

### 3.3.7 Land Use

The discussion of land use is divided into four sections. The affected environment is discussed in Section 3.3.7.1, environmental effects of the Project are discussed in Section 3.3.7.2, unavoidable adverse effects are addressed in Section 3.3.7.3, and measures or studies recommended by agencies but not adopted by SSWD are discussed in Section 3.3.7.4.

Existing, relevant, and reasonably available information was sufficient to determine the potential effects of the Project on land use, and SSWD did not perform any studies related to land use.

#### 3.3.7.1 Affected Environment

This section describes existing land use conditions and is divided into the following eight areas: 1) land ownership within the FERC Project Boundary; 2) land use; 3) land management; 4) Project-related land use permits and easements; 5) SSWD's vehicular access routes to Project facilities; 6) known Project-related wildfires and SSWD's policies regarding fire prevention and suppression; 7) law enforcement in the Project Area; and 8) restricted public access to Project waters and lands.

##### 3.3.7.1.1 Land Ownership within the FERC Project Boundary

The existing FERC Project Boundary encompasses 2,863.7 ac of land. SSWD owns 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 or state land occurs within or adjacent to the FERC Project Boundary or on the Bear River downstream of the Project.

##### 3.3.7.1.2 Land Use

The Project is located in Yuba, Placer and Nevada counties, California. The land within the FERC Project Boundary in Yuba, Placer and Nevada counties is shown in Table 3.3.7-1, with the majority of Project land in Yuba County.

**Table 3.3.7-1. Summary of county land within the existing FERC Project Boundary.**

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

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

#### 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 3.3.7-2). The amount of Yuba

County land within the existing FERC Project Boundary represents 0.36 percent of the total land within the county.

**Table 3.3.7-2. 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%
<b>Total</b>	<b>33,432</b>	<b>475,723</b>	<b>100.00%</b>

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).

## 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 3.3.7-3). The amount of Placer County land within the existing FERC Project Boundary represents 0.11 percent of the total land within the county.

**Table 3.3.7-3. 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 Sutter Water District	18	949	0.10%
Private (or other)	164,367	520,712	57.42%
<b>Total</b>	<b>167,352</b>	<b>906,912</b>	<b>100.00%</b>

Source: BLM 2015, Placer County 2015

The predominant land uses in Placer County are timberland (700,785), agriculture (15,925), city (90,069), and rural residential (103,642) (Placer County, 2015a).

## Nevada County

Of the 629,097 ac of land comprising Nevada County, 66 percent is in private ownership and the remaining 34 percent is administered by public agencies (Table 3.3.7-4). The amount of Nevada County land within the existing FERC Project Boundary represents 0.04 percent of the total land within the county.

**Table 3.3.7-4. 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 Sutter Water District	2	275	0.04%
Private (or other)	64,891	413,753	65.78%
<b>Total</b>	<b>66,069</b>	<b>629,097</b>	<b>100.00%</b>

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).

### 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 3.3.7-5 shows the Zoning Ordinances for all of the land within the Project Vicinity.

**Table 3.3.7-5. Zoning Ordinance land use categories in the Project Vicinity.**

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.
F-B – Farm Building Zone	Placer	Implement the Forest Taxation Reform Act (1976) and the California Timberland Productivity Act (1982).
RES – Resort		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

