

## **1.0 BACKGROUND AND PURPOSE AND NEED FOR PROPOSED ACTION**

### **1.1 INTRODUCTION**

As appropriate, issues that are uniquely applicable to the California Environmental Quality Act (CEQA) or the National Environmental Policy Act (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.” In addition, this Draft Environmental Assessment/Initial Study (EA/IS) is also being used to fulfill the National Historic Preservation Act (NHPA) review and documentation process.

### **1.2 DOCUMENT STRUCTURE**

A description of the proposed action and alternatives for the Hetch Hetchy Communication System Upgrade Project, and the evaluation of potential impacts of these alternatives, are integrated into this document. The contents of this document are as follows:

**Executive Summary** – This section includes an overview of the project’s purpose and need, alternatives, and summary of environmental consequences.

**Section 1: Background and Purpose and Need for Proposed Action** – This section includes a discussion of the project background; the project’s purpose and need; project objectives; local, National Park Service (NPS), and United States Forest Service (USFS) planning context; the local and federal regulatory authorities and jurisdictions; and a summary of the public scoping process.

**Section 2: Proposed Action and Alternatives** – This section describes the No Project Alternative, two Action Alternatives under consideration by the San Francisco Public Utilities Commission (SFPUC), NPS, and the USFS, including alternatives that were considered but dismissed from further consideration.

**Section 3: Affected Environment and Environmental Consequences** – This section provides an overview of the affected environment, describing the existing condition of natural, cultural, and social resources in the project area. This section also presents the analysis of the potential environmental impacts of the proposed action, including cumulative impacts, and an assessment of the impacts associated with each alternative that was analyzed in detail.

**Section 4: Mitigation Measures** – This section describes the mitigation measures for the proposed action by resource area.

**Section 5: Wild and Scenic Rivers Act Compliance** – This section analyzes the consistency of the proposed action with the management elements of the Tuolumne Wild and Scenic River Comprehensive Management Plan. Yosemite National Park has begun the preparation of the Tuolumne Wild and Scenic

River Comprehensive Management Plan for the 54 miles of river that are under the jurisdiction of the NPS in Yosemite National Park. A final document is not available at this time; however, the NPS has developed the *Tuolumne Wild and Scenic River Draft Outstandingly Remarkable Values (ORV) Report*. This EA/IS will not constrain the preparation of the future Wild and Scenic River Comprehensive Management Plan.

**Section 6: Consultation and Coordination** – This section summarizes the proposed action’s compliance with Federal Executive Orders, and the process of interaction with the public, agencies, and organizations that was used during the preparation of this document.

**Section 7.0: List of Preparers and Reviewers** – This section lists the names and qualifications of the persons who are primarily responsible for preparing and reviewing the document.

**Section 8.0: Glossary and Acronyms** – This section defines the technical terms and acronyms used in this document.

**Section 9.0: Bibliography** – This section lists the references cited in this document.

In addition to the above sections, the following appendices to this document provide additional supporting data and information.

Appendix A – Cumulative Projects List

Appendix B – CEQA Initial Study Checklist

Appendix C – Tuolumne Wild and Scenic River Section 7 Determination

Appendix D – Communication Systems Technical Requirements

## **1.3 PROJECT BACKGROUND**

### **1.3.1 Existing Facilities and Operation**

#### **1.3.1.1 Overview of Existing Facilities**

The Hetch Hetchy regional water 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 Raker Act (further described in Section 1.9.3.1) authorizes the City and County of San Francisco (CCSF) to occupy federal lands in Tuolumne and other counties for purposes relating to the construction and operation of Hetch Hetchy Water & Power (HHW&P) facilities. HHW&P holds easements under the Raker Act across lands in Stanislaus National Forest and Yosemite National Park. Communications is one of the authorized uses encompassed by the Raker Act and not a new use that is outside of the City and County of San Francisco’s easement rights.

