JUNE 2023

EL DORADO IRRIGATION DISTRICT

Watershed Sanitary Survey Update 2022

JENKINSON LAKE AND MIDDLE FORK COSUMNES RIVER WATERSHEDS

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science | policy | solutions

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF APPENDICES

1 INTRODUCTION

To meet the requirements of Title 22 of the California Code of Regulations (CCR) Section 64446(c), the El Dorado Irrigation District (District/EID) completed the original Watershed Sanitary Survey (WSS) in August 1996 with a revision to the original WSS in October 1996 (considered the final version of the 1996 WSS) and performed a comprehensive update in 2001. The WSS describes the watersheds for Reservoir A and Outingdale Water Treatment Plants (WTPs): the Jenkinson Lake and Middle Fork Cosumnes River watersheds, respectively. El Dorado County and the two applicable watersheds included in this sanitary survey are shown in **Figure 1**.

The District filed statements of "no change" with the California State Water Resources Control Board (SWRCB) in lieu of updates between 2001 and 2013, as there were no significant changes in the watersheds. HydroScience Engineers completed an update of the WSS in 2013 and again in 2018.

This 2022 WSS update is intended to build upon the existing watershed surveys and not repeat information provided in previous versions. The 2022 WSS update covers the years 2018 through 2022. This report provides updated data and information about the watersheds, as available and applicable. The previous WSS, updates to the WSS, and documents included with the WSS/updates are incorporated by reference and described below.

1.1 PREVIOUS STUDIES/EXISTING DOCUMENTS

The following list provides a brief description of the reports that were previously completed. These documents and the attachments are incorporated by reference.

- **Sanitary Watershed Survey for Reservoir One, Reservoir A, Outingdale Water Treatment Plants (October 1996, Revision 1):** This document served as the original WSS developed to meet the Title 22 requirement as detailed above. The document was a comprehensive survey of the three watersheds including the Jenkinson Lake Watershed, the Middle Fork Cosumnes River Watershed, and the El Dorado Irrigation District Canal Watershed. The Watershed Survey was conducted in accordance with the California Code of Regulations Title 22, Section 64665 and followed the suggested format detailed in the 1993 Watershed Survey Guidance Manual prepared by the American Water Works Association, California-Nevada Section.
- **Watershed Sanitary Survey Update and Source Water Assessment for Reservoir A, Reservoir One, and Outingdale Water Treatment Plants (February 2001):** This document served as the five year update to the original WSS completed in 1996 and covered the Jenkinson Lake Watershed, the Middle Fork Cosumnes River Watershed, and the El Dorado Irrigation District Canal Watershed. This document was not intended to duplicate the data provided in the 1996 WSS and instead provided new and updated data as well as a vulnerability analysis of the three watersheds in accordance with the Source Water Assessment Program.

- **Watershed Sanitary Survey Update 2013, Jenkinson Lake and Middle Fork Cosumnes River Watersheds (February 2014):** This document served as the update to the WSS completed in 2001 and covered the Jenkinson Lake Watershed and the Middle Fork Cosumnes River Watershed. This document provided updated data and information through 2012.
- **Watershed Sanitary Survey Update 2018, Jenkinson Lake and Middle Fork Cosumnes River Watersheds (July 2018):** Similar to the 2013 update, this document served as the five-year update to the 2013 WSS. This document provided updated data and information from 2013 through 2017.

1.2 REGULATIONS

Per SWRCB Title 22 Regulations, the District is required to provide a WSS Update at least every five years. The regulatory requirement is detailed in the California Code of Regulations, Title 22, Section 64665, as follows:

Article 7. Sanitary Surveys

§64665. Watershed Requirements.

a) All suppliers shall have a sanitary survey of their watershed(s) completed at least every five years. The first survey shall be completed by January 1, 1996.

b) A report of the survey shall be submitted to the Department not later than 60 days following completion of the survey.

c) The survey and report shall include physical and hydrogeological description of the watershed, a summary of source water quality monitoring data, a description of activities and sources of contamination, a description of any significant changes that have occurred since the last survey which could affect the quality of the source water, a description of watershed control and management practices, an evaluation of the system's ability to meet requirements of this chapter, and recommendations for corrective actions.

§64665.5. Additional Requirements.

A supplier shall comply with the sanitary survey requirements specified in section 64650(f)(1).

§64650. General Requirements.

(f) A supplier shall comply with the following provisions of 40 Code of Federal Regulation as they appear in the:

1. Long Term 2 Enhanced Surface Water Treatment Rule published in 71 Federal Register 654 (January 5, 2006), which is incorporated by reference.

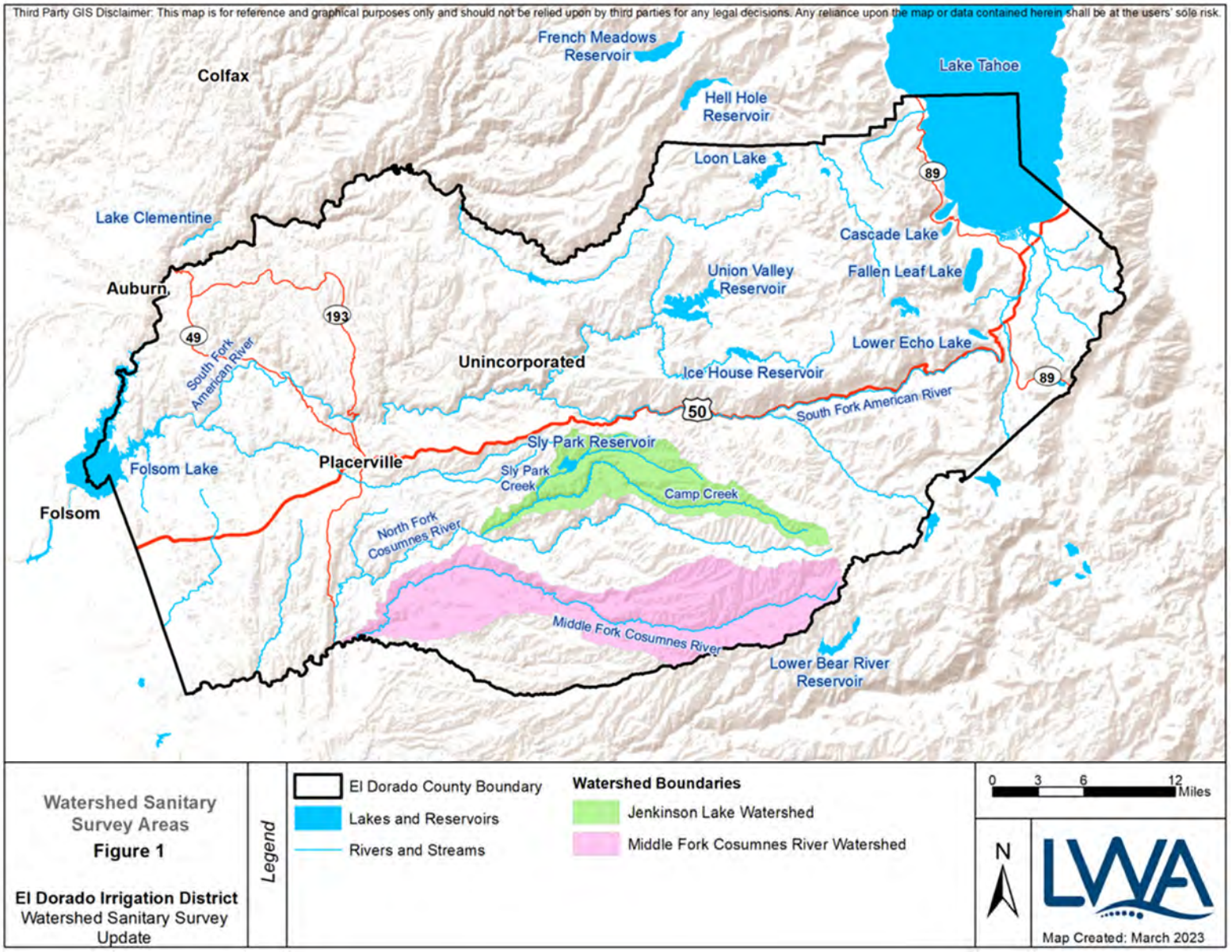

Figure 1. El Dorado Irrigation District Watershed Sanitary Survey Areas[5]

2 DESCRIPTION OF WATERSHEDS

The Jenkinson Lake and Middle Fork Cosumnes River watersheds are largely unchanged from previous WSS descriptions. Both watersheds are located within El Dorado County and share many of the same natural features and characteristics such as common geology, vegetation, habitat, and wildlife. However, they have some individual characteristics, such as topography, soils, and hydrology. Land use and ownership also varies between the two watersheds. Individual and common characteristics are discussed in further detail in the following sections.

2.1 NATURAL SETTING AND CHARACTERISTICS OF EACH WATERSHED

A brief description of the individual watersheds and the natural characteristics specific to each watershed is provided below. These descriptions are based on the information provided in the 1996 WSS, as well as updated information, as available.

2.1.1 Jenkinson Lake Watershed

Jenkinson Lake is an artificial reservoir bounded by two dams. Construction began in 1951 by the U.S. Bureau of Reclamation. By 1954, the reservoir began to store water and has up to 41,000 acre feet of storage capacity. The Sly Park Dam is 190 feet high and 760 feet long. The Sly Park Saddle Dam is 130 feet high and 600 feet long. Hazel Creek and Sly Park Creek flow into the upper end of the lake. Lake water flows from the two dams into Sly Park Creek and subsequently to Camp Creek further downstream. There is also a 2,855-foot diversion tunnel, seven feet in diameter from Camp Creek to upper Sly Park Creek.

The Reservoir A Water Treatment Plant is supplied from Sly Park Dam through a 48-inch diameter pipeline that extends for about two miles to the plant. The pipeline has a single intake 40 feet from the bottom of Jenkinson Lake. Flow in the pipeline is regulated by hydraulically operated slide gates located in an all-weather building adjacent to the dam. Intake protection facilities include fencing and log boom that surrounds the dam and protects the intake pipe. The treatment plant is an approved alternative providing direct filtration and disinfection, with a flow typically ranging from 8 MGD to 56 MGD.

The watershed area includes Sly Park Creek and the Cold Canyon tributary of Sly Park Creek as well as Hazel Creek, which both drain naturally to Jenkinson Lake. There are also a number of seasonal drainages into the Lake. The watershed area is approximately 16.5 square miles. The Jenkinson Lake watershed area is delineated in **Figure 2**.

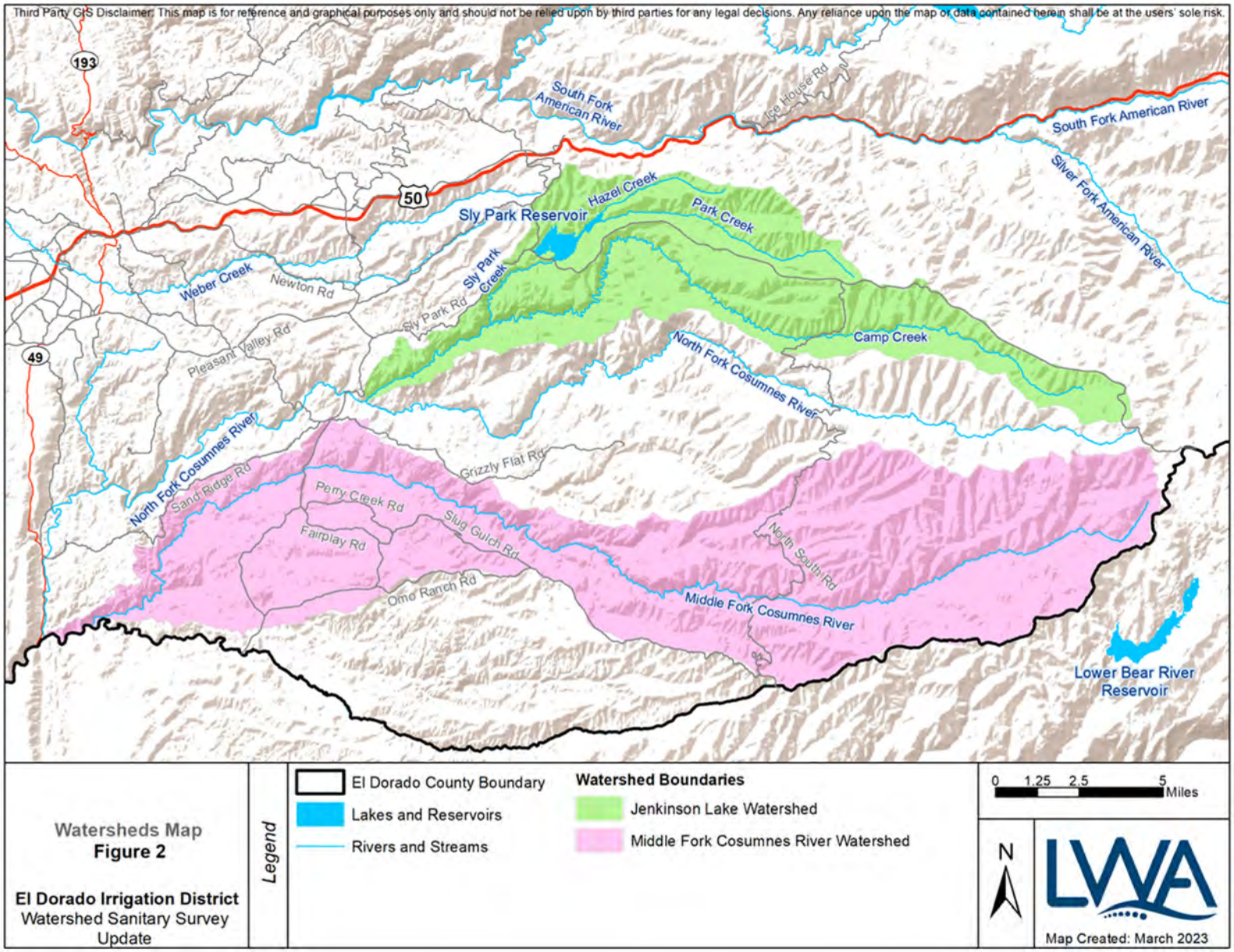

Figure 2. El Dorado Irrigation District Watersheds Map[5]

2.1.1.1 Topography

The Jenkinson Lake Watershed ranges in elevation from approximately 3,400 feet at the Lake to 5,600 feet at the upper end of Cold Canyon. The watershed is encompassed by the southern slope of the Iron Mountain Ridge and the northern slope of the Baltic Ridge. The slopes adjacent to Sly Park Creek and North Sly Park Creek are relatively steep and rocky outcrops, while the majority of the watershed has mild to moderate slopes. The minimum and maximum elevations of the watershed tributaries are provided in **Table 1**.

Table 1. Elevation of Tributaries to Jenkinson Lake[21]

Creek Name	Minimum Elevation (feet)	Maximum Elevation (feet)
Sly Park Creek	3,600	5,400
North Sly Park Creek	3,920	5,120
Hazel Creek	3,560	4,560

Source: EID, 1996 Watershed Sanitary Survey

2.1.1.2 Soils

Updated soils information was collected from the USDA Natural Resources Conservation Service through the Web Soil Survey – National Cooperative Soil Survey. Recently prepared surveys in the area include the El Dorado National Forest Area Version 14 (September 1, 2022) and the El Dorado National Forest Area Version 15 (September 1, 2022) surveys.

The most common soil series in the region include Cohasset, Josephine, Mariposa, McCarthy and McCarthy-Ledmount, Chaix-Pilliken, Jocal, and Waca. All of these soils occur in the region in quantities greater than 2% by area. The details of the most recent soil surveys for the area of interest are included in **Appendix A**.

In general, these soils have a relatively high water-holding capacity due to greater soil depth (40 to 60 inches) and finer textured subsoils. The Josephine and Mariposa series tend to be shallower (15 to 30 inches). The most common soil types found at elevations above 4,500 feet are the McCarthy and Ledmount series, developed on volcanic rocks. These soils are moderately deep (24 to 36 inches) with coarse texture throughout, except for the Ledmount series, which tends to be shallow (less than 20 inches).

2.1.1.3 Hydrology

The District monitors the flow operations at Jenkinson Lake on a daily basis. Surface water elevation, storage volume, releases, spills, diversions, evaporation, and precipitation are monitored and documented. A summary of precipitation at the reservoir from 2018 through 2022 is shown in **Table 2**. The annual precipitation, depicted to show the wettest and driest quarters on an annual basis between 2018 and 2022, is shown in **Figure 3**.

Table 2. Monthly Precipitation at Jenkinson Lake (2018-2022)[20]

Month	2018 (inches)	2019 (inches)	2020 (inches)	2021 (inches)	2022 (inches)
January	6.8	10	3.8	7.16	0.64
February	1.04	21.08	0.04	4.8	1.08
March	16.32	11.08	10.24	4.48	1.32
April	5.16	3.76	4.2	0.6	8.44
May	1.16	8.68	3.72	0	0.52
June	0.12	0.24	0.08	0	1.08
July	0	0	0	0	0
August	0	0	0	0	0
September	0	1.2	0	0.32	1.24
October	0.4	0.12	0	12.88	0
November	6.68	2.04	3.64	1.68	5.28
December	4.2	8.4	3.92	13.24	22.68
Annual Total	**41.88**	**66.6**	**29.64**	**45.16**	**42.28**

Source: EID, https://cdec.water.ca.gov/dynamicapp/staMeta?station_id=SLP, USBR Weather Station at Sly Park

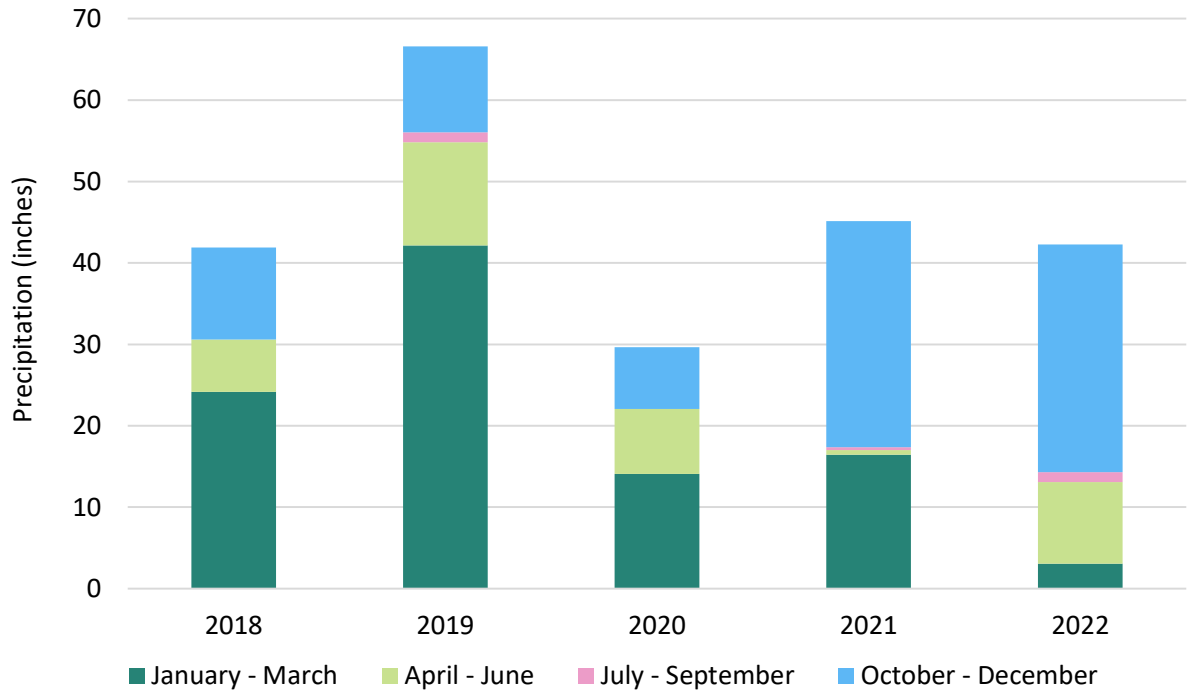

Figure 3. Precipitation at Jenkinson Lake, by Quarter (2018-2022)[20]

Precipitation at Jenkinson Lake occurs predominantly from November through April with the driest months from May through October. In the past five years, 2020 was the driest year and 2019 was the wettest.

Camp Creek is tributary to the Middle Fork Cosumnes River; however, a diversion tunnel from Camp Creek to Sly Park Creek is used to divert flow in order to supplement the reservoir. The monthly diversion data collected by the District is shown in **Table 3**. Annual diversions from Camp Creek to Sly Park Creek are shown by quarter in **Figure 4**. Between 2018-2020, the annual diversion volume followed the pattern of precipitation and peaked in 2019. Although not the driest year, diversion volume was lowest in 2021. Diversions occur primarily in the wetter months when streamflow is expected to be higher due to rainfall and snowmelt, from December through June, as shown in **Figure 5**.

Table 3. Monthly Camp Creek Water Diversions to Jenkinson Lake (2018-2022)[15]

Month	2018 (acre-feet)	2019 (acre-feet)	2020 (acre-feet)	2021 (acre-feet)	2022 (acre-feet)
January	750.1	1966.6	475.9	103.8	1858.6
February	464.1	3039.6	406.1	514.9	1793.9
March	3495.9	283.1	450.8	890.0	1088.1
April	912.6	907.3	2709.7	1007.1	360.0
May	675.6	1461.2	1245.8	451.0	424.8
June	273.6	1141.9	359.8	25.7	418.0
July	74.6	271.1	60.5	0.0	188.0
August	2.9	120.0	0.2	0.0	112.5
September	4.4	86.7	0.0	0.0	132.1
October	0.0	108.2	0.0	45.6	128.1
November	85.8	94.3	50.5	481.8	310.4
December	230.4	800.1	68.8	1884.5	3149
Annual Total	**6,970**	**10,280**	**5,828**	**5,404**	**9,963**

Source: EID, Sly Park Reservoir (Jenkinson Lake) Daily Operation Summaries by Month from 2018 through 2022.

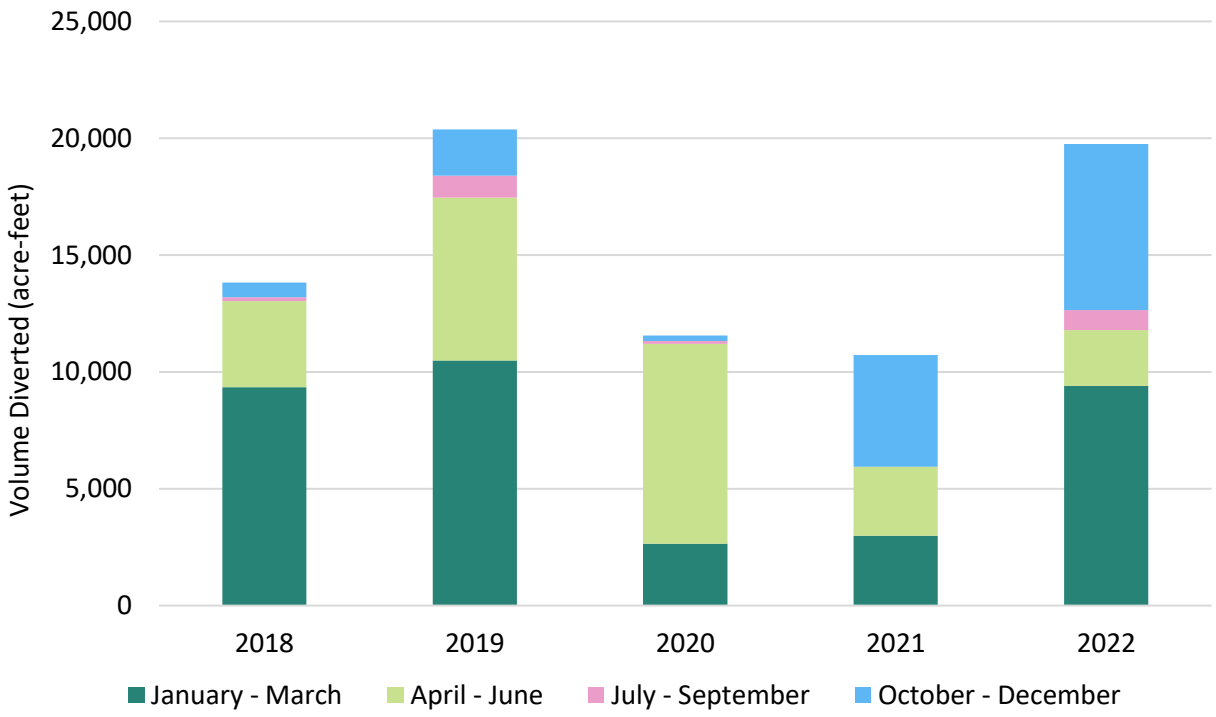

Figure 4. Annual Camp Creek Water Diversions to Jenkinson Lake, by Quarter (2018-2022)[15]

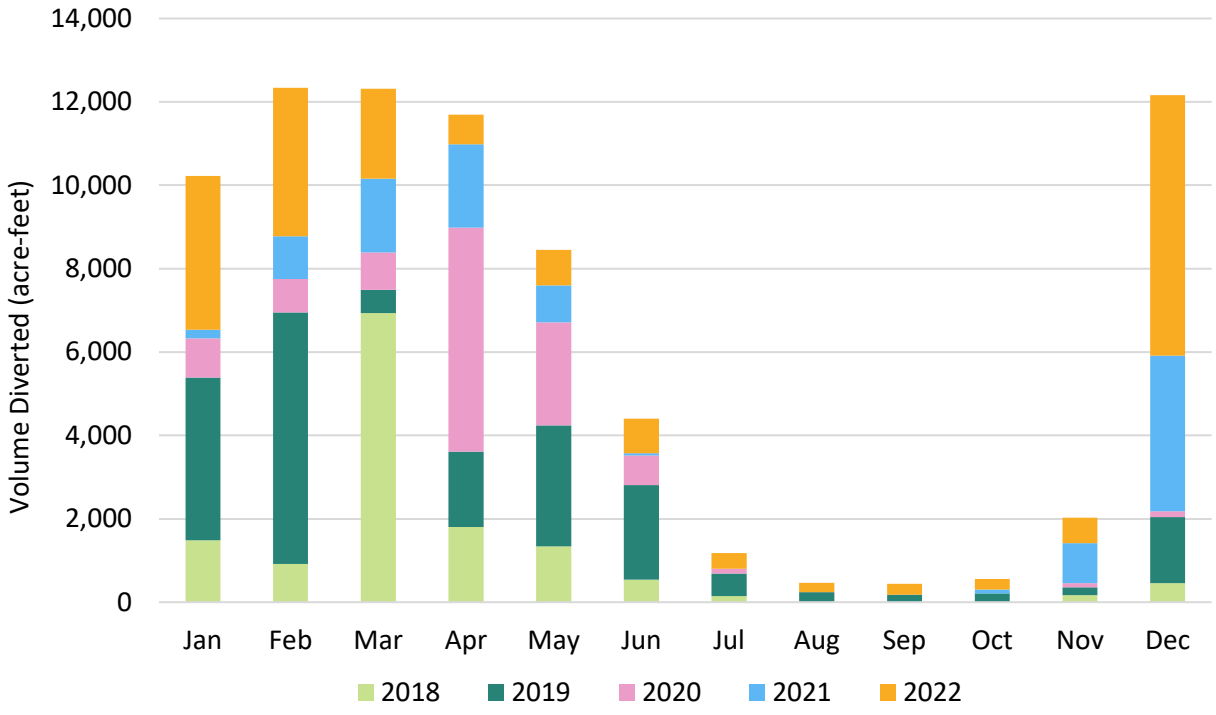

Figure 5. Camp Creek Water Diversions to Jenkinson Lake, by Month (2018-2022)[15]

2.1.2 Middle Fork Cosumnes River Watershed

The Middle Fork Cosumnes River descends from the Anderson Canyon in the east to the confluence with the South Fork Cosumnes River. The Outingdale WTP is located along the Middle Fork Cosumnes River in the community of Outingdale, east of the point of confluence, upstream of where Spanish Creek meets the Middle Fork Cosumnes River.