### Public Land

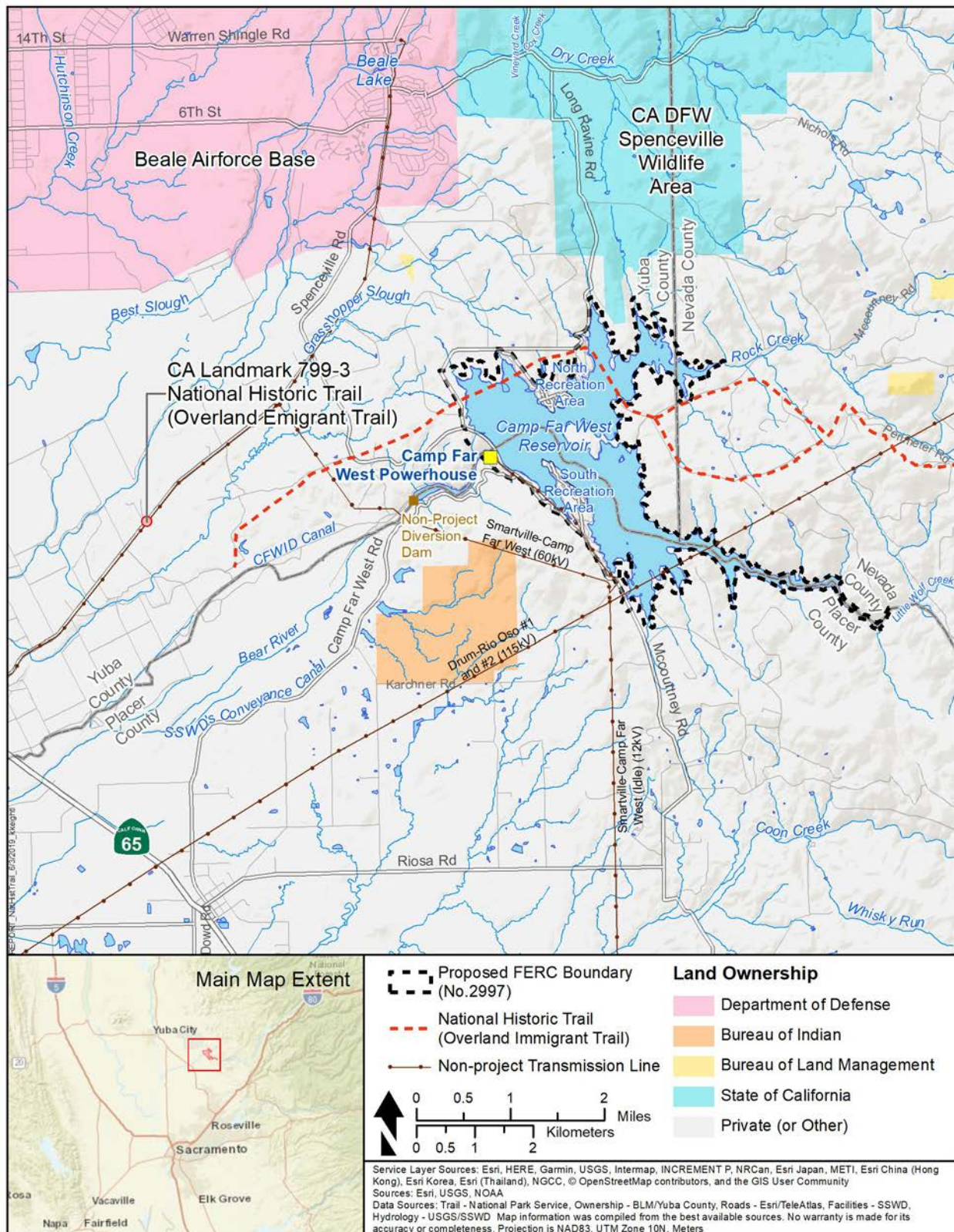
Federal and state-owned public lands are generally not subject to county jurisdiction, however, no public land occurs within the existing FERC Project Boundary.

### 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 and administered by the National Park Service 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 3.3.7-1). The entire emigrant trail covers over 5,600 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. There is no trail, *per se*, but only isolated features of the pioneer trail, graves, monuments, landmarks, historic structures and other traces along the route that have been identified to commemorate existing remnants of the trail (NPS 2015). The nearest such trail feature to the Project is California Historic Landmark No. 799-3, Overland Emigrant Trail, commemorating the Pioneer trail on Spenceville Road, which is 3.5 miles west and outside the proposed FERC Project Boundary, and located approximately 3.5 mi east of Wheatland, CA (OHP 2015), as shown in Figure 3.3.7-1. The segment of the trail within the FERC Project Boundary contains no public lands or features and is not a ‘developed’ trail with any features, but rather is a line on the map where the trail once existed, as depicted in Figure 3.3.7-1. The trail is sometimes referred to as the Overland Emigrant Trail, and as discussed in Section 3.3.10 Cultural Resources, the segment of the trail within the FERC Project Boundary is considered a non-contributing element to the larger site, which is eligible for inclusion in the National Register of Historic Places. As such, no management of the resource is required for the Project with regards to Section 106 compliance.



**Figure 3.3.7-1. California National Historic Trail in relation to the proposed FERC Project Boundary.**

## **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.

## **United States Army Corps of Engineers Jurisdictional Wetlands**

Wetlands that meet the criteria of "waters of the United States" are managed under the jurisdiction of the USACE and the United States Environmental Protection Agency (EPA) pursuant to Section 404 of the Clean Water Act (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 3.3.4.3.