The Hetch Hetchy system includes facilities in the upper Tuolumne River watershed of Yosemite National Park and the Stanislaus National Forest in the Sierra Nevada, and facilities that convey water from the Sierra Nevada to the Alameda East Portal near Sunol in the San Francisco Bay Area. The Hetch Hetchy regional water system is owned by the CCSF, managed by the SFPUC, and operated and

maintained by the SFPUC subsidiary, HHW&P. The Hetch Hetchy regional water system provides drinking water to 2.4 million people in San Francisco, San Mateo, Santa Clara, Alameda and Tuolumne counties. The system also provides hydroelectric power for San Francisco municipal uses and for sale to irrigation districts and public utilities. HHW&P operates a communications system to support the operation of the above facilities. Please see Figure 1-1, Existing Microwave System.

### **1.3.1.2 Communication System Configuration**

The existing communication 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 (see Figure 1-1 Existing Microwave System).

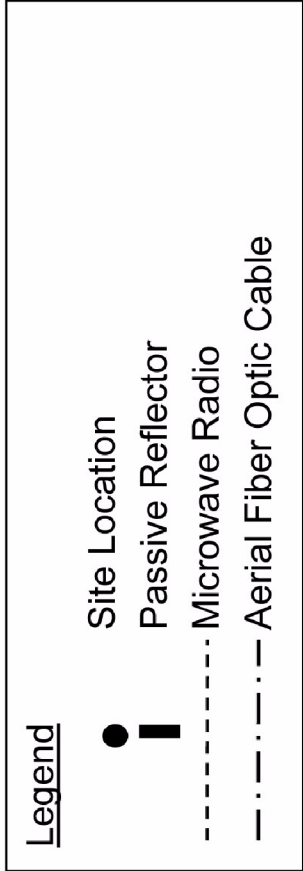
There is currently limited communications in the O'Shaughnessy Dam, Cherry Lake, and Lake Eleanor areas. The backbone sites of the existing communication system are (west to east): Warnerville Switchyard, Moccasin Peak, Moccasin Powerhouse, Moccasin Powerhouse Passive Reflector, Duckwall Mountain, Jones Point, Holm Powerhouse, Intake Switchyard and Kirkwood Powerhouse.

The existing communication system provides basic services to support HHW&P's operations, but it is obsolete and is no longer supported by the manufacturer. The system also relies on outdated fiber optic terminal equipment at Intake Switchyard, Holm Powerhouse, Kirkwood Powerhouse, and Intake Radio Site, for which HHW&P has had difficulty acquiring spare parts (Timberline 2004).

