

EXECUTIVE SUMMARY

INTRODUCTION

This Draft Environmental Assessment/Initial Study (EA/IS) evaluates the potential environmental impacts that may be associated with the Hetch Hetchy Communication System Upgrade Project (the “Proposed Action”) by the California Environmental Quality Act (CEQA) lead agency San Francisco Public Utilities Commission (SFPUC) in cooperation with the National Environmental Policy Act (NEPA) co-lead agencies United States Department of Interior National Park Service (NPS), and the United States Department of Agriculture Forest Service (USFS). The Purpose and Need, Project Objectives, and Proposed Action are described in Section 1.0 of this document. An EA/IS is intended to provide an objective, impartial source of information to be used by the lead agency and members of the public in their consideration of the project. The EA/IS itself does not determine whether or not the project will be approved, but only serves as an informational document in the planning and decision-making process.

This joint environmental document was developed to meet the requirements of both NEPA and CEQA. This document contains a Preliminary Mitigated Negative Declaration (PMND) and an initial study (IS) prepared in accordance with the CEQA, Public Resources Code §21000 et seq., and the State CEQA Guidelines, Title 14 California Code of Regulations (CCR) §15000 et seq. The purpose of this EA/IS is: (1) to determine whether implementation of the project would result in potentially significant effects to the environment, and (2) to incorporate mitigation measures into the project design, as necessary, to eliminate the project’s significant or potentially significant effects or reduce them to a point where they are clearly less than significant. In addition, this EA is also being used to fulfill the National Historic Preservation Act (NHPA) review and documentation process. Based on the findings of this IS, the San Francisco Planning Department intends to issue a Mitigated Negative Declaration on the proposed action after the public review period.

Prior to the approval of the Proposed Action, the National Park Service and US Forest Service must comply with NEPA and the regulations published by the Council on Environmental Quality (Title 40 Code of Federal Regulations [CFR] Parts 1500-1508). This document serves as an environmental assessment (EA), prepared in accordance with NEPA and associated federal guidelines, including the National Park Service policies (e.g., DO-12 Handbook and Director’s Order), and US Forest Service policies (e.g., FSM 1950 - Environmental Policy and Procedures Manual, and FSH 1909.15 – Environmental Policy and Procedures Handbook). This EA provides information describing the Proposed Action, alternatives, and their environmental consequences. Prior to making a final decision on the Proposed Action, the EA is being provided to public agencies and citizens to allow for an opportunity to comment. The National Park Service and the US Forest Service intent is to prepare separate findings of no significant impact (FONSI) for this Proposed Action after public review of the EA.

The SFPUC, in cooperation with the NPS and the USFS, is proposing a communication system upgrade project in Tuolumne and Stanislaus Counties, California. Hetch Hetchy Water & Power (Hetch Hetchy Water & Power), a subsidiary of the SFPUC, operates the SFPUC Regional Water System in the Hetch

Hetchy region. The project would be constructed at 32 sites, 29 of which already contain existing Hetch Hetchy Water & Power facilities.¹ The proposed project would require the installation of facilities at three new sites: one within Yosemite National Park and two within the Stanislaus National Forest (see Figure 1-1). The SFPUC, the National Park Service, and the US Forest Service have identified deficiencies in the current radio communication system that impair visitor and staff safety, and reduce the ability to provide emergency response and protect forest and park resources from hazards such as fire. To amend these deficiencies, the SFPUC, along with the partner agencies, is proposing improvements to the current communication system.

This EA/IS has been prepared in accordance with both NEPA and CEQA. Of the 32 total sites comprising the Hetch Hetchy Communication System Upgrade Project, one site is within Yosemite National Park; however, 10 sites are within the boundaries of Yosemite National Park on lands managed by the City and the County of San Francisco (CCSF) under the terms of the Raker Act. The newly proposed Poopenaut Pass site is not within the Raker Act right-of-way and is therefore subject to National Park Service land use entitlement authority, and thus subject to NPS action. Of the 32 total sites of the Hetch Hetchy Communication System Upgrade Project, 17 sites are within the Stanislaus National Forest boundary; however 14 of those sites are on lands managed by the City and County of San Francisco under the terms of the Raker Act. Fifteen of those sites 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 Site, located on National Forest System lands and managed by the US Forest Service. Duckwall Mountain and Jones Point are located outside of the Raker Act right-of-way and currently operate under a Special Use Permit from the US Forest Service.

The project would be undertaken by a governmental agency within the State of California (the SFPUC). The CEQA lead agency for this EA/IS is the City and County of San Francisco Planning Department, and the NEPA co-lead agencies are the National Park Service and the US Forest Service.

