3.2.7 Land Use

3.2.7.1 Overview

In addition to this introductory information, this section contains three subsections. Section 3.2.7.2 provides a regional context regarding land use and management. Section 3.2.7.3 focuses on the land use and management within the existing FERC Project Boundary. Section 3.2.7.4 describes known or potential Project effects on land use.

SSWD prepared this section based on its collection of existing, relevant and reasonably available information on land use. Specifically, SSWD found 19 source documents regarding land use. These are listed below and cited throughout this section:

- BLM 2015
- Cal Fire 2015
- CDFW 2015p
- Data.gov 2009
- Nevada County 2012
- Nevada County 2014a
- Nevada County 2014b
- Nevada County 2015
- NPS 2011
- NPS 2015
- OHP 2015
- Placer County 2014a
- Placer County 2012
- Placer County 2014b
- Placer County 2015a
- Yuba County 2005
- Yuba County 2010b
- Yuba County 1994
- Yuba County 2015

3.2.7.2 Regional Context

3.2.7.2.1 Public and Private Land Ownership and Zoning Ordinances

Table 3.2.7-1 shows that the land within the FERC Project Boundary is located within Yuba, Placer and Nevada counties, with the majority of land in Yuba County.

Table 3.2.7-1. Summary of county land within the existing FERC Project Boundary.

Yuba County	Placer County	Nevada County	To	tal
(ac)	(ac)	(ac)	(ac)	(%)
1,719.7 (60%)	972.7 (34%)	171.3 (6%)	2,863.7	100.0%

Public and private land ownership within these three counties is summarized below.

3.2.7.2.1.1 Yuba County

Of the 475,723 ac of land comprising Yuba County, 75 percent is in private ownership and the remaining 25 percent is administered by public agencies (Table 3.2.7-2). The amount of Yuba County land within the existing FERC Project Boundary represents 0.36 percent of the total land within the county.

Table 3.2.7-2. Distribution of public and private lands in Yuba County.

Public Agency or Private Ownership	Number of Parcels	Total Acreage per Agency/Owner	Ownership as a Percentage of County
Bureau of Land Management	82	19,136	4.02%
United States Army Corps of Engineers	3	64	0.01%
Department of Defense	298	24,610	5.17%
Forest Service	531	53,461	11.24%
State of California	82	18,642	3.92%
South Sutter Water District	12	1,961	0.41%
Private (or other)	32,424	357,849	75.23%
Total	33,432	475,723	100.00%

Source: BLM 2015, Yuba County 2015

The predominant land uses in Yuba County are agriculture (80,943 ac), forested lands (56,000 ac), and open space/grazing lands (198,000 ac) (Yuba County 1994).

3.2.7.2.1.2 Placer County

Of the 906,912 ac of land comprising Placer County, 57 percent is in private ownership and the remaining 43 percent is administered by public agencies (Table 3.2.7-3). The amount of Placer County land within the existing FERC Project Boundary represents 0.11 percent of the total land within the county.

Table 3.2.7-3. Distribution of public and private lands in Placer County.

Public Agency or Private Ownership	Number of Parcels	Total Acreage per Agency/Owner	Ownership as a Percentage of County
Bureau of Land Management	313	23,810	2.63%
Department of Defense	35	374	0.04%
Forest Service	2,233	356,691	39.33%
State of California	386	4,376	0.48%
South State Water District	18	949	0.10%
Private (or other)	164,367	520,712	57.42%
Total	167,352	906,912	100.00%

Source: BLM 2015, Placer County 2015a

3.2.7.2.1.3 Nevada County

Of the 629,097 ac of land comprising Nevada County, 67 percent is in private ownership and the remaining 33 percent is administered by public agencies (Table 3.2.7-4). The amount of Nevada County land within the existing FERC Project Boundary represents 0.03 percent of the total land within the county.

Table 3.2.7-4. Distribution of public and private lands in Nevada County.