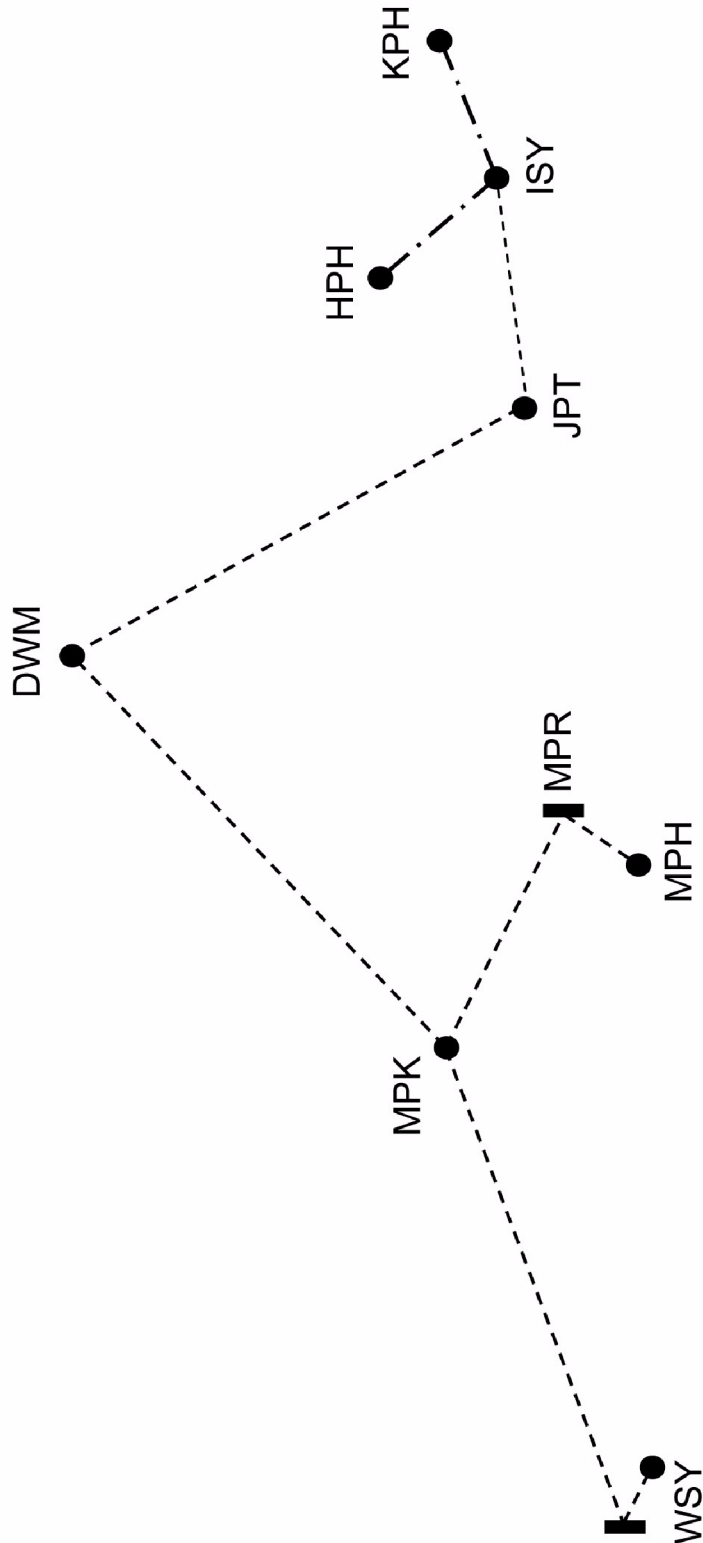
Utility power reliability generally cannot be expected to meet the system requirements, especially at remote mountain top sites. Therefore, existing switchyards and powerhouses have station batteries that can be used to provide emergency backup power.

## **1.4 PURPOSE AND NEED FOR THE PROJECT/ACTION**

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 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 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



SITE ACRONYMS and NAMES	
Site Acronym	Site Name
DWM	Duckwall Mountain
HPH	Holm Powerhouse
ISY	Intake Switchyard
JPT	Jones Point
KPH	Kirkwood Powerhouse
MPH	Moccasin Powerhouse
MPK	Moccasin Peak
MPR	Moccasin Powerhouse Passive Reflector
WSY	Warnerville Switchyard



Source: Timberline Engineering, Inc. 2006

Existing System Configuration  
Figure 1-1

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.

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.