As appropriate, issues that are uniquely applicable to CEQA or NEPA are identified within the applicable sections of the document. The term “proposed action” is used in this document in a manner equivalent to the term “proposed project” that is commonly used in environmental documents prepared under CEQA. Similarly, “affected environment,” a common NEPA term is used in this document. “Affected environment” is approximately equivalent to the standard CEQA term of “environmental setting.” Finally, “environmental consequences” is the term used in this document in place of the more common CEQA term of “environmental impacts.”

PURPOSE AND NEED AND PROJECT OBJECTIVES

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 obsolete and aging communication system with an improved system; (3) provide the video and radio

¹ Hetch Hetchy Water & Power holds easements under the Raker Act across lands in Stanislaus National Forest and Yosemite National Park. Hetch Hetchy Water & Power may hold special use permits from the US Forest Service for project facilities, but for the most part has rights-of-way defined as easements in the Raker Act.

bandwidth to allow for future installation of voice radio systems, which could expand system coverage above existing levels in the O’Shaughnessy, Cherry Lake, and Lake Eleanor areas; (4) provide the foundation infrastructure for housing National Park Service and US Forest Service communication equipment associated with their separate communication 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 communication systems. Currently, microwave radio equipment is used to transmit voice and data communications essential to the operation of Hetch Hetchy Water & Power electric and water supply utilities. The existing radio equipment is obsolete and no longer supported by its manufacturers. Hetch Hetchy Water & Power has, for example, had difficulties in acquiring spare parts for system components. The proposed project would replace or update components of the current communication system located mostly throughout Tuolumne County, and one site in Stanislaus County.

In addition to the age and condition of the existing communications equipment and the insecure position of SFPUC’s license to operate its communication system in the Hetch Hetchy region, the SFPUC also has identified communication needs not served by the existing system. These needs include:

- Voice communication to protect the safety of staff working in remote areas as well as develop improved safety for visitors (e.g. better response to emergency search and rescue). Hetch Hetchy Water & Power 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 US Forest Service and National Park Service radio communication systems do not provide full radio coverage for the Stanislaus National Forest and O’Shaughnessy Dam and Lake Eleanor areas for Yosemite National Park.
- The current microwave system does not have sufficient capacity to provide the bandwidth required to support the voice, data, and video services needed by Hetch Hetchy Water & Power. Video and multiple-network needs are not currently supported on the existing system.
- Dam security is always a concern to Hetch Hetchy Water & Power. 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 the public 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 not addressed by the existing system at O’Shaughnessy Dam include improved two-way radio coverage, reliable telephone service, and the addition of corporate Local Area Network (LAN) service to improve operational efficiency.
- Current needs not addressed by the existing system at Cherry Lake include Supervisory Control and Data Acquisition (SCADA) monitoring and control of the Cherry Pump Station, Cherry Valvehouse and the domestic water system; two-way radio coverage; reliable telephone coverage; and the addition of corporate LAN service to improve operational efficiency. Needs not addressed by the existing system at Lake Eleanor include SCADA monitoring of the lake elevation and tunnel flow.
- The current system does not allow for data communication which supports the next generation of protective power line equipment needed to replace aged and obsolete equipment. However, 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 future additional bandwidth requirements.

- Access to existing and future administrative control system networks at operational sites are needed to enhance the productivity of Hetch Hetchy Water & Power staff.

RELATIONSHIP TO OTHER PLANS

The Proposed Action is not tiered to the *Yosemite Valley Plan* and does not implement specific actions called for in the *Yosemite Valley Plan*. The Yosemite National Park *General Management Plan*, the 1991 Stanislaus National Forest Land and Resource Management Plan as amended (Forest Plan, as amended), and the Stanislaus National Forest Plan Direction (July 2005) are the guiding documents for the Hetch Hetchy Communication System Upgrade EA/IS on federal lands. The Proposed Action is not part of the SFPUC Water System Improvement Program (WSIP), which would repair, replace, and seismically upgrade the system's aging pipelines, tunnels, reservoirs, pump stations, storage tanks, and dams.²