Public Agency or Private Ownership	Number of Parcels	Total Acreage per Agency/Owner	Ownership as a Percentage of County
Bureau of Land Management	324	16,873	2.68%
Department of Defense	20	858	0.14%
Forest Service	954	187,210	29.76%
State of California	170	10,128	1.61%
South State Water District	2	275	0.04%
Private (or other)	64,891	413,753	65.78%
Total	66,069	629,097	100.00%

Source: BLM 2015, Nevada County 2015

The predominant land uses in Nevada County are forest (349,968 ac); rural (184,436 ac); open space (26,906 ac); estate (17,580 ac); planned development (10,649 ac); and residential (10,081 ac) (Nevada County 2014a).

3.2.7.2.1.4 Zoning Ordinances

Private land use is managed in accordance with the Yuba County 2030 General Plan, Placer County General Plan, Nevada County General Plan and the county zoning ordinances. Table 3.2.7-5 shows the Zoning Ordinances for all of the land within the Project Vicinity.

Table 3.2.7-5. Zoning Ordinance land use categories in the Project Vicinity.

		e e	
Land Use Categories	County	Description	
EA- Exclusive Agricultural Zone 10	Yuba	Growing and harvesting of forest products, grazing of livestock, single-family residence, and accessory buildings.	
GA – General Agricultural 40	Nevada	Provide low intensity recreational opportunity that also maintains natural environment.	

Table 3.2.7-5. (continued)

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Land Use Categories	County	Description	
F-B – Farm Building Zone	Placer	Implement the Forest Taxation Reform Act (1976) and the California Timberland Productivity Act (1982).	
RES – Resort	Flacei	Apply to mountainous areas, water-oriented, or other areas with significant natural amenities and commercial recreational potential, with good access to major highways.	

Source: Yuba County 2010b, Nevada County 2012, Placer County 2014a

3.2.7.2.2 Public Land

This section describes land use on public land in the Project Vicinity. The section is divided by land management agency. Federal and state-owned public lands are generally not subject to county jurisdiction. No public land occurs within the existing FERC Project Boundary.

3.2.7.2.3 Wild and Scenic Rivers, Wilderness Areas, and National Scenic Trails

There are no federal Wild and Scenic Rivers or Wilderness Areas in the Project Vicinity.

An area designated as the California National Historic Trail runs through the FERC Project Boundary and crosses Camp Far West Reservoir in two locations of the upstream, northern portion of the reservoir, where the building of the initial reservoir 'drowned' sections of the historic emigrant trail (Figure 3.2.7-1). The trail covers over 2,000 mi across 10 states (i.e., California, Colorado, Idaho, Kansas, Missouri, Nebraska, Nevada, Oregon, Utah and Wyoming) and follows the paths of the 250,000 emigrants who came to California in the 1840s and 1850s. The trail was authorized in 1992 and is administered by the National Park Service. Along the route are pieces of the pioneer trail, graves, monuments, historic structures and other traces (NPS 2015). California Historic Landmark No. 799-3, Overland Emigrant Trail, commemorating the Pioneer trail on Spenceville Road, lies approximately 3.5 mi outside of Wheatland (OHP 2015). The section within the FERC Project Boundary is not a 'developed' trail.