With the Outingdale WTP located upstream of the South Fork Cosumnes River point of confluence, the watershed area for the WTP is smaller, and contained within the Middle Fork Cosumnes River watershed up to the vicinity of the WTP intake structure. The Middle Fork Cosumnes River watershed area is shown in **Figure 2**.

2.1.2.1 Topography

The Middle Fork Cosumnes River Watershed ranges in elevation from approximately 1,600 feet in the North Fork Cosumnes River Canyon to 7,200 feet at the upper end of the Anderson Ridge. The watershed is encompassed by the southern slope of Plummer Ridge; all of Cat Creek Ridge, Big Mountain Ridge, and Gold Note Ridge; and the northern slopes of Peddlar Hill and Barney Ridge. The slopes adjacent to the river and some of the creeks can be relatively steep with rocky outcrops, while the majority of the watershed has mild to moderate slopes. The minimum and maximum elevations of the watershed tributaries are shown in **Table 4**.

Table 4. Elevation of Tributaries to the Middle Fork Cosumnes River[21]

Creek Name	Minimum Elevation (feet)	Maximum Elevation (feet)
Dogtown Creek	2,880	5,280
Sopiago Creek	2,720	4,320
Middle Dry Creek	3,760	5,200
McKinney Creek	4,400	5,600
Shingle Mill Creek	4,320	6,000
Prothro Creek	3,560	6,160
Mehrten Creek	5,040	5,920
Peddlar Creek	5,280	6,400

Source: EID, 1996 Watershed Sanitary Survey

2.1.2.2 Soils

Updated soils information was collected from the USDA Natural Resources Conservation Service through the Web Soil Survey – National Cooperative Soil Survey. Recently prepared surveys in the area include the El Dorado National Forest Area Version 15 (September 1, 2022), El Dorado National Forest Area Version 14 (September 1, 2022), and the Amador Area Version 15 (September 1, 2022) surveys.

The most common soil series in the region include Cohasset-McCarthy, Holland, Mariposa, McCarthy and McCarthy-Ledmount, Chaix and Chaix-Pilliken, Waca and Waca-Windy, and Lithic Xerumbrepts. All of these soils occur in the region in quantities greater than 2% by area. The details of the most recent soil surveys for the area of interest are included in **Appendix A**.

In general, these soils have a relatively high water-holding capacity due to greater soil depth (40 to 60 inches) and finer textured subsoils. The Josephine and Mariposa series tend to be shallower (15 to 30 inches). The most common soil types found at elevations above 4,500 feet are the McCarthy and Ledmount series, developed on volcanic rocks and Chaix and Pilliken, developed on granitic rocks. These soils are moderately deep (24 to 36 inches) with coarse texture throughout, except for the Ledmount series, which tends to be shallow (less than 20 inches).

2.1.2.3 Hydrology

Monthly precipitation data collected at the Fiddletown Dexter Ranch Station (Western Regional Climate Center, Station Number 043038-5) is provided in **Table 5**. The Fiddletown Dexter Ranch Station is located just minutes southeast of Aukum and the Middle Fork Cosumnes River Watershed. It is the nearest active weather station that could be located at the time of this WSS. No active station could be located within the watershed.

Table 5. Precipitation Near Middle Fork Cosumnes River Watershed (2018-2022)[28]

Month	2018 (inches)	2019 (inches)	2020 (inches)	2021 (inches)	2022 (inches)
January	5.16	7.95	2.93	7.95	0.42
February	3.14	14.23	0.03	2.90	0.32
March	13.06	8.21	11.84	3.55	0.13[a]
April	3.82	2.37	3.61	0.20	2.15
May	0.42	7.42	3.29	0.04	0.00
June	0.00	0.00	0.02	0.00	0.49
July	0.00	0.00	0.00	0.00	0.00
August	0.00	0.00	0.00	0.00	0.00
September	0.00	1.79	0.00	0.36	0.97
October	0.39	0.02	0.00	9.76	0.00
November	5.30	3.46	2.36	1.13	3.92
December	3.46	7.48	2.19	10.59	18.87
Annual Total	**34.75**	**52.93**	**26.27**	**36.48**	**27.27**

Source: U.S. Department of Commerce, National Oceanic & Atmospheric Administration, National Environmental Satellite, Data, and Information Service, Fiddletown Dexter Ranch, CA, Station USC00043038.
https://www.ncdc.noaa.gov/cdo-web/datasets/GHCND/stations/GHCND:USC00043038/detail
[a] Data are only available from March 1-5.

Precipitation at the Fiddletown Dexter Ranch Station occurs predominantly from October through May with the driest months from June through September. In the past five years, 2020 was the driest year and 2019 was the wettest. The annual precipitation, depicted to show the wettest and driest quarters on an annual basis between 2018 and 2022, is shown in **Figure 6**.

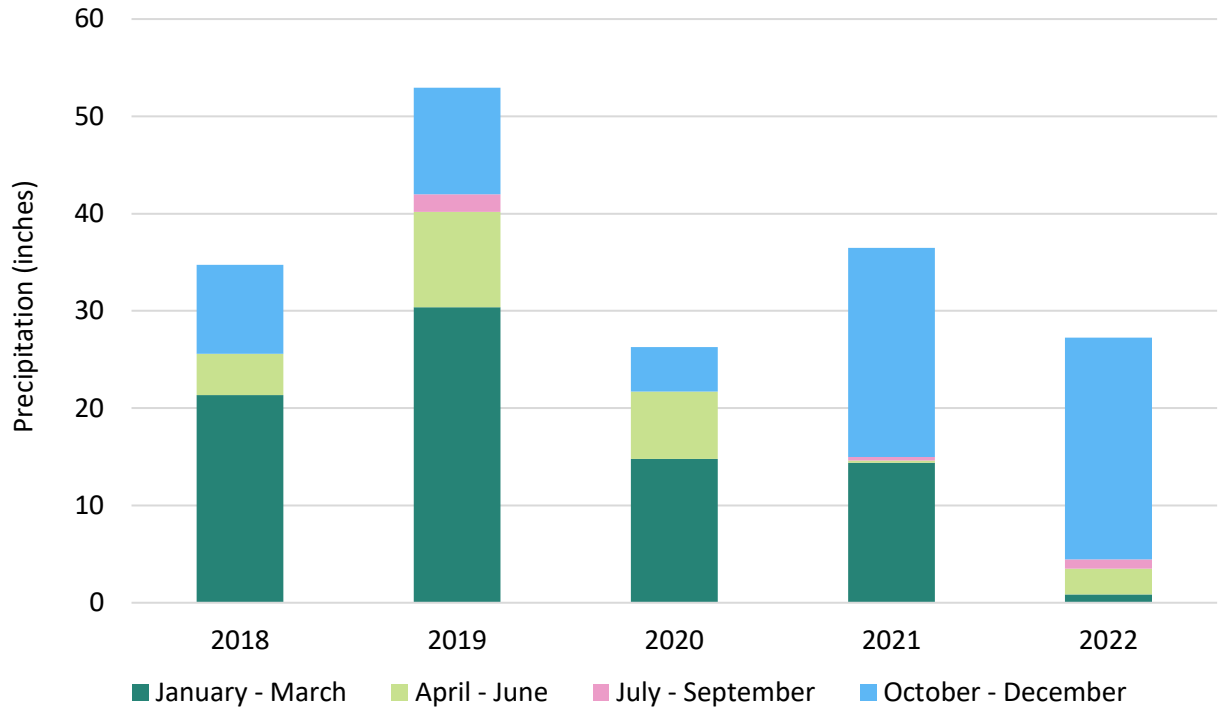

Figure 6. Annual Precipitation Near Middle Fork Cosumnes River Watershed, by Quarter (2018-2022)[28]

2.1.3 Common Characteristics of Both Watersheds

A brief description of the common characteristics shared by both watersheds is provided below, including the original information provided in the 1996 WSS and additional information as available.

2.1.3.1 Geology

Geologic formations within the watershed consist primarily of Cenozoic-age and to a lesser extent Paleozoic formations with a few isolated areas of Mesozoic formations. The three types of geologic formations include the Valley Springs Formation, the Mehrten's Formation, and the Shoo Fly formation of the Calaveras Complex. The Valley Springs and Mehrten's Formations are several hundred feet in depth along the western slope of the Sierra Nevada range and are a result of deposited ash and mudflows from Cenozoic Era volcanic eruptions. The Shoo Fly formation is indicative of an ancient fault zone.

Shallow unconfined groundwater aquifers occur within streamside alluvium and deeper confined groundwater aquifers within bedrock. Gold is the major mineral deposit in the watershed. There are few and relatively inactive fault lines within the region.

The potential for earthquake-related and volcanic geologic hazards appears minimal. Landslides are the most significant potential geologic hazard in the region, particularly along the steeper embankments of the creeks.

2.1.3.2 Wildlife

The eastern portion of both watersheds is located within the Eldorado National Forest (ENF). The ENF is home to a very diverse variety of species due to the diversity in climate, elevation, soil, and water. There are as many as 243 species of animals including mammals, birds, reptiles, fish, and amphibians (www.inaturalist.org/places/eldorado-national-forest iNaturalist).

Several types of large and small mammals live within the ENF. The California mule deer is one of the more common species. Large mammals include bears and mountain lions. Small mammals include the bobcat, coyote, weasel, raccoon, jack rabbit, porcupine, California ground squirrel, marmot, cottontail rabbit, gray squirrel, and Sierra pocket gopher.

The bald eagle, an endangered species, has been found in the ENF during the winter months and sightings of the peregrine falcon have been observed during the summer nesting period. Sensitive species include Sierra Nevada red foxes, pine martens, fishers, spotted owls, great gray owls, goshawks, and willow flycatchers. Other bird species include the blue grouse, band-tailed pigeon, mountain quail, mourning dove, and an occasional wild turkey. Raptor species include the golden eagle, red-tailed hawk, sharp-shinned hawk, and great horned owl. Turkey vultures are also common seasonally.

Over 100 species of song birds are found in the ENF. Some of the more commonly seen species are mountain chickadee, Stellar's jay, Clark's nutcracker, pygmy nuthatch, robin, red shafted flicker, myrtle warbler, fox sparrow, rufous-sided towhee, Oregon junco, white-crowned sparrow, yellow-bellied sapsucker, white-headed woodpecker, and acorn woodpecker.

2.1.3.3 Vegetation

Vegetation provides natural protection against erosion within a watershed as well as habitat for wildlife. The Jenkinson Lake Watershed is covered predominantly by Sierran Mixed Conifer vegetation. Within the region of the recreational area, closer to the lake and the lower elevations, there is a mixture of Ponderosa Pine, Montane and mixed Chaparral, Aspen, Douglas Fir, as well as some annual grassland. There is also Red Fir, White Fir and Jeffrey Pine at the higher elevations.

The Middle Fork Cosumnes Watershed is also covered predominantly by Sierran Mixed Conifer vegetation as well as Montane Hardwood. Within the region of the lower elevations, there is a broad mixture of species including Ponderosa Pine, Montane and mixed Chaparral, Montane Hardwood, Aspen, Douglas Fir, Sagebrush, as well as some annual grassland. There are also Red Fir, White Fir and Jeffrey Pine at the higher elevations.

The various plant communities found within the watersheds and El Dorado County are shown in **Figure 7**.

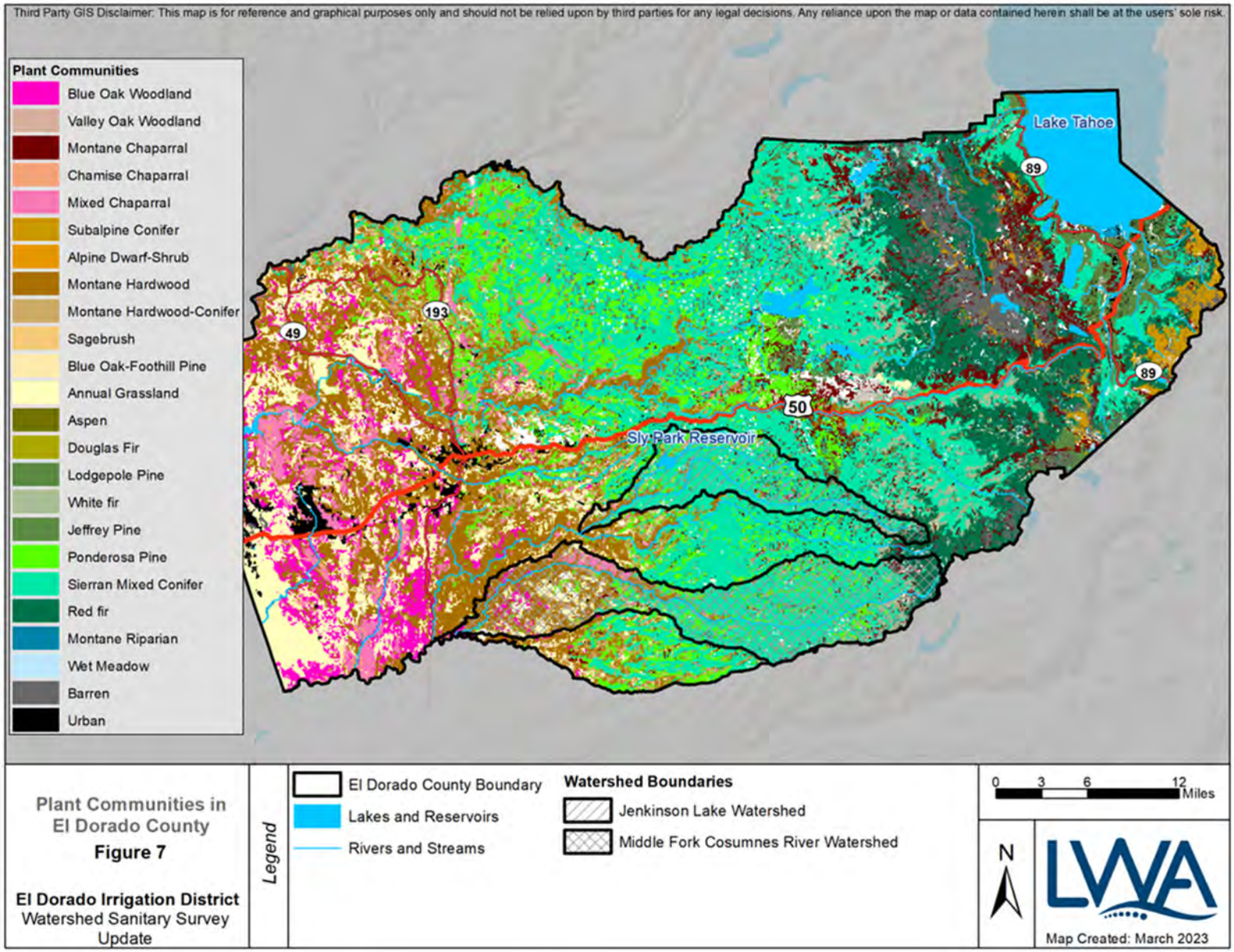

Figure 7. Plant Communities in El Dorado County[26]

2.2 LAND USE AND OWNERSHIP

Land use and land ownership within the watersheds have remained essentially unchanged since the first WSS conducted in 1996. The descriptions of the land uses are discussed in detail in the 1996 WSS and are incorporated by reference. The watersheds are designated primarily as Forest/Recreational and Upland Agricultural Zones. Brief descriptions of the land uses and updated data regarding the watersheds are provided below, as available.

2.2.1 Land Ownership

Land ownership in the watersheds is a mix of federal, public, and private lands. For the Jenkinson Lake watershed, the District owns and operates the recreational facilities while the remaining watershed is owned by the U.S. Forest Service, the U.S. Bureau of Reclamation, as well as large and small private landowners including the Georgia Pacific and Sierra Pacific Corporations.

The Middle Fork Cosumnes River watershed is also owned primarily by the U.S. Forest Service with a mix of large and small private landowners including the Georgia Pacific and Sierra Pacific Corporations. A map of the County identifying all federally-owned land within the County is shown in **Figure 8**.

2.2.2 Population Centers/Major Towns

The watersheds are generally rural. The more densely populated regions of the County are generally to the west of Highway 49 and along Highway 50. Pollock Pines is the most densely populated town near Jenkinson Lake and is located just north and east of the watershed. The Jenkinson Lake watershed population ranges as high as 101 to 1,000 people per square mile near the lake to as little as 100 persons or less elsewhere.

The Middle Fork Cosumnes River watershed is sparsely populated. Outingdale is likely one of the more densely populated areas within the watershed, though a small community. Population within the watershed is consistently 100 persons or less per square mile.

Population density maps for the County and for the Jenkinson Lake and Middle Fork Cosumnes River watersheds are shown in **Figure 9** and **Figure 10**, respectively.

2.2.3 Land Use

As depicted in **Figure 8**, a large percentage of the watershed land is federally-owned. The federally-owned areas are generally National Forest. Areas shown in gray are not federally-owned. Other land uses in the County are presented in **Figure 11**. Land uses within the watersheds include:

- Agricultural Lands;
- Natural Resources;
- Open Space;
- Public Facilities; and

- Rural Residential and Low Density Residential

Specific recreational uses include the Jenkinson Lake Recreation Area, discussed in Section 2.2.3.1 of this document.

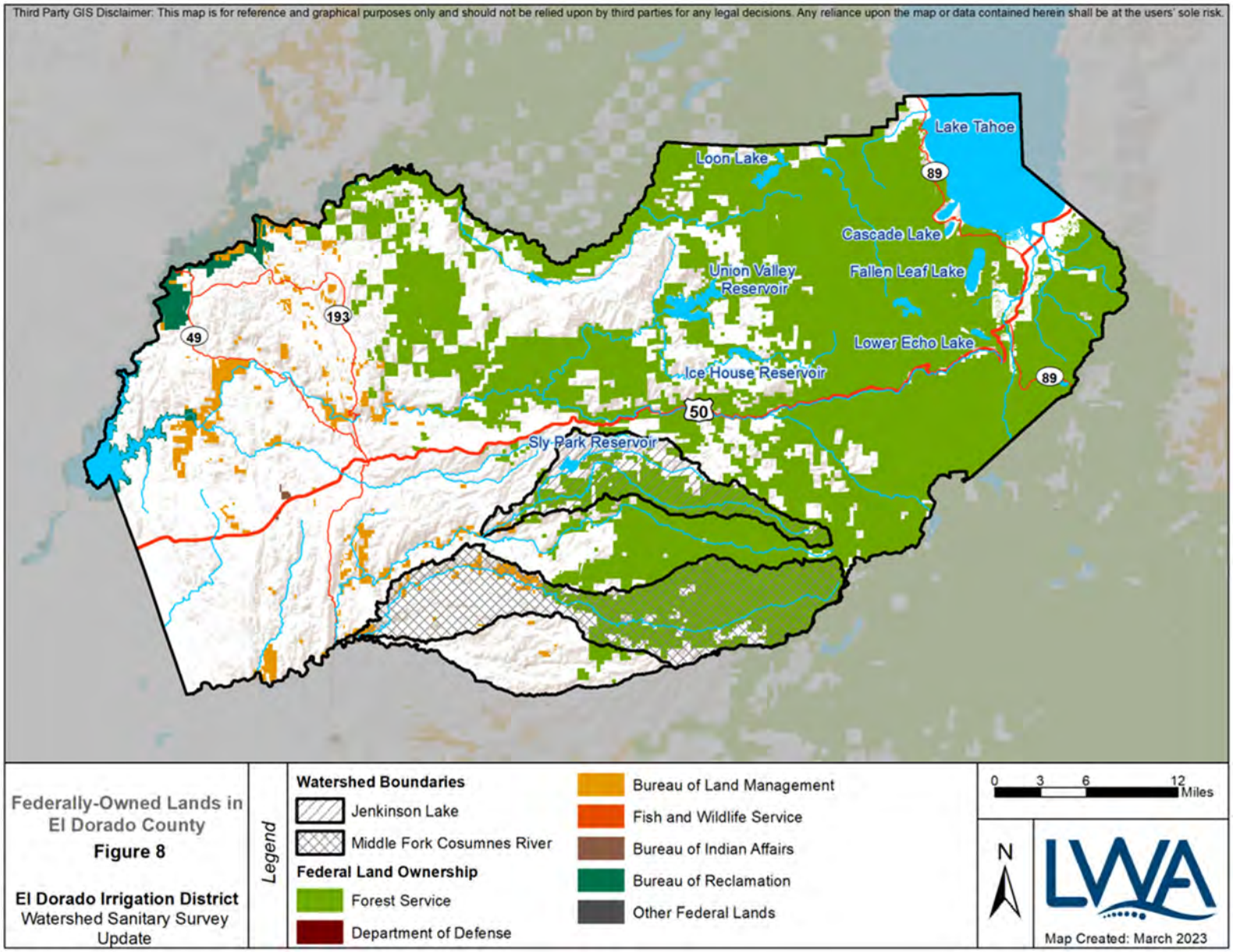

Figure 8. Federally-Owned Land in El Dorado County[10]

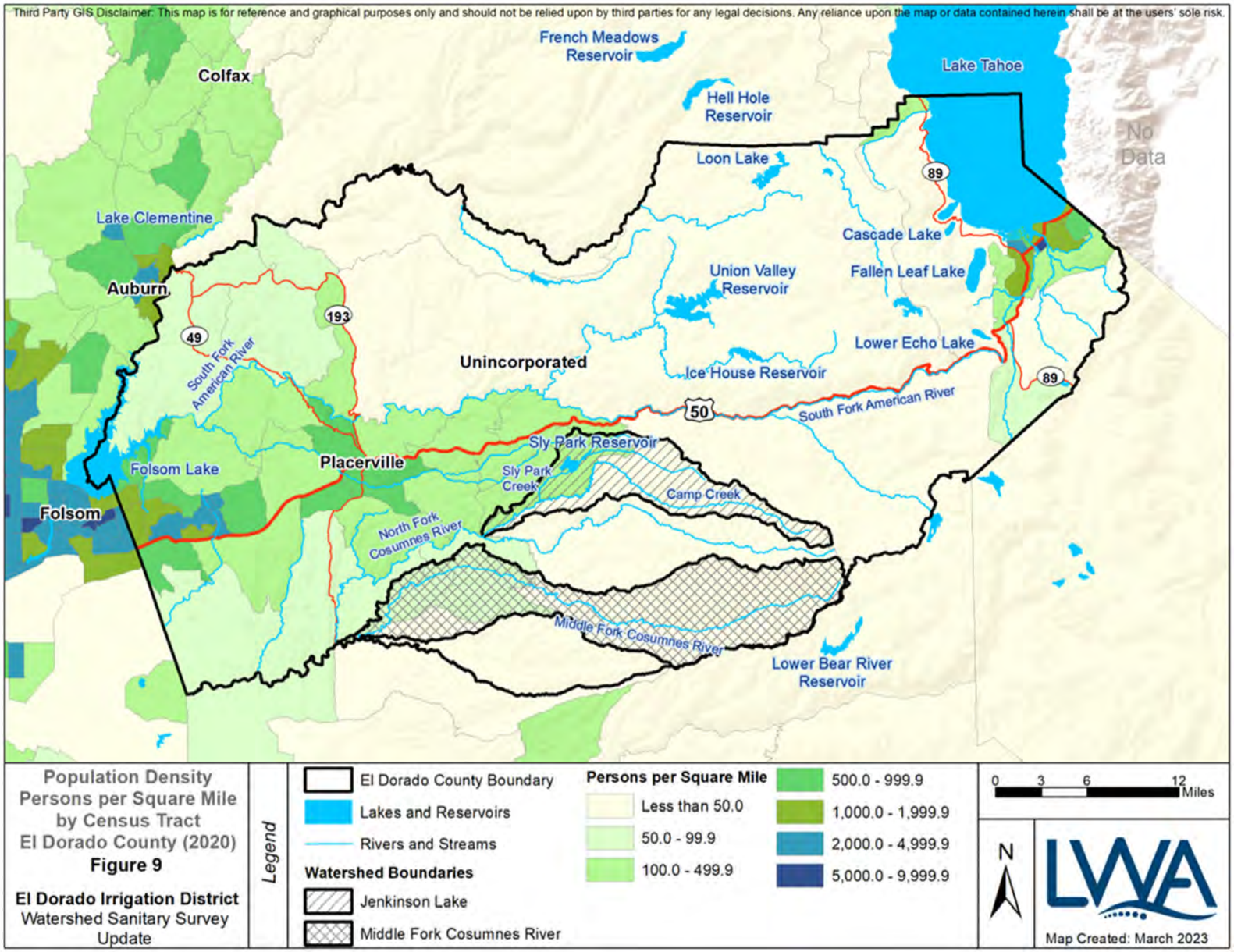

Figure 9. Population Density in El Dorado County (2022)[6]

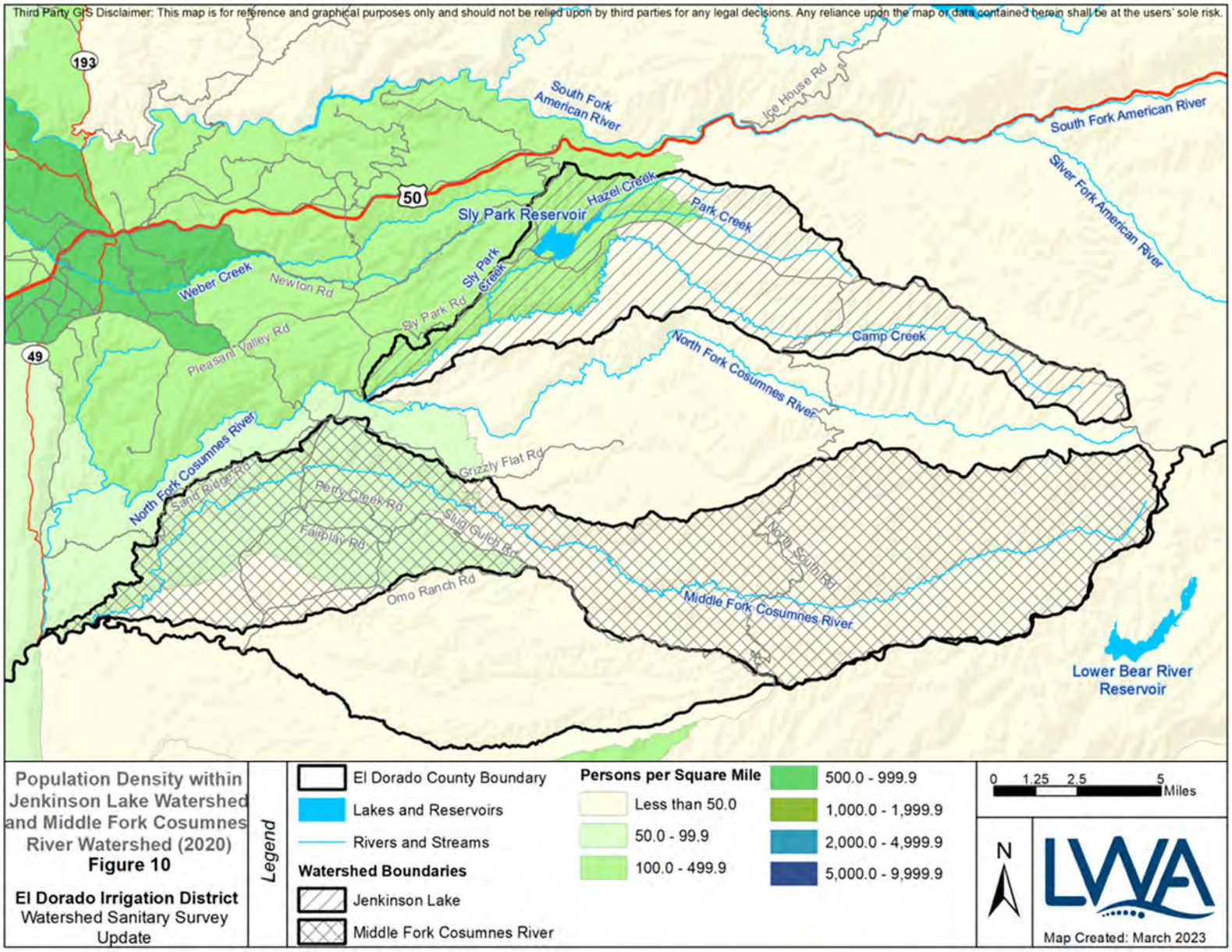

Figure 10. Population Density within Jenkinson Lake and Middle Fork Cosumnes Watersheds (2022)[6]