The City and County of San Francisco land use plans and policies are primarily applicable to projects within the jurisdictional boundaries of San Francisco but in some cases they apply to projects outside of San Francisco. And, although the SFPUC is not legally bound to the land use plans and policies of other jurisdictions, non-CCSF land use plans are discussed to the extent that they provide general land use planning information for the jurisdiction in which the proposed project is located. The *San Francisco General Plan* and the *Sustainability Plan* were developed specifically for lands within the jurisdictional boundaries of San Francisco; however, their underlying goals apply to SFPUC projects on extraterritorial lands. In addition, the SFPUC has adopted various plans and policies that further direct its activities, including the *Urban Water Management Plan*, and the *Water Enterprise Environmental Stewardship Policy*. The Proposed Action relates to the Hetch Hetchy Water & Power communication operations rather than water supply demand and use; therefore the SFPUC's *Urban Water Management Plan* is not relevant to the Proposed Action. Other SFPUC plans, such as the *Alameda Watershed Management Plan*, and the *Peninsula Watershed Management Plan*, are not relevant to the study area of the Proposed Action. The *Water Enterprise Environmental Stewardship Policy*, adopted in 2006, established long-term management direction for CCSF-owned lands and natural resources affected by operation of the SFPUC water system within the Tuolumne River, Alameda Creek, and Peninsula watersheds (SFPUC 2006). It also addresses rights-of-way and properties in urban surroundings under SFPUC management. The policy directs the SFPUC to manage the lands under its responsibility in a manner that maintains the integrity of natural resources. In addition, the Environmental Stewardship Policy will be integrated into SFPUC Water Enterprise planning and decision-making processes and also implemented through a number of direct efforts (SFPUC 2006a).

OVERVIEW OF THE ALTERNATIVES

The Hetch Hetchy Communication System Upgrade Project EA/IS presents and analyzes three alternatives. Alternatives to the Proposed Action are required by Section 102(2)(E) of NEPA. However, alternatives analysis is not required for the project under CEQA. The No Action Alternative

² Please note: the WSIP refers to Lake Lloyd, and Cherry Dam while the Proposed Action refers to the same locations solely as Cherry Lake.

(Alternative 1) represents continuing the existing operation and maintenance of the Hetch Hetchy Communication System. The two action alternatives (Alternatives 2 and 3) represent a reasonable range of options to satisfy the purpose and need of the project. An overview of each alternative is presented in Section 2.0.

ENVIRONMENTALLY PREFERABLE ALTERNATIVE

The Council on Environmental Quality (CEQ) regulations implementing NEPA and the National Park Service and US Forest Service NEPA guidelines require that “the alternative or alternatives which were considered to be environmentally preferable” be identified (CEQ Regulations, Section 1505.2).

Environmentally preferable is defined as “the alternative that will promote the national environmental policy as expressed in NEPA’s Section 101. Ordinarily, 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” (CEQ 1981).

Section 101 of NEPA states that:

“It is the continuing responsibility of the Federal Government to... (1) fulfill the responsibilities of each generation as trustee of the environment for succeeding generations; (2) assure for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings; (3) attain the widest range of beneficial uses of the environment without degradation, risk to health or safety, or other undesirable and unintended consequences; (4) preserve important historic, cultural, and natural aspects of our national heritage, and maintain, wherever possible, an environment which supports diversity, and variety of individual choice; (5) achieve a balance between population and resource use which will permit high standards of living and wide sharing of life’s amenities; and (6) enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.”

Among the three alternatives considered, Alternative 2 represents the Environmentally Preferable Alternative for the Hetch Hetchy Communication System Upgrade Project. Alternative 2 satisfies the national environmental policy goals stated in Section 101 of NEPA. This conclusion is analyzed in Section 2.0 of this document.

ENVIRONMENTAL ANALYSIS

Section 3.0 of this document presents the Affected Environment and Environmental Consequences for the Hetch Hetchy Communication System Upgrade Project EA/IS, which fulfills the requirements of NEPA and CEQA. The Affected Environment section of Section 3.0 describes the existing conditions of the area affected by the alternatives identified in Section 2.0, and the Environmental Consequences section of Section 3.0 analyzes the environmental effects associated with each of the alternatives.

SUMMARY OF CONSULTATION AND COORDINATION PROCESS

Public scoping comments were reviewed and analyzed using the National Park Service Comment Analysis and Response Database (CARD) system. Similar comments were grouped together and a ‘concern statement’ was generated, which captured the main points expressed by the scoping comments.

The SFPUC, the National Park Service and the US Forest Service prepared responses to each concern statement, presenting the reasons as to how these concerns are incorporated into the planning process. The public scoping process is summarized in Section 1.0 and the consultation process is summarized in Section 6.5 of this document.

SUMMARY OF ENVIRONMENTAL CONSEQUENCES/SIGNIFICANT IMPACTS

Table ES-1 shows the summary of environmental consequences of the No Action, Preferred Alternative, and Poopenaut Pass Alternative Site.