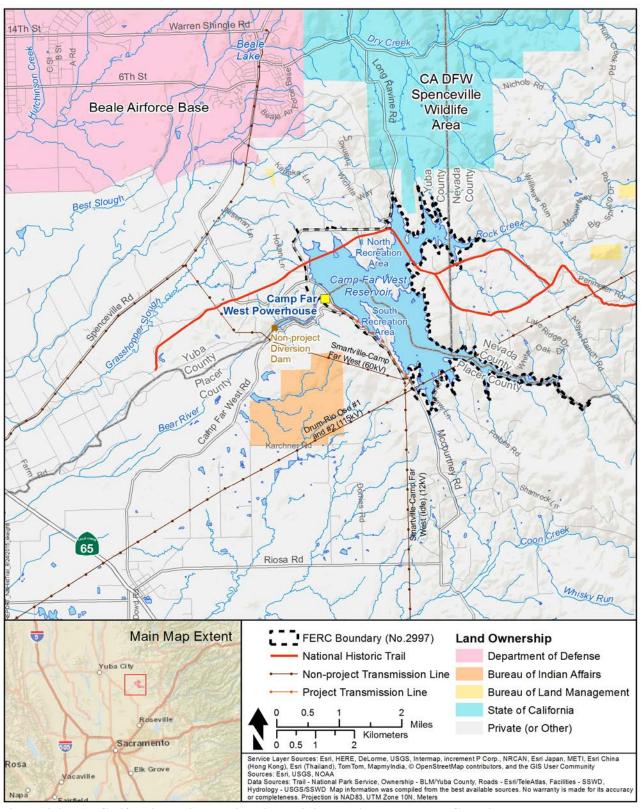


Figure 3.2.7-1. California National Historic Trail in relation to the FERC Project Boundary.

3.2.7.2.4 Nationwide Rivers Inventory

The NRI is a listing of more than 3,400 free-flowing river segments in the U.S. that are believed to possess one or more "outstandingly remarkable" natural or cultural values judged to be of more than local or regional significance (NPS 2011). The NRI is a source of information for statewide river assessments and federal agencies involved with stream-related projects. None of the NRI-listed river segments occur in the Project Area or downstream of the Project.

3.2.7.2.5 USACE-Jurisdictional Wetlands

Wetlands that meet the criteria of "waters of the United States" are managed under the jurisdiction of the USACOE and the EPA pursuant to Section 404 of the CWA. The definition developed by the USACE considers those areas which "...are inundated or saturated by surface or ground water at a frequency and duration to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" as wetlands. Under the USACE definition, all three of the following conditions must be present (CWIS 1998):

- a dominance of wetland plants
- hydric soils, those soils that are sufficiently wet in the upper part to develop anaerobic conditions during the growing season
- wetland hydrology

Wetlands that meet these criteria may exist within the Project Vicinity and are within the jurisdiction of the USACE. Wetland types and acreages are discussed in Section 3.2.4.6 of this PAD. Within the existing FERC Project Boundary, approximately 0.79-ac of freshwater pond habitat, 1,202 ac of open-water habitat, and more than 5 ac of riverine habitat may qualify as jurisdictional waters and/or wetlands under Section 404 of the CWA. Figure 3.2.4-2 in Section 3.2.4.6 shows the NWI wetlands and waters within the FRC Project Boundary.

3.2.7.2.6 FEMA Floodplains

Maps of FEMA floodplains within the Project Vicinity are included as Figure 3.2.7-2. A review of the FEMA flood maps within the existing FERC Project Boundary indicated that 2,079.6 ac (i.e., 73% of the total area within the boundary) are within the FEMA 100-year flood plain. (Data.gov 2009.)