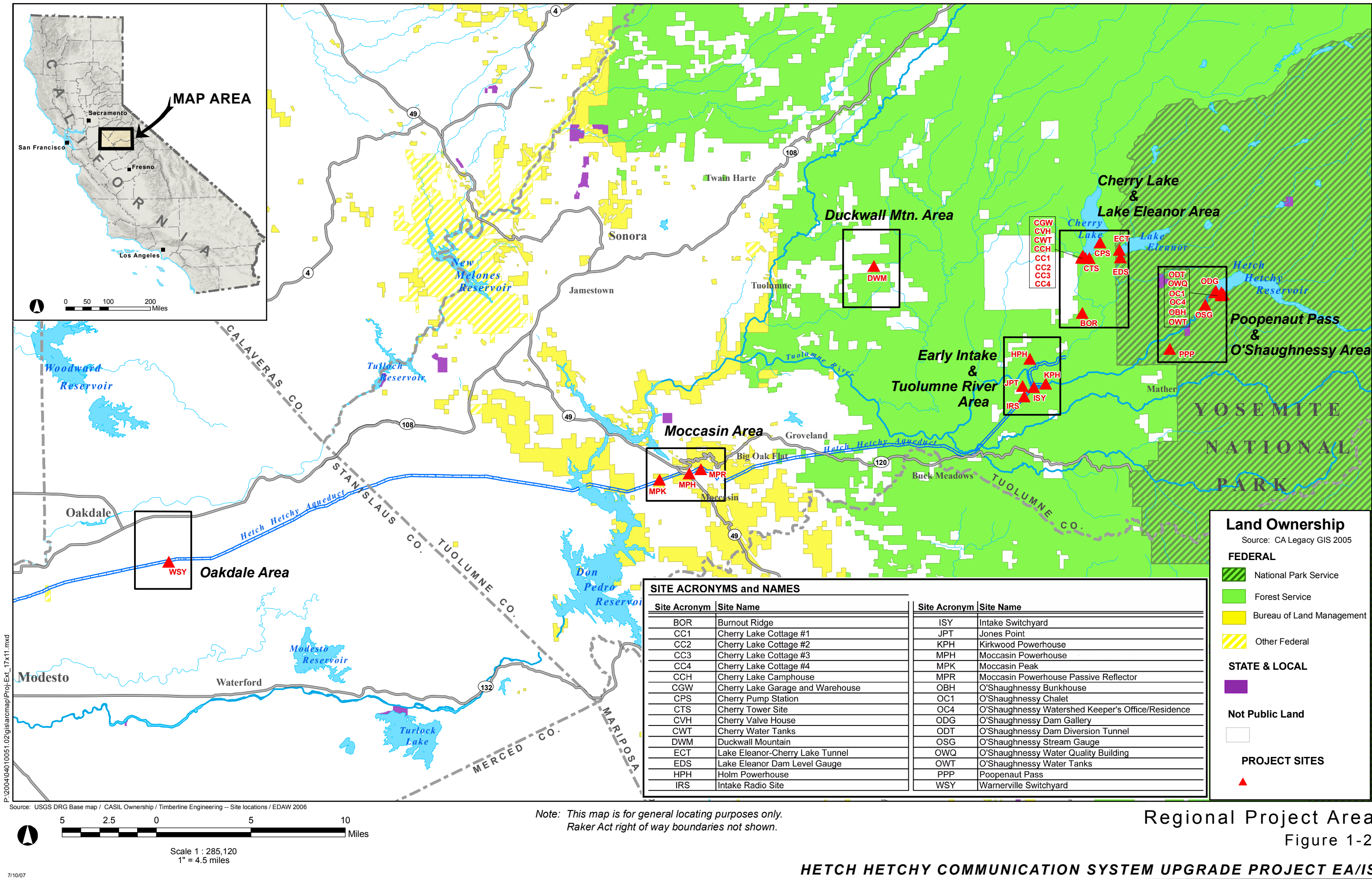
Current needs not addressed with the system at Cherry Lake includes Supervisory Control and Data Acquisition (SCADA) monitoring and control of the Cherry Pump Station and Cherry Valvehouse and the domestic water system, two-way radio coverage, reliable telephone coverage, and the addition of the corporate 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 Regional Project Area showing the sites for the proposed action are shown in Figure 1-2.

The 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 (described in Section 1.7). 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



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Source: USGS DRG Base map / CASIL Ownership / Timberline Engineering -- Site locations / EDAAW 2006

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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 Proposed Action 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. Please refer to Appendix F, *Communication Systems Technical Requirements* which details the explanation for the selection of the new sites.

## **1.5 PROJECT OBJECTIVES**

Objectives of the project are to:

- Comply with FCC requirements to vacate the 2 GHz band.
- Replace and update aged and obsolete components of the communication system.
- Add new critical communication sites to the system.
- Provide the foundation infrastructure to allow for the option of separate or integrated communications for HHW&P, NPS and USFS in the future; and provide opportunities to improve the communication reliability for the prospective health and safety of staff and for emergency response.
- Provide the foundation infrastructure to enable improvements to be made for communication reliability for dam and facility security in the future.