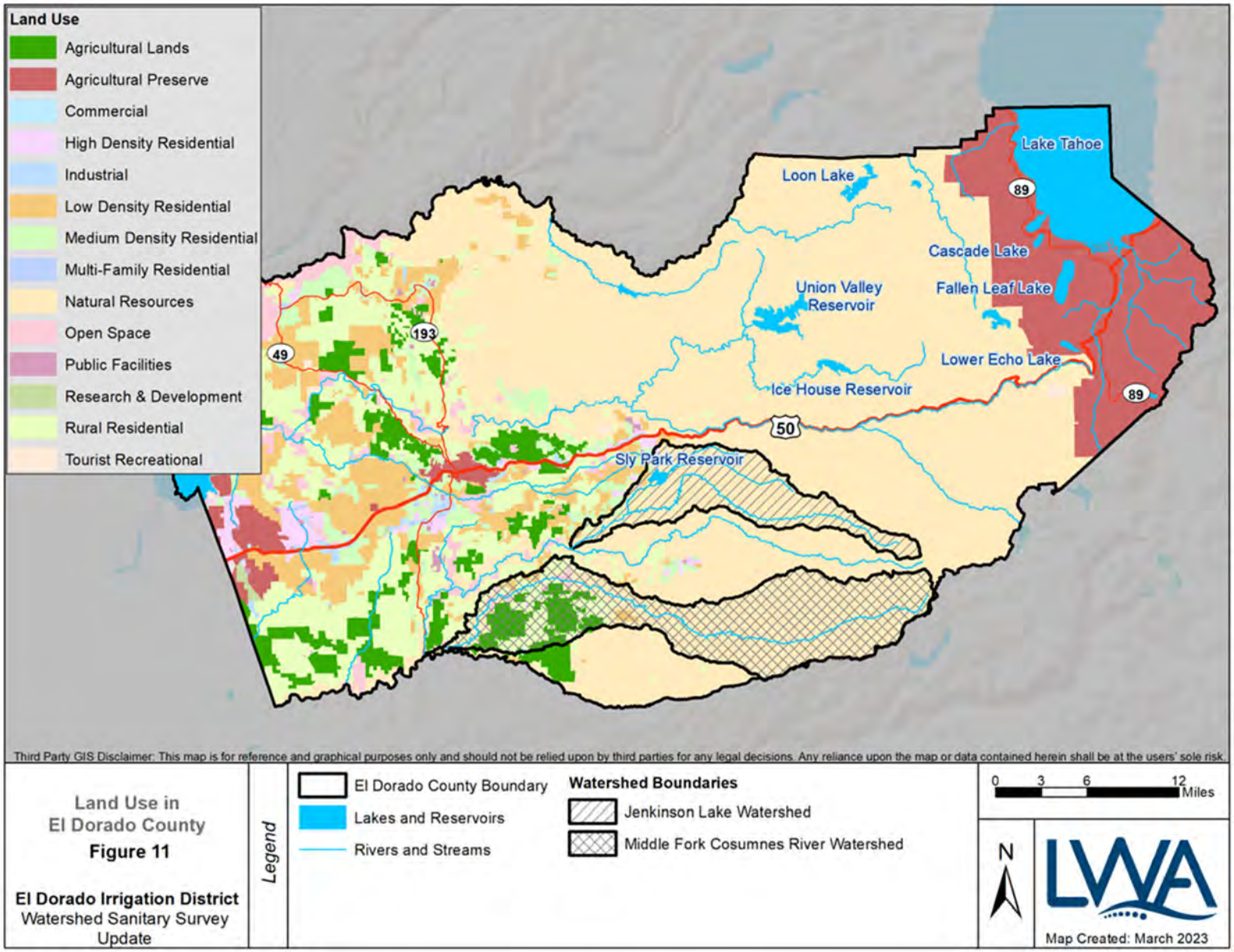

Figure 11. Land Uses in El Dorado County[13]

2.2.3.1 Jenkinson Lake Recreation Area Use

The Sly Park Recreational Area (Area) is operated by District staff. The Area includes thirteen campgrounds, which consist of nearly 200 campsites. The Area is open for recreational use including body contact sports, boating, and fishing. The Area is equipped with a variety of facilities including camp sites, boat ramps, marina, ADA accessible areas, day use areas and parking, toilets, and hiking, biking, and equestrian trails. District staff has documented usage of the facilities over time and the data collected over the last five years are summarized in **Table 6**.

Table 6. Jenkinson Lake (Sly Park) Recreational Area Statistics (2018-2022)[19]

	2018	2019	2020	2021	2022
Day Use	34,451	37,464	56,396	33,182	31,445
Boat Use	3,099	3,422	4,107	2,743	2,647
Overnight Campers	24,793	22,857	17,257	16,329	21,892
Total Number of Visitors	**62,343**	**63,743**	**77,760**	**52,254**	**55,984**

Source: EID, Sly Park Recreation Area Statistical Information, 2018-2022.

The number of visitors increased between 2018 and 2020, mainly due to day use, then dropped significantly in 2021. The peak in 2020 may be due to COVID-19. The impact of the drought is evident in boat use, which peaked in 2020, then dropped, potentially due to low reservoir levels. These annual statistics are graphed in **Figure 12**. A map of the Jenkinson Lake Recreation Area is provided in **Figure 13**.

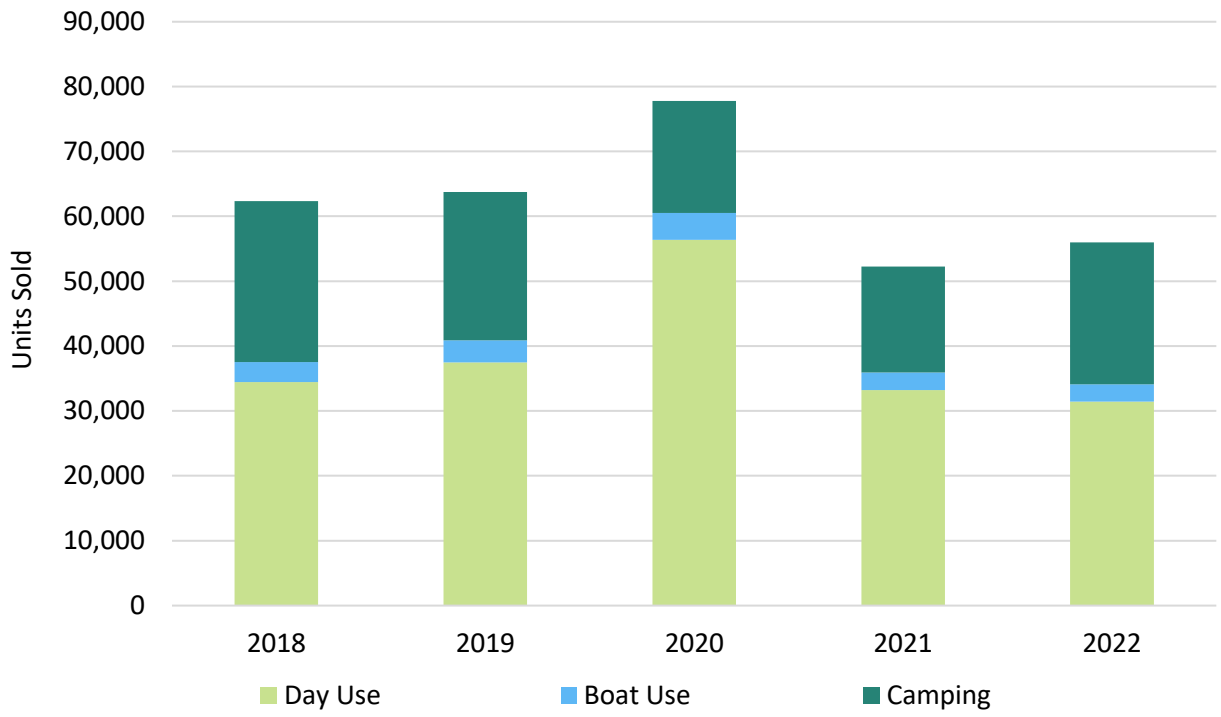

Figure 12. Jenkinson Lake Recreation Area Visitors and Boat Use (2018-2022)[19]

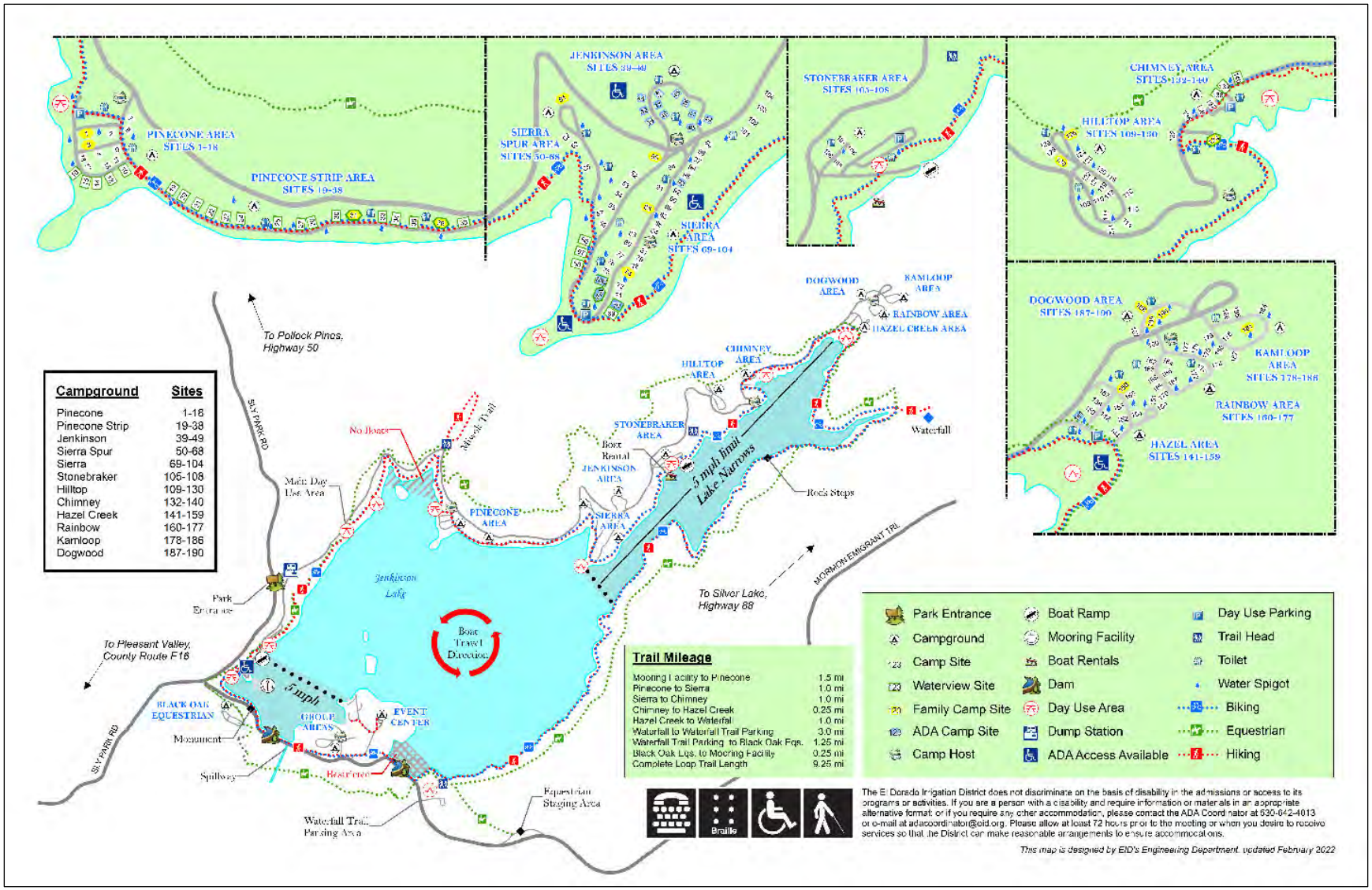

Figure 13. Jenkinson Lake Recreation Area Map[16]

3 DESCRIPTION OF WATER SUPPLY SYSTEMS

The Reservoir A and Outingdale WTPs and distribution facilities are discussed in the following sections.

3.1 HISTORY OF WATER SUPPLY SYSTEMS

The history of the water supply systems was described in the first WSS conducted in 1996 as well as the updates conducted in 2001, 2013, and 2018. Those documents are incorporated by reference. Brief descriptions of the current water supply and distribution facilities are provided below.

3.2 JENKINSON LAKE (RESERVOIR A) WATER SUPPLY FACILITIES

Jenkinson Lake is supplied by Sly Park Creek, Hazel Creek, and Camp Creek via a diversion tunnel. The water is treated at the Reservoir A WTP and distributed to the Sly Park Hills, Pleasant Oak Main, and Camino Conduit systems. A description of the water treatment and treated water distribution system is provided in the following sections.

3.2.1 Reservoir A Water Treatment Plant

The Reservoir A WTP was originally constructed in 1974 and treats water stored in Jenkinson Lake. The WTP has a T5 classification which requires that the chief operator maintain a minimum T5 level of certification. Modifications have been made to the system over time to improve treatment and meet SWRCB requirements. There have been no changes in the process previously described in the 2018 WSS Update, as follows:

The WTP is an in-line direct filtration plant with disinfection. Treatment processes include chemical addition (polymer and chlorine) with rapid mixing, twelve-cell dual-media gravity filtration using anthracite and filter sand, followed by a chlorine contact basin clearwell and additional chlorination. The facility converted from chlorine gas to sodium hypochlorite at the end of 2013. Orthophosphate is added at the clearwell for corrosion control. A sodium hydroxide feed system at the head of the plant replaced the lime feed system at the end of 2013. Filter backwash is directed to an equalization basin and pumped to settling/drying beds, decanted, then returned to the influent. Treated water is sent to Reservoir A prior to distribution, except for a small volume, which is distributed directly to a higher elevation pressure zone (Sly Park Hills).

The WTP has a 56 MGD production capacity. However, the water production is limited by the annual supply that is available for diversion, which is 23,000 AFY (21 MGD). The maximum daily volume is limited to twice that amount (42 MGD). The District's annual water right is for 33,400 AFY, resulting in a maximum production capacity of approximately 60 MGD. The outlet works at Sly Park Dam have a discharge capacity of 80 MGD.

3.2.2 Reservoir A Distribution System

Reservoir A is a concrete lined and covered storage reservoir with a 2.3 MG capacity. It has a screened roof vent and overflow with a sealed access hatch. Water from Reservoir A is routed to either the Camino Conduit and/or the Pleasant Oak Main (POM), as dictated by system demands. A small amount of water is supplied to the Sly Park Hills Pressure Zone to serve customers at higher elevations. This water comes from the clearwell at Reservoir A WTP, not the actual storage reservoir.

Water transmitted via the Camino Conduit is routed to Reservoirs 2/2A where water can be met with Reservoir 1 WTP; water transmitted via the POM is conveyed to Reservoirs B and C. From Reservoir C, water is routed to Reservoir 7A/7B, where it enters the Diamond Springs Main (DSM). From the DSM, water is further conveyed to Reservoir 9. From Reservoir 9, the DSM conveys water through the Diamond Springs/El Dorado, Logtown, Shingle Springs, and Cameron Park service zones, terminating at Reservoir 12A/12B east of Cameron Park.

The Reservoir 1 distribution and the DSM of the Reservoir A distribution are connected by the Lateral 8.0 South and Highway 49 Intertie of the respective systems. DSM Lateral 3.6 North extends northwest, serving commercial areas along Missouri Flat Road. During months of low demand (October – April), Reservoir A WTP serves the entire main (0910001) distribution system.

The distribution system has a D5 classification and requires that the chief operator maintain a minimum D5 level of certification.

3.3 OUTINGDALE WATER SUPPLY FACILITIES

The Outingdale system is a satellite distribution system that is served by a small WTP on the banks of the Middle Fork Cosumnes River. Water is collected from the Middle Fork Cosumnes River, treated, and distributed to Outingdale customers. A description of the water treatment and treated water distribution system is provided in the following sections.

3.3.1 Outingdale Water Treatment Plant

The Outingdale WTP is a 100 gpm system that serves a small satellite water system. The treatment system is a U.S. Filter Trident Microfloc packaged treatment plant consisting of an upflow clarifier and multi-media filter with anthracite coal. Raw water is collected via a flexible hose with an inlet screen and two trash pumps that pump water through a sand separator and into a tank, from which it is then boosted with two vertical pumps to the plant from the Middle Fork Cosumnes River. The system implements a polymer coagulant, soda ash for pH adjustment, and pre- and post- chlorination using sodium hypochlorite. The backwash system is either initiated manually or triggered by headloss or time; there is a waste tank, return pumps, and filter to waste (FTW). Decanted backwash water is pumped from the holding tank to the WTP headworks.

3.3.2 Outingdale Distribution System

The Outingdale distribution system consists of two treated water storage tanks and a distribution network. Both water storage tanks are bolted steel. The Lower Tank is located at the Outingdale WTP and the Upper Tank is located at the higher elevation zone. Both tanks are equipped with screened roof vents and overflows as well as sealed access hatches. The Upper Tank has an 80,000 gallon capacity and the Lower Tank has a 60,000 gallon capacity.

The distribution system is divided into the Upper and Lower Zones, which are further divided in the Zones 1 and 2, resulting in four zones. Each of the zones operates within 75 to 100 psi. The high service pump station transmits water from the WTP to the Upper Tank and the Upper Booster Station, which is located at the Upper Tank, pumps water to the Upper Zone 2. The Lower Booster Station pumps water from Lower Zone 1 to Lower Zone 2.

The distribution system consists of 4- to 6-inch pipelines. Pipeline materials are primarily PVC with some asbestos cement pipe (ACP), which is replaced on an as-needed basis. No water quality issues have been associated with the ACP.

The distribution system has a D1 classification and requires that the chief operator maintain a minimum D1 level of certification.

4 SOURCE WATER QUALITY

The quality of the source water provides an indication of whether there are impacts to the source water from potentially contaminating activities within the watershed. The District collects water quality data for a handful of constituents to identify issues or possible trends that may be associated with seasons, weather, or watershed activity.

4.1 BACTERIOLOGICAL WATER QUALITY

The District collects total coliform and *Escherichia coli* (*E. coli*) samples on a monthly basis (at a minimum). Coliform is naturally present in the environment and are not harmful to humans but used as an indicator organism for the potential presence of microbial contamination. *E. coli* is directly related to the presence of fecal pathogens. The presence of *E. coli* indicates that the water may be contaminated with human or animal wastes. *E. coli* can cause short-term gastrointestinal upset such as diarrhea, cramps, nausea, headaches, and other symptoms.

4.1.1 Jenkinson Lake Bacteriological Water Quality

During the winter months, the District collects an average of one bacteriological sample per month at the Reservoir A WTP intake from Jenkinson Lake. During the spring and summer months, samples are collected more frequently at the intake and at Sly Park Reservoir Sierra Swim Area. The requirement for bacteriological monitoring of source water is dictated by California Health and Safety Code Section 115842(a)(2), which states:

Article 1. Recreational Use of Reservoirs

§115842. (Sly Park Reservoir)

(a) Recreational activity in which there is bodily contact with the water by any participant is allowed in the Sly Park Reservoir provided that all of the following conditions are satisfied:

(1) The water shall receive complete water treatment, including coagulation, flocculation, sedimentation, filtration, and disinfection; or alternative treatment that complies with all applicable department regulations and requirements. Such treatment shall, at a minimum, comply with all state laws and department regulations and all federal laws and regulations, including, but not limited to, the federal Environmental Protection Agency Long-Term 2 Enhanced Surface Water Treatment regulations. Nothing in this division shall limit the state or the department from imposing more stringent treatment standards than those required by federal law.

(2) The El Dorado Irrigation District conducts a monitoring program for E. coli, bacteria and giardia, and cryptosporidium organisms at various reservoir locations and at a frequency determined by the department.

(3) The reservoir is operated in compliance with regulations of the department.

Summaries of the source water quality results for Total Coliform and *E. coli*, showing the highest monthly values from 2018 to 2022, are shown in **Table 7** and **Table 8**, respectively.

Table 7. Jenkinson Lake: Reservoir A WTP Monthly Maximum Source Water Total Coliform (2018-2022), MPN/100mL[18]

Month	2018	2019	2020	2021	2022
January	16	18	9	16	76
February	6	5	5	22	17
March	6	<1	2	5	23
April	<1	1	13	6	28.2
May	<1	<1	28	10	28
June	<1	12	17	29	46
July	14	16	**866**	31.8	45
August	**1414**	124	34	30	63
September	138	**291**	172	37	**1315**
October	62	53	28	24	105
November	34	26	11	0	36
December	101	3	29	**99**	488

Source: EID Monthly Summary of Bacteriological Monitoring, 2018-2022.

Total Coliform levels tend to be higher during the summer and fall months, which can be attributed to higher recreational activity levels in the summertime as well as water stagnation and associated bacteriological growth. During 2021, drought conditions may have led to higher winter coliform levels.

Table 8. Jenkinson Lake: Reservoir A WTP Monthly Maximum Source Water *E. Coli* (2018-2022), MPN/100mL[18]

Month	2018	2019	2020	2021	2022
January	**2**	3	3	<1	<1
February	<1	<1	<1	<1	<1
March	1	<1	<1	<1	<1
April	<1	<1	1	2	1
May	<1	<1	2	1	1
June	<1	<1	<1	1	<1
July	<1	<1	**18**	1	<1
August	<1	1	<1	<1	<1
September	<1	<1	1	<1	<1
October	<1	<1	1	<1	<1
November	1	**4**	1	**4**	**4**
December	<1	<1	1	1	2

Source: EID Monthly Summary of Bacteriological Monitoring, 2018-2022.

E. coli detections are relatively few and the minor peaks occur mainly during the winter months with the exception of 2020. This may be due to precipitation events and animal feces getting transported into the Lake via runoff.

Summaries of Sly Park Reservoir Sierra Swim Area water quality results for total coliform and *E. coli* collected during the summer months from 2018 to 2022[1], showing the highest monthly values, are shown in **Table 9** and **Table 10**, respectively.

[1] As required by the EID Jenkinson Lake Reservoir Management and Operations Plan, January 2017.

Table 9. Jenkinson Lake: Monthly Maximum Sly Park Reservoir Sierra Swim Area Total Coliform (2018-2022), MPN/100mL[18]

Month	2018	2019	2020	2021	2022
April	17.5	17.1	8.6	8.6	32.3
May	51.2	81.3	66.3	72.3	397
June	307.6	435	138	**517**	326
July	1413.1	219	199	225	517
August	**2419.6**	**1553**	160	276	488
September	261.3	1414	**219**	249	**980**

Source: EID Monthly Summary of Bacteriological Monitoring, 2018-2022.

Table 10. Jenkinson Lake: Monthly Maximum Sly Park Reservoir Sierra Swim Area *E. Coli* (2018-2022), MPN/100mL[18]

Month	2018	2019	2020	2021	2022
April	1	1	<1	3.1	1
May	1	**2**	**2**	3.1	**8.6**
June	**3.1**	1	1	**4.1**	<1
July	1	1	1	2	2
August	1	<1	1	<1	<1
September	<1	<1	<1	2	1

Source: EID Monthly Summary of Bacteriological Monitoring, 2018-2022.

In addition to total coliform and *E. coli*, the District monitors source water for the pathogens Giardia and Cryptosporidium. Both are known to cause gastrointestinal symptoms such as nausea, cramps, diarrhea, vomiting, and associated headaches. The District typically collects up to three samples in the late spring through summer. Samples are collected in the swimming area as well as near the intake to the WTP. Both Giardia and Cryptosporidium were detected in Jenkinson Lake WTP source water during August 2020 (4 Oocyst/L and 4 Cysts/L, respectively). All other results collected at Jenkinson Lake between 2018-2022 were non-detect.

The District also monitored the Reservoir A WTP source water for the pathogen Cryptosporidium during the summer months of 2018-2022. All results but one were below 0.3 oocyst/L and most were non-detected.

4.1.2 Middle Fork Cosumnes River Bacteriological Water Quality

The District collects total coliform and *E. coli* samples on a monthly basis upstream of the intake to the Outingdale WTP. During the spring and summer months, samples may be collected weekly. For the 12-month period beginning in October 2017 and ending in September 2018, the District collected biweekly samples, consistent with the monitoring requirements for the 2nd round LT2 for small water systems. A summary of the water quality results for Total Coliform and *E. coli*, showing the highest value collected during any month from 2018 to 2022, is shown in **Table 11** and **Table 12**, respectively.

Table 11. Middle Fork Cosumnes River: Outingdale WTP Monthly Maximum Source Water Total Coliform (2018-2022), MPN/100mL[18]

Month	2018	2019	2020	2021	2022
January	920.0	344.8	112.6	150.0	387.3
February	2419.6	980.4	79.4	248.9	261.3
March	**2600.0**	145.0	27.9	260.3	73.3
April	159.7	125.9	344.8	770.1	435.2
May	613.1	155.3	579.4	601.5	290.9
June	517.2	461.1	980.4	**>2419.6**	1553.1
July	1553.1	658.6	**>2419.6**	**>2419.6**	960.6
August	1986.3	547.5	**>2419.6**	WTP offline	**>2419.6**
September	**2419.6**	**2419.6**	2419.6	WTP offline	**>2419.6**
October	307.6	579.4	1732.9	2419.6	1553.1
November	387.3	275.5	488.4	1986.3	344.8
December	186.0	344.8	160.7	770.1	1046.2

Source: EID Monthly Summary of Bacteriological Monitoring, 2018-2022.

Total Coliform levels tend to be higher during the summer months, which can be attributed to higher recreational activity levels in the summertime as well as water stagnation and associated bacteriological growth.

Table 12. Middle Fork Cosumnes River: Outingdale WTP Monthly Maximum Source Water *E. coli* (2018-2022), MPN/100mL[18]

Month	2018	2019	2020	2021	2022
January	88.0	13.1	1.0	5.2	6.2
February	15.0	**81.6**	2.1	7.4	6.3
March	**410.0**	7.5	<1.0	14.8	0.0
April	12.2	5.2	15.8	8.6	11.9
May	76.3	1.0	10.8	29.5	2.0
June	38.8	17.5	34.1	66.3	107.1
July	195.6	16.0	43.7	**67.7**	118.7
August	73.3	25.9	18.1	WTP offline	**122.3**
September	16.0	25.6	**172.5**	WTP offline	81.6
October	34.1	12.2	23.1	52.0	46.5
November	17.3	8.6	53.0	17.3	38.3
December	6.2	34.5	9.8	5.2	7.3

Source: EID Monthly Summary of Bacteriological Monitoring, 2018-2022.