## **FEMA Floodplains**

FEMA floodplains within the Project Vicinity are shown in Figure 3.3.7-2. A review of the FEMA flood maps within the existing FERC Project Boundary indicated that 2,079.6 ac or 73 percent of the total area within the boundary are within the FEMA 100-year floodplain (Data.gov 2009).



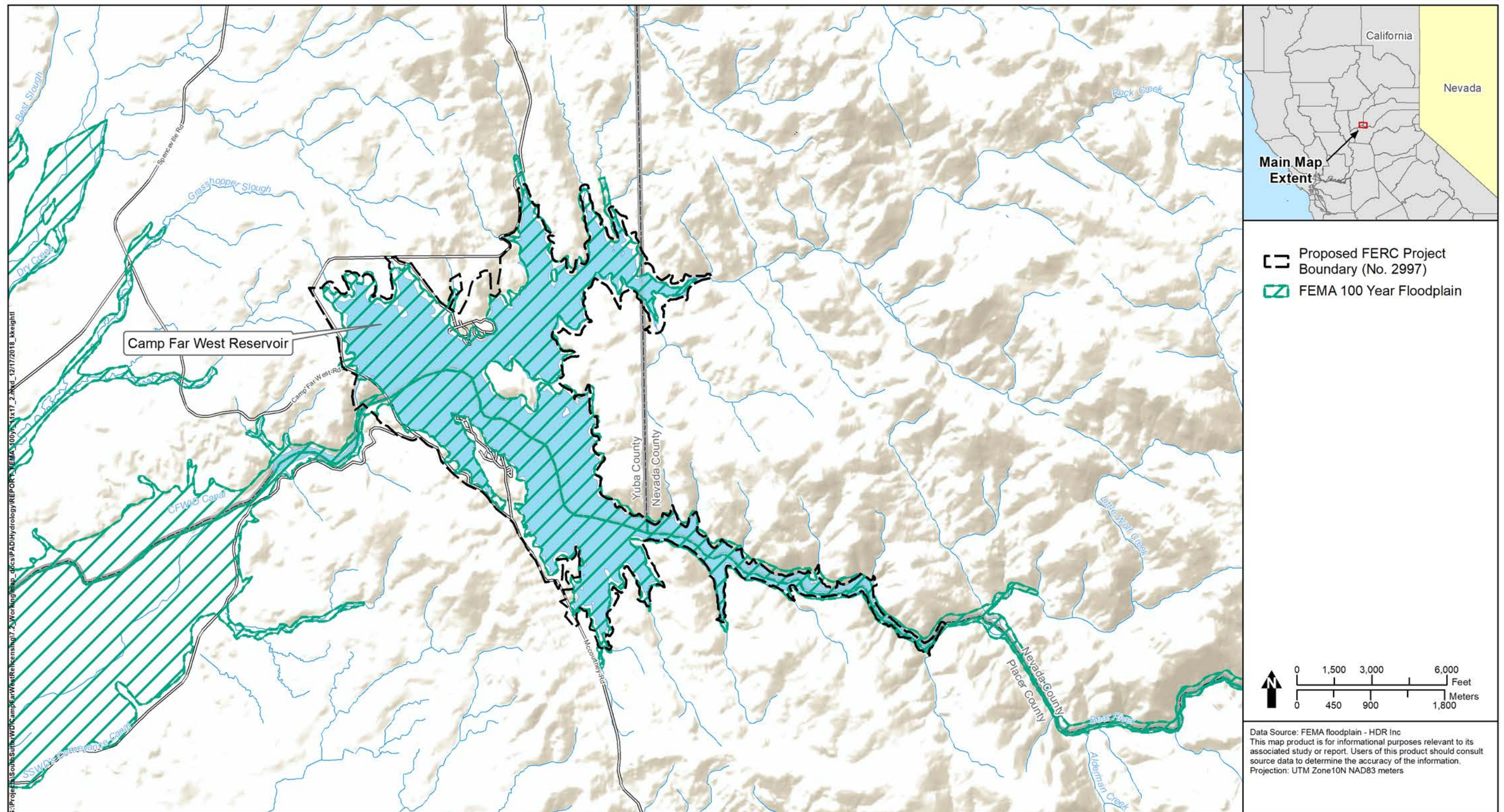


Figure 3.3.7-2. FEMA floodplains within a 1-mile wide buffer of the proposed FERC Project Boundary.