## **1.6 MANAGEMENT GOALS**

The management goals for the project are:

### **San Francisco Public Utilities Commission (SFPUC)**

- To provide an improved communication system for management of the regional water and power supply.

### **National Park Service**

- Maintain a safe, functional, and orderly environment that provides compatible opportunities for resource preservation and enjoyment by visitors and employees (NPS 1980).
- Protect the rights, safety, and security of all visitors and employees (NPS 1980).

## Forest Service, Stanislaus National Forest

- Provide facilities, including transportation system and administrative sites, needed to efficiently and safely manage the National Forest (USDA 2005).

### 1.7 DECISIONS TO BE MADE

The Hetch Hetchy Communication System Upgrade Project involves reviews and decisions that must be made by the San Francisco Planning Department (the CEQA Lead Agency), the SFPUC, the NPS (NEPA Co-Lead Agency), and the USFS (NEPA Co-Lead Agency). To support the decision-making on their respective actions, the NPS and USFS must comply with NEPA. The USFS must approve appropriate amendments to the Stanislaus National Forest Land and Resource Management Plan (Forest Plan) and approve the use of Stanislaus National Forest site (outside of Raker Act right-of-way) for the proposed facilities and their operation (at the Burnout Ridge site). The NPS does not require a General Management Plan amendment, but must approve the use of the Yosemite National Park site for the proposed facilities and their operation outside of the Raker Act right-of-way (Poopenaut Pass site). The San Francisco Planning Department is responsible for environmental review of the proposed project pursuant to CEQA. The SFPUC is responsible for project approval (as it relates to use of CCSF funding). The City and County of San Francisco is exempt from obtaining county use permits under the principle of intergovernmental immunity set forth in Government Code 53090 et Seq. for sites within Raker Act lands. The SFPUC would be responsible for project implementation, adherence to permit conditions, and other regulatory requirements.

**San Francisco Planning Department Decision:** Environmental review under CEQA and approval by the Planning Department Major Environmental Analysis Division Environmental Review Officer.

**SFPUC Decision:** Project approval and adoption of findings regarding mitigation, monitoring and reporting; entry into special use permits or right-of-way agreements with the USFS and NPS for the sites outside of the Raker Act right-of-way; and easement acquisition over privately owned timberland for access to the Burnout Ridge site.

**USFS Decision:** Environmental review under NEPA; Finding of No Significant Impact (FONSI) and this supporting EA document approval by the Forest Supervisor.

Forest Plan Amendment. Development at the Burnout Ridge site would require approval of an amendment to the Stanislaus National Forest Land and Resource Management Plan (Forest Plan) by the USFS, as this plan currently does not provide for the development of new communication sites beyond those already identified in the plan.

A Special Use Permit approved by the Forest Supervisor for the development, operation and maintenance of the proposed facilities, utilities, and road improvements. Approval of appearance of all sites under Raker Act section 4. NHPA Section 106 review and documentation.

**NPS Decision:** Environmental review under NEPA: FONSI and this supporting EA document approval by the Regional Director of Yosemite National Park.

Issuance of land use entitlement (right-of-way permit) for the Poopenaut Pass site, and approval of appearance of all sites under Raker Act section 4. NHPA Section 106 review and documentation.

**FCC Decision:** Licensing of new sites, re-licensing of upgraded sites and giving up licensing of sites that will no longer be part of the communication system.

## **1.8 SUMMARY OF PUBLIC SCOPING PROCESS**

### **1.8.1 Public Scoping**

The proposed action was listed in the USFS Schedule of Proposed Actions for the January 1, 2006 to March 31, 2006 period, the Stanislaus National Forest website, and 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). In addition, a site tour of the proposed project siting options within Yosemite National Park in the Poopenaut Pass vicinity took place 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. Using the comments from the public and other agencies, the interdisciplinary team developed a list of issues to address in this document. Written public scoping comments were received by fax, email, and U.S. mail. As a result of the public scoping period, the NPS received comments from 24 individuals, three (3) organizations, one (1) civic group, and one (1) 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.