E. coli detections peaked during the winter months of 2018 and 2019 and during the summer months of 2020 through 2022. High winter levels may be due to precipitation events and wildlife activity along the river, while subsequent higher recreational activity levels in the summertime, water stagnation, and associated bacteriological growth may be the causes of high levels during 2020-2022.

4.2 TURBIDITY

Turbidity has no negative health effects, but it is monitored because it is a good indicator of water quality. It is a measure of the clarity of water and is monitored to determine the effectiveness of filtration. High levels of turbidity can interfere with disinfection and provide a medium for microbial growth and may indicate the presence of disease-causing organisms. These organisms may include bacteria, viruses, and parasites that can cause gastrointestinal illness.

4.2.1 Jenkinson Lake Turbidity

The level of turbidity is monitored at the intake as well as after filtration to determine the effectiveness of treatment. In general, source water turbidity samples collected at the treatment plant intake indicate that turbidity levels are generally under 10 Nephelometric Turbidity Units (NTU). Occasional spikes can be associated with turbulence related to wet weather events and additional loading of suspended materials from erosion.

A visual representation of the source water turbidity based on average monthly data is shown in **Figure 14**. Turbidity levels tend to peak during early winter months and are relatively stable during the summer months, which can be associated with wet weather and increased loading from the tributary waterways (i.e., Sly Park Creek, Hazel Creek, etc.).

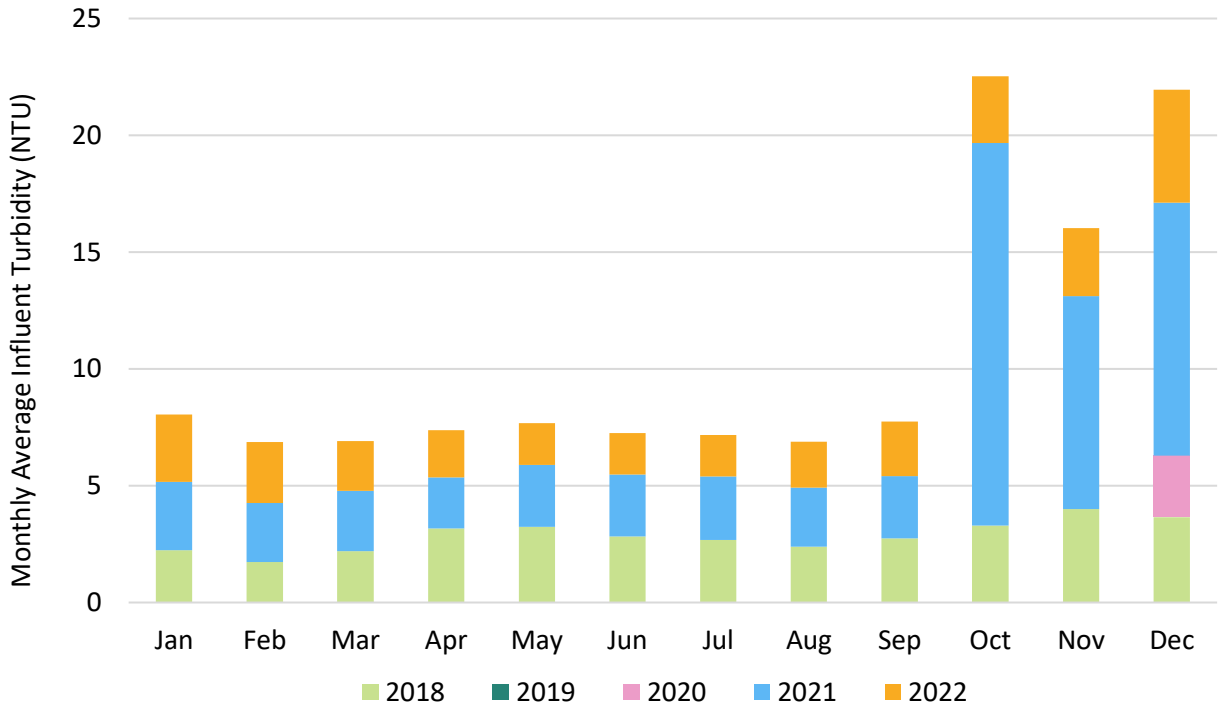

Figure 14. Jenkinson Lake: Reservoir A WTP Intake Average Monthly Turbidity, NTU[18]

Average monthly influent (source water) and effluent (combined filter effluent) turbidity levels are provided in **Table 13**. Filtration at the Reservoir A WTP effectively reduces turbidity to less than 0.3 NTU at least 95% of the time, consistently achieving water quality goals.

Table 13. Jenkinson Lake: Reservoir A WTP Average Monthly Influent and Effluent Turbidity (2018-2022), NTU[18]

Month	2018		2019		2020		2021		2022	
	Inf	Eff	Inf	Eff	Inf	Eff	Inf	Eff	Inf	Eff
Jan	2.23	0.05	-	0.08	-	0.08	2.94	0.05	2.87	0.06
Feb	1.73	0.04	-	0.06	-	0.06	2.53	0.07	2.60	0.05
Mar	2.19	0.05	-	0.08	-	0.05	2.58	0.06	2.14	0.05
Apr	3.17	0.05	-	0.05	-	0.06	2.19	0.05	2.02	0.05
May	3.23	0.05	-	0.05	-	0.06	2.65	0.05	1.79	0.05
Jun	2.82	0.06	-	0.07	-	0.06	2.65	0.05	1.77	0.05
July	2.67	0.07	-	0.08	-	0.06	2.73	0.06	1.78	0.05
Aug	2.39	0.06	-	0.06	-	0.06	2.52	0.06	1.97	0.09
Sep	2.75	0.06	-	0.07	-	0.07	2.66	0.05	2.33	0.06
Oct	3.29	0.07	-	0.09	-	0.06	16.38	0.12	2.85	0.06
Nov	4.00	0.08	-	0.06	-	0.05	9.12	0.05	2.91	0.05
Dec	3.65	0.07	-	0.06	2.64	0.06	10.83	0.09	4.83	0.08
Max	**4.00**	**0.08**	[a]	**0.09**	[a]	**0.08**	**16.38**	**0.12**	**4.83**	**0.09**

Source: EID Monthly Summary of Turbidity Monitoring, 2018-2022. Effluent data represent the highest single 4-hour reading.
[a] No valid SCADA tag reading, null or zero result.

4.2.2 Middle Fork Cosumnes River Turbidity

The level of turbidity is monitored within the Middle Fork Cosumnes River at the Outingdale WTP intake as well as after filtration to determine the effectiveness of treatment. In general, source water turbidity samples collected at the treatment plant intake indicate that turbidity levels are generally less than 10 NTU. Occasional spikes can be associated with turbulence related to wet weather events and additional loading of suspended materials from erosion.

A visual representation of the source water turbidity based on average monthly data is shown in **Figure 15**. Turbidity levels tend to peak more in late summer to early winter (August – December) and are relatively stable during January through July.

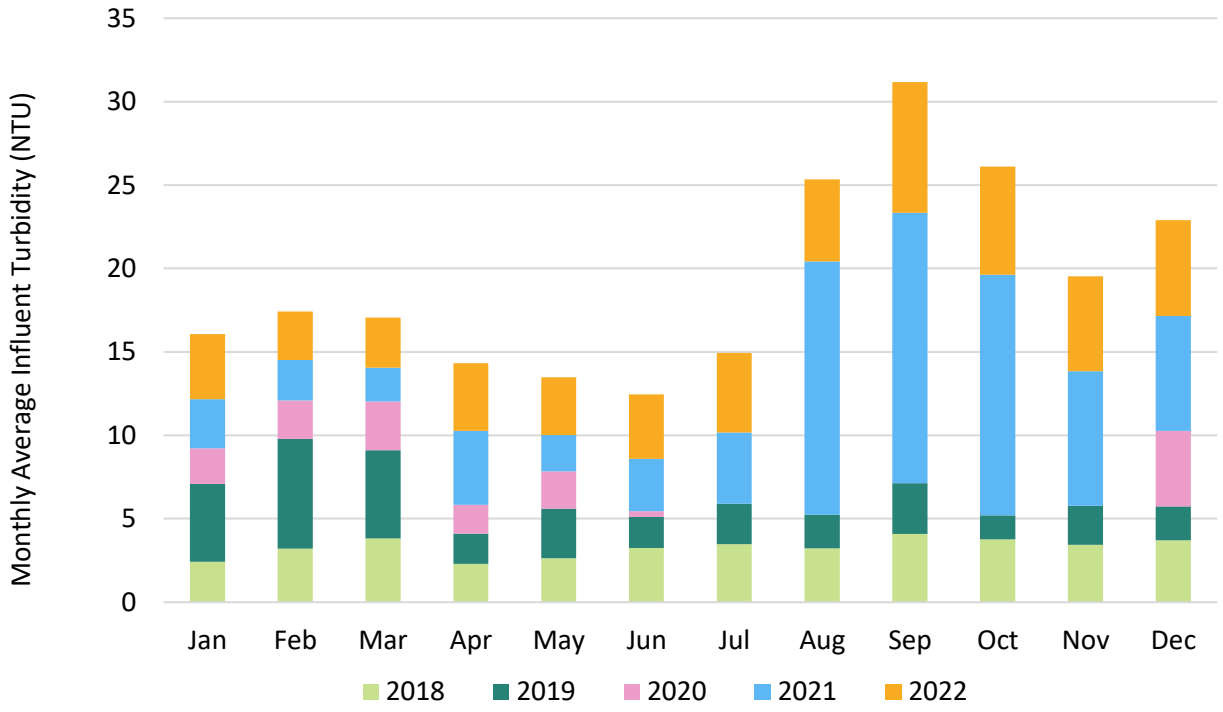

Figure 15. Middle Fork Cosumnes River: Outingdale WTP Intake Average Monthly Turbidity, NTU[18]

Influent and effluent (treated water) turbidity levels are provided in **Table 14**. Filtration at the Outingdale WTP effectively reduces turbidity to less than 0.3 NTU at least 95% of the time, consistently achieving water quality goals.

Table 14. Middle Fork Cosumnes River: Outingdale WTP Average Monthly Influent and Effluent Turbidity (2018-2022), NTU[18]

Month	2018		2019		2020		2021		2022	
	Inf	Eff	Inf	Eff	Inf	Eff	Inf	Eff	Inf	Eff
Jan	2.43	0.124	4.67	0.086	2.11	0.067	2.96	0.126	3.89	0.064
Feb	3.20	0.096	6.58	0.127	2.31	0.099	2.43	0.08	2.90	0.071
Mar	3.82	0.054	5.27	0.092	2.93	0.122	2.03	0.179	2.99	0.16
Apr	2.30	0.145	1.81	0.083	1.72	0.092	4.45	0.05	4.05	0.177
May	2.64	0.075	2.97	0.106	2.24	0.064	2.17	0.089	3.48	0.053
Jun	3.24	0.065	1.86	0.097	0.34	0.091	3.15	0.058	3.86	0.041
July	3.47	0.17	2.43	0.079	[a]	0.064	4.27	0.087	4.76	0.06
Aug	3.23	0.09	2.01	0.08	[a]	0.065	15.19	WTP offline	4.92	0.185
Sep	4.09	0.113	3.03	0.047	[a]	0.04	16.20	WTP offline	7.86	0.124
Oct	3.76	0.11	1.44	0.053	[a]	0.099	14.43	0.061	6.48	0.155
Nov	3.44	0.102	2.33	0.156	[a]	0.143	8.07	0.059	5.68	0.070
Dec	3.69	0.123	2.04	0.097	4.54	0.157	6.88	0.14	5.74	0.118
Max	**4.09**	**0.17**	**6.58**	**0.156**	**4.54**	**0.157**	**16.20**	**0.179**	**7.86**	**0.185**

Source: EID Monthly Summary of Turbidity Monitoring, 2018-2022.. Effluent data represent the highest single 4-hour reading.
[a] No valid SCADA tag reading, null or zero result.

4.3 TOTAL ORGANIC CARBON (TOC)

The presence of organic matter in source water can provide a medium for the formation of disinfection byproducts during the treatment disinfection process. Disinfection byproducts include trihalomethanes (THMs) and haloacetic acids (HAAs). Drinking water containing these byproducts in excess of the regulated maximum contaminant level (MCL) can lead to adverse health effects, liver or kidney problems, or nervous system effects, and may lead to an increased risk of getting cancer.

The average monthly TOC levels from 2018 to 2022 for both Jenkinson Lake and the Middle Fork Cosumnes River are shown in **Figure 16**.

4.3.1 Jenkinson Lake TOC

Average monthly TOC levels at the Reservoir A WTP intake at Jenkinson Lake are provided in **Table 15**. TOC levels in Jenkinson Lake were generally consistent and remained at or below 1.7 mg/L during all years but 2021, when TOC levels were slightly higher (but still below 3 mg/L) during January, April, and November.

As shown in **Figure 16** on page 40, TOC levels at Jenkinson Lake are relatively constant, with a slight winter elevation.

Table 15. Jenkinson Lake: Reservoir A WTP Intake Average Monthly Total Organic Carbon (2018-2022), mg/L[18]

Month	2018	2019	2020	2021	2022
January	1.6	1.6	1.3	2.3	1.6[a]
February	1.5	1.5	1.2	1.4	1.4
March	1.5	1.6	1.2	1.3	1.3
April	1.7	1.5	1.4	2.0	1.3
May	1.6	1.2	1.7	1.7	1.3
June	1.5	1.3	1.0	1.6	1.2
July	1.5	1.2	0.97	1.7	1.2
August	1.6	1.2	1.2	1.1	1.3
September	1.4	1.1	1.5	1.1	1.4
October	1.5	1.2	1.1	1.2	1.3
November	1.4	1.5	1.2	2.7	1.3
December	1.6	1.2	1.4	1.8[a]	1.6

Source: EID Monthly Summary of Total Organic Carbon Monitoring, 2018-2022.
[a] Average of four results, as EID performed a special study due to compliance issues related to stormwater runoff from the 2021 Caldor Fire.

4.3.2 Middle Fork Cosumnes River TOC

Average monthly TOC levels at the Outingdale WTP intake are provided in **Table 16**. TOC levels at the Middle Fork Cosumnes River are relatively constant through the summer, and peak during the winter months with higher levels from October – March (although not during February).

Table 16. Middle Fork Cosumnes River: Outingdale WTP Intake Average Monthly Total Organic Carbon (2018-2022), mg/L[18]

Month	2018	2019	2020	2021	2022
January	3.5	2.5	2.0	1.8	1.2
February	1.0	1.6	0.6	1.1	1.0
March	4.1	1.3	1.6	1.6	0.8
April	1.5	1.2	2.0	1.3	1.3
May	1.0	1.2	1.1	1.5	1.0
June	1.0	1.3	1.2	1.5	0.8
July	1.1	1.3	0.9	1.7	0.8
August	1.1	0.7	1.5	WTP offline	1.0
September	1.1	0.7	1.0	WTP offline	1.0
October	1.9	1.1	1.0	1.9	0.9
November	1.3	1.0	1.8	1.9	2.7
December	1.5	1.7	1.2	1.2	1.7

Source: EID Monthly Summary of Total Organic Carbon Monitoring, 2018-2022.

The TOC intake data are also presented in **Figure 16**. TOC levels are more variable in Middle Fork Cosumnes River than in Jenkinson Lake, and slightly lower during the summer months.

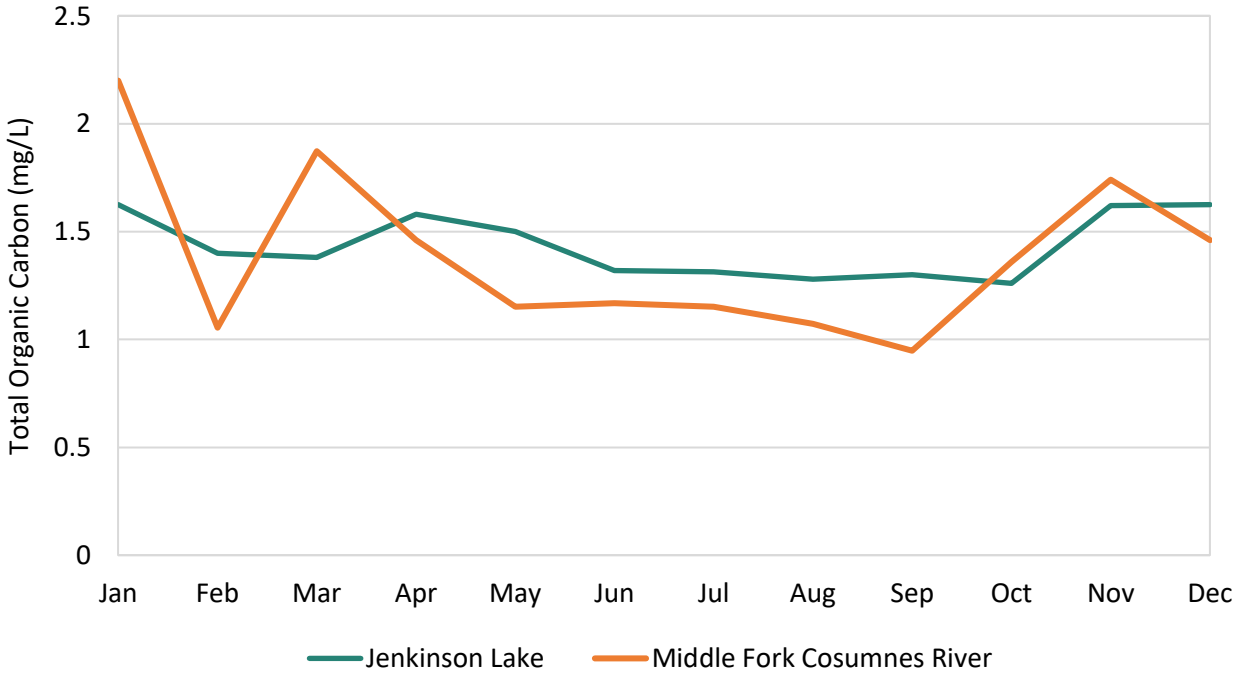

Figure 16. Average Monthly Total Organic Carbon in Jenkinson Lake (Reservoir A WTP Intake) and Middle Fork Cosumnes River (Outingdale WTP Intake) (2018-2022), mg/L[18]

5 POTENTIAL SOURCES OF CONTAMINATION

Several potential contamination sources to the watersheds exist; some are direct sources and some are indirect. Direct sources can be sources that are in direct contact with the water supply such as body contact recreation, or that may directly impact the water supply through malfunction or leakage of nearby septic systems. An indirect source is not directly contaminating the water but can become a source of contamination as a result of a weather event or natural disaster.

The following types of potential sources of contamination have remained constant in the 1996 WSS and 2001, 2013, and 2018 updates:

- **Wastewater Contaminants:** These are result of contamination from septic or wastewater systems.
- **Stormwater Runoff:** This is generally associated with runoff from urbanized areas after storm events.
- **Timber Harvest:** Activities related to clearing timber can be a potential source of contamination, as well as the potential for erosion in cleared areas.
- **Grazing and Non-grazing Animals:** Domestic and wild animals can be a source of bacteriological contamination to a water supply.
- **Pesticide Application:** Pesticide application in the area is generally implemented for residential use, timber harvest management, and agricultural use and can be entrained in stormwater and drainage channels.
- **Forest Fires:** Firefighting activities as well as erosion and landslide associated with soil instability can be a potential source of contamination.
- **Mining:** Most mining operations have been abandoned, although mine tailings can still be a potential source of contamination.
- **Solid and Hazardous Waste:** Illegal dumping is a pervasive issue in wilderness areas and can be difficult to control.
- **Recreational activities:** Body contact and recreational boating activities in a drinking water supply can be a potential source of bacteriological and fuel contamination.
- **Natural Disasters:** Natural disasters such as flooding can occur with little notice and can wreak havoc on a water supply system by causing overflows from impacted wastewater systems, landslides and excessive sedimentation, and damage to water supply facilities, directly and indirectly affecting water quality.

Much of the discussion in the 1996 WSS and 2001, 2013, and 2018 updates remain unchanged; as those reports are incorporated by reference, the discussion is not duplicated in this report. The following discussion provides information about activities or events that occurred between 2018 and 2022 that had the potential to affect water quality. These include timber harvesting, forest fires, and mining.

5.1 TIMBER HARVESTING

Timber harvesting is an ongoing activity within El Dorado County. The act of timber harvesting as well as the potential for erosion after harvesting can impact watershed receiving waters. Timber harvesting activities require heavy equipment and access, which can have potential impacts to receiving waters due to increased potential for erosion and by modifying natural drainage patterns. These can lead to increased siltation of the receiving waters and can also affect local vegetation and habitats. If the region is not properly protected from erosion after harvesting, subsequent precipitation has the potential to cause further and more severe erosion. Water quality impacts may include an increase in suspended solids as well as nutrient loading and possible eutrophication.

Timber harvesting (or logging) on privately-owned lands is an activity that is regulated and monitored by the California Department of Forestry & Fire Protection (CAL FIRE). The laws regulating timber harvesting were enacted in 1973 in the Forest Practice Act. The laws are intended to protect wildlife, their habitat, and receiving waters. In general, the laws apply to all landowners, from small parcels, ranchers with hundreds of acres, and large timber corporations that own thousands of acres. CAL FIRE ensures that all private landowners adhere to the law.

As part of the harvesting process, the landowner must prepare and submit a Timber Harvesting Plan (THP) which details what timber will be harvested, how it will be harvested, and the measures that will be implemented to mitigate impacts to the environment. A description of the THP review process is included in **Appendix B**. A list of the Notices of Intent (NOIs) that were prepared and submitted for timber harvesting within the watersheds from 2018 to 2022 is shown in **Table 17**. These plans indicate the intention of harvesting timber, not the actual harvesting.

Table 17. El Dorado Irrigation District Watershed Timber Harvesting Plans (2018-2022)[2]

Notice of Intent[a]	Year	Acres	Owner	Location
4-18-002-ELD	2018	231	Sierra Pacific Land & Timber Company	9.5 miles east of the town of Omo Ranch.
4-18-008-ELD	2018	27	Eric K. Salvisberg	5.5 miles southeast of the Indian Diggings School in the town of Omo Ranch.
4-18-014-ELD	2018	420	Sierra Pacific Land & Timber Company	1.5 miles southwest of the Jenkinson Lake dam extending 14 miles east, to the vicinity of Iron Mountain and Pilliken.
4-18-00184-ELD	2019	608	Sierra Pacific Land & Timber Company	3.75 miles southeast from Pollock Pines.
4-20-00017-ELD	2020	1096	Sierra Pacific Land & Timber Company	½ miles east and 7.2 miles southeast of the Town of Omo Ranch.
4-21-00079-ELD	2021	473	Sierra Pacific Land & Timber Company	27 miles east of Placerville and 5 miles west of Hwy 88 intersection with Mormon Emigrant Trail.

Source: CAL FIRE, https://caltreesplans.resources.ca.gov/Caltrees/customization/common/searchdata.aspx
[a] Copies of NOIs are provided in **Appendix B**.

The locations of the intended timber harvesting activities are shown in **Figure 17**.

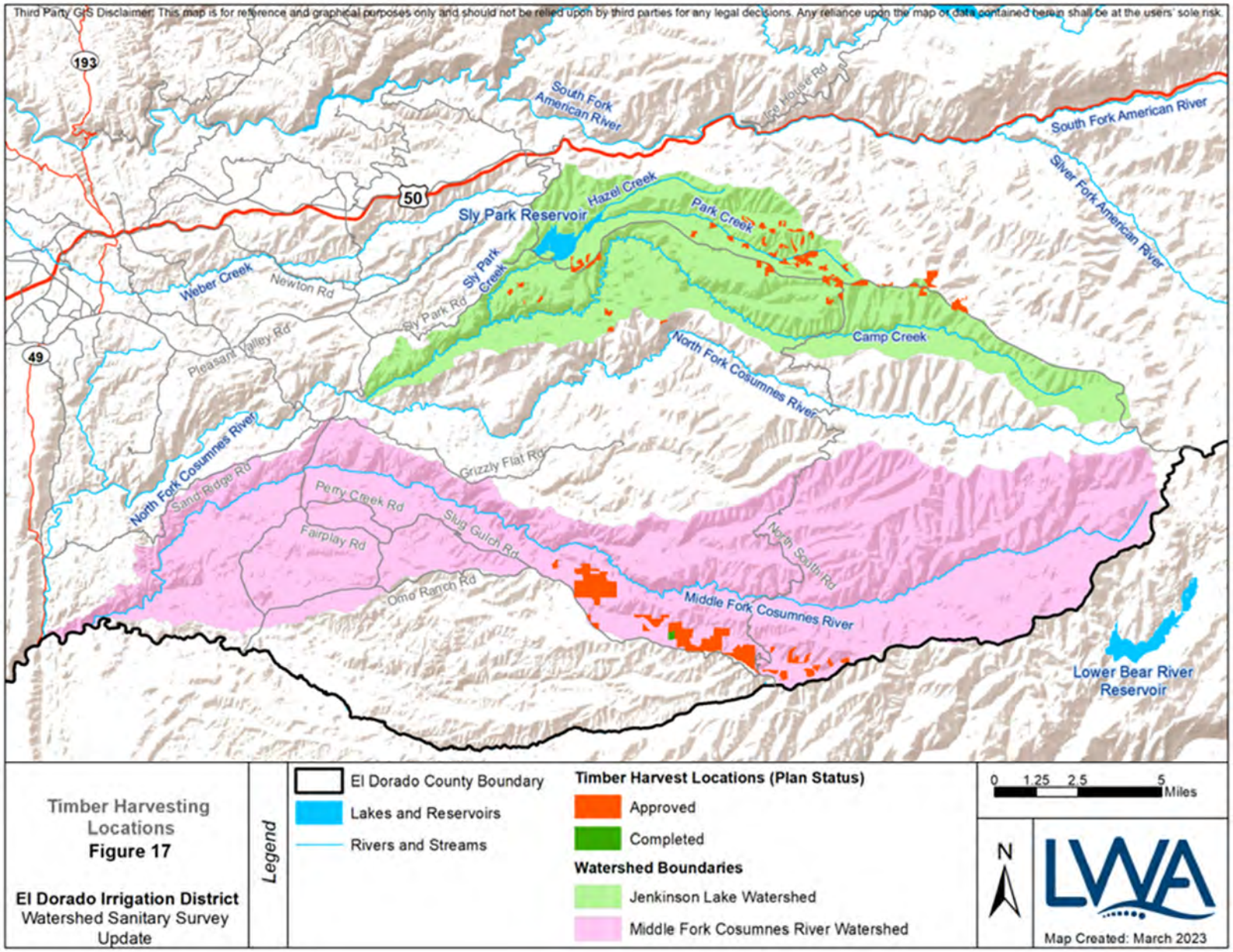

Figure 17. El Dorado Irrigation District Timber Harvesting Locations (2018-2022)[4]

5.2 FOREST FIRES

Forest fires are generally a seasonal hazard and a notable one considering the amount of available fuel in the two watersheds. The various causes can be natural, accidental, or deliberate. Forest fires can affect the water supply via both direct and indirect pathways.

Direct pathways include the direct application of fire retardants or the direct contamination of waterways by burned materials from the fire, as well as by airborne material deposits such as ash. Indirect pathways for contamination are generally associated with the aftermath of fire. Soils in areas affected by fire can become unstable, contributing to erosion and even landslides. Lack of vegetation or canopy can affect the water temperature.

A list of forest fires that occurred within or near the two watersheds between 2018 and 2022 is shown in **Table 18**. A map of these fires is shown in **Figure 18**. A map of fire fuel ranking throughout El Dorado County is shown in **Figure 19**.