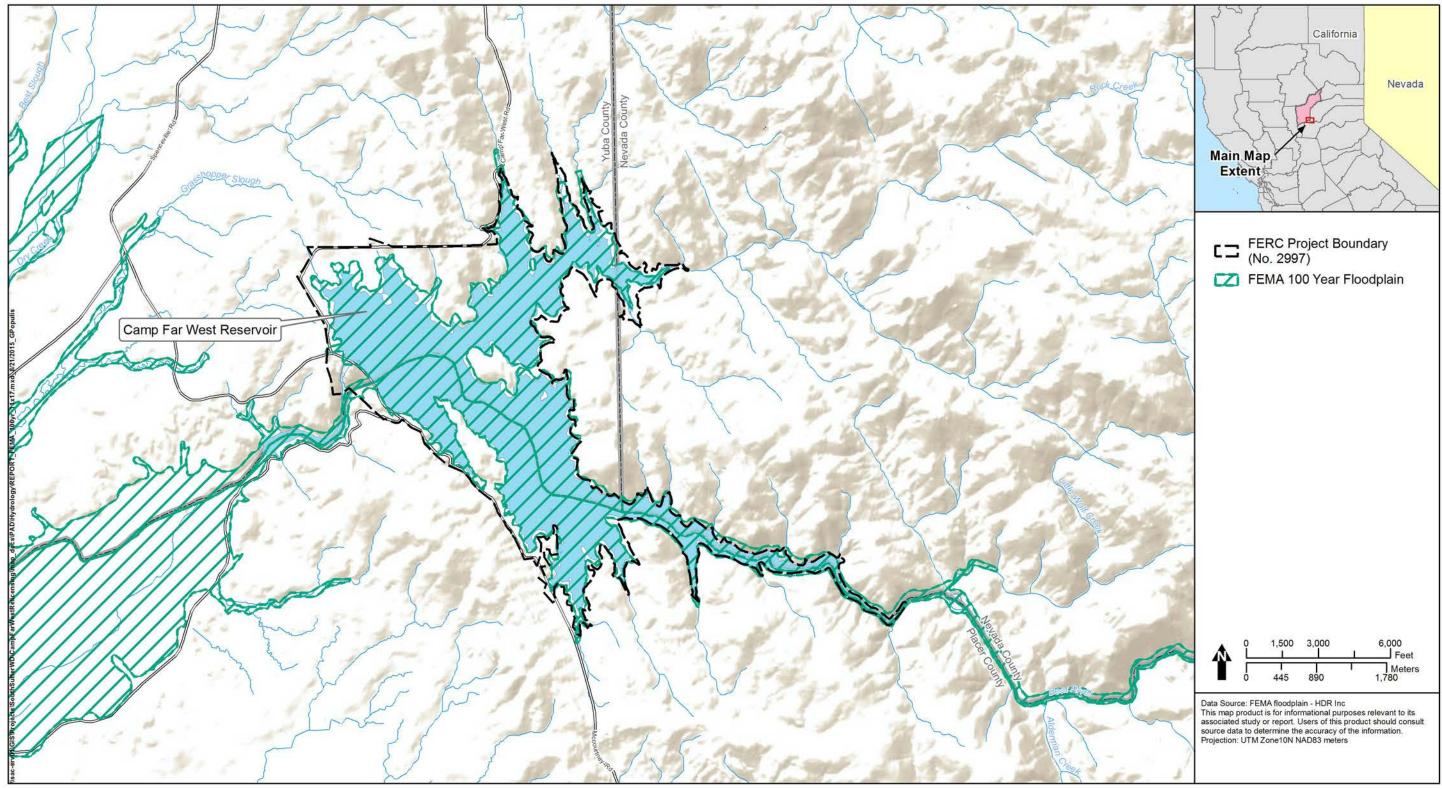


Figure 3.2.7-2. FEMA floodplains within a 1-mile wide buffer of the FERC Project Boundary.

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3.2.7.2.7 Other Public Lands

There are additional public lands within the Project Vicinity, managed for land conservation. These are discussed below.

3.2.7.2.7.1 Cal Fish and Wildlife's Spenceville Wildlife Area

The Spenceville Wildlife Area is managed by the State of California and comprised of approximately 11,900 ac of blue oak – gray pine woodland, which are characteristic of the Sierra Foothills. The elevation of the area varies from 200 to 1,200 ft. The wildlife area is bordered on the west by Beale Air Force Base and on the north, south, and east by privately-owned ranches. There are numerous ponds, creeks, trails and riparian zones in the area (CDFW 2015p).

3.2.7.2.7.2 Placer County's Kirk Ranch Conservation Easement

In June 2000, Placer County adopted the Placer Legacy Program. The Placer Legacy Program is a program designed to protect and conserve open space and agricultural lands. The program was developed to implement the goals, policies and programs of the 1994 Placer County General Plan. As of September 2012, Kirk Ranch is 1 of 12 Placer Legacy County Acquisitions. The Kirk Ranch Property was acquired in summer 2007 for a total of 281 ac as use for a conservation easement and development rights (Placer County 2012).

The Kirk Ranch property is located in western Placer County near Camp Far West Reservoir. It is considered protected through the purchase of a conservation easement, thus preserving the property's long-standing history of agricultural activities and a large tract of rangeland. Property assets include dense stands of clue oak woodland, grassland/dry pasture, perennial and seasonal creeks, and scenic views. This particular easement allows for no public access (Placer County 2012).

Figure 3.2.7-3 shows the location of Cal Fish and Wildlife's Spenceville Wildlife Area and Placer County's Kirk Ranch Conservation Easement area in relation to Camp Far West Reservoir.