### **1.8.2 Issues and Concerns Addressed in this Document**

The following issues were identified during the public scoping process by NPS and USFS staff. These issues are addressed in the analysis presented in Section 3.0, Affected Environment and Environmental Consequences.

Some of the main concerns raised during the public scoping period are identified below, along with where the issues are addressed in this document:

- Demonstrate the necessity and benefit of the improved communication systems to the NPS and USFS (see Section 1.4 - Purpose and Need for the Project).
- Consider the potential impacts to vistas and views and physical integrity to the landscape from the proposed action (See Section 3.10.2 - Visual/Scenic Resources).

- Clarify the locations of Burnout Ridge and/or Poopenaut Pass (see Figures 2-15 and 2-16 in Section 2.0 – Proposed Action and Alternatives).
- Clarify the description of the existing and proposed communication systems (see Sections 1.3 and 2.2).
- Clarify the relationship between the NPS, HHW&P, and whether Yosemite National Park and visitors would benefit from the proposed action (see Section 1.4 – Purpose and Need).
- The National Park Service should cooperate with the people of Tuolumne County regarding the proposed action (see Section 6.3 – Project Scoping History).
- Consider sites with the least short-term and long-term environmental impacts (see Section 2.3 – Overview of Alternatives).
- Evaluate Site 6 and 7 as the preferred Poopenaut Pass location (see Section 2.4.5.1 – Poopenaut Pass Sites).
- Evaluate sites for special status plant and animal species (see Sections 3.8.3 – Vegetation, 3.8.4 – Wildlife, and 3.8.5 – Rare, Threatened and Endangered Species).
- Address the history of the Paiute Indians in historical related context of Hetch Hetchy Valley (see Section 3.9.1.1 – Prehistory and Ethnography).
- Consider impacts to public recreational uses (see Section 3.10.3).
- Place new communication hardware in areas that would not interfere with emergency helicopter landings. (No issue has been identified for the proposed facilities.)
- Do not consider expanding cell service because of impacts to Wilderness. (see Section 3)
- Present the analysis of the different communication systems (see Section 2.4 – Alternatives Considered But Dismissed).
- Conduct a valid NEPA process. (This document fulfills a key part of this requirement.)
- Ensure that the project is compliant with NPS and USFS regulations (see Section 3.0).
- Trench for utility lines associated with the project along existing roadways (see Section 2.3).
- Preserve the designated Wilderness boundaries. (No boundary change is proposed or needed.)
- Preserve the overlook and old trail. (No specific change is proposed to any overlooks and trails.)

### **1.8.3 Issues and Concerns Not Addressed in this Document**

Issues and concerns generated through public scoping that are not within the scope of this proposed action, and thereby will not be addressed in the environmental assessment, include the following items:

- 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 (see Section 2.2.4).

## **1.9 EA/IS JOINT DOCUMENT AND ROLE OF AGENCIES**

### **1.9.1 State and Federal Lead Agencies.**

This document addresses both state and federal environmental laws. As appropriate, issues that are uniquely applicable to CEQA, NEPA, NPS policies (e.g., DO-12 Handbook and Director's Order), and USFS policies are identified within the applicable sections of the document. Pursuant to CEQA Guidelines Section 15051, designation of a lead agency is required to ensure certification of the environmental documents that evaluate project impacts and propose mitigation, in accordance with the CEQA requirements. The lead agency under CEQA for the proposed project is the San Francisco Planning Department. The NPS and USFS are the co-lead agencies under NEPA (40 CFR 1501.5), because the proposed action would involve lands under the jurisdiction of both agencies. The FCC is a cooperating agency because the proposed action would require new sites to be licensed and upgraded sites to be re-licensed.

