allow for improved radio communications into areas currently not served, or adequately served. Under Alternative 2, most project actions would occur within existing developed areas, and implementation of best management practices (BMPs) and mitigation measures would reduce impacts to natural resources. When comparing Alternative 2 to the No Action alternative (Alternative 1), Alternative 2 is considered the "environmentally preferable alternative" because, on balance, it is the alternative that would cause the least damage to the biological and physical environment while providing for an improved communication system that would help fulfill the Responsibilities of NPS and USFS as trustees of the environment.

COMMUNICATION SYSTEM

Concern #7: The National Park Service, U.S. Forest Service, and City and County of San Francisco should consider including cell phone service in this communication system.

"Would the proposed phone towers be usable or available by the public, for cell phone communication? As an avid hiker with Frank Oyungs group out of Groveland, I believe it would greatly enhance the safety of hikers and backpackers in at least some remote areas of Yosemite. As it is, there are very few land lines available for emergency situations."

(Recreational Organization, Comment #3-1)

"Is there any way to work with this group to make it bigger than their immediate needs to fill some of the gateway needs also with connectivity through the corridor on both internet and cell phones? Who would one speak to about this possibility?"

(Individual, Comment #12-1)

Response: The proposed action would upgrade the communication system by replacing the existing analog microwave radio system with digital microwave radios and fiber optic cable. Cellular phone service is not part of the proposed upgrade and is outside the scope of this project. However, implementation of this project would not preclude cell phone service projects from consideration in the future. Any such projects would be subject to environmental review, as appropriate.

Concern #8: The National Park Service, U.S. Forest Service, and City and County of San Francisco should consider not expanding cell service within Yosemite National Park.

"And what about the clause that effectively lets SF at some future date add cell phone equipment to the tower... cell phones ringing in the last quiet Yosemite wilderness? Have you been on a Yosemite Valley rim trail lately? Might as well be in the mall. Besides we are just beginning to understand the effects of cell towers on wildlife and valuable insects, why are we risking putting these things up in the last wild places in Yosemite?"

(Individual, Comment #5-5)

"We also oppose including any component for the project that would provide cell phone communication."

(Conservation Organization, Comment #7-3)

Response: As stated on page 1-6 of the EA/IS, the proposed action would upgrade the communication system by replacing the existing analog microwave radio system with digital microwave radios and fiber optic cable. Cellular phone service is not part of the proposed upgrade and is outside the scope of this project. Any such projects would be subject to environmental review, as appropriate.

CUMULATIVE IMPACTS

Concern #9: The National Park Service, U.S. Forest Service, and City and County of San Francisco should consider the significance of the cumulative impacts of the proposed action.

"The total of those three impacts [visual, wildlife, land management] creates a significant cumulative impact to the affected environment at the Burnout Ridge site. CSERC urges the Forest Service and the City and County of San Francisco to acknowledge those combined impacts, and to create additional mitigation to reduce the significance of those effects."

(Conservation Organization, Comment #10-18)

"CSERC believes that the cumulative impacts of development at the sites that are deemed to be authorized under the Raker Act, combined with the new development at the three new sites, all add up to create a total significant environmental impact that clearly is not mitigated, despite the claim in the Mitigated Negative Declaration."

(Conservation Organization, Comment #10-31)

Response: The EA/IS evaluates the cumulative impacts of the projects as required by NEPA for each of the resource areas. In addition, the Mandatory Findings of Significance in Section 3.11 evaluates cumulative impacts pursuant to CEQA. No significant cumulative impacts were identified.

FIRE SUPPRESSION AND MANAGEMENT

Concern #10: The Forest Service should consider the impact of a new site on fire suppression and management efforts.

"Any new communications tower, modular building, and overall facility at this site will now become the focus of fire suppression efforts in any major wildfire roaring up the canyon wall out of the Cherry Creek drainage. This significantly alters how the Forest Service will manage fire (including prescribed burning) in the vicinity of the new development."