Table 18. El Dorado Irrigation District Watershed Forest Fires (2018- 2022)[3]

Fire Name	Date	Acres Burned	Jenkinson Lake Watershed	Middle Fork Cosumnes River Watershed	Description
Shingle	7/4/2018	316	West of watershed	West of watershed	Off South Shingle Road and Latrobe Road, west of Latrobe
Bumper	8/1/2018	67	West of watershed	West of watershed	Bumper Road and China Hill Road, east of Frenchtown
Meyers	9/20/2018	12	Northwest of watershed	North of watershed	Meyers Road in Camino
Carson	7/30/2019	13	Northwest of watershed	North of watershed	Northeast of Placerville in the community of Camino, off of Shadow Ridge Road
Patterson	8/15/2019	35	West of watershed	West of watershed	Patterson Drive, south of Placerville
Caples	10/11/2019	3,444	Northeast of watershed	Northeast of watershed	Northern ridge above Caples Creek north of Highway 88
Fork	9/8/2020	1,673	North of watershed	North of watershed	South Fork Road and Trail View, northeast of Pollock Pines in El Dorado County.
Cold	1/19/2021	30	Within watershed	North of watershed	East of Omo Ranch, South of the community of Grizzly Flats

Fire Name	Date	Acres Burned	Jenkinson Lake Watershed	Middle Fork Cosumnes River Watershed	Description
Bell	5/20/2021	18	Southwest of watershed	Southwest of watershed	Bell and N. Vineyard Roads in the Plymouth area
Steins	6/26/2021	14	West of watershed	West of watershed	Kingvale Road and Wildcrest Road
Tamarack	7/4/2021	68,637	East of watershed	East of watershed	Pleasant Valley, Southwest of Markleeville
Summit	7/20/2021	22	East of watershed	East of watershed	3 miles south of Kirkwood, CA
Caldor	8/14/2021	221,835	Within watershed	Within watershed	East of Omo Ranch, South of the community of Grizzly Flats
Lawrence	9/5/2021	46	Southwest of watershed	South of watershed	Lawrence Road between Tyler Road and Cedar Creek Road, North of Fiddletown
Mosquito	9/6/2022	76,788	North of watershed	North of watershed	Mosquito Road and OxBow Reservoir east of Foresthill, Placer County

Source: CAL FIRE, Department of Forestry and Fire Protection. https://frap.fire.ca.gov/mapping/gis-data/. Accessed March 21, 2023.

As described in **Table 18**, only the Caldor fire occurred within the watershed boundaries. It is possible that ash from distant fires may have been deposited within the watershed boundary, but this is not expected to have had a significant impact on water quality. The Caldor Fire had the largest impact on the watershed, especially on the turbidity of WTP intake water.

In October 2021, Middle Fork Cosumnes River and Jenkinson Lake were affected by runoff from heavy rainfall on the Caldor Fire burn area. For three days following that rainfall, turbidity levels over 100 NTU were measured in intake water to the Reservoir A and Outingdale WTPs, higher than any previously-recorded level. This required the WTPs to increase their chlorine dose to well beyond normal amounts and increase the filter backwash frequency to clear the increased sediment load. Gradually, over the course of 20 days and with occasional small increases, the intake water turbidity returned to normal levels. However, the increased chlorine dosage necessary during the period of elevated turbidity resulted in a significant increase in HAA5 (five haloacetic acids commonly found in drinking water[2]) during the fourth quarter of 2021.

[2] Monochloracetic acid, dichloroacetic acid, trichloroacetic acid, monobromoacetic acid, and dibromoacetic acid.

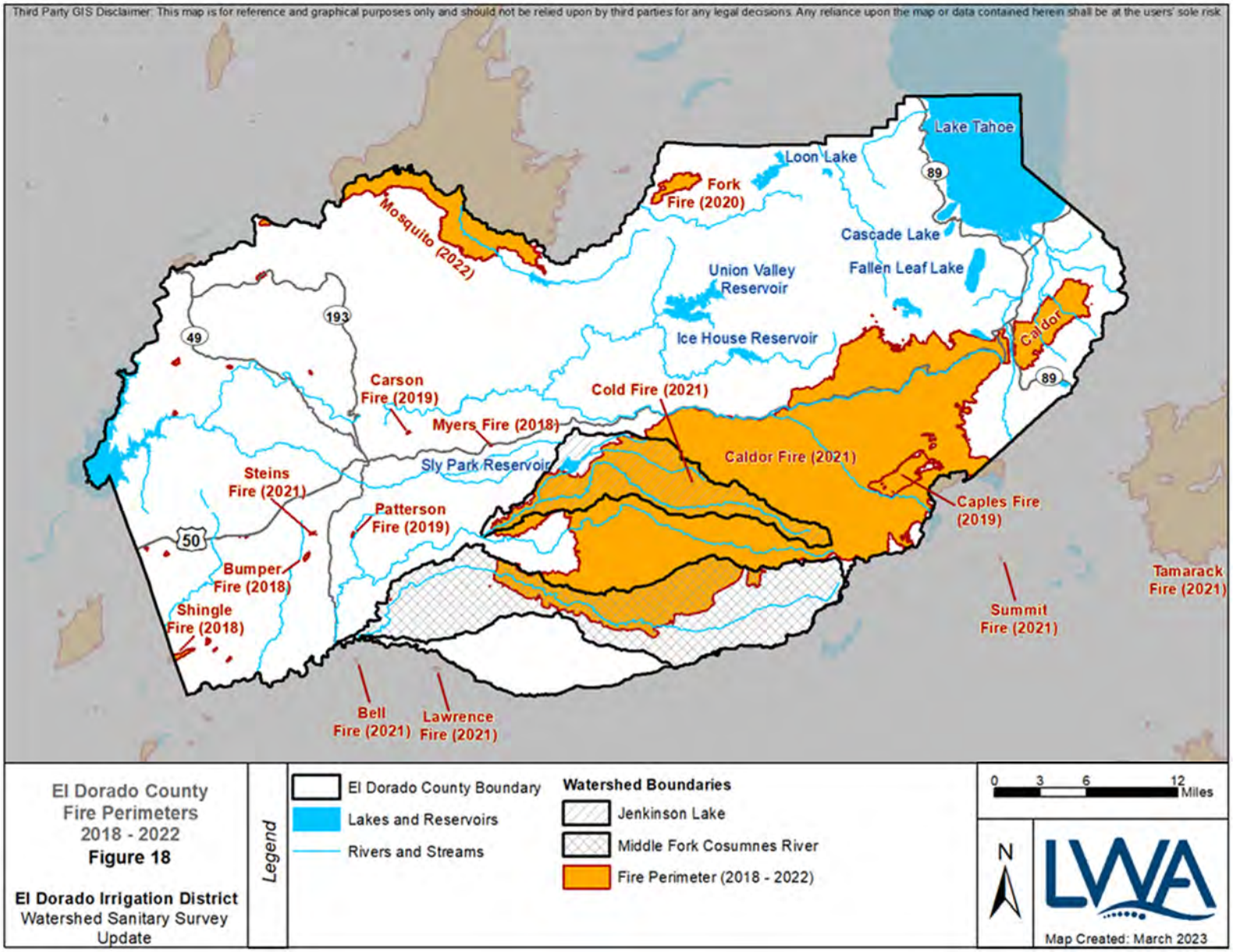

Figure 18. El Dorado Irrigation District Watershed Forest Fires (2018-2022)[3]

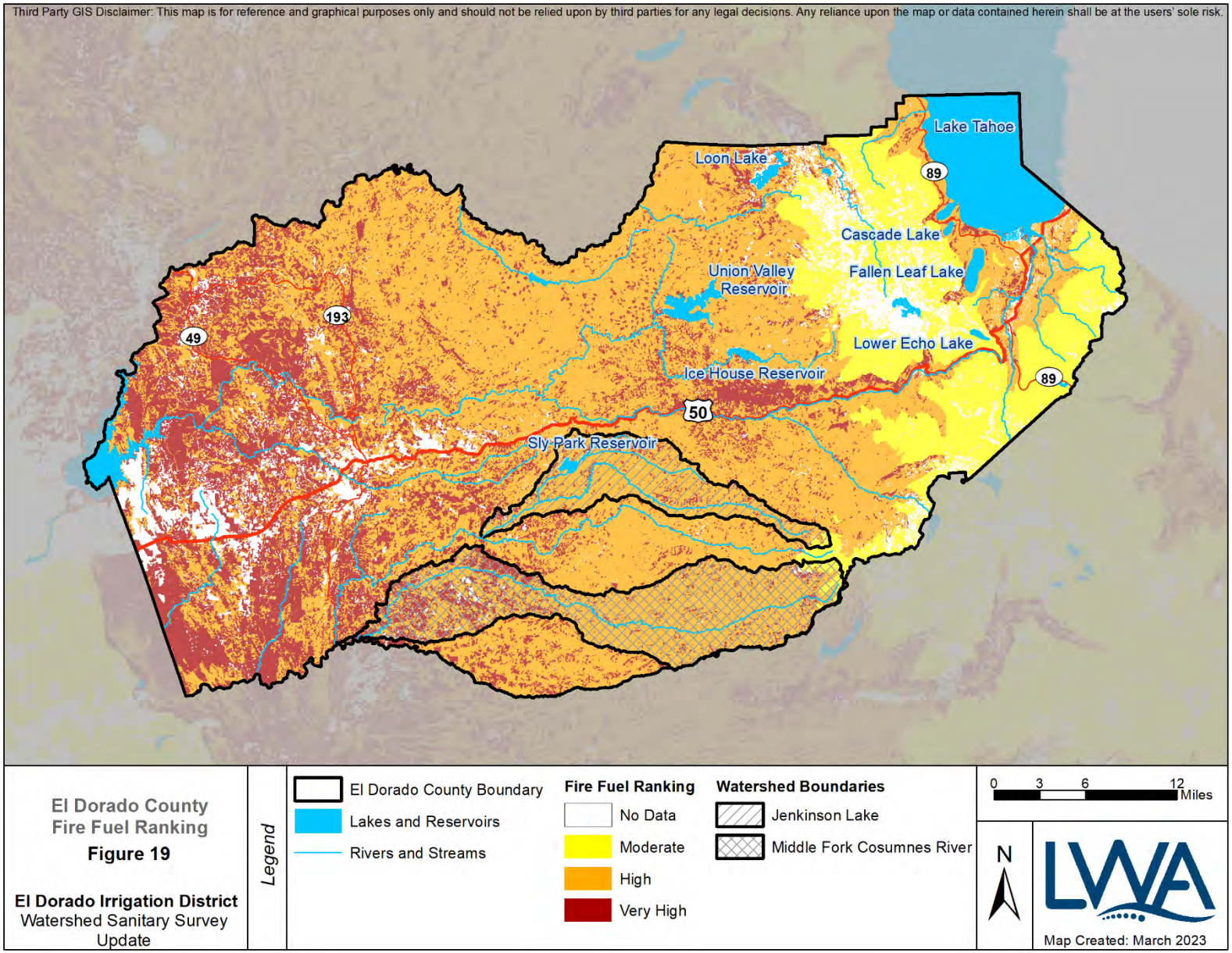

Figure 19. El Dorado County Fire Fuel Ranking[14]

5.3 MINES

Gold mining has occurred within this region of California. Abandoned mines within the watersheds were described in the 1996 WSS.

The Hazel Creek Mine site is located approximately one mile south of Highway 50 along Hazel Creek, 15 miles east of Placerville. The mine was reactivated in 1984 by Mineral Strategies Inc., discharging mine tailings (consisting of iron and lead) to six unlined ponds located along Hazel Creek under Waste Discharge Requirements Order No. 83-002. Mineral Strategies Inc. went bankrupt and abandoned the mine. Georgia Pacific acquired ownership of the site in 1988 and the mineral rights in 1995. In March 1997, Sierra Pacific Industries became the owner. The mine was closed in 1998.

When the Hazel Creek Mine was officially closed on July 7, 1998, the Central Valley Regional Water Quality Control Board (Regional Board) issued Waste Discharge Requirements (WDR) to Sierra Pacific Industries for the site (Order No. 98-153). As part of that permit, Sierra Pacific Industries was required to remove the wastes and construct a new waste management unit above the 100-year peak stream flow. The monitoring and reporting requirements of the WDR included water quality sampling until September 2007, when the Regional Board revised the monitoring and reporting program to eliminate water quality sampling and reduced the requirement to visual monitoring and reporting, due to a determination of no detected or observed impacts to the water quality of Hazel Creek.

The original WDR and revised monitoring and reporting program are included as Appendix C of the 2018 WSS update.

5.4 GEOTRACKER RESULTS FOR SITES OF POTENTIAL IMPACT

GeoTracker is the SWRCB data management system for sites that impact or have the potential to impact groundwater quality in California. GeoTracker contains records for sites that require cleanup, such as Site Cleanup Program sites, Department of Defense sites, and Leaking Underground Storage Tank (LUST) sites. GeoTracker also contains records for various unregulated projects as well as permitted facilities, including irrigated lands, oil and gas production, operating permitted Underground Storage Tanks, and land disposal sites.

GeoTracker was searched for sites that impact or have the potential to impact groundwater quality near or within the watersheds. Five sites near or within the Jenkinson Lake Watershed and five sites near or within the Middle Fork Cosumnes River Watershed were identified. Among these ten sites, four were active and regulated by the Regional Board, and four were closed with no further action required. The status of one site was listed as unknown, and the status of one site was listed as closed with monitoring requirements.

Regulation by the Regional Board reduces and mitigates risks to the groundwater quality of both watersheds.

6 WATERSHED MANAGEMENT AND RECOMMENDATIONS

There are no significant improvements to the management and protection of the watershed that have not already been identified and recommended in the 1996, 2001, 2013, and 2018 WSS Reports. The overarching goals have been identified as follows (1996 WSS):

- Reduction of the potential for wildfires, landslides, or other natural disasters;
- Reduction of bacteriological contamination of multi-use waters by septic systems, animal grazing, or recreational use;
- Reduction of the potential for hazardous chemical release to multi-use waters caused by car highway accidents, poor disposal practices, pesticide spray programs, or domestic yard; and
- Protection of water supplies from effects of urbanization, especially urban stormwater contamination.

6.1 WATERSHED MANAGEMENT STRATEGY

Control measures were proposed to achieve the identified goals, summarized below. These are discussed in detail in the 1996 WSS:

- **Buffer Zones:** Developing buffer zones along the watercourse can be an effective way to protect the receiving waters;
- **Land Acquisition:** Acquiring land within the watershed can help prevent the types of activities that may contribute to water source contamination by limiting the amount of available land on which those activities can occur;
- **Public Participation and Education:** Public outreach and education is an effective way to protect the watershed by alerting the public to the types of activities that can pollute the watershed and water supply;
- **Density Restrictions:** Urbanization can lead to higher amounts of stormwater runoff and indirectly affect source water quality. Restricting urbanization can reduce these impacts;
- **Septic System Restrictions:** El Dorado County Environmental Health implements a program for evaluating and regulating septic system construction and use. Continued implementation will continue to provide protection for sources of water supply;
- **Stormwater Management:** El Dorado County Environmental Health and the Regional Water Quality Control Board are responsible for implementing and regulating stormwater management through municipal stormwater permits. Continued regulation and monitoring of municipal stormwater programs will continue to protect the receiving water and water supply;
- **Grazing Restrictions:** Implementing livestock restrictions will continue to protect the watershed from excessive bacterial loading from domestic livestock;

- **Timber Harvest Management:** The California Department of Forestry & Fire Protection is responsible for continued regulation of timber harvesting through the timber harvesting plan review process, which is intended to protect wildlife habitat and receiving waters from the potential impacts of timber harvesting;
- **Watershed Surveillance and Monitoring:** Effective watershed management is coupled with continued monitoring and surveillance to identify potential sources of contamination as they occur and to identify trends.

6.1.1 Regional Collaboration

The District is an active member of the Cosumnes, American, Bear & Yuba (CABY) Integrated Regional Water Management Plan (IRWMP), which is a collaborative planning effort comprised of more than 30 regional organizations. Members represent water supply, conservation, recreation, agriculture, federal and local government, and community interests.

The purpose of the planning effort is to collaborate among and involve a diverse group of stakeholders and bring funding into the region for projects that improve water quality, water quantity, and environmental quality. The CABY guiding principles are as follows:

- Achieve the consumptive, environmental, power, and recreational requirements of our region in a balanced manner.
- Encourage implementation of water management policies in support of CABY goals and objectives.
- Manage and protect our resources in the face of climate change and variability through water policy, monitoring, assessment, restoration, and infrastructure development and operations.
- Address the increase in population and demand through water and watershed management.
- Inform and educate our current and future generations on the value and methods of a watershed approach and water management consistent with CABY goals and objectives.
- Build and maintain constructive relationships with multiple stakeholders and the public to foster collaboration and communication in our region.
- Engage elected officials within the CABY region through an advisory council about CABY activities that may affect their constituents.
- Build organizational and community capacity to aid in achieving our vision in the watersheds of the CABY region.

6.2 RECOMMENDATIONS

There have been no significant changes to the watersheds or the types of activities within the watersheds that would create a new or increased potential for source water contamination.

It is recommended that the District continue to implement current watershed management, source water protection, and water quality monitoring programs in order to continue to meet source water and drinking water quality goals.

It is recommended that the District continue to be an active participant of the CABY IRWMP to assure that there is communication among other stakeholders within the watersheds.

It is recommended that the District explore options to work with the California Department of Forestry & Fire Protection to promote mitigation of sediment transport after logging and wildfire prevention actions.

7 REFERENCES

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3. CAL FIRE, Department of Forestry and Fire Protection. https://frap.fire.ca.gov/mapping/gis-data/. [Table 18. El Dorado Irrigation District Watershed Forest Fires (2018- 2022)[3], Figure 18. El Dorado Irrigation District Watershed Forest Fires (2018-2022)[3]]
4. California Department of Forestry and Fire Protection, https://gis.data.cnra.ca.gov/datasets/CALFIRE-Forestry::cal-fire-timber-harvesting-plans-all-ta83/explore?layer=0&location=38.613495%2C-120.271509%2C10.47, 3/16/2023. [Figure 17. El Dorado Irrigation District Timber Harvesting Locations (2018-2022)]
5. California Natural Resources Agency, https://data.cnra.ca.gov/dataset/nhd-archive, 1/12/2023. [Figure 1. El Dorado Irrigation District Watershed Sanitary Survey Areas, Figure 2. El Dorado Irrigation District Watersheds Map]
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14. El Dorado Irrigation District, California Department of Forestry and Fire Protection (CAL FIRE) - Fire and Resource Assessment Program (FRAP), 2023. [Figure 19. El Dorado County Fire Fuel Ranking]
15. El Dorado Irrigation District, Daily Operation Summaries, 2018-2022. [Table 3. Monthly Camp Creek Water Diversions to Jenkinson Lake (2018-2022)]
16. El Dorado Irrigation District, Jenkinson Lake Recreation Area Map, http://www.eid.org. [Figure 13. Jenkinson Lake Recreation Area Map]
17. El Dorado Irrigation District, Jenkinson Lake Reservoir Management & Operations Plan, January 2017.
18. El Dorado Irrigation District, Monthly Summaries of Bacteriological, Turbidity, Total Organic Carbon Monitoring, 2018-2022. [Table 7, Table 8, Table 9, Table 10, Table 11, Table 12, Table 13, Table 14, Table 15, Table 16]
19. El Dorado Irrigation District, Sly Park Recreation Area Statistical Information, 2018-2022. [Table 6Table 6. Jenkinson Lake (Sly Park) Recreational Area Statistics (2018-2022)]
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APPENDIX

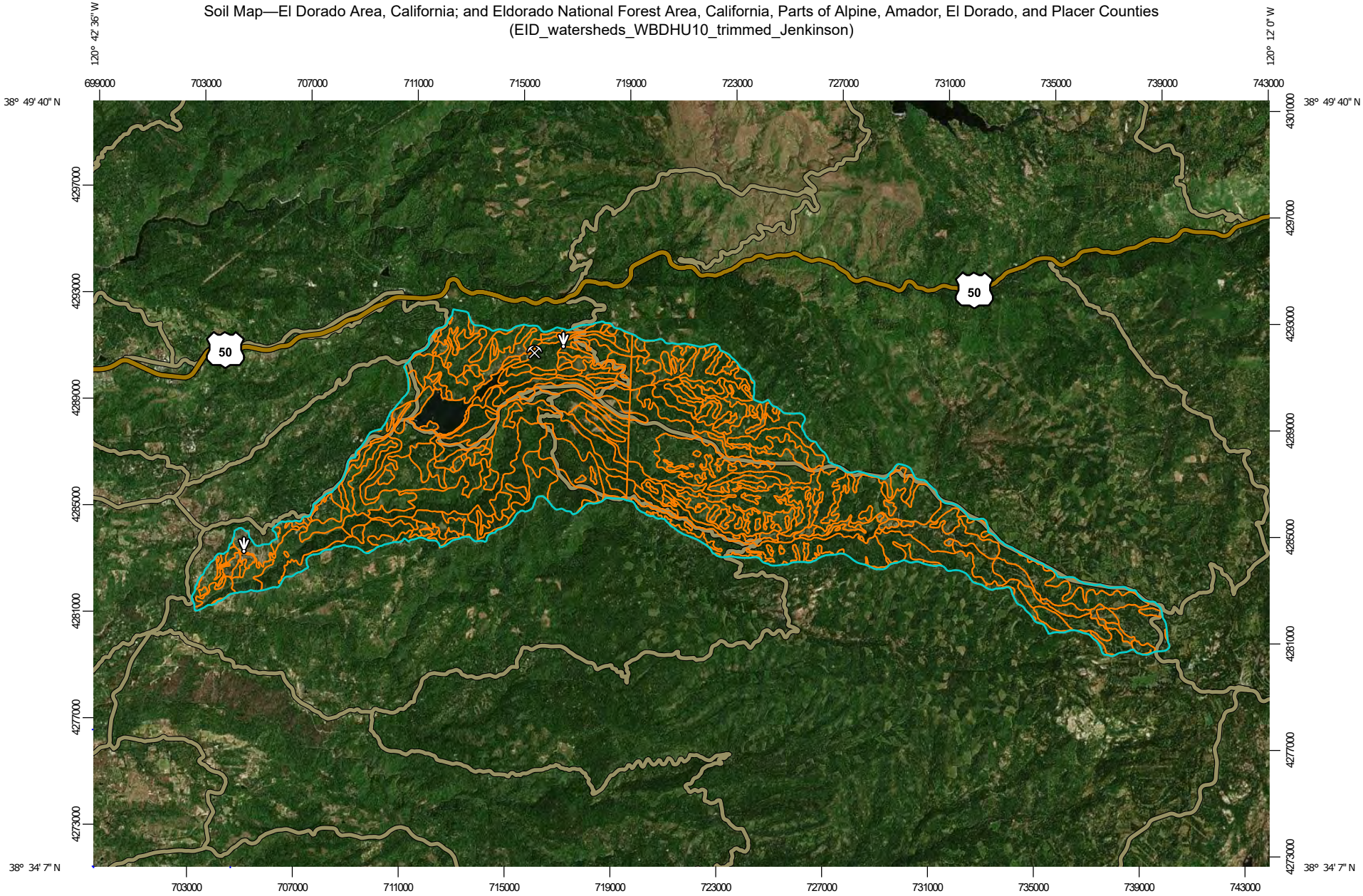
Appendix A: Watershed Soil Surveys

Appendix B: Timber Harvest Plan Review Process and Notices of Intent from 2018 to 2022

APPENDIX A

Watershed Soil Surveys

Soil Map—El Dorado Area, California; and Eldorado National Forest Area, California, Parts of Alpine, Amador, El Dorado, and Placer Counties
(EID_watersheds_WBDHU10_trimmed_Jenkinson)



Map Scale: 1:203,000 if printed on A landscape (11" x 8.5") sheet.

N

Meters
0 3000 6000 12000 18000

Feet
0 5000 10000 20000 30000

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 10N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at scales ranging from 1:20,000 to 1:24,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: El Dorado Area, California
Survey Area Data: Version 14, Sep 1, 2022

Soil Survey Area: Eldorado National Forest Area, California, Parts of Alpine, Amador, El Dorado, and Placer Counties
Survey Area Data: Version 15, Sep 1, 2022

Your area of interest (AOI) includes more than one soil survey area. These survey areas may have been mapped at different scales, with a different land use in mind, at different times, or at different levels of detail. This may result in map unit symbols, soil properties, and interpretations that do not completely agree across soil survey area boundaries.