Table ES-1 Summary of Environmental Consequences

Resource Area	Alternative 1 No Action	Alternative 2 Preferred Alternative	Alternative 3 Poopenaut Pass Alternative Site
Geology, Geohazards and Soils			
	No new sites or construction -related ground disturbance would occur.	Implementation of this alternative would result in construction-related ground disturbance at Intake Radio Site, Poopenaut Pass, Cherry Tower Site, and Burnout Ridge. This includes trenching along the Burnout Ridge access road and Poopenaut Pass access trail. Implementation of construction BMPs and mitigation measures would reduce impacts to less than significant levels. Upgrades at most sites would be in existing developed areas.	Same impacts as Alternative 2.
Hydrology, Floodplains, and Water Quality Affected Environment			
	No new sites or construction-related ground disturbance would occur.	Implementation of this alternative would result in an increase in impervious surfaces from new sites. Implementation of construction BMPs and Mitigation Measures 1, 2, and 3 – Hydrology, would reduce hydrology impacts to less than significant levels.	Same impacts as Alternative 2.
Vegetation			
	No new sites or construction-related ground disturbance would occur. No impacts to vegetation would occur.	Implementation of this alternative would disturb vegetation where new sites would be built from ground disturbance and vegetation clearing. Vegetation to be cleared at Intake Radio Site is primarily non-native grassland with some interspersed native grasses and wildflowers. Vegetation to be cleared at	Same impacts as Alternative 2.

Table ES-1 Summary of Environmental Consequences

Resource Area	Alternative 1 No Action	Alternative 2 Preferred Alternative	Alternative 3 Poopenaut Pass Alternative Site
		Burnout Ridge consists of approximately seven trees, shrubs, and native and non-native grasses. Limited vegetation removal at the Poopenaut Pass site would occur. No significant impacts to vegetation would occur. Implementation of Mitigation Measure 1 – Vegetation, at these sites would prevent the introduction of noxious weeds.	
Wildlife			
	No new sites or construction-related ground disturbance would occur. No impacts to wildlife would occur.	Implementation of this alternative would result in short-term, direct impacts as a result of these activities which could include temporary disturbances to foraging, movement, and reproductive activities, and temporary displacement of wildlife species at the new sites. No impacts to wildlife habitat composition or structure would occur at existing developed sites. The new communication towers would meet US Fish & Wildlife Service (USFWS) guidelines for siting and design and therefore, the risk of avian collisions is expected to be low and not likely to affect the viability of common species.	Same impacts as Alternative 2.
Sensitive, Rare, Threatened, and Endangered Species			
	No new sites or construction-related ground disturbance would occur. No impacts to rare, threatened, and endangered species would occur.	Implementation of this alternative could result in impacts to special-status species. The new communication towers would meet USFWS guidelines for siting and design and therefore, the risk of avian collisions is expected to be	Same impacts as Alternative 2.

Table ES-1 Summary of Environmental Consequences

Resource Area	Alternative 1 No Action	Alternative 2 Preferred Alternative	Alternative 3 Poopenaut Pass Alternative Site
		low and not likely to affect the viability of special-status species. Implementation of Mitigation Measure 1 - Vegetation: Protect Known Occurrences of Special-status Plant Species, and Mitigation Measure 2 — Wildlife: Protect Active Spotted Owl and Northern Goshawk Nest Sites, would reduce impacts to less than significant levels.	
Air Quality			
	Additional trips and construction would not occur. No impacts to air quality would occur.	Implementation of this alternative would result in short-term impacts to air quality from construction related activities. Implementation of BMPs and compliance with applicable regulations would reduce construction related impacts to less than significant levels.	Same impacts as Alternative 2.
Noise			
	Additional trips and construction would not occur. No impacts to noise would occur.	Implementation of this alternative would result in short-term impacts to noise from construction- related activities. Implementation of BMPs and Mitigation Measure 1 and 2 – Noise, would reduce construction related impacts to less than significant levels.	Same impacts as Alternative 2.