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## **Other Public Lands**

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

### Cal Fish and Wildlife's Spenceville Wildlife Area

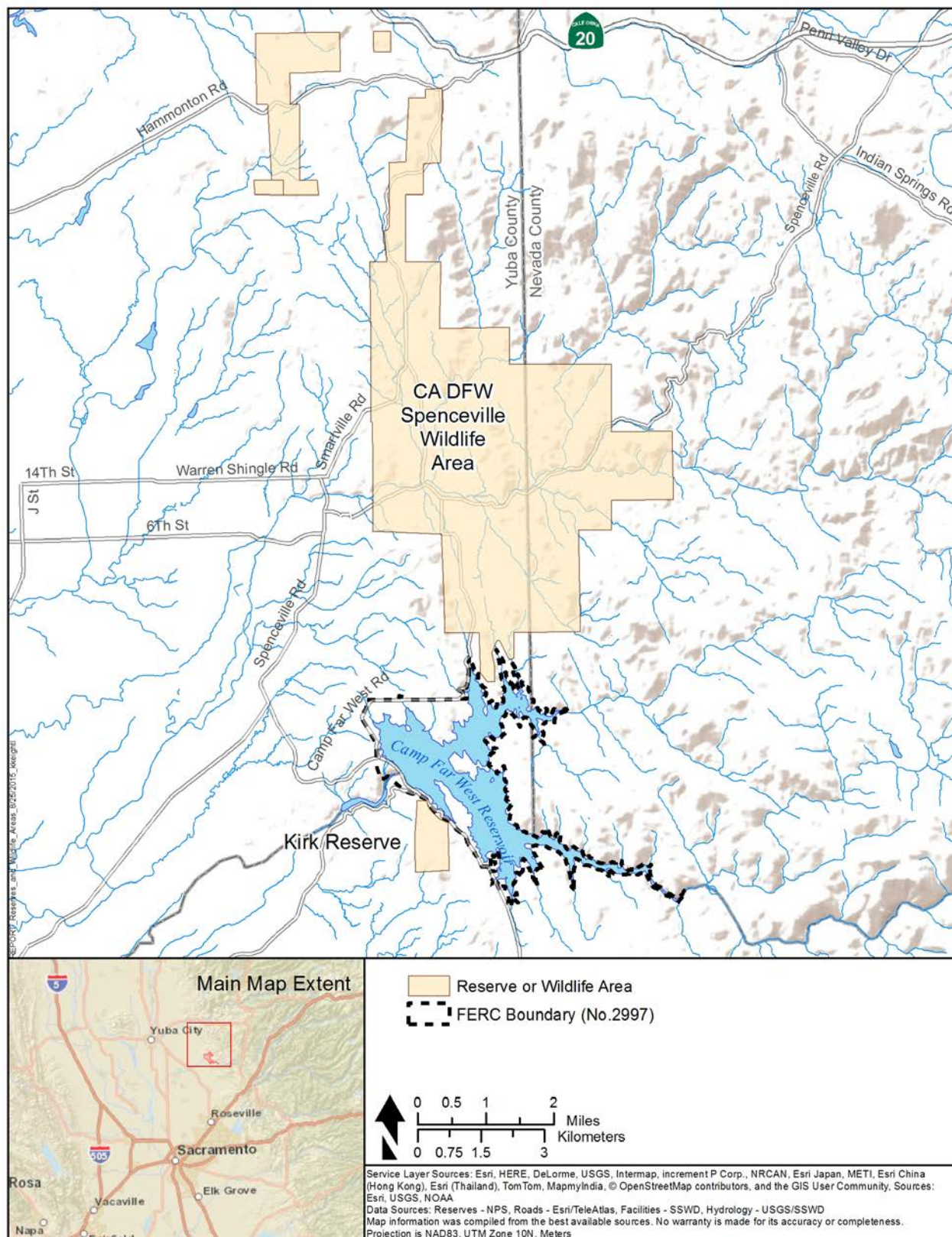
The Spenceville Wildlife Area is managed by the State of California and comprised of approximately 11,900 ac of blue oak – gray pine woodland, which are characteristic of the Sierra Foothills. The elevation of the area varies from 200 to 1,200 ft. The wildlife area is bordered on the west by Beale Air 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 2015).

### 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 blue oak woodland, grassland/dry pasture, perennial and seasonal creeks, and scenic views. This particular easement allows for no public access (Placer County 2012).