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jan 1, 1999—Dec 31, 2003

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
101pc	Aiken loam, 9 to 15 percent slopes, low precip	0.1	0.0%
AaF	Acidic rock land	233.6	0.6%
AfD	Aiken loam, 15 to 30 percent slopes, C Low Montane	204.1	0.5%
AgD	Aiken cobbly loam, 3 to 30 percent slopes	123.7	0.3%
CmC	Cohasset loam, shoulders, 3 to 20 percent slopes, dry	417.1	1.0%
CmD	Cohasset loam, backslopes, 10 to 30 percent slopes, dry	604.2	1.5%
CoC	Cohasset cobbly loam, 3 to 15 percent slopes	214.0	0.5%
CoE	Cohasset cobbly loam, 15 to 50 percent slopes	1,189.6	3.0%
CrE	Crozier cobbly loam, 9 to 50 percent slopes	567.3	1.4%
DmD	Diamond Springs gravelly sandy loam, grayish subsoil variant, 9 to 30 percent slopes	23.0	0.1%
DmE	Diamond Springs gravelly sandy loam, grayish subsoil variant, 30 to 50 percent slopes	23.8	0.1%
HgC	Holland coarse sandy loam, 9 to 15 percent slopes	49.1	0.1%
HkE	Holland very rocky coarse sandy loam, 15 to 50 percent slopes	198.8	0.5%
ImE	Iron Mountain very rocky sandy loam, 3 to 50 percent slopes	784.0	1.9%
JrC	Josephine gravelly loam, 9 to 15 percent slopes	194.6	0.5%
JrD	Josephine gravelly loam, 15 to 30 percent slopes	1,780.7	4.4%
JsE	Josephine very rocky loam, 15 to 50 percent slopes	2,089.1	5.2%
JtC	Josephine silt loam, 5 to 15 percent slopes	0.1	0.0%
JtD	Josephine silt loam, 15 to 30 percent slopes	397.5	1.0%
JuE	Josephine very rocky silt loam, 9 to 50 percent slopes	234.8	0.6%

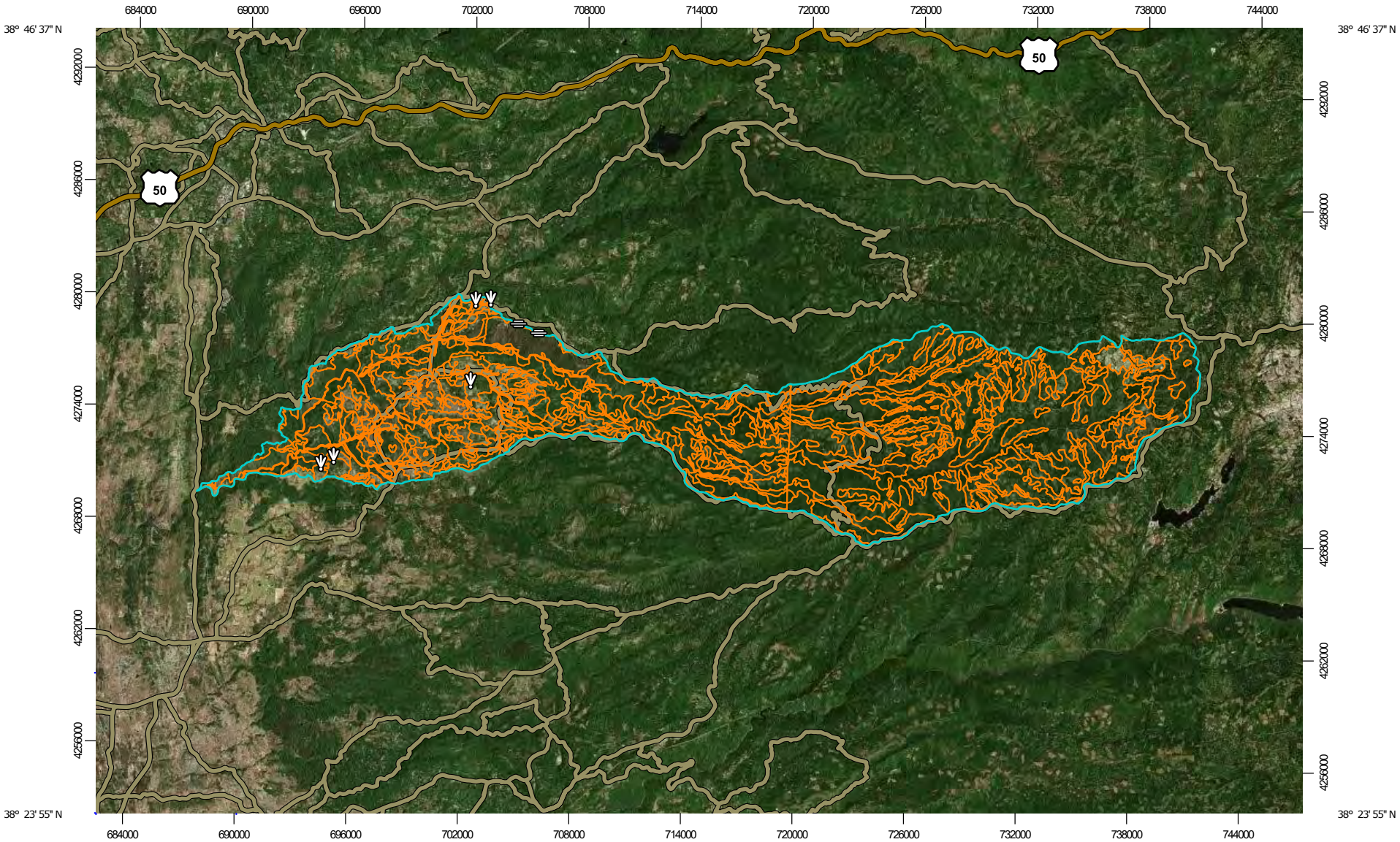
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
JuF	Josephine very rocky silt loam, 50 to 70 percent slopes	782.8	1.9%
JvD	Josephine-Mariposa gravelly loams, 15 to 30 percent slopes	293.3	0.7%
MaD	Mariposa gravelly silt loam, 3 to 30 percent slopes	16.5	0.0%
MbE	Mariposa very rocky silt loam, 3 to 50 percent slopes	761.7	1.9%
MbF	Mariposa very rocky silt loam, 50 to 70 percent slopes	2,391.1	5.9%
McE	Mariposa-Josephine very rocky loams, 15 to 50 percent slopes	2,338.4	5.8%
McF	Mariposa-Josephine very rocky loams, 50 to 70 percent slopes	279.2	0.7%
MhE	McCarthy cobbly loam, 9 to 50 percent slopes	2,428.9	6.0%
MmF	Metamorphic rock land	655.1	1.6%
MpB	Mixed alluvial land	26.6	0.1%
MrC	Musick sandy loam, 9 to 15 percent slopes	6.4	0.0%
PrD	Placer diggings	130.2	0.3%
SkC	Sites loam, 9 to 15 percent slopes, C low montane	55.3	0.1%
SkD	Sites loam, 15 to 30 percent slopes, C low montane	55.9	0.1%
SkE	Sites loam, 30 to 50 percent slopes, C low montane	26.1	0.1%
TaD	Tailings	5.0	0.0%
W	Water	633.3	1.6%
WaB	Wet alluvial land	20.7	0.1%
Subtotals for Soil Survey Area		**20,235.6**	**50.3%**
Totals for Area of Interest		**40,212.3**	**100.0%**

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
107	Chaix-Pilliken coarse sandy loam, 5 to 30 percent slopes complex	833.4	2.1%
108	Chaix-Pilliken coarse sandy loams, 30 to 75 percent slopes complex	540.9	1.3%
112	Cohasset-McCarthy association, 2 to 30 percent slopes	279.3	0.7%

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
113	Cohasset-McCarthy association, 30 to 50 percent slopes	104.9	0.3%
116	Crozier-Cohasset loams, 5 to 30 percent slopes complex	359.9	0.9%
117	Crozier-Cohasset loams, 30 to 50 percent slopes complex	443.5	1.1%
118	Crozier-McCarthy complex, 5 to 30 percent slopes	713.0	1.8%
119	McCarthy-Crozier complex, 30 to 50 percent slopes	361.3	0.9%
150	Jocal loam, 5 to 30 percent slopes	1,034.1	2.6%
151	Jocal loam, 30 to 50 percent slopes	190.9	0.5%
159	Ledmount-Rock outcrop association, 2 to 30 percent slopes	300.4	0.7%
160	Ledmount-Rock outcrop association, 30 to 75 percent slopes	58.9	0.1%
162	Lithic Cryumbrepts-Waca association, 5 to 30 percent slopes	288.3	0.7%
164	Lithic Xerumbrepts-Rock outcrop complex, 15 to 75 percent slopes	392.4	1.0%
165	Lumberly gravelly coarse sandy loam, 5 to 30 percent slopes	416.6	1.0%
166	Lumberly gravelly coarse sandy loam, 30 to 50 percent slopes	290.6	0.7%
170	Mariposa-Jocal complex, 30 to 75 percent slopes, C Low Montane	352.5	0.9%
175	McCarthy gravelly sandy loam, 2 to 30 percent slopes	6,391.2	15.9%
176	McCarthy gravelly sandy loam, 30 to 50 percent slopes	617.2	1.5%
177	McCarthy-Ledmount association, 2 to 30 percent slopes	3,693.9	9.2%
178	McCarthy-Ledmount association, 30 to 75 percent slopes	393.6	1.0%
211	Waca cobbly sandy loam, 5 to 30 percent slopes	998.4	2.5%
212	Waca cobbly sandy loam, 30 to 50 percent slopes	221.0	0.5%

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
216	Waca-Windy complex, 5 to 30 percent slopes	575.7	1.4%
217	Waca-Windy complex, 30 to 50 percent slopes	124.8	0.3%
Subtotals for Soil Survey Area		**19,976.7**	**49.7%**
Totals for Area of Interest		**40,212.3**	**100.0%**

Soil Map—Amador Area, California; El Dorado Area, California; and Eldorado National Forest Area, California, Parts of Alpine, Amador, El Dorado, and ...
(EID_watersheds_WBDHU10_trimmed_Middle_Fork_Cosumnes)



Map Scale: 1:296,000 if printed on A landscape (11" x 8.5") sheet.

N

Meters
0 4000 8000 16000 24000

Feet
0 10000 20000 40000 60000

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 10N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at scales ranging from 1:20,000 to 1:24,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Amador Area, California
Survey Area Data: Version 15, Sep 1, 2022

Soil Survey Area: El Dorado Area, California
Survey Area Data: Version 14, Sep 1, 2022

Soil Survey Area: Eldorado National Forest Area, California, Parts of Alpine, Amador, El Dorado, and Placer Counties
Survey Area Data: Version 15, Sep 1, 2022

Your area of interest (AOI) includes more than one soil survey area. These survey areas may have been mapped at different scales, with a different land use in mind, at different times, or at different levels of detail. This may result in map unit symbols, soil properties, and interpretations that do not completely agree across soil survey area boundaries.

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jan 1, 1999—Dec 31, 2003

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
ArD	Auburn silt loam, moderately deep, 16 to 31 percent slopes	0.0	0.0%
IsE	Iron Mountain very stony loam, 9 to 51 percent slopes	0.2	0.0%
MmE	McCarthy and Jiggs very cobbly loams, 16 to 51 percent slopes	0.4	0.0%
Mn	Mine tailings and Riverwash	0.0	0.0%
SkF	Sierra very rocky coarse sandy loam, 51 to 71 percent slopes	0.0	0.0%
SmE	Sierra very rocky coarse sandy loam, moderately deep, 31 to 51 percent slopes	0.0	0.0%
SoE	Sites loam, moderately deep, 31 to 51 percent slopes	0.1	0.0%
W	Water	0.3	0.0%
WcE	Windy cobbly sandy loam, 16 to 51 percent slopes	9.9	0.0%
Subtotals for Soil Survey Area		**11.0**	**0.0%**
Totals for Area of Interest		**85,967.2**	**100.0%**

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
101pc	Aiken loam, 9 to 15 percent slopes, low precip	313.0	0.4%
AaF	Acidic rock land	1,758.8	2.0%
AcC	Ahwahnee coarse sandy loam, 9 to 15 percent slopes	68.1	0.1%
AdD	Ahwahnee very rocky coarse sandy loam, 9 to 30 percent slopes	632.8	0.7%
AdE	Ahwahnee very rocky coarse sandy loam, 30 to 50 percent slopes	1,544.7	1.8%
AfB	Aiken loam, 2 to 9 percent slopes, C Lower Montane	175.5	0.2%
AfD	Aiken loam, 15 to 30 percent slopes, C Low Montane	349.3	0.4%
AoB	Argonaut loam, seeped variant	132.1	0.2%
ArC	Auberry coarse sandy loam, 9 to 15 percent slopes	192.3	0.2%
ArD	Auberry coarse sandy loam, 15 to 30 percent slopes	3.9	0.0%

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
AsC	Auberry rocky coarse sandy loam, 5 to 15 percent slopes	475.6	0.6%
AtD	Auberry very rocky coarse sandy loam, 15 to 30 percent slopes	526.8	0.6%
AtE	Auberry very rocky coarse sandy loam, 30 to 50 percent slopes	137.3	0.2%
AxD	Auburn very rocky silt loam, 2 to 30 percent slopes	34.9	0.0%
AxE	Auburn very rocky silt loam, 30 to 50 percent slopes	47.4	0.1%
AyF	Auburn extremely rocky silt loam, 3 to 70 percent slopes	10.7	0.0%
CcE	Chaix very rocky coarse sandy loam, 9 to 50 percent slopes	2,474.8	2.9%
CcF	Chaix very rocky coarse sandy loam, 50 to 70 percent slopes	602.2	0.7%
ChE	Chawanakee very rocky coarse sandy loam, 9 to 50 percent slopes	923.9	1.1%
CkD	Cohasset sandy loam, 9 to 30 percent slopes	438.2	0.5%
ClE	Cohasset cobbly sandy loam, 9 to 50 percent slopes	791.0	0.9%
CmB	Cohasset loam, summits, 2 to 20 percent slopes, dry	91.3	0.1%
CmC	Cohasset loam, shoulders, 3 to 20 percent slopes, dry	68.6	0.1%
CmD	Cohasset loam, backslopes, 10 to 30 percent slopes, dry	360.7	0.4%
CoC	Cohasset cobbly loam, 3 to 15 percent slopes	158.3	0.2%
CoE	Cohasset cobbly loam, 15 to 50 percent slopes	709.8	0.8%
CrE	Crozier cobbly loam, 9 to 50 percent slopes	85.8	0.1%
DmD	Diamond Springs gravelly sandy loam, grayish subsoil variant, 9 to 30 percent slopes	21.6	0.0%
DmE	Diamond Springs gravelly sandy loam, grayish subsoil variant, 30 to 50 percent slopes	30.3	0.0%
GuF	Gullied land	2,215.7	2.6%
HgB	Holland coarse sandy loam, 5 to 9 percent slopes	229.3	0.3%

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
HgC	Holland coarse sandy loam, 9 to 15 percent slopes	2,398.0	2.8%
HgD	Holland coarse sandy loam, 15 to 30 percent slopes	1,334.6	1.6%
HhC	Holland rocky coarse sandy loam, 5 to 15 percent slopes	298.0	0.3%
HkE	Holland very rocky coarse sandy loam, 15 to 50 percent slopes	2,615.0	3.0%
HkF	Holland very rocky coarse sandy loam, 50 to 70 percent slopes	71.5	0.1%
HtE	Hotaw very rocky coarse sandy loam, 15 to 50 percent slopes	681.2	0.8%
ImE	Iron Mountain very rocky sandy loam, 3 to 50 percent slopes	272.6	0.3%
JrC	Josephine gravelly loam, 9 to 15 percent slopes	179.9	0.2%
JrD	Josephine gravelly loam, 15 to 30 percent slopes	325.6	0.4%
JsE	Josephine very rocky loam, 15 to 50 percent slopes	728.8	0.8%
JtC	Josephine silt loam, 5 to 15 percent slopes	63.4	0.1%
JtD	Josephine silt loam, 15 to 30 percent slopes	177.0	0.2%
JuE	Josephine very rocky silt loam, 9 to 50 percent slopes	1,104.7	1.3%
JuF	Josephine very rocky silt loam, 50 to 70 percent slopes	926.3	1.1%
LaB	Loamy alluvial land	113.8	0.1%
MbE	Mariposa very rocky silt loam, 3 to 50 percent slopes	229.9	0.3%
MbF	Mariposa very rocky silt loam, 50 to 70 percent slopes	2,560.9	3.0%
McE	Mariposa-Josephine very rocky loams, 15 to 50 percent slopes	55.6	0.1%
McF	Mariposa-Josephine very rocky loams, 50 to 70 percent slopes	824.6	1.0%
MhE	McCarthy cobbly loam, 9 to 50 percent slopes	953.2	1.1%
MmF	Metamorphic rock land	596.5	0.7%
MrC	Musick sandy loam, 9 to 15 percent slopes	301.4	0.4%

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
MrD	Musick sandy loam, 15 to 30 percent slopes	316.2	0.4%
MsC	Musick rocky sandy loam, 5 to 15 percent slopes	218.1	0.3%
MtE	Musick very rocky sandy loam, 15 to 50 percent slopes	837.4	1.0%
PrD	Placer diggings	480.1	0.6%
Qu	Quarries	39.2	0.0%
SbB	Shaver coarse sandy loam, 5 to 9 percent slopes	313.6	0.4%
SbC	Shaver coarse sandy loam, 9 to 15 percent slopes	1,452.2	1.7%
SbD	Shaver coarse sandy loam, 15 to 30 percent slopes	1,139.6	1.3%
ScC	Shaver rocky coarse sandy loam, 5 to 15 percent slopes	409.0	0.5%
SdE	Shaver very rocky coarse sandy loam, 15 to 50 percent	1,421.5	1.7%
SfC2	Sierra sandy loam, 9 to 15 percent slopes, eroded	102.9	0.1%
SfD2	Sierra sandy loam, 15 to 30 percent slopes, eroded	153.4	0.2%
SgC	Sierra rocky sandy loam, 5 to 15 percent slopes	271.0	0.3%
ShD	Sierra very rocky sandy loam, 15 to 30 percent slopes	344.4	0.4%
ShE	Sierra very rocky sandy loam, 30 to 50 percent slopes	336.8	0.4%
SkC	Sites loam, 9 to 15 percent slopes, C low montane	135.5	0.2%
SkD	Sites loam, 15 to 30 percent slopes, C low montane	644.5	0.7%
SkE	Sites loam, 30 to 50 percent slopes, C low montane	230.4	0.3%
SrE	Sites very rocky loam, 15 to 50 percent slopes	37.7	0.0%
TaD	Tailings	23.1	0.0%
W	Water	333.1	0.4%
WaB	Wet alluvial land	118.1	0.1%
WhE	Whiterock gravelly silt loam, 3 to 50 percent slopes	16.9	0.0%
Subtotals for Soil Survey Area		**41,791.7**	**48.6%**
Totals for Area of Interest		**85,967.2**	**100.0%**

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
103	Aquepts, Umbrepts and 0 to 15 percent slopes soils	29.3	0.0%
107	Chaix-Pilliken coarse sandy loam, 5 to 30 percent slopes complex	6,996.6	8.1%
108	Chaix-Pilliken coarse sandy loams, 30 to 75 percent slopes complex	2,875.6	3.3%
112	Cohasset-McCarthy association, 2 to 30 percent slopes	7,262.3	8.4%
113	Cohasset-McCarthy association, 30 to 50 percent slopes	3,037.8	3.5%
147	Holland-Musick loams, 30 to 50 percent slopes complex	415.1	0.5%
151	Jocal loam, 30 to 50 percent slopes	47.4	0.1%
162	Lithic Cryumbrepts-Waca association, 5 to 30 percent slopes	395.9	0.5%
163	Lithic Cryumbrepts-Waca association, 30 to 50 percent slopes	2.0	0.0%
164	Lithic Xerumbrepts-Rock outcrop complex, 15 to 75 percent slopes	1,965.5	2.3%
165	Lumberly gravelly coarse sandy loam, 5 to 30 percent slopes	727.1	0.8%
166	Lumberly gravelly coarse sandy loam, 30 to 50 percent slopes	1,198.5	1.4%
170	Mariposa-Jocal complex, 30 to 75 percent slopes, C Low Montane	55.8	0.1%
175	McCarthy gravelly sandy loam, 2 to 30 percent slopes	2,949.0	3.4%
176	McCarthy gravelly sandy loam, 30 to 50 percent slopes	5,885.8	6.8%
177	McCarthy-Ledmount association, 2 to 30 percent slopes	4,775.0	5.6%
178	McCarthy-Ledmount association, 30 to 75 percent slopes	111.3	0.1%
211	Waca cobbly sandy loam, 5 to 30 percent slopes	2,556.4	3.0%
212	Waca cobbly sandy loam, 30 to 50 percent slopes	1,090.2	1.3%

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
216	Waca-Windy complex, 5 to 30 percent slopes	1,694.4	2.0%
217	Waca-Windy complex, 30 to 50 percent slopes	93.5	0.1%
Subtotals for Soil Survey Area		**44,164.5**	**51.4%**
Totals for Area of Interest		**85,967.2**	**100.0%**

APPENDIX B

Timber Harvest Plan Review Process and Notices of Intent from 2018 to 2022

CDF's Role in Timber Harvesting

The California Department of Forestry and Fire Protection (CDF) enforces the laws that regulate logging on privately-owned lands in California. These laws are found in the Forest Practice Act which was enacted in 1973 to ensure that logging is done in a manner that will also preserve and protect our fish, wildlife, forests, and streams. Additional rules enacted by the State Board of Forestry and Fire Protection are also enforced to protect these resources.

CDF ensures that private landowners abide by these laws when harvesting trees. Although there are specific exemptions in some cases, compliance with the Forest Practice Act and Board rules apply to all commercial harvesting operations for landowners of small parcels, to ranchers owning hundreds of acres, and large timber companies with thousands of acres.

The Timber Harvesting Plan (THP) is the environmental review document submitted by a landowner to CDF outlining what timber he or she wants to harvest, how it will be harvested, and the steps that will be taken to prevent damage to the environment. THPs are prepared by Registered Professional Foresters (RPFs) who are licensed to prepare these ccomprehensive, detailed plans. THPs can range from about 100 pages to more than 500 pages.

CDF does not have the authority to deny a THP that is in compliance with state and federal rules and laws simply because the logging plan is unpopular with the public. The Department reviews and approves between 500 and 1400 THPs each year. A THP that does not comply with all forestry and environmental regulations is returned to the RPF. It is only approved after the RPF and landowner agree to make the changes necessary to ensure compliance with all laws. CDF follows-up on approved THPs with site inspections and can shutdown operations, cite or fine Registered Professional Foresters, Licensed Timber Operators (LTOs), and landowners if illegal operations are found.

The Timber Harvesting Plan Review Process

When a THP is submitted to a CDF administrative unit the following process takes place:

Within 10 days of receipt:

- The THP is assigned a number.
- Copies are distributed to all state and federal reviewing agencies.
- A *Notice of Intent* is sent to landowners within 300 feet of the THP, the office of the county clerk within the THP county, and the local CDF unit headquarters.
- A *Notice of Submission* is sent to anyone who has requested notification in writing.
- A first review of the THP is done by a multi-agency team that includes CDF, the California Department of Fish and Game, the California Regional Water Quality Control Board, the California Geological Survey and other agencies as needed. This first review is meant to assess whether the THP is complete, accurate and in proper order. Any incomplete applications are returned to the Registered Professional Forester (RPF) who prepared the THP. The RPF must answer any questions raised by the review team about completeness of the THP, and revise the THP before it is processed any further.
- Once all review team concerns are clarified and the THP is deemed complete, it is officially "filed". A Notice of Filing is sent to the person who submitted the THP, the office of the County Clerk and to anyone who has requested notification in writing.

The public may submit to CDF comments concerning a filed THP once the plan is submitted. Comments will be accepted by the Department in writing or via e-mail up until the close of business on the designated final date for public comment. The public shall be informed as to where they may send their e-mail comments on all public notices and postings. All comments regarding plans shall be in writing and shall be addressed to the Director at the regional office where the plan is filed. CDF responds in writing to public comment that raises significant environmental issues.

Addresses for written comments to CDF facilities can be found at CDF Contacts

The names of the assigned e-mail mailboxes for electronic comments are as follows:

Santa Rosa - santarosapubliccomment@fire.ca.gov
Redding - reddingpubliccomment@fire.ca.gov
Riverside - riversidepubliccomment@fire.ca.gov
Fresno - fresnopubliccomment@fire.ca.gov

Public comments pertaining to CEQA documents, normally reviewed by the Environmental Coordinator in Sacramento,should be sent to:
sacramentopubliccomment@fire.ca.gov.

E-mail Comment Requirements and Limitations

- Incoming e-mail messages will not be accepted by the system if they exceed 6 megabytes in size.
- Incoming e-mails with virus-laden attachments will be scanned and rejected by the CDF virus wall.
- Undecipherable e-mail messages shall be discarded.
- It is the responsibility of the sender to provide the Department with clear and complete messages when providing public comment through our e-mail system.
- Hypertext e-mail links to other web pages or publications shall not be deemed the equivalent of written comment.
- Not all comment formats may be compatible with current CDF software.
- Obscene, threatening, or offensive comments may be reported to CDF Law Enforcement Staff.

Within 10 days of the Notice of Filing:

- The review team may conduct a Pre-Harvest Inspection (PHI) to examine the proposed logging site. More than 95 percent of all plans receive a PHI.

Within 20 days of the Pre-Harvest Inspection:

- A second meeting is held by the review team to discuss the Pre-Harvest Inspection reports and to finalize any recommendations or changes needed for the THP.

30 days after the Pre-harvest Inspection:

- The public comment period ends. Frequently, however, the public comment period is extended to allow time for all agencies involved in the THP process to complete their reviews, or for additional study of a specific THP issue.

Following the Review Team's final recommendation:

- The final recommendations are sent to the Registered Professional Forester for response. After the RPF's response is received, and the public comment period closes, the THP goes to the CDF Director, or the Director's representative, who has 15 working days to approve or deny the THP. The Director considers all Board of Forestry and Fire Protection rules, the review team's recommendations, and any public comment that was submitted concerning the proposed timber operation before making a decision to approve or deny the THP. CDF prepares and sends or e-mails a written response to each person or group who submits public comment on a THP.

Once a THP is approved:

- CDF Unit Forest Practice Inspectors periodically inspect the logging operation to ensure compliance with the approved THP and all laws and regulations.
- Any violations are promptly acted upon. Enforcement actions range from violation notices requiring corrective actions, assessment of civil fines, and criminal proceedings through the court system. Action may also be taken against the license of the timber operator and/or the RPF on the operation.
- When a THP operation has been completed, the timber owner has the responsibility for submitting a completion report to CDF. CDF then inspects the area to certify that all rules were followed.
- The landowner must restock (replant) the area according to the Forest Practice Rules requirements. A stocking report must be filed with CDF to certify that these requirements were met. If the landowner fails to restock the land, CDF may hire a contractor to do the work and bill the landowner.

July 2005
www.fire.ca.gov

DOES YOUR SALVAGE LOGGING OR VEGETATION MANAGEMENT PROJECT INCLUDE WORKING IN OR NEAR A WATERBODY?

The California Department of Fish and Wildlife (CDFW) helps landowners avoid impacts to fish, wildlife, and native plants, and the habitats upon which these species depend.

The CDFW **Lake and Streambed Alteration (LSA)** Program reviews projects that may alter a river, stream, or lake (waterbody). These projects require landowner notification to CDFW for the project activities. CDFW also provides guidance to avoid unauthorized "take" of species protected under the **California Endangered Species Act (CESA)**.

BEFORE YOU BEGIN YOUR PROJECT, USE THE CHECKLIST BELOW TO HELP DETERMINE IF A CONSULTATION WITH CDFW MAY BE NEEDED

A PERMIT IS LIKELY REQUIRED IF YOUR PROJECT INCLUDES:

- ☐ The construction of a road, bridge, or crossing in or near a waterbody
- ☐ The installation or replacement of a culvert in or near a waterbody
- ☐ Substantial diversion of a waterbody's natural flow (e.g., removing water or water drafting)
- ☐ The obstruction of flowing water in a waterbody (e.g., dam or wood piles)
- ☐ Substantial change to the bed, bank, or channel of any waterbody
- ☐ Potential impact to any sensitive or CESA-protected species or their habitat
- ☐ Removal of a tree with a bird nest in it

If any of the boxes apply to your project, please consult with CDFW **BEFORE** you start the project. If you checked any of the first five boxes, you may need to submit a LSA notification. Failure to notify CDFW of any potential Lake and Streambed Alterations or to apply proper take avoidance measures for sensitive and protected species may result in a violation of the Fish and Game Code (see sidebar).

It is very important for landowners, Registered Professional Foresters, Licensed Timber Operators, utility companies, or **anyone** working on salvage logging, fuel reduction, or vegetation management projects to know what CDFW permits or authorizations might be needed. **Even if you are working under a CAL FIRE Emergency or Exemption, the Fish and Game Code must still be followed.** Contact CDFW if you have any questions or to start a consultation.

To locate the Fish and Wildlife Office near you:
https://wildlife.ca.gov/Regions

For more information on permits:
https://wildlife.ca.gov/Conservation/Timber

APPLICABLE FISH AND GAME CODES

§ 45: "Fish" means a wild fish, mollusk, crustacean, invertebrate, amphibian, or part, spawn, or ovum of any of those animals.

§ 86: "Take" means to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.

§ 1600 *et seq*. (LSA Program): Requires an entity to notify CDFW, and if required, obtain an Agreement, before substantially diverting or obstructing the natural flow of a river, stream, or lake; substantially changing or using any material from the bed, channel, or bank of a river, stream, or lake; or depositing or disposing debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake.

§ 2050 *et seq*. (CESA): Prohibits unauthorized take of species listed or a candidate for listing under CESA.

§§ 3503 and 3503.5: Prohibits take, possession, or destruction of bird nests and eggs.

§§ 5650 and 5652: Prohibits depositing in, permitting to pass into, or placing where it can pass into a water of the state any substance or material deleterious to fish, plant life, mammals, or bird life (§ 5650), or garbage, rubbish, litter, refuse, waste, and debris, among other materials (§ 5652).

§ 5901: Prohibits construction or maintenance of any device that prevents, impedes, or tends to impede upstream or downstream fish passage.

§ 5937: Requires the owner of a dam or other artificial obstruction to allow sufficient water at all times to pass over, around, or through the dam, to keep fish below the dam in good condition.

ARE YOU PLANNING TO REMOVE TREES OR VEGETATION ON YOUR PROPERTY TO REDUCE THE RISK OF A WILDFIRE?

Various agencies are prepared to work with you to make your project a success! Please read the information below and get the permits you need.