Table ES-1 Summary of Environmental Consequences

Resource Area	Alternative 1 No Action	Alternative 2 Preferred Alternative	Alternative 3 Poopenaut Pass Alternative Site
Cultural Resources			
	<p>No new sites or construction-related ground disturbance would occur. No impacts to archaeological resources would occur.</p>	<p>Implementation of this alternative would result in no effects to archaeological sites as the project sites do not contain known archaeological resources. Buried resources could be discovered during ground disturbing construction activities at the new sites. Implementation of Mitigation Measure 1 – Undocumented Cultural Resources, would reduce impacts to less than significant levels.</p> <p>Implementation of this alternative would result in the addition of communication equipment to existing structures. However, the proposed project would not have direct or adverse effects on historic buildings, structures, or landscapes. No mitigation measures for architectural resources are required.</p> <p>Buried resources could be discovered during ground disturbing construction activities at the new sites. Implementation of Mitigation Measure 2 – Human Remains, Compliance with US Forest Service Cultural Resources Management Practice would reduce impacts to less than significant levels.</p> <p>Implementation of Mitigation Measure 3 – Traditional Cultural Properties, would complete the Section 106 consultation process.</p>	<p>Same impacts as Alternative 2.</p>

Table ES-1 Summary of Environmental Consequences

Resource Area	Alternative 1 No Action	Alternative 2 Preferred Alternative	Alternative 3 Poopenaut Pass Alternative Site
Land Use			
	No new sites or construction-related ground disturbance would occur. No impacts to land use would occur.	Implementation of this alternative would result in the construction of new sites. Land uses at existing sites would not change. A Forest Plan Amendment for the new US Forest Service sites and implementation of a Mitigation Measure 1 – Land Use, to reduce impacts between the Poopenaut Pass site and the Wilderness Boundary area would reduce impacts to less than significant.	Same impacts as Alternative 2.
Visual/Scenic Resources			
	No new sites or construction-related ground disturbance would occur. No impacts to visual/scenic resources would occur.	Implementation of this alternative would result in construction of new sites and installation of new equipment. No significant visual/scenic impacts would occur. Implementation of Mitigation Measure 1 – Visual, would reduce visual/scenic impacts to less than significant levels.	Same impacts as Alternative 2 except at alternate Poopenaut Pass site. Implementation of this alternative would introduce a human-made feature into the visual landscape that would be more visible than Alternative 2.
Visitor Experience and Recreation			
	Parts of the existing communication system are obsolete now while other parts are aging; timely replacement and upgrades will ensure continued support of operational activities such as law enforcement, search and rescue, fire management, and visitor and staff safety.	Implementation of Mitigation Measure 1 – Visitor Experience and Recreation, would reduce visitor experience and recreation impacts to less than significant levels at the Poopenaut Pass and Cherry Tower Site areas during construction periods.	Same impacts as Alternative 2.

Table ES-1 Summary of Environmental Consequences

Resource Area	Alternative 1 No Action	Alternative 2 Preferred Alternative	Alternative 3 Poopenaut Pass Alternative Site
Transportation			
	No additional trips would be generated. No impacts to transportation would occur.	Implementation of the Proposed Action would result in a short-term increase in traffic at the new sites from construction related traffic. Implementation of Mitigation Measure 1 – Transportation, would reduce construction related impacts at the new sites to less than significant levels.	Same impacts as Alternative 2.
CEQA Specific			
Population and Housing			
	N/A	Implementation of the Proposed Action would not induce substantial population growth because new homes or businesses or extension of major infrastructure are not proposed or needed. Impacts to population growth would not occur.	N/A
Utilities and Service Systems			
	N/A	Implementation of the Proposed Action would not require wastewater treatment, sewer, or water supply system. The new sites would not require a significant amount of electricity to operate and would result in less than significant impacts to utilities service systems, specifically electricity.	N/A

Table ES-1 Summary of Environmental Consequences

Resource Area	Alternative 1 No Action	Alternative 2 Preferred Alternative	Alternative 3 Poopenaut Pass Alternative Site
Public Services			
	N/A	None of the upgrades would require new public service facilities, increased staffing, or result in the need for residential development; and therefore would not result in an increased demand for fire and police protection; or additional demand for schools, parks, or other public services.	N/A
Hazards and Hazardous Materials			
	N/A	Implementation of the Proposed Action would result in construction activities at all of the project sites that would require the use of certain potentially hazardous materials such as fuels, oils, and solvents. Construction activities could result in accidental spills. Implementation of mitigation measures would reduce impacts from hazards and hazardous materials to less than significant levels.	N/A
Mineral and Energy Resources			
	N/A	Implementation of the Proposed Action would not result in the loss of locally or regionally important mineral and energy resources. No impacts would occur to mineral resources and the project would not encourage activities that would result in the use of large amounts of fuel, water, or energy, or use these in a wasteful manner.	N/A

Table ES-1 Summary of Environmental Consequences

Resource Area	Alternative 1 No Action	Alternative 2 Preferred Alternative	Alternative 3 Poopenaut Pass Alternative Site
Agricultural Resources			
	N/A	Implementation of the Proposed Action would not convert any farmland or conflict with Williamson Act contracts. No impacts to agricultural resources would occur.	N/A