Figure 3.3.7-3 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 3.3.7-3. Location of Cal Fish and Wildlife’s Spenceville Wildlife Area and Placer County’s Kirk Ranch Conservation Easement area.**

### 3.3.7.1.3 Land Management

Land use management for each county in which the Project occurs is summarized below. No federal or state land occurs within or adjacent to the FERC Project boundary or on the Bear River downstream of the Project. With respect to county land designations, the county designates land within its boundaries to be used in ways that are consistent with the resources found in that area.

Table 3.3.7-6 provides a summary of the Yuba County, Placer County and Nevada County land use designations within and adjacent to the Project.

**Table 3.3.7-6. Land Use Designations in counties for Camp Far West facilities.**

Camp Far West Facilities	Land Use Designation
<b>YUBA COUNTY</b>	
Camp Far West Dam	Exclusive Agricultural Zone 10
Camp Far West Reservoir	Exclusive Agricultural Zone 10
North Recreation Area	Exclusive Agricultural Zone 10
<b>PLACER COUNTY</b>	
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
<b>NEVADA COUNTY</b>	
Camp Far West Reservoir	General Agricultural 40

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

### 3.3.7.1.4 Project-Related Land Use Permits and Easements

SSWD does not require or hold any land use permits or easements for the Project, other than from the few private landowners within the Project Boundary.

### 3.3.7.1.5 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. SSWD employees also use Camp Far West Road, McCourtney Road (public), and a short private access road (gated and locked) to access the powerhouse and dam.

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 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.



### 3.3.7.1.6 Known 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.

### Technical Approach to Wildfire Analysis

The period from 1967 to 2016 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 ac burned by cause within fire occurrence analysis area, where available
- Total percent ac 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.

### Fire Occurrence Analysis Results

From 1967 through 2016, four fire ignitions were reported to occur within the Project Vicinity (Table 3.3.7-7). 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 3.3.7-7. Fires within the Camp Far West Project Vicinity from 1967 through 2016.**

Fire Name	Fire Year	Cause	Total Acres Burned	Acres Within a 1-Mile Buffer Zone
Capehart	1967	Unknown / Unidentified	1,063.4	588.5
Camp Far West	1970	Unknown / Unidentified	588.7	674.9
PG&E #5	1981	Non-Project Equipment Use	812.5	476.3
Perimeter	2014	Non-Project Debris Burning	9.6	9.6
<b>Total</b>	--	--	<b>2,474.2</b>	<b>1,749.3</b>

GIS Source: CAL FIRE 2017

Three of the four reported fires burned acreage within the existing FERC Project Boundary (Table 3.3.7-8). The Capehart Fire, ignited on October 14, 1967, 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. The PG&E #5 Fire, ignited on June 14, 1981, damaged 2.1 ac within the FERC Project Boundary. The fire was sparked by PG&E equipment use. Approximately 107 ac of the fire-damaged lands from these three fires were within the existing FERC Project Boundary.