(Conservation Organization, Comment #10-17)

Response: The EA/IS evaluates potential impacts related to fire in Section 3.10.8, Hazards and Hazardous Materials. As stated on page 3-303 of the EA/IS, all contractors working on National Forest lands during fire season are required to submit a fire plan for the people and equipment under their authority. In addition, implementation procedures established in the Fire Management Plan for Stanislaus National Forest (which is required through the 2001 Federal Wildland Fire Management Policy) would reduce fire related hazards to less than significant levels. The improved communications are expected to be valuable in future fire suppression efforts.

SCENIC, WILDLIFE, AND WILDERNESS RESOURCES

Concern #11: The National Park Service, U.S. Forest Service, and City and County of San Francisco should consider impacts to scenic, wildlife, and wilderness resources.

"CSERC strongly disagrees that the current mitigation reduces to a level of less than significance of the environmental impact of building a structure, erecting a 40' tower, and placing a security fence in a location that is considered by the majority of Park visitors to be totally wild once they are beyond the existing road. The visual impact of the communication tower will clearly be a long-term impact of major significance as considered under NEPA due to the tens of thousands of people who will see it over time. The impact of the building, fence, and tower at close range will likely be limited to far fewer hikers, backpackers, or others who are traveling away from the main road in the vicinity of the development.

This visual impact is of even greater significance than the Burnout Ridge impact because it is far closer to a highly utilized road and because of the expectations of the visiting public that Yosemite Park surrounding the road is wilderness. Even though the specific site for the facility is not directly in wilderness, the visual impact of the development will be clearly visible to wilderness travelers for miles around the site.

Accordingly, the long-term significance of allowing this pristine site location to be converted into a communications tower site is a major negative impact. If there was any alternative location, leaving the Poopenaut Pass area in its pristine condition would be the highest priority. Given the assessment that this area is the most effective, most desirable site for such a facility, we recognize that trade-offs sometimes have to be made."

(Conservation Organization, Comment #10-26)

"That type [cell phone] of facility is inappropriate in a National Park. Particularly so since site 9 is near designated Wilderness and is not consistent with Wilderness management."

(Conservation Organization, Comment #7-4)

"And aren't there studies that show we don't know the whole effect of microwave towers on wildlife? Are we willing to risk wildlife (let alone the plowing up of the landscape to put in secondary electrical lines, a retaining wall and steel-grated steps) for these towers?"

(Individual, Comment #5-4)

"In terms of wildlife, the construction of the 1,500' of improved road /new road will now mean that motor vehicles are now traveling periodically through an area that would otherwise be nonmotorized. There will be increased risk of poaching from road-hunters as well as increased risk of legal take of game species. There will be increased disturbance of wildlife in the proximity of the new facility each time that maintenance is done, as well as during construction. There will be increased of tower mortality to birds flying over the site, and while that may be a low overall risk, it adds cumulatively to the other impacts that will be generated."

(Conservation Organization, Comment #10-14)

"Doesn't building a 12x24' shed, a microwave tower, a 125' footpath and a barbed wire enclosure with an automatic security alarm on the edge of the Yosemite wilderness boundary... well, doesn't it compromise the boundary? I thought boundaries are established "so many" feet away from a built environment (250' from the centerline of a road, for instance). Doesn't putting the above next to the wilderness boundary automatically move the boundary back? And doesn't moving a wilderness boundary require some kind of congressional action (and going "over my dead body," too)?"
(Individual, Comment #5-1)

"The visual impacts to backcountry vistas would be unacceptable and it would present at best only false security from vandals or terrorists intent on serious misbehavior. We strongly recommend alternative measures be considered to address security concerns while protecting the visual quality of YNP."
(Individual, Comment #6-4)

"Poopenaut Pass facility

Again, these are all major impacts affecting, in particular, scenic and wilderness resources. (We note that on page 2-41 that the claim is made that the structure will be finished such that it is "park-like" in order to be consistent with NPS architectural standards. It is difficult to envision what the document authors conceive of as "parklike" in describing a modular building perched on a rocky hillside in the midst of wild terrain -- referring to such a building as park-like."
(Conservation Organization, Comment #10-9)