California Department of Forestry and Fire Protection (CAL FIRE)

CAL FIRE oversees state and federal forestry assistance programs while implementing the California Forest Practice Act on non-federal timberlands. This allows for the coordination of timber harvesting and fuel reduction processes to reduce fire risks and improve ecosystems. Programs available for individual and corporate landowners include; reducing fuel loads, creating defensible space, improving health and productivity of private forest land, and improving vegetation management.
https://www.fire.ca.gov/programs/resource-management

California Department of Fish and Wildlife (CDFW)

If your tree removal, vegetation cutting, or clearing project involves any of the activities in the photo below, you may need a Lake or Streambed Alteration Agreement **prior** to starting. This applies to any watercourse that is wet **or** dry without water present. Please also note that sensitive species may live within your work area and require protection.

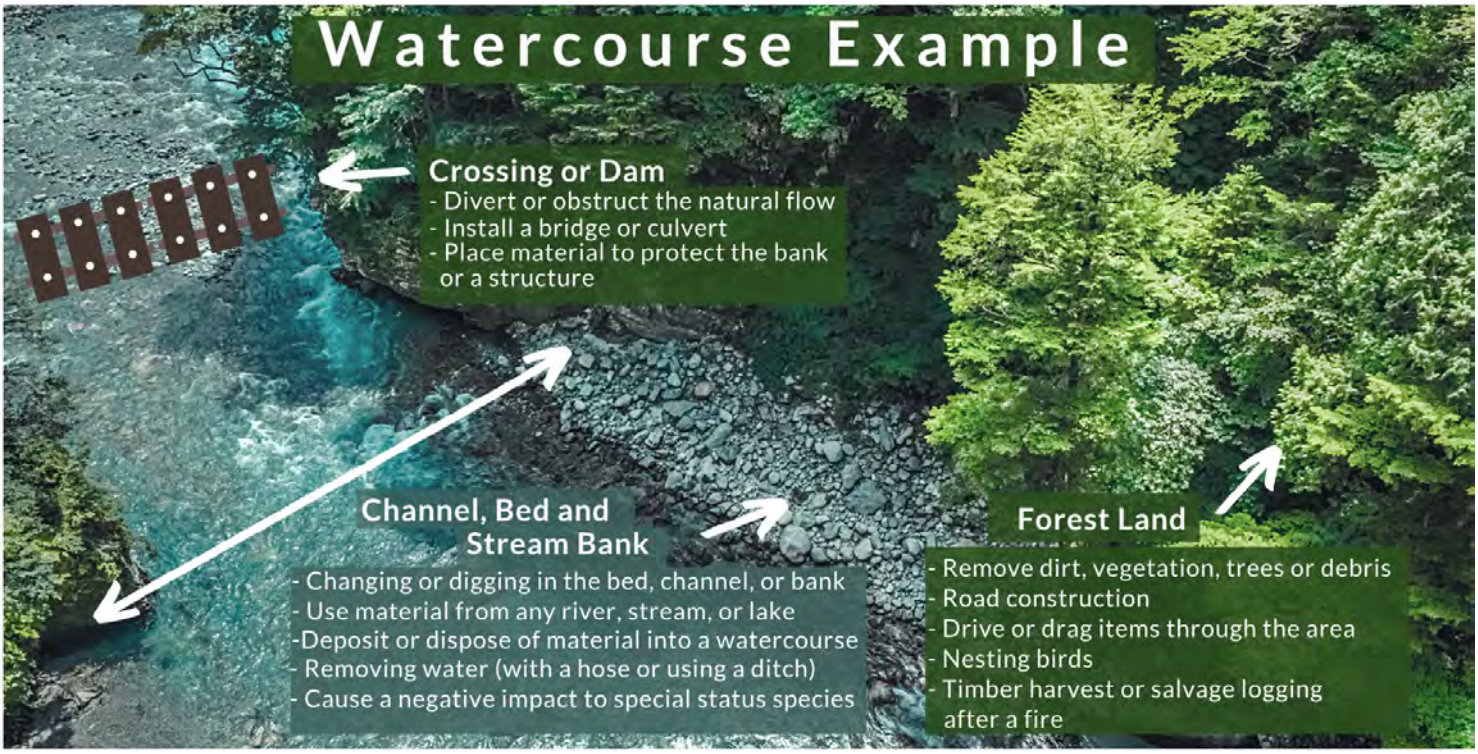
https://wildlife.ca.gov/Conservation/Environmental-Review

Department of Conservation - California Geological Survey (CGS)

The CGS Forest and Watershed Geology Program provides information and advice about landslides, erosion, sedimentation and other geologic hazards that may affect water quality and fish habitat. Many activities related to those in the photo below can change the stability of the land which can be dangerous to both people and natural resources. Please visit the website below for more information about how you can avoid geological hazards.
https://www.conservation.ca.gov/cgs/fwgp

Regional Water Quality Control Boards (RWQCBs)

The RWQCBs are the primary water-pollution control and prevention agencies for the state. In that role, the RWQCBs issue permits, conduct inspections, and in some circumstances take enforcement actions to address activities that cause or may cause pollutants to discharge into streams, lakes, or wetlands, or impact riparian vegetation. To protect yourself, your property and the environment, please contact the RWQCB in your area.
https://www.waterboards.ca.gov/publications_forms/publications/factsheets/docs/boardoverview.pdf



NOTICE OF INTENT TO HARVEST TIMBER

A Timber Harvesting Plan (Plan) or Amendment has been submitted to the California Department of Forestry & Fire Protection (CAL FIRE). CAL FIRE will be reviewing the proposed timber operation for compliance with State law and rules of the Board of Forestry and Fire Protection. The following briefly describes the proposed timber operation and where and how to get more information. In accordance with the timeline stated under Public Resources Code Section 4582.7, you may submit written public comments on the Plan or Amendment for CAL FIRE to consider.

This notice applies to (select one): ☒ New Timber Harvesting Plan ☐ Amendment Approved Timber Harvesting Plan

Applicant Information (Timberland Owner(s), Registered Professional Forester who prepared the plan and Plan Submitter should match those listed in the plan or amendment.)

1. The name(s) of the Timberland Owner(s) where timber operations are to occur: **Sierra Pacific Industries**

2. Registered Professional Forester who prepared the plan or amendment: **Frank Mulhair**

   Registered Professional Forester Phone (optional): **(209) 223-7170**

3. The name of the Plan or Amendment Submitter: **Sierra Pacific Industries**

Project Summary (County, legal description, acres proposed to be harvested and treatments to be used should match those listed in the plan or amendment.)

4. Location of the proposed timber operation (county, legal description, approximate direction & approximate distance of the timber operation from the nearest community or well-known landmark):
   Wholly within the Sopiago Creek Planning watershed, in T8N, R14E, Sections 14, 15, 16, 20, 21, 22 & 23

   The plan is approximately 9 ½ miles East of the town of Omo Ranch in El Dorado County.

5. The name of, and distance from, the nearest perennial stream and major watercourse flowing through or downstream from the timber operation:
   Sopiago Creek flows through the center of this plan

6. Acres proposed to be harvested: **231**

7. The regeneration methods and intermediate treatments to be used:
   Clearcut, Selection and Fuelbreak

POWERLINES: 14 CCR 1032.7(d)(10) & (e) (provide name and mailing addresses of the utilities for department distribution)

8. ☐ Yes ☒ No Overhead electrical power lines within the plan boundary? (except lines from transformers to service panels)
9. ☐ Yes ☒ No Overhead powerlines within 200 feet outside the plan boundary?

Public Information: The review times allowed for CAL FIRE to review the proposed timber operation are variable in length, but limited. To ensure CAL FIRE receives your comments please read the following:

The estimated earliest possible date CAL FIRE may **APPROVE** the Plan or Amendment is: MAY 0 2 2018
(This date is 15 calendar days from receipt of the Plan or Amendment by CAL FIRE, except in counties for which special rules have been adopted where the earliest date is 45 calendar days after receipt.)

NOTE: THE ESTIMATED EARLIEST APPROVAL DATE IS PROBABLY NOT THE ACTUAL APPROVAL DATE. Normally, a much longer period of time is available for public comment and preparation of CAL FIRE's responses to public comments. Please check with CAL FIRE, prior to the above listed date, to determine the actual date that the public comment period closes.

The public may review, or purchase a copy of, the Plan or Amendment at the CAL FIRE Review Team Office shown below. The cost to obtain a copy is 37 cents for each page, $2.50 minimum per request. The cost to obtain a copy of this plan or amendment is: $ 89.91
(to be completed by CAL FIRE upon receipt of plan).

Questions or concerns regarding this plan should be directed to the CAL FIRE Review Team Office shown below or emailed to FresnoPublicComment@fire.ca.gov for incorporation into an Official Response Document. Please include the plan number on all correspondence.

Forest Practice Program Manager
CAL FIRE
1234 East Shaw Avenue
Fresno, CA 93710
(559) 222-3714

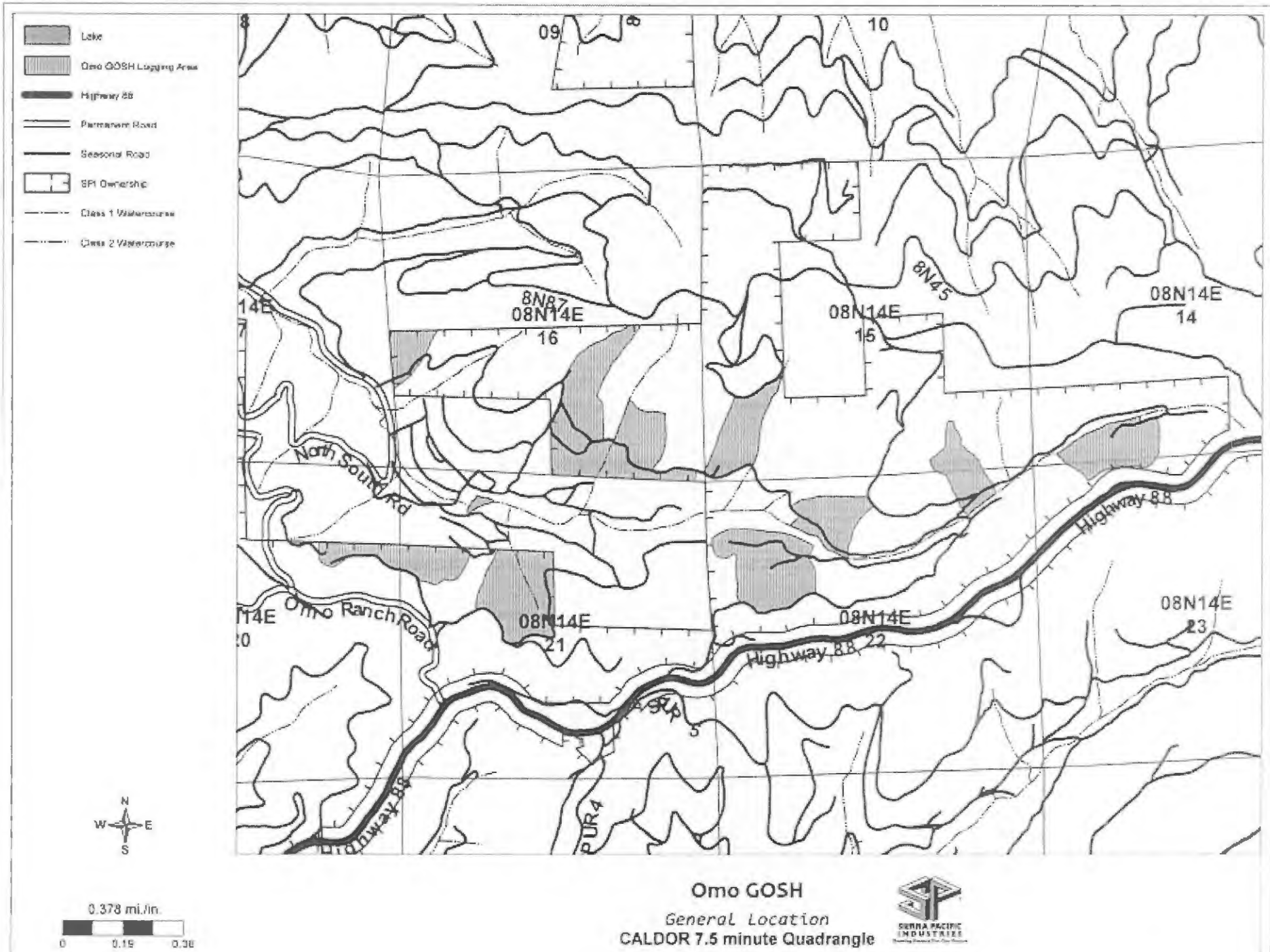
RECEIVED
APR 17 2018
CA. DEPT. OF FORESTRY
RESOURCE MANAGEMENT

The plan may be viewed online at ftp://thp.fire.ca.gov/THPLibrary/Sierra_Southern_Region

A map showing the approximate boundary of the THP area, a map legend, and a scale is attached to help in locating where the proposed timber operation is to occur.

For CAL FIRE Use Only

Timber Harvest Plan Number: 4-18-002ELD Date of Receipt: APR 17 2018


Lake
Omo GOSH Logging Area
Highway 88
Permanent Road
Seasonal Road
SPI Ownership
Class 1 Watercourse
Class 2 Watercourse
09
10
8N87
08N14E
16
8N45
08N14E
15
08N14E
14
North Soda Rd
Highway 88
Omo Ranch Road
08N14E
21
08N14E
22
08N14E
23
Highway 88
N
W
E
S
0.378 mi./in.
0
0.19
0.38
Omo GOSH
General Location
CALDOR 7.5 minute Quadrangle
SIERRA PACIFIC INDUSTRIES

OMO GOSH THP

Mailing List for neighbors 300 feet of THP

Regehr Tim
PO Box 809
Pioneer, CA 95666

O'Brien Langield L
4549 Offner Ln
Santa Rosa, CA 95409
Section 21

Great Springs Waters of AME INC
900 Long Ridge Rd BLDG 2
Stamford Ct 06902

United States Forest Service
Amador Ranger Station
26820 Silver Drive
Pioneer, CA 95666

Oneto Brian & Rux
PO BOX 694
Jackson, CA 95642

Siemons Robert J & Doreen
782 Centennial PL
Brentwood, CA 94513

Church Glenn Warren
470 Hidden Valley Rd.
Royal Oaks, CA 95076

NOTICE OF INTENT TO HARVEST TIMBER

A Timber Harvesting Plan (Plan) or Amendment has been submitted to the California Department of Forestry & Fire Protection (CAL FIRE). CAL FIRE will be reviewing the proposed timber operation for compliance with State law and rules of the Board of Forestry and Fire Protection. The following briefly describes the proposed timber operation and where and how to get more information. In accordance with the timeline stated under Public Resources Code Section 4582.7, you may submit written public comments on the Plan or Amendment for CAL FIRE to consider.

This notice applies to (select one): ☒ New Timber Harvesting Plan ☐ Amendment Approved Timber Harvesting Plan

Applicant Information (Timberland Owner(s), Registered Professional Forester who prepared the plan and Plan Submitter should match those listed in the plan or amendment.)

1. The name(s) of the Timberland Owner(s) where timber operations are to occur: Eric K. Salvisberg

2. Registered Professional Forester who prepared the plan or amendment: Andrea H. Eggleton, RPF #3003

   Registered Professional Forester Phone (optional):

3. The name of the Plan or Amendment Submitter: Eric K. Salvisberg

Project Summary (County, legal description, acres proposed to be harvested and treatments to be used should match those listed in the plan or amendment.)

4. Location of the proposed timber operation (county, legal description, approximate direction & approximate distance of the timber operation from the nearest community or well-known landmark):
   El Dorado County, Township 8 North, Range 13 East, Portion of Section 13 MDBM, approximately 5.5 miles southeast of the Indian Diggings School in the town of Omo Ranch, CA.

5. The name of, and distance from, the nearest perennial stream and major watercourse flowing through or downstream from the timber operation:
   Soplago Creek is the northern border of the THP area for approximately 200 feet.

6. Acres proposed to be harvested: 27

7. The regeneration methods and intermediate treatments to be used:
   Group Selection

POWERLINES: 14 CCR 1032.7(d)(10) & (e) (provide name and mailing addresses of the utilities for department distribution)

8. ☐ Yes ☒ No Overhead electrical power lines within the plan boundary? (except lines from transformers to service panels)
9. ☐ Yes ☒ No Overhead powerlines within 200 feet outside the plan boundary?

Public Information: The review times allowed for CAL FIRE to review the proposed timber operation are variable in length, but limited. To ensure CAL FIRE receives your comments please read the following:

The estimated earliest possible date CAL FIRE may **APPROVE** the Plan or Amendment is: JUN 2 1 2018
(This date is 15 calendar days from receipt of the Plan or Amendment by CAL FIRE, except in counties for which special rules have been adopted where the earliest date is 45 calendar days after receipt.)

NOTE: THE ESTIMATED EARLIEST APPROVAL DATE IS PROBABLY NOT THE ACTUAL APPROVAL DATE. Normally, a much longer period of time is available for public comment and preparation of CAL FIRE's responses to public comments. Please check with CAL FIRE, prior to the above listed date, to determine the actual date that the public comment period closes.

The public may review, or purchase a copy of, the Plan or Amendment at the CAL FIRE Review Team Office shown below. The cost to obtain a copy is 37 cents for each page, $2.50 minimum per request. The cost to obtain a copy of this plan or amendment is: $35.52
(to be completed by CAL FIRE upon receipt of plan).

Questions or concerns regarding this plan should be directed to the CAL FIRE Review Team Office shown below or emailed to FresnoPublicComment@fire.ca.gov for incorporation into an Official Response Document. Please include the plan number on all correspondence.

Forest Practice Program Manager
CAL FIRE
1234 East Shaw Avenue
Fresno, CA 93710
(559) 222-3714

RECEIVED
JUN 0 6 2018
CA. DEPT. OF FORESTRY
RESOURCE MANAGEMENT

The plan may be viewed online at ftp://thp.fire.ca.gov/THPLibrary/Sierra_Southern_Region

A map showing the approximate boundary of the THP area, a map legend, and a scale is attached to help in locating where the proposed timber operation is to occur.

For CAL FIRE Use Only

Timber Harvest Plan Number: 4-18-008/ELD Date of Receipt: JUN 0 6 2018

4-18-008/ELD

Salvisberg THP Map

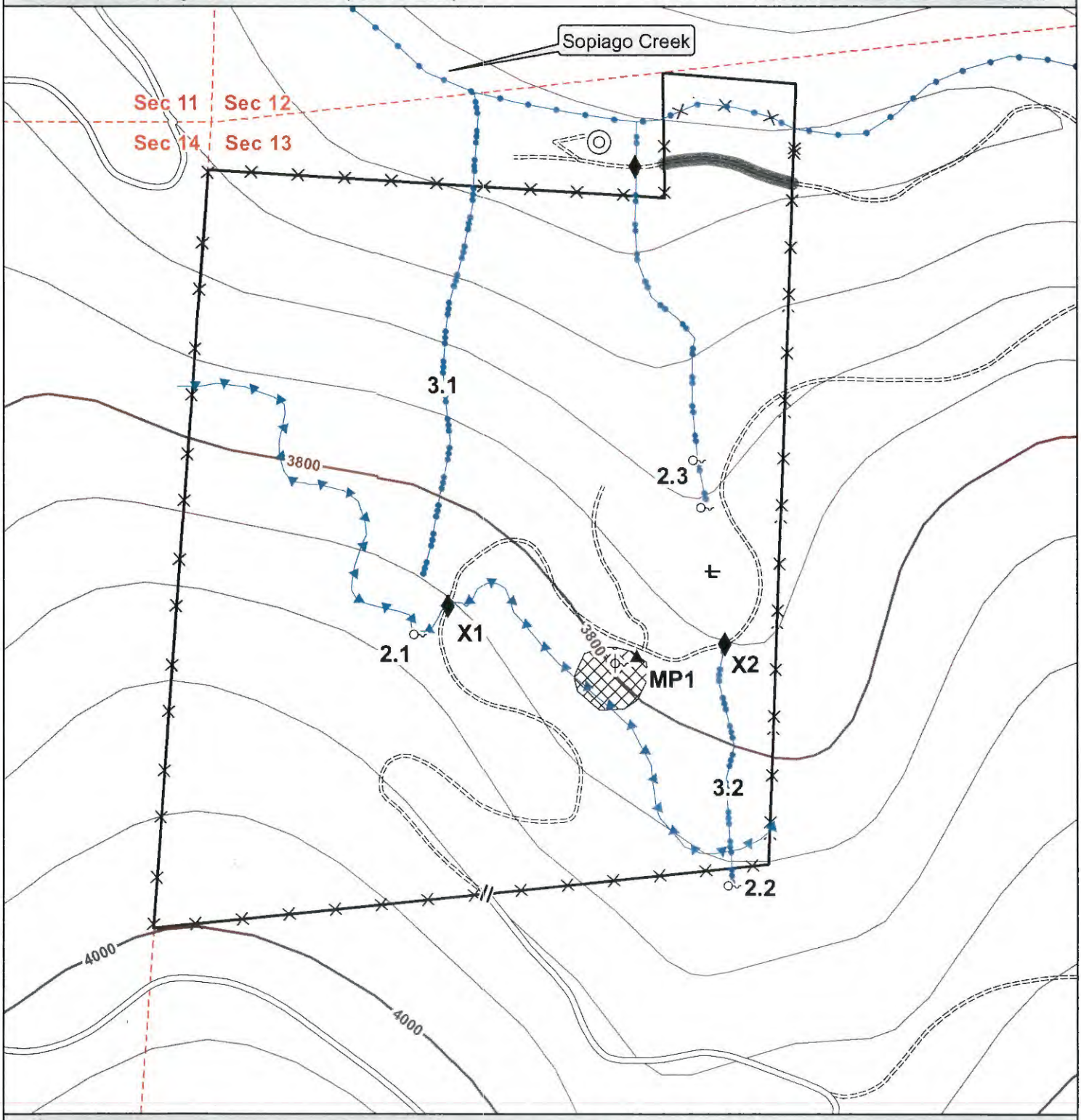
1:2,800 | 1 inch = 233 feet | Contour Interval = 40'

El Dorado Co, CA T8N R13E S13 MDBM; Caldor (1985) USGS 7.5' Quad
CalWater 2.2.1 Sopidgo Creek Watershed (6532.240300)

Date: 5/22/2018

FIRST

0 110 220 330 440 Feet



Culvert
Existing landing >.25 ac
Gate
Pore water
SEPES
Spring
Drafting location
Public seasonal rd
Priv seasonal road
Non-functional ditch
Existing rd in WLPZ
Ditch failure slide
THP boundary
Property bdry
PLS Sections

Silviculture: Group Selection
Tractor yarding only
Site Class: I

Class I watercourse
Class II watercourse
Class III watercourse

NOI List- Salvisberg THP

Sierra Pacific Industries
PO Box 496014
Redding, CA 96049

Wetsel-Oviatt Lumber Co
PO Box 496014
Redding, CA 96049

US Forest Service
100 Forni Rd
Placerville, CA 95667

NOTICE OF INTENT TO HARVEST TIMBER

A Timber Harvesting Plan (Plan) or Amendment has been submitted to the California Department of Forestry & Fire Protection (CAL FIRE). CAL FIRE will be reviewing the proposed timber operation for compliance with State law and rules of the Board of Forestry and Fire Protection. The following briefly describes the proposed timber operation and where and how to get more information. In accordance with the timeline stated under Public Resources Code Section 4582.7, you may submit written public comments on the Plan or Amendment for CAL FIRE to consider.

This notice applies to (select one below):

☒ New Timber Harvesting Plan ☐ Amendment to an Approved Timber Harvesting Plan

Applicant Information (Timberland Owner(s), Registered Professional Forester who prepared the plan and Plan Submitter should match those listed in the plan or amendment.)

1. The name(s) of the Timberland Owner(s) where timber operations are to occur: **Sierra Pacific Industries**

2. Registered Professional Forester who prepared the plan or amendment: **Kim Tiesen #2617**

   Registered Professional Forester Phone (optional): _____

3. The name of the Plan or Amendment Submitter: **Sierra Pacific Industries**

Project Summary (County, legal description, acres proposed to be harvested and treatments to be used should match those listed in the plan or amendment.)

4. Location of the proposed timber operation (county, legal description, approximate direction & approximate distance of the timber operation from the nearest community or well-known landmark):

   The project is located in El Dorado County and approximately extends from 1.5 miles southwest of the Jenkinson Lake dam, to the east approximately 14 air miles, to the vicinity of Iron Mountain and Pilliken. It is located in portions of sections 13, 15, 16, 19, 20, 25, 26, and 27, T10N R13E, portions of sections 20, 22, 23, and 27, T10N R14E, and portions of sections 19 and 29, T10N R15E, all MD B&M.

5. The name of, and distance from, the nearest perennial stream and major watercourse flowing through or downstream from the timber operation:

   Stonebreaker Creek and Dark Canyon flow through the project area. At their closest points, Camp Creek, Sly Park Creek, and Snow Creek are 1,100 feet, 1,600 feet, and 1,200 feet, respectively, downstream from the project area. Unnamed associated tributaries to the aforementioned watercourses receive drainage from the project area and portions of the unnamed watercourses are included in the project area.

6. Acres proposed to be harvested:
   The total Timber Harvest Plan area is 420 acres.

7. The regeneration methods and intermediate treatments to be used:

   Clearcutting, sanitation salvage, commercial thinning, fuelbreak, no harvest area, and road right-of-way.

8. ☐ Yes ☒ No Is there a known overhead power line, except lines from transformers to service panels, within the plan area?

Public Information: The review times allowed for CAL FIRE to review the proposed timber operation are variable in length, but limited. To ensure CAL FIRE receives your comments please read the following:

The estimated earliest possible date CAL FIRE may **APPROVE** the Plan or Amendment is: **September 15, 2018**
(This date is 15 calendar days from receipt of the Plan or Amendment by CAL FIRE, except in counties for which special rules have been adopted where the earliest date is 45 calendar days after receipt.)

NOTE: THE ESTIMATED EARLIEST APPROVAL DATE IS PROBABLY NOT THE ACTUAL APPROVAL DATE. Normally, a much longer period of time is available for public comment and preparation of CAL FIRE's responses to public comments. Please check with CAL FIRE, prior to the above listed date, to determine the actual date that the public comment period closes.

The public may review, or purchase a copy of, the Plan or Amendment at the CAL FIRE Review Team Office shown below. The cost to obtain a copy is 37 cents for each page, $2.50 minimum per request. The cost to obtain a copy of this plan or amendment is: $ 97.68
(to be completed by CAL FIRE upon receipt of plan).

Questions or concerns regarding this plan should be directed to the CAL FIRE Review Team Office shown below or emailed to **FresnoPublicComment@fire.ca.gov** for incorporation into an Official Response Document. Please include the plan number on all correspondence.