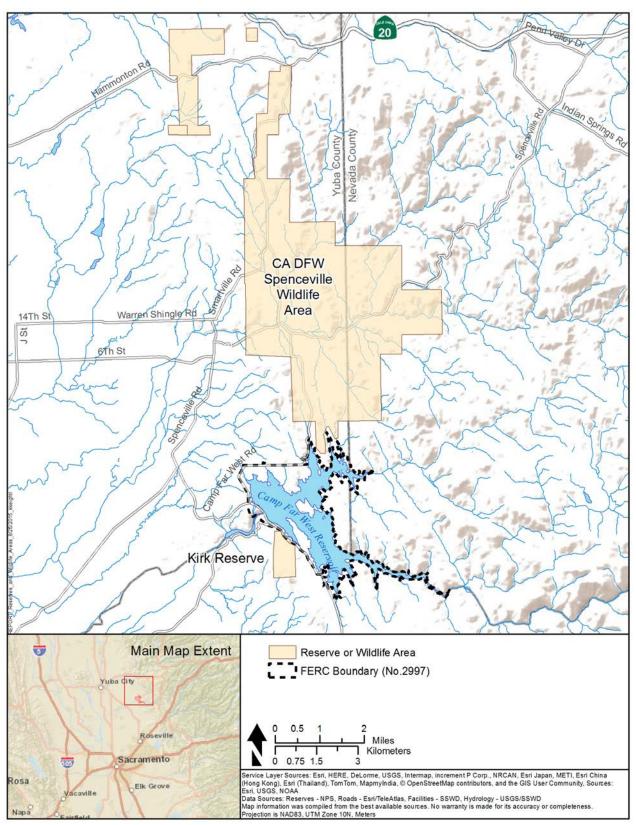


Figure 3.2.7-3. Location of Cal Fish and Wildlife's Spenceville Wildlife Area and Placer County's Kirk Ranch Conservation Easement area.

3.2.7.3 Project-Specific Land Use Information

3.2.7.3.1 Area and Land Ownership within the FERC Project Boundary

The existing FERC Project Boundary encompasses 2,863.7 ac of land. SSWD owns over 95 percent (2,710.5 ac) of the land within the boundary, and the remaining 5 percent (153.2 ac) of the land is owned by private parties – no federal of state land occurs within or adjacent to the FERC Project boundary or on the Bear River downstream of the Project.

3.2.7.3.2 Land Use Management

Table 3.2.7-6 provides a summary of the Yuba County, Placer County and Nevada County land use designations within and adjacent to the Project.

Table 3.2.7-6. Land Use Designations in Counties for Camp Far West facilities.

Camp Far West Facilities	Land Use Designation				
YUB	YUBA COUNTY				
Camp Far West Dam	Exclusive Agricultural Zone 10				
Camp Far West Reservoir	Exclusive Agricultural Zone 10				
North Recreation Area	Exclusive Agricultural Zone 10				
PLAC	PLACER COUNTY				
Camp Far West Dam	Farm Building Zone				
Camp Far West Reservoir	Farm Building Zone				
Camp Far West Powerhouse	Farm Building Zone				
Camp Far West Transmission Line/Switchyard	Farm Building Zone				
South Recreation Area	Resort				
NEVA	NEVADA COUNTY				
Camp Far West Reservoir	General Agricultural 40				

Source: Yuba County 2005, Placer County 2014b, Nevada County 2014b

3.2.7.3.3 Project-Related Land Use Permits and Easements

SSWD does not require or hold any land use permits or easements for the Project.