"Considering the large size of the dishes, it should be clear to decision-makers that the visibility of such dishes will be very high, especially on 40' - 120' tall towers."
(Conservation Organization, Comment #10-6)

"As CSERC will emphasize in our later comments concerning the Poopenaut Pass site, viewshed impacts cannot reasonably be limited to what is seen from highly prominent viewing sites. If, over time, literally thousands of people will see a developed site with its unnatural scenic impact, and if those thousands of people feel a little less surrounded by a natural setting, that diminishment adds up to a significant overall impact over time. The total visual impacts of the Burnout Ridge and Poopenaut Pass sites does total a significant impact."
(Conservation Organization, Comment #10-16)

"In terms of visual impact, the new facilities will be visible from many locations across the canyon, up and down on the same side of the canyon, as well as from forest locations close to the project site. The new road will remove a natural view and replace it with a roaded view."
(Conservation Organization, Comment #10-15)

"Cherry Tower Site facility

This site would have a 40' lattice communication tower with several microwave dishes, along with a 12' by 24' modular communication shelter. Similar to the other sites, this site would be surrounded by security fencing. Unlike the other sites, however, this site has already had significant alteration of the scenic landscape; it already is a setting that is developed and which would be expected by recreational visitors to be altered; and it has trees at the tower site that will screen to a large degree the tower and building."
(Conservation Organization, Comment #10-8)

Response: The EA/IS evaluates impacts related to Visual/Scenic Resources and Wildlife in sections 3.10.2 and 3.8.4, respectively. The Visual/Scenic Resources analysis concluded that with the

implementation of Mitigation Measure 1 – Visual, no significant impacts to visual resources would occur. While the new structures would be visible, the EA/IS concluded that they would not substantially alter the existing visual character of the area. In addition, simulated views of the proposed towers and/or communication shelters were prepared for Warnerville Switchyard, Lake Eleanor Dam Level Gauge, Lake Eleanor-Cherry Lake Tunnel, Poopenaut Pass, Cherry Pump Station, Cherry Tower Site, Intake Radio Site, and Burnout Ridge were prepared and included in the visual impact analysis. The heights of the proposed towers were determined by their lines of sight to other sites in the communication system. Section 3.8.4.3 includes discussion with regard to tower heights and bird strike mortality. Based on current information regarding communication towers and bird strikes, the proposed towers meet the USFWS guidelines for siting and design to minimize effects on resident and birds. With implementation Mitigation Measure 2 - Special Species Wildlife, no impacts to rare, threatened or endangered wildlife species are expected to occur.

Wilderness impacts were considered during the scoping process and dismissed from further analysis because, as stated on page 3-4 of the EA/IS, the proposed project sites are not within designated Wilderness Areas or near commonly used access points into designated Wilderness Areas.

CULTURAL RESOURCES

Concern #12: The National Park Service should address the history of the Paiute Indian community in Hetch Hetchy valley.

"Please add Paiute History in Hetch Hetchy Valley. Since they owned the valley."
(Individual, Comment #1-1)

"If there are signs involved please add that Paiutes were the owners of Hetch Hetchy. They had a war with the Big Creek Indian, which the Paiutes won, and the Paiutes retained ownership. That is documented in several books and other accounts."
(Individual, Comment #2-1)

Response: Section 3.9 of the EA/IS (Cultural Resources) addresses the prehistory and ethnography of the region, and includes a discussion of the Paiute Indians in the Hetch Hetchy Valley.

SITING AND INFRASTRUCTURE

Concern #13: The National Park Service and City and County of San Francisco should clarify the justification for siting communication towers at Lake Eleanor and Poopenaut Pass.