**Table 3.3.7-8. Fires within the Camp Far West existing FERC Project Boundary from 1967 through 2016.**

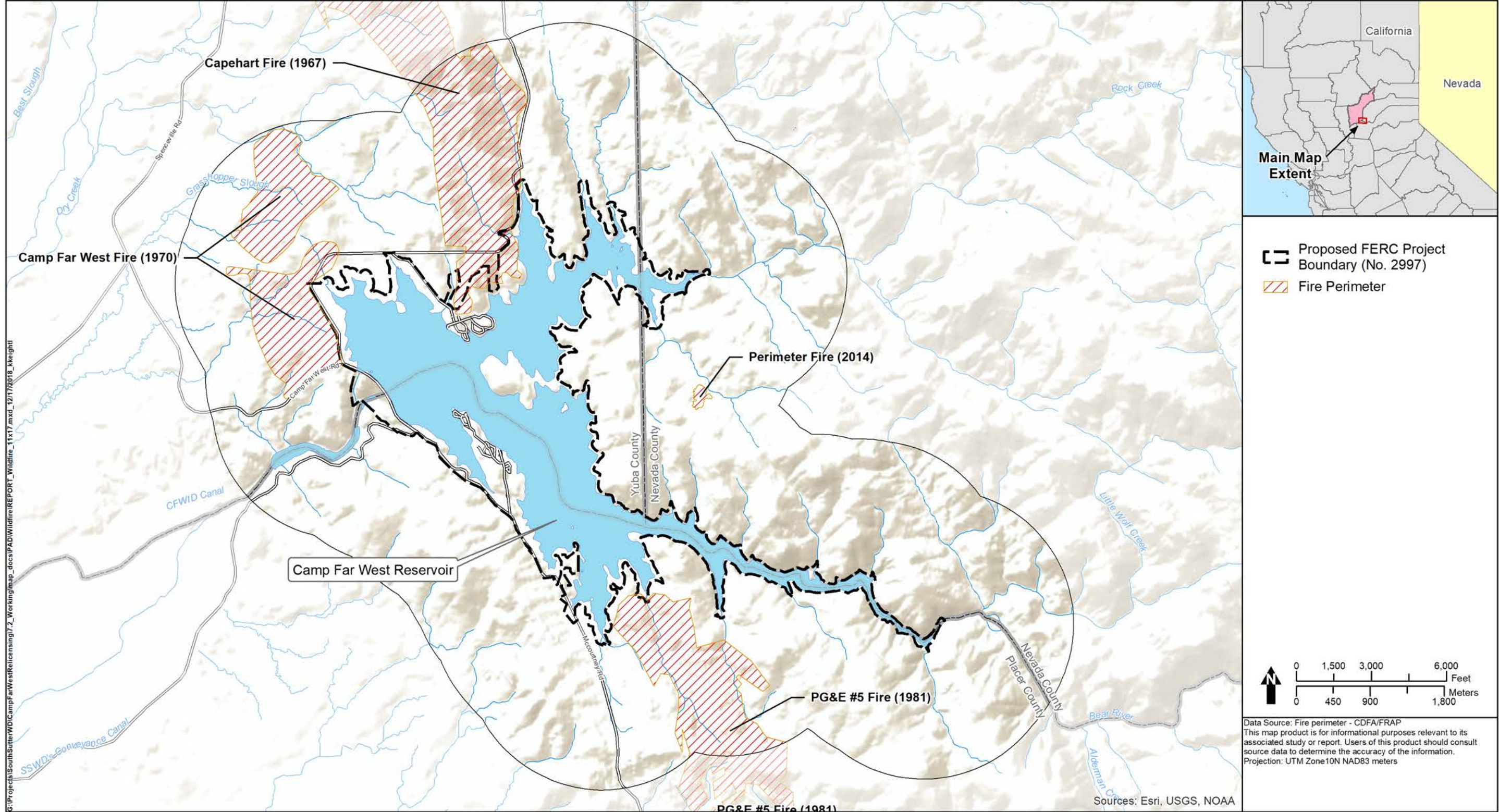
Fire Name	Fire Year	Cause	Reported Acres Within FERC Boundary
Capehart	1967	Unknown / Unidentified	89.7
Camp Far West	1970	Unknown / Unidentified	15.1
PG&E #5	1981	Equipment Use	2.1
Perimeter	2014	Non-Project Debris Burning	0.0
<b>Total</b>	<b>--</b>	<b>--</b>	<b>106.9</b>

GIS Source: CAL FIRE 2017

Fire ignitions, shown in Figure 3.3.7-4, 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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## 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 3.3.7-9 below represents a statistical summary of all fire ignitions identified in the fire occurrence analysis.

**Table 3.3.7-9. 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%
<b>Total</b>	<b>4</b>	<b>100%</b>

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.

### 3.3.7.1.7 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 Reservoir, or unusual for the other areas of the Project.

### 3.3.7.1.8 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.

## 3.3.7.2 Environmental Effects

This section discusses the potential environmental effects of SSWD's proposed Project, as described in Section 2.2 of this Exhibit E. As part of the Project relicensing, SSWD proposes a Pool Raise of 5 feet, addition of an existing road as a Primary Project Road for access to the Camp Far West Powerhouse, modifications of existing recreation facilities, and modification of the existing Project boundary. SSWD proposes to include in the new license one measure related to land use. Measure RR1 would require SSWD to implement the Recreation Facilities Plan.

To mitigate effects to land use resources during construction of the Pool Raise, SSWD will obtain and implement all permits required for construction. The effects to land use during construction will be temporary as staging areas and other construction-related areas will be returned to pre-construction form.