The FCC licenses associated with HHW&P operations at Moccasin Powerhouse Passive Reflector, Duckwall Mountain, and Jones Point would be given up, as these sites would no longer be in use as part of the Hetch Hetchy Communication System. HHW&P is one of several tenants at the Duckwall Mountain site, and Duckwall Mountain would be maintained as a communication site even though the HHW&P microwave equipment, antennas, and antenna feed system is removed. The USFS will work with HHW&P and the remaining Duckwall communication site tenants to determine who will become the new Special Use Permit Holder at the site. Since HHW&P would no longer need a repeater at Jones Point, the existing microwave equipment, shelter, communication tower, antennas, and antenna feed system would be removed.

### **1.9.2 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 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.<sup>1</sup>

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- City and County of San Francisco 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

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<sup>1</sup> Please note: the WSIP refers to what this project refers to as Cherry Lake as Lake Lloyd, and the dam as Cherry Dam.

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. 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 project relates to the HHW&P communication operations rather than water supply demand and use and therefore the SFPUC's *Urban Water Management Plan* is not relevant to the proposed project. 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 project.

The *Water Enterprise Environmental Stewardship Policy*, adopted in 2006, established the long-term management direction for City and County of San Francisco-owned lands and natural resources affected by operation of the SFPUC water system within the Tuolumne River, Alameda Creek, and Peninsula watersheds (SFPUC 2006a). 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 directly implemented through a number of efforts (SFPUC 2006a). Project consistency with applicable plans is discussed in Section 3.7.1.

### **1.9.3 Planning Context**

The Hetch Hetchy Communication System Upgrade Project is subject to the following regulations and policies. It 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.

#### **1.9.3.1 City and County of San Francisco**

##### **Raker Act**

The Raker Act (H.R. 7207, 63<sup>rd</sup> Congress, 1<sup>st</sup> Session) was passed by the U.S. Congress in 1913, which granted the City and County of San Francisco certain rights-of-way in, over, and through certain public lands, including Yosemite National Park and Stanislaus National Forest. The Raker Act right-of-way's purpose is to allow for the construction, operation, and maintenance of aqueducts, canals, ditches, pipes, pipelines, flumes, tunnels, and conduits for conveying water for domestic purposes and uses to the City and County of San Francisco. The Raker Act authorized 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 communications facilities. Communications is one of the authorized purposes of the Raker Act and not a new use that is outside of the City and County of San Francisco's easement rights.

Extraterritorial Lands Under the San Francisco City Charter, Section 8B.121, conveys SFPUC authority over the management, use, and control of extraterritorial lands, which are properties outside of the City

that the CCSF owns or leases or over which it holds easements.<sup>2</sup> Section 8B.121 of the City Charter provides that the *San Francisco General Plan* and City building and zoning ordinances, to the extent they are applicable to these extraterritorial lands and are not in conflict with Section 8B.121 of the City Charter, would generally apply to SFPUC projects on extraterritorial lands outside of the city.

### **Intergovernmental Immunity**

The City and County of San Francisco, as a chartered city and county, and its SFPUC, as a municipal utility, receive intergovernmental immunity under California Government Code Sections 53090 *et seq.* for sites within the Raker Act. Section 53090 *et seq.* provides that the SFPUC receives intergovernmental immunity from the planning and building laws of other cities and counties in which those lands are located, including CCSF-owned extraterritorial lands managed through the SFPUC. Thus, the zoning and building codes, general plans, specific plans, and other planning policies of Stanislaus and Tuolumne counties do not apply to the proposed project.

The SFPUC seeks to work cooperatively with local jurisdictions where CCSF-owned facilities are sited outside of San Francisco to avoid conflicts with local plans and building and zoning codes. Although the SFPUC is not legally bound to the general plans and zoning ordinances of other jurisdictions, these plans may provide guidance in the environmental review of the Hetch Hetchy Communication System Upgrade Project, particularly policies or plans that have been adopted for the purpose of avoiding or mitigating an environmental effect.

Under Government Code Section 65402(b), the SFPUC is required to inform local jurisdictions, including Stanislaus and Tuolumne counties, of its plans to construct the proposed project (or to acquire or dispose of its extraterritorial property). The counties are entitled to a 40-day review period to determine the consistency of the project with their general plans. Under this requirement, the counties' determinations of consistency are advisory to the SFPUC rather than binding. However, as mentioned above, a project's compatibility with the environmental conservation and mitigation plans and policies of other potentially affected jurisdictions may be relevant under CEQA.