3.2.7.3.4 SSWD's Vehicular Access to Project Facilities for Operation and Maintenance

SSWD obtains vehicular access to Project facilities from its office in Trowbridge over State of California roads, county roads, and private roads. From Trowbridge, SSWD employees take Spenceville Road (public) to Camp Far West Road (public) to the reservoir. The NSRA is accessible by vehicle from the west and north via Camp Far West Road and Spenceville Road. A gated, paved, two-way access road, owned and maintained by SSWD, leads to the recreation area off of Camp Far West Road. The road has some cracks and patches, along with eroding edges. The SSRA is accessible by vehicle from the north and south via McCourtney Road. A gated, paved, two-way access road, owned and maintained by SSWD, leads to the recreation area. When the recreation areas are closed, the gates are closed and locked. Otherwise the gates are open to allow the public access to the recreation areas. The road has some cracks and patches, along with eroding edges. A private gated road, owned by SSWD, is taken from McCourtney Road to access the dam.

3.2.7.3.5 Project-Related Wildfires and SSWD's Policy Regarding Fire Prevention and Suppression

SSWD does not have a formal policy regarding wildfire prevention and suppression. SSWD's staff is not trained in wildfire suppression and is not required to fight fires, but instead notifies appropriate response agencies in the event of such an emergency.

SSWD adheres to local, State, and federal rules and regulations and best management practices during work. If work includes burning debris, SSWD obtains necessary permits and approvals from the appropriate agency, which may require SSWD to have specialized equipment on-site and restrict burning to specific times of the year.

3.2.7.3.5.1 Technical Approach to Wildfire Analysis

The period from 1967 to 2014 was analyzed using available fire occurrence data collected from CAL FIRE. Fire occurrences were analyzed within a 1-mi wide buffer zone of the existing FERC Project Boundary, which represents an analysis area that identifies not only those fires that may have occurred in the Project, but also those fires that present a realistic threat to the Project's infrastructure. Fire occurrence data was analyzed for the following:

- Individual ignition by size, cause, and date
- Total ignitions within fire occurrence analysis area
- Total percent ignition by cause within fire occurrence analysis area
- Total acres burned by cause within fire occurrence analysis area, where available
- Total percent acres burned by cause within fire occurrence analysis area, where available

The CAL FIRE database was used to identify, analyze, and evaluate current and historic sources of fire ignition.

3.2.7.3.5.2 Fire Occurrence Analysis Results

From 1967 through 2014, four fire ignitions were reported to occur within the Project Vicinity (Table 3.2.7-7).

Table 3.2.7-7. Fires within the Camp Far West Project Vicinity from 1967 through 2014.

Fire	Fire	Corre	Total Acres	Acres Within a
Name	Year	Cause	Burned	1-Mile Buffer Zone
Capehart	1967	Unknown / Unidentified	1,063.43	588.53
Camp Far West	1970	Unknown / Unidentified	588.70	674.92
PG&E #5	1981	Non-Project	812.49	476.33
I GCL #3	1901	Equipment Use	012.49	470.33

Table 3.2.7-7. (continued)

Fire Name	Fire Year	Cause	Total Acres Burned	Acres Within a 1 Mile Buffer Zone
Perimeter	2014	Non-Project Debris Burning	9.59	9.59
Total			2,474.21	1,749.37

GIS Source: CAL FIRE 2015

Three of the four reported fires burned acreage within the existing FERC Project Boundary (Table 3.2.7-8). The most recent wildfire, the 2014 Perimeter Fire, damaged roughly 10 ac, all outside of the existing FERC Project Boundary, and was contained on May 9, 2014.

Table 3.2.7-8. Fires within the Camp Far West existing FERC Project Boundary from 1967 through 2014.

Fire Name	Fire Year	Cause	Reported Acres Within FERC Boundary
Capehart	1967	Unknown / Unidentified	89.70607
Camp Far West	1970	Unknown / Unidentified	15.09562
PG&E #5	1981	Equipment Use	2.113054
Total			106.9

GIS Source: CAL FIRE 2015

The Capehart Fire, ignited on October 14, 1967 and damaged 89.7 ac within the existing FERC Project Boundary. The cause of the fire was unidentified. The Camp Far West Fire, ignited on June 27, 1970, damaged 15.1 ac within the existing FERC Project Boundary. This fire was also started by an unknown cause. Sparked by PG&E equipment use, the PG&E #5 Fire ignited on June 14, 1981 and damaged 2 ac within the FERC Project Boundary. Approximately 107 ac of the fire-damaged lands from these three fires were within the existing FERC Project Boundary.