"It seems unfathomable that they're using the Raker Act (historically bad legislation if ever there was any - and a ruling that a good solid chunk of Californians and other Americans would like to see overturned) to justify putting unsightly communications towers up on the shores of Lake Eleanor and in the Poopenaut Pass. When will this end?"
(Individual, Comment #5-3)

Response: As described in Section 2.3.1.2 of the EA/IS, the Lake Eleanor Sites are remote sites that require communications for HHW&P operations. Facilities proposed at Lake Eleanor include the installation of two antennas at the Lake Eleanor Dam Level Gauge (not communication towers). One of the antennas would be used to communicate with Burnout Ridge and the other to repeat signals from Burnout Ridge to Lake Eleanor-Cherry Lake Tunnel. All project-related actions at the Lake Eleanor Dam Level Gauge site would occur within existing developed areas. At the Lake Eleanor-Cherry Lake Tunnel

site, a pad-mounted communication cabinet would be installed with RGS conduit antenna mast supporting a solar panel and Yagi antenna. This antenna would allow communication to Burnout Ridge via the repeater at Lake Eleanor Dam Level Gauge. Ground disturbance would be approximately 24 sq. ft. for the installation of the concrete equipment pad at the Lake Eleanor-Cherry Lake Tunnel site.

As described in Section 2.3.1 of the EA/IS, the Poopenaut Pass site provides a critical link to the communication system because it would repeat the microwave signal from Burnout Ridge to the O'Shaughnessy area and provide the NPS and HHW&P with a voice radio repeater site. Appendix D of the EA/IS, Communication Systems Technical Requirements, details the selection of the new sites based on the technical requirements of the system. Furthermore, the Poopenaut Pass area is about the only area that would provide for a direct line-of-sight to these other tower locations, while providing a location that is not highly visible to the public, and is located outside of designated Wilderness Areas.

Concern #14: The National Park Service should consider removal of infrastructure rather than providing more infrastructure to support O'Shaughnessy Dam.

"Shouldn't we be taking San Francisco's century-old disastrous private interests OUT of our public park, rather than giving them more? This seems to be part of San Francisco's way of keeping O'Shaughnessy Dam alive and kicking: "Well, we've sunk so much money into the infrastructure, it wouldn't make sense for us to take the dam down now.""

(Individual, Comment #5-2)

Response: Removal of infrastructure would not meet the purpose and need of the proposed project and is therefore considered outside of the scope of the proposed project.

INTENSITY ANALYSIS

Concern #15: The National Park Service, U.S. Forest Service, and City and County of San Francisco should consider the intensity of impacts.

"Burnout Ridge facility

We note on pages 2-38 through 2-40 that the document explains that the Burnout Ridge site would require the construction of not only a 120' lattice-type communication tower and a 12' by 40' modular communication shelter, but the project, if approved, would also result in the construction of extensive security fencing, a significant amount of trenching for an underground powerline, and 1,500' of upgrading or road construction to accommodate access to the site from Forest Road 1N86. These are all major impacts to the existing environment."

(Conservation Organization, Comment #10-7)

Response: The EA/IS evaluates the potential impact to each of the resource areas. The intensity of the impacts to the resource areas are shown in the table under Environmental Consequences of Alternative 2.

ADDITIONAL COMMENT LETTERS SUBMITTED TO THE CITY AND COUNTY OF SAN FRANCISCO PLANNING DEPARTMENT (CEQA LEAD AGENCY)

The City and County of San Francisco Planning Department accepted comments on the EA/IS from October 2, 2007 to November 2, 2007. During this period, two comment letters were received. The following is a summary of each letter, followed by a response.

Letter from the California Department of Transportation, October 5, 2007

The California Department of Transportation submitted a letter stating that they have no comments at this time.

Response: No response is required.

Letter from the California Department of Water Resources, October 23, 2007

The Department of Water Resources submitted a letter stating that the proposed project may be an encroachment on the State Adopted Plan of Flood Control and referred to a link for the department's Designated Floodway maps to determine whether any of the project sites are located within designated floodways.

Response: None of the project sites fall within designated floodways based on review of the maps available on the website referenced in the comment letter.

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