### **1.9.3.2 Yosemite National Park**

#### **National Park Service Organic Act**

The U.S. Department of the Interior NPS was established in 1916 by the Organic Act, in order to “promote and regulate the use of parks” and defined the purpose of the national parks “to conserve the scenery and natural and historic objects and wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations.” This law provides overall guidance for the management of Yosemite National Park. The National Park Service *Management Policies 2006* provides guidance on addressing impairment on park resources and values.

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<sup>2</sup> Notwithstanding Charter Section 8B.121, the Public Utilities Commission shall have exclusive charge of the construction, management, supervision, maintenance, extension, expansion, operation, use and control of all water, clean water and energy supplies and utilities of the City as well as the real, personal and financial assets that are under the Commission's jurisdiction or assigned to the Commission under Section 4.132.

## **General Management and Implementation Plans**

Planning in Yosemite National Park takes five forms: general management planning, program planning, strategic planning, implementation planning, and annual planning. General and implementation level planning are relevant to the proposed action. General management plans are required for all national parks by the National Park and Recreation Act of 1978.

The purpose of a general management plan is to set a “clearly defined direction for resource preservation and visitor use” (NPS 1998), and to provide general directions and policies to guide planning and management in the park. The General Management Plan (NPS 1980) is the overall planning document for Yosemite National Park.

Implementation plans, which typically tier off of the General Management Plan focus on “how to implement an activity or project needed to achieve a long-term goal” (NPS 1998). Implementation plans may direct specific projects as well as ongoing management activities or programs—and typically provide a more extensive level of detail and analysis. The proposed action described in this EA/IS fulfills implementation plan requirements.

## **Management Goals**

Management goals identify long-range direction for Yosemite National Park. Any proposed action must carefully balance multiple goals and constraints, especially in a park as large and complex as Yosemite National Park. The General Management Plan for Yosemite National Park sets forth five broad goals for management of the park:

- reclaim priceless natural beauty;
- allow natural processes to prevail;
- promote visitor understanding and enjoyment;
- markedly reduce traffic congestion; and
- reduce crowding.

Of the 32 total sites of the Hetch Hetchy Communication System Upgrade Project, 11 sites are within Yosemite National Park; however, 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 authority.

### **1.9.3.3 Stanislaus National Forest Plan**

The USFS was initially established in 1905 by Congress as an agency of the U.S. Department of Agriculture to provide quality timber and water for the Nation’s benefit (USDA 2006). However, the USFS’ purpose has expanded to “manage national forests for additional multiple uses and benefits and for the sustained yield of renewable resources such as water, forage, wildlife, wood, and recreation” (USDA 2006).

The 1991 Stanislaus National Forest Land and Resource Management Plan as amended (Forest Plan, as amended) provides direction for general forest desired conditions. The Stanislaus National Forest “Forest Plan Direction July 2005” presents the current Forest Plan management direction, based on the original Forest Plan as modified through the Forest Plan appeals process and amendments. The Forest Plan as amended has established Forest-wide Standards and Guidelines, which apply to all Forest lands. These Standards and Guidelines are necessary to implement the Forest Plan in conformance with Regional Management direction and legal requirements (such as Clean Water Act, Clean Air Act, National Historic Preservation Act, National Forest Management Act, Endangered Species Act, and other legislation and regulations such as 36 CFR 219.13) (USDA 2005). These Standards and Guidelines are used at the project level as part of planning for all projects and activities.

In addition to the Forest-wide Standards and Guidelines, the Forest has been divided into Management Areas based on their predominant management emphasis. Each Management Area has a management emphasis statement, a description of the physical area, and a management prescription that describes specific practices, activities, and Standards and Guidelines applicable to that Management Area (USDA 2005). All Forest-wide Standards and Guidelines also apply within each Management Area.

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, 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 operate under a Special Use Permit from the USFS.

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