Fire ignitions, shown in Figure 3.2.7-4, include all four of the reported fire ignitions that have occurred within the Project Vicinity. All four reported incidences (i.e., Capehart, Camp Far West, PG&E #5, and Perimeter) occurred within the 1-mi buffer zone. There was no record of any fire ignitions resulting from Project O&M activities or Project-related recreation.

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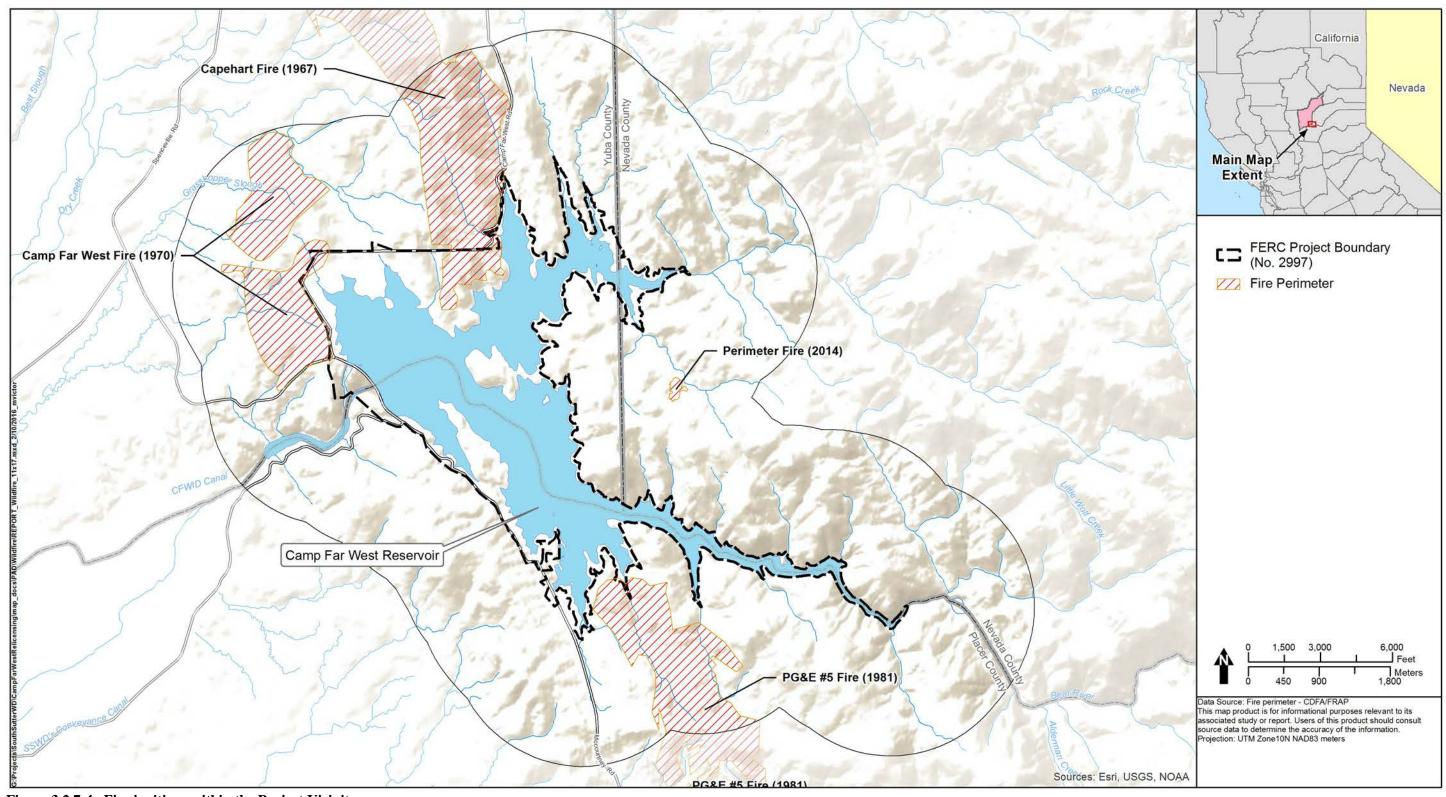