SSWD's proposed Project includes the addition of an existing road as a Primary Project Road for access to the Camp Far West Powerhouse. The existing powerhouse access road is a paved road, approximately 0.25 mi long, located entirely on SSWD-owned land, is within both the existing and proposed Project Boundary, and begins from the locked gate at Camp Far West Road and terminating at the Camp Far West Powerhouse and Switchyard. The road is closed to the public due to safety concerns, has been maintained solely by SSWD for Project purposes since the existing Project was constructed, and SSWD does not propose any changes to these maintenance activities. The road area was included in the study area for SSWD's relicensing cultural and botanical studies. There is some potential for erosion related to surface runoff from the roadway during storm events, however, such effects are minimal given the well vegetated, gently sloping terrain surrounding this well-maintained SSWD road. In addition, periodic inspection by SSWD during trips to and from the powerhouse, especially during and after major storm events, will identify the need for any maintenance to drainage controls or pavement. SSWD's proposal to include the road as a Primary Project Road (i.e., Project facility) in the new license simply corrects an oversight in the existing license. The addition of this existing paved road as a Primary Project Road for use by SSWD staff for O&M access to the powerhouse will have a less-than-significant effect on land use resources.

As described in Exhibit G, SSWD proposes to modify the existing FERC Project Boundary. This modification would entail reducing the boundary in certain locations and expanding it in other locations. While most of the boundary changes would affect SSWD-owned lands, some private property owners would be affected. SSWD has notified, by certified mail, property owners on the additional lands to be encompassed by the Project. No governmental agencies, tribal lands, or subdivisions would be interested in or affected by the boundary expansion. The private property owners that would be affected are listed in Table 3.3.7-10. All are in Yuba County, CA.

**Table 3.3.7-10. List of property owners who would have 0.5 acres or more of land impacted by SSWD's proposed expansion of the FERC Project boundary.**

Assessor's Parcel Number	Acres Added to Project Boundary	Owner's Name
5403009000	0.7	SPLINTER MICHAEL TRSTE
5403010000	1.1	SPLINTER MICHAEL TRSTE
5403015000	2.6	SPLINTER MICHAEL TRSTE
5403013000	0.9	JENSON PETE & STACY
018020015000	0.7	LASSAGA ALBERT J ET AL
026010003000	1.4	PINEBROOK VILLAGE L P

SSWD's proposed Project does not include any significant changes in operations other than management of the additional 5 ft of reservoir pool following completion of the Pool Raise. Maintenance of proposed Project facilities on private lands, 95 percent of which are owned by SSWD, would have a less-than-significant effect. SSWD does not propose significant changes to existing Project facilities or how they are maintained and operated.

SSWD's Proposed Condition RR1 will implement the Recreation Facilities Plan that includes relocation, re-routing or re-alignment of recreation features that will be inundated by the Pool Raise, and maintenance and management of Project recreation facilities. The majority of

construction at recreation facilities would occur outside the peak recreation season (i.e., after the Labor Day holiday weekend and before the Memorial Day holiday weekend).

Over the past 15 years, SSWD's existing Project has not had a significant effect on fire occurrence. SSWD does not propose significant changes to the facilities or how they are maintained and operated, so the proposed Project would not increase the risk of Project-related fires.

### **3.3.7.3 Unavoidable Adverse Effects**

The proposed Project would have both short- and long-term minor impacts on land use resources that are unavoidable. Project facilities will continue to be a long-term, committed land use. Their initial construction represented a major, short-term impact to land use resources, but as most of the facilities have been in place for many years, their impact is now relatively minor, and part of the baseline condition. The proposed Pool Raise will have a minor, short-term effect in respect to construction, and will result in seasonal inundation of an additional 160.1 ac of land.

Project O&M activities and associated road use will continue to have a long-term, minor effect on fire risk. In the past 15 years, no Project O&M or road-use activities have caused a fire. Use of roads for Project purposes will continue to have a minor, short-term effect on the road facilities themselves (e.g., road surfaces and culverts), and associated resource areas.

### **3.3.7.4 Measures or Studies Recommended by Agencies and Not Adopted by SSWD**

As described in Appendix E4 in this Exhibit E, USFWS, NMFS, CDFW, SWRCB and FWN each submitted written comments on SSWD's December 29, 2018, DLA. None of the written comments recommended land use-specific PM&E measures or studies. Recommendations regarding SSWD's Proposed Condition RR1 are addressed in Section 3.3.6.4 in Exhibit E of this FLA.

### **3.3.7.5 List of Attachments**

None.

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