Figure 3.2.7-4. Fire ignitions within the Project Vicinity

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3.2.7.3.5.3 Fire Occurrence Trend Analysis

The Project-specific fire occurrence analysis also included a statistical trend analysis of the fire ignition/fire cause history. This analysis served to ascertain causes for historical fires and occurrence patterns that define the historic presence and impacts of fires, including project-induced fires, within the proposed Project Area. There was no record of any fire ignitions resulting from Project O&M activities or Project-related recreation. Table 3.2.7-9 below represents a statistical summary of all fire ignitions identified in the fire occurrence analysis.

Table 3.2.7-9. Fire occurrence analysis statistics by cause from 1967 through 2014.

Cause	Total Ignitions	Percent of Cause
Non-Project Debris Burning	1	25%
Unknown/Unidentified/ Undetermined	2	50%
Non-Project Equipment Use	1	25%
Total	4	100%

The Project Area remains at risk from high-intensity wildfires that typically start outside of the existing FERC Project Boundary, but can rapidly escalate to threaten Project infrastructure. These high-threat fires typically burn in heavy fuel and steep topography, and resist aggressive fire suppression efforts over prolonged periods of time, particularly at the Camp Far West Powerhouse.

3.2.7.3.6 Shoreline Buffer Zones Policy and Shoreline Management Plan

SSWD does not maintain any buffer zones along the Camp Far West Reservoir, with the exception of restricting boat access near the spillway for public safety reasons, nor has SSWD developed a formal shoreline management plan for the reservoir. As described above, there are no residential or commercial developments on the reservoir shoreline, nor do any unique areas occur that warrant the implementation of buffer zones or a shoreline management plan.

3.2.7.3.7 Public Safety

Public and employee safety are SSWD's primary concerns. Outside of the existing license, but under FERC jurisdiction, SSWD has developed and maintains one plan related to public safety for the Project – the Emergency Action Plan.

In addition, about once every 6 years, FERC performs a comprehensive Environmental and Public Use Inspection of the Project, which includes an overview of public safety. SSWD and all interested agencies participate in these inspections.

SSWD is unaware of any Project-related injuries that would be "reportable" to FERC.

3.2.7.3.8 Law Enforcement

Local law enforcement provides for all needs at the Project.

SSWD is unaware of any unique law enforcement issues that would be unusual for recreation areas similar to those at Camp Far West, or unusual for the other areas of the Project.

3.2.7.3.9 Restricted Public Access to Project Waters and Land

The Project reservoir and lands are accessible to the public with minor exceptions, such as restricted access to dams, powerhouses, and switchyards for public safety reasons. SSWD is unaware of any complaints regarding access to Project waters and lands.

3.2.7.3.10 Use of Herbicides and Pesticides

SSWD's State-certified applicators periodically apply herbicides to control vegetation on the face of Camp Far West Dam. The amount of application is in the order of 1-2 ounces.

3.3.7.3.11 Use of Cloud Seeding

SSWD does not cloud seed as part of the Project.

3.3.7.3.12 Management of Debris Collected in Reservoirs

LWM rarely collects on the surface of the reservoir. In the few instances when a particularly large obstacle is observed (i.e., a tree), SSWD removes it using its barge and disposes of the material on SSWD land. Otherwise, the rare pieces of LWM on the reservoir pass over the spillway when the reservoir spills.

3.2.7.4 Known or Potential Project Effects

Provided below is a list of known or potential Project effects on land use. The list was developed based on responses to SSWD's PAD Information Questionnaire and SSWD's current understanding of the issues.

- From Responses to SSWD's PAD Information Questionnaire:
 - Respondents to SSWD's Questionnaire did not identify any specific known or potential effects of the Project on land use.
- From SSWD:
 - ➤ Effects of Project O&M on the condition and use of roads in the Project Area.
 - ➤ Effects of Project O&M on wildlife risks and fire management.
 - ➤ Effects of Project O&M and recreation on the California National Historic Trail.

3.2.7.5 List of Attachments

There are no attachments to this section.