Forest Practice Program Manager
CAL FIRE
1234 East Shaw Avenue
Fresno, CA 93710
(559) 222-3714

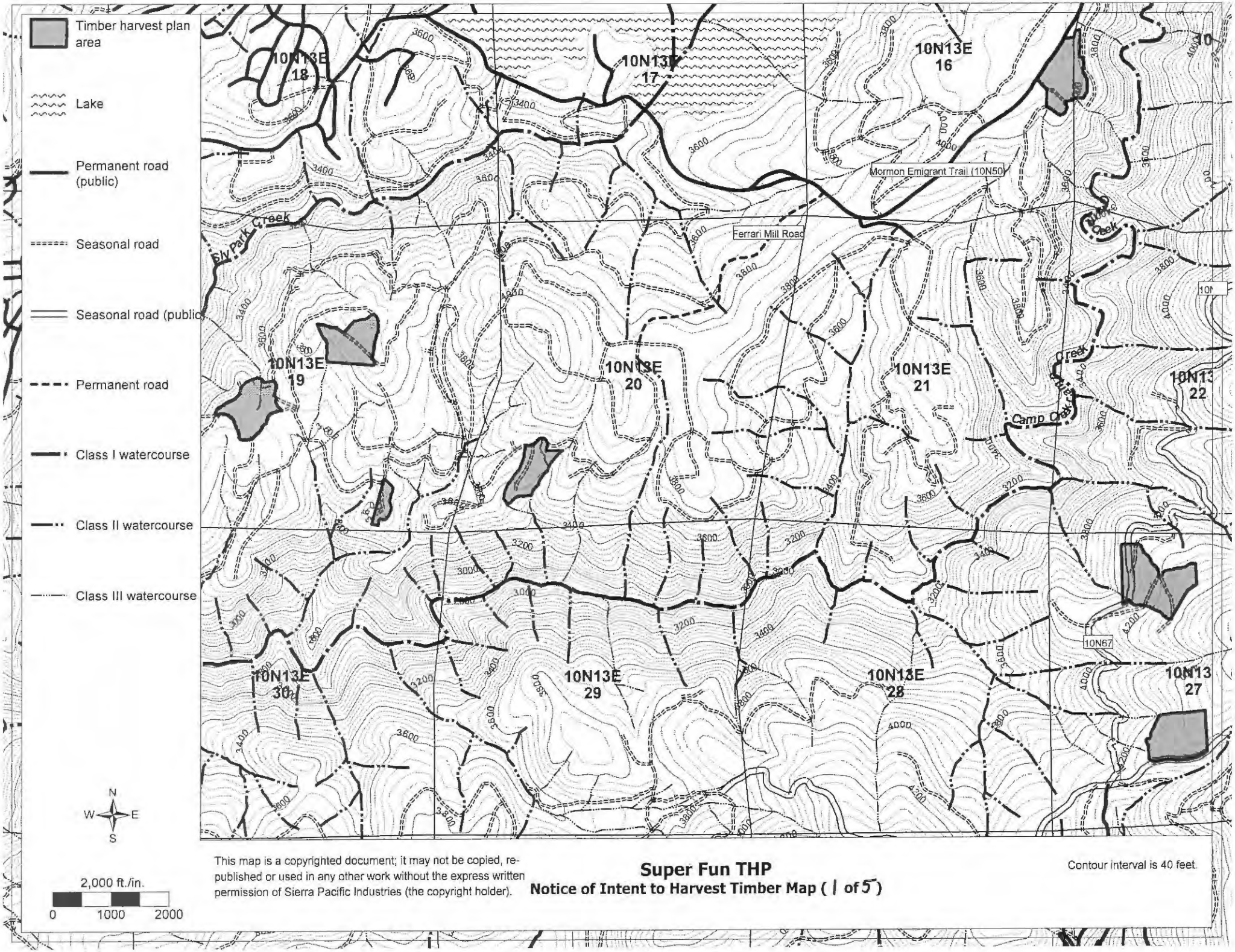
RECEIVED
AUG 3 0 2018
CA. DEPT. OF FORESTRY
RESOURCE MANAGEMENT

The plan may be viewed online at ftp://thp.fire.ca.gov/THPLibrary/Sierra_Southern_Region

A map showing the approximate boundary of the THP area, a map legend, and a scale is attached to help in locating where the proposed timber operation is to occur.

For CAL FIRE Use Only

Timber Harvest Plan Number: 4-18-014/ELD Date of Receipt: AUG 3 0 2018



Super Fun THP

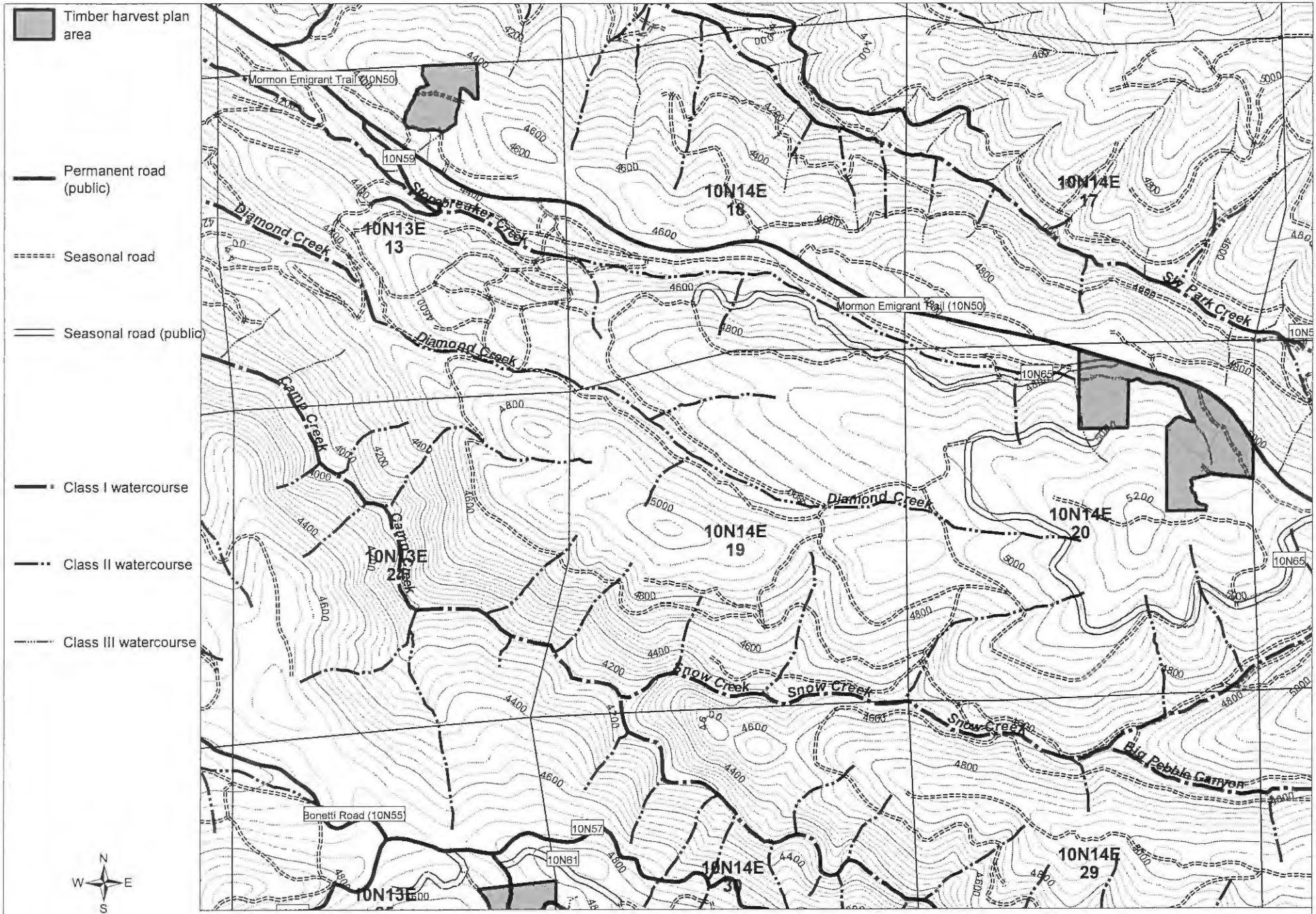
Notice of Intent to Harvest Timber Map (1 of 5)

Contour interval is 40 feet.

Super Fun THP

Notice of Intent to Harvest Timber Map (2 of 5)

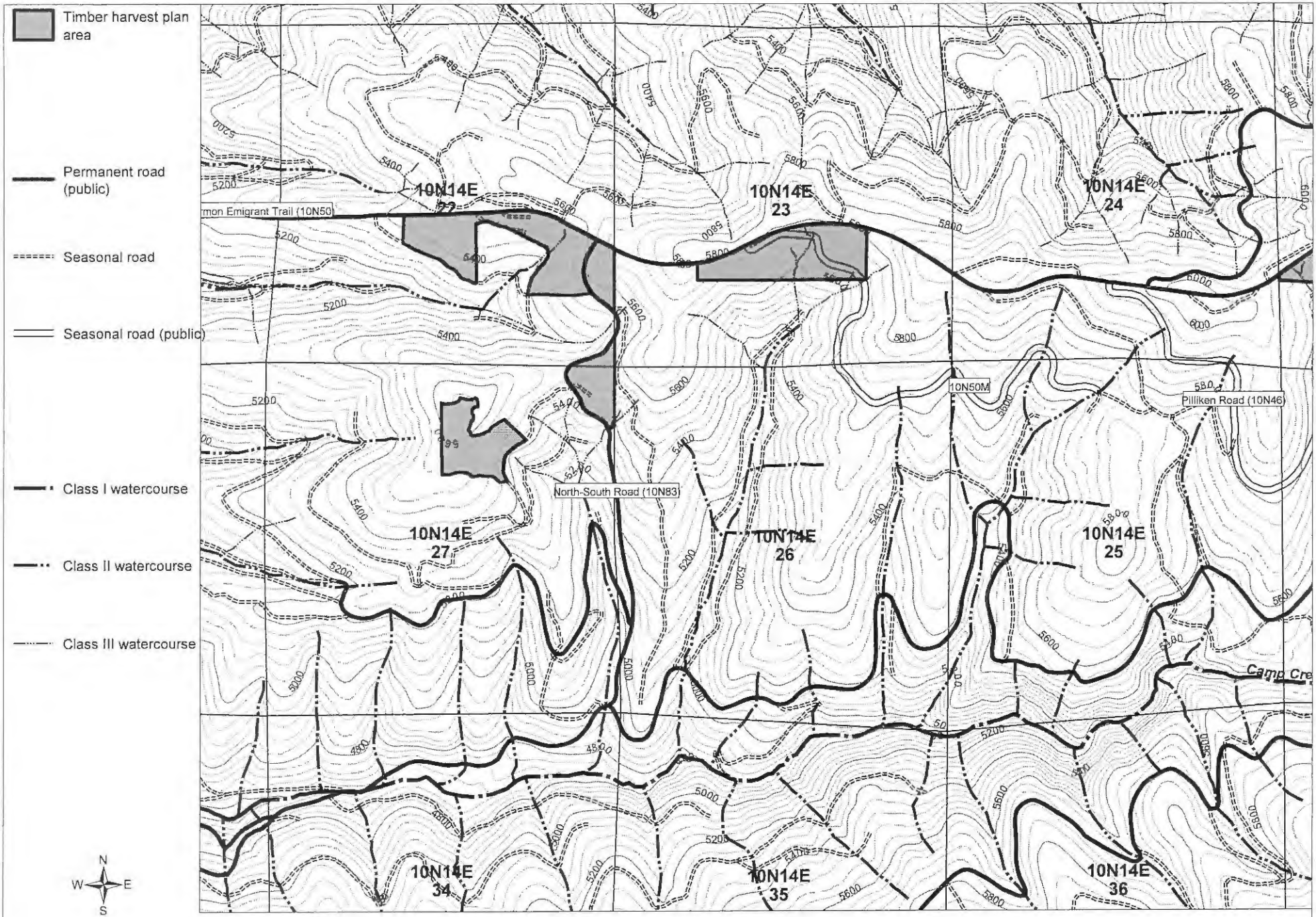
Contour interval is 40 feet.



Super Fun THP

Notice of Intent to Harvest Timber Map (3 of 5)

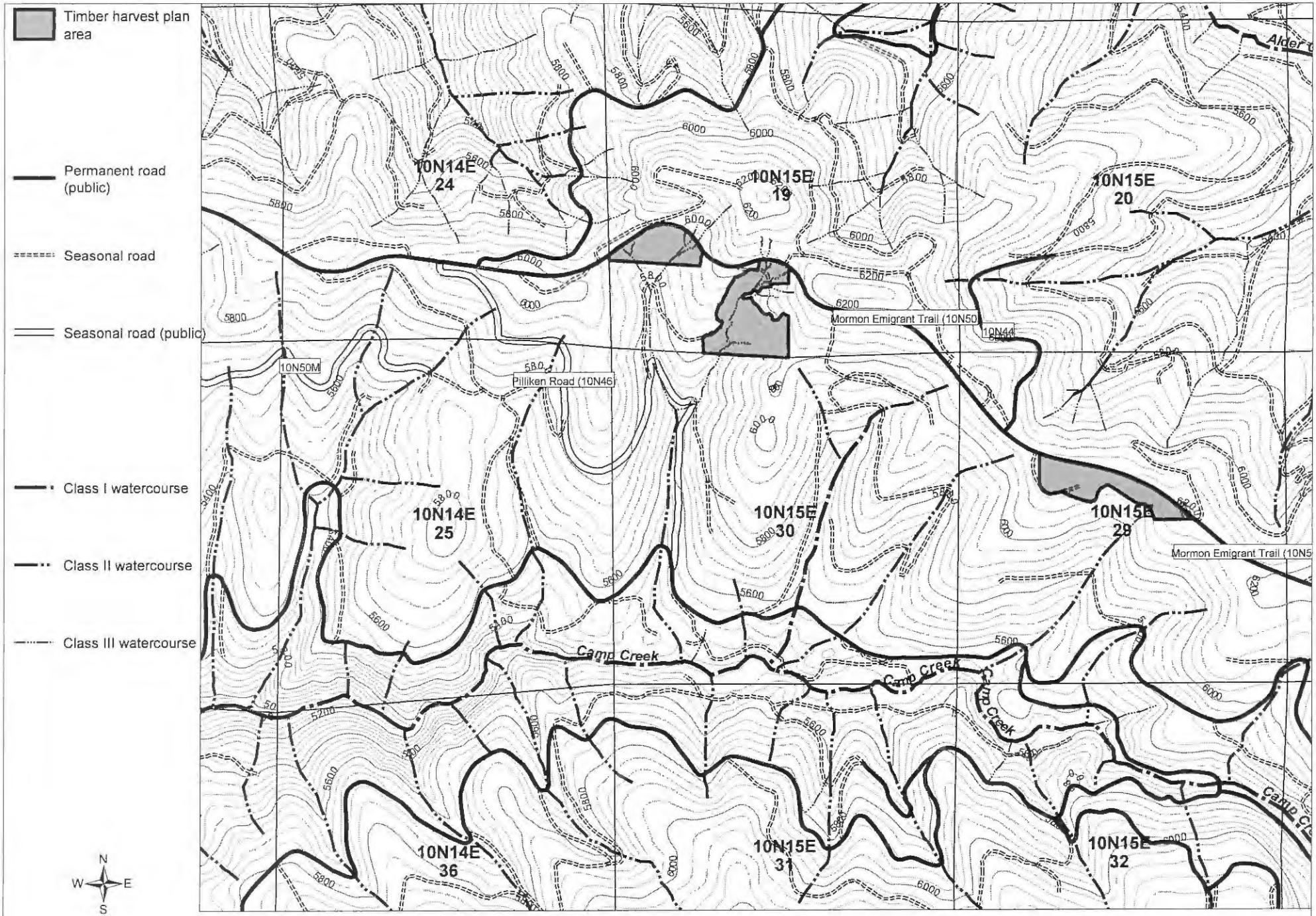
Contour interval is 40 feet.



Super Fun THP

Notice of Intent to Harvest Timber Map (4 of 5)

Contour interval is 40 feet.



Super Fun THP

Notice of Intent to Harvest Timber Map (5 of 5)

Contour interval is 40 feet.

Lan owners within 300 feet of the Super Fun THP boundary

Eldorado National Forest
Placerville Ranger District
4260 Eight Mile Road
Camino, CA 95709

Eldorado National Forest
100 Forni Road
Placerville, CA 95667

Bureau of Land Management
Mother Lode Field Office
5152 Hillsdale Circle
El Dorado Hills, CA 95762

Christopher and Lola Heath
2938 Rockville Rd
Fairfield, CA 94534

Timothy and Barbara Land
2851 Centennial CT
Placerville, CA 95667

Jan and Margaret Londahl
3138 Land Park Dr
Sacramento, CA 95818

NOTICE OF INTENT TO HARVEST TIMBER

A Timber Harvesting Plan (Plan) or Amendment has been submitted to the California Department of Forestry & Fire Protection (CAL FIRE). CAL FIRE will be reviewing the proposed timber operation for compliance with State law and rules of the Board of Forestry and Fire Protection. The following briefly describes the proposed timber operation and where and how to get more information. In accordance with the timeline stated under Public Resources Code Section 4582.7, you may submit written public comments on the Plan or Amendment for CAL FIRE to consider.

This notice applies to (select one): ☒ New Timber Harvesting Plan ☐ Amendment Approved Timber Harvesting Plan

Applicant Information (Timberland Owner(s), Registered Professional Forester who prepared the plan and Plan Submitter should match those listed in the plan or amendment.)

1. The name(s) of the Timberland Owner(s) where timber operations are to occur: **Sierra Pacific Land and Timber Company**

2. Registered Professional Forester who prepared the plan or amendment: **James Woodside, RPF #3065**

   Registered Professional Forester Phone (optional): **(530)644-2311**

3. The name of the Plan or Amendment Submitter: **Sierra Pacific Industries**

Project Summary (County, legal description, acres proposed to be harvested and treatments to be used should match those listed in the plan or amendment.)

4. Location of the proposed timber operation (county, legal description, approximate direction & approximate distance of the timber operation from the nearest community or well-known landmark):
   County of El Dorado, Section 16, T10N, R13E, MDBM; and Sections 7-9, 15-18, and 21-24, T10N R14E, MDBM; the community of Pollock Pines is approximately 3.75 air miles northwest from the nearest harvest area of this Plan.

5. The name of, and distance from, the nearest perennial stream and major watercourse flowing through or downstream from the timber operation: **Sly Park Creek, North Sly Park Creek, Camp Creek, Plum Creek, and Snow Creek are named Class I Watercourses that flow through or are downstream from timber operations proposed under this Plan.**

6. Acres proposed to be harvested: **608 acres**

7. The regeneration methods and intermediate treatments to be used:
   Clearcut, Commercial Thinning, Selection, Fuelbreak, Sanitation/Salvage

POWERLINES: 14 CCR 1032.7(d)(10) & (e) (provide name and mailing addresses of the utilities for department distribution)

8. ☒ Yes ☐ No Overhead electrical power lines within the plan boundary? (except lines from transformers to service panels)
9. ☒ Yes ☐ No Overhead powerlines within 200 feet outside the plan boundary?

Public Information: The review times allowed for CAL FIRE to review the proposed timber operation are variable in length, but limited. To ensure CAL FIRE receives your comments please read the following:

The estimated earliest possible date CAL FIRE may APPROVE the Plan or Amendment is: FEB 2 1 2019
(This date is 15 calendar days from receipt of the Plan or Amendment by CAL FIRE, except in counties for which special rules have been adopted where the earliest date is 45 calendar days after receipt.)

NOTE: THE ESTIMATED EARLIEST APPROVAL DATE IS PROBABLY NOT THE ACTUAL APPROVAL DATE. Normally, a much longer period of time is available for public comment and preparation of CAL FIRE's responses to public comments. Please check with CAL FIRE, prior to the above listed date, to determine the actual date that the public comment period closes.

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(to be completed by CAL FIRE upon receipt of plan).

Questions or concerns regarding this plan should be directed to the CAL FIRE Review Team Office shown below or emailed to **FresnoPublicComment@fire.ca.gov** for incorporation into an Official Response Document. Please include the plan number on all correspondence.

Forest Practice Program Manager
CAL FIRE
1234 East Shaw Avenue
Fresno, CA 93710
(559) 222-3714

RECEIVED
FEB 0 6 2019
CA. DEPT. OF FORESTRY
RESOURCE MANAGEMENT

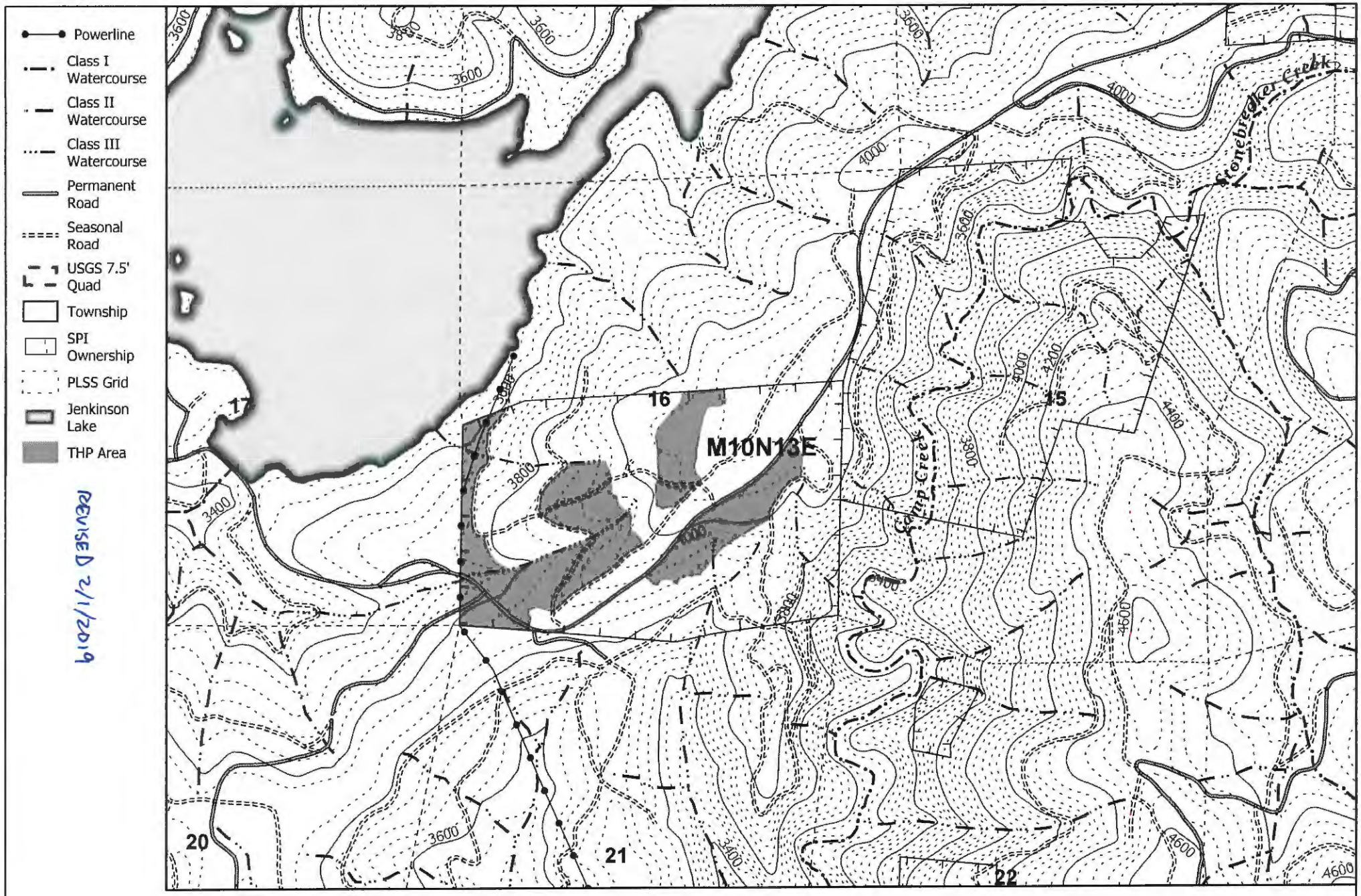
The plan may be viewed online at ftp://thp.fire.ca.gov/THPLibrary/Sierra_Southern_Region

A map showing the approximate boundary of the THP area, a map legend, and a scale is attached to help in locating where the proposed timber operation is to occur. REVISED 2/1/2019

For CAL FIRE Use Only

Timber Harvest Plan Number: 4-18-00184/ELD

Date of Receipt: FEB 0 6 2019



Uber THP

Plan Area Map 1 of 4

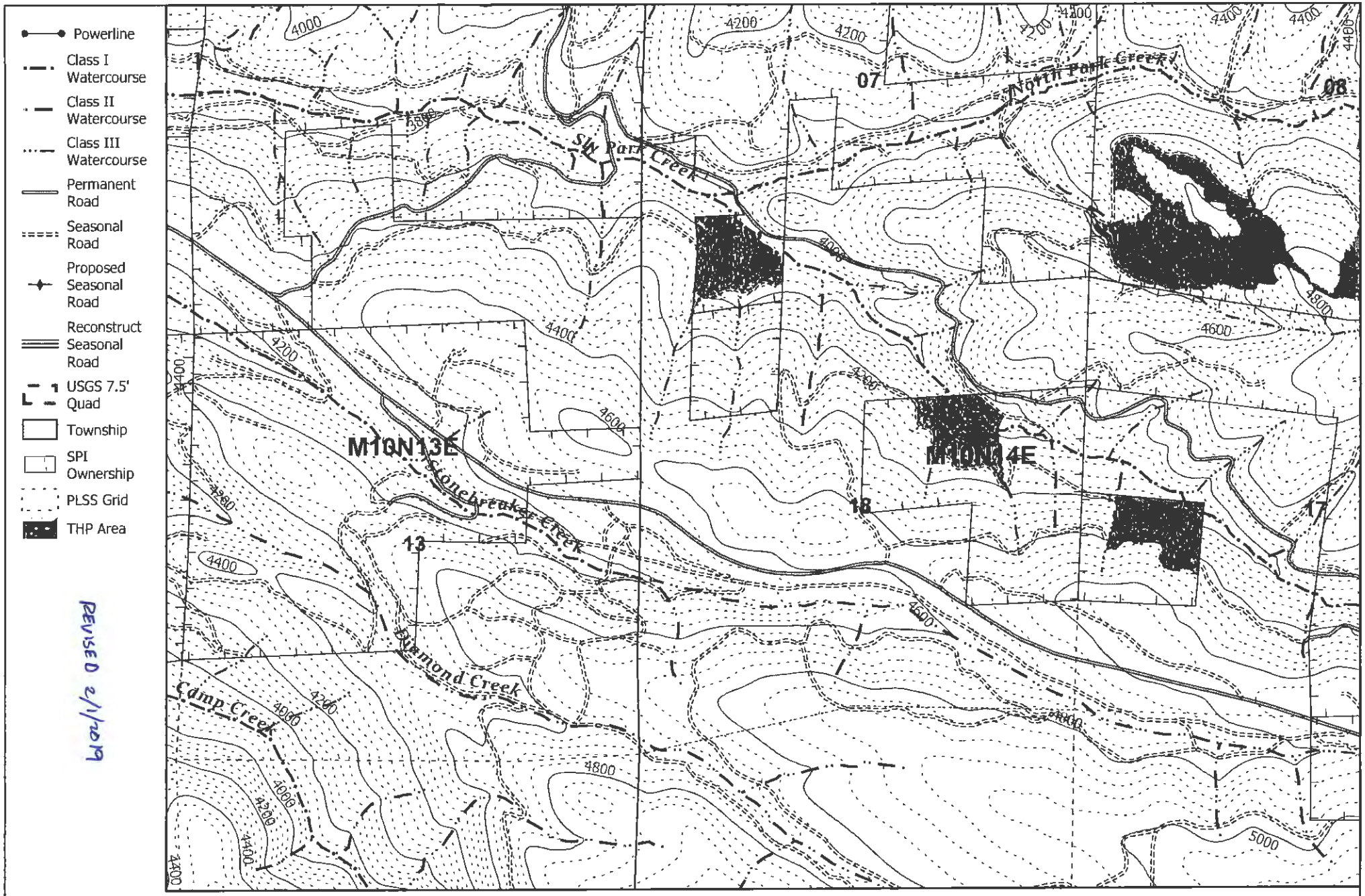
Sly Park 7.5' USGS Quad

Scale: 1:24,000

Feet

0 1,000 2,000

Created By:
James Woodside
RPF #3065



REVISED 2/1/19

Uber THP

Plan Area Map 2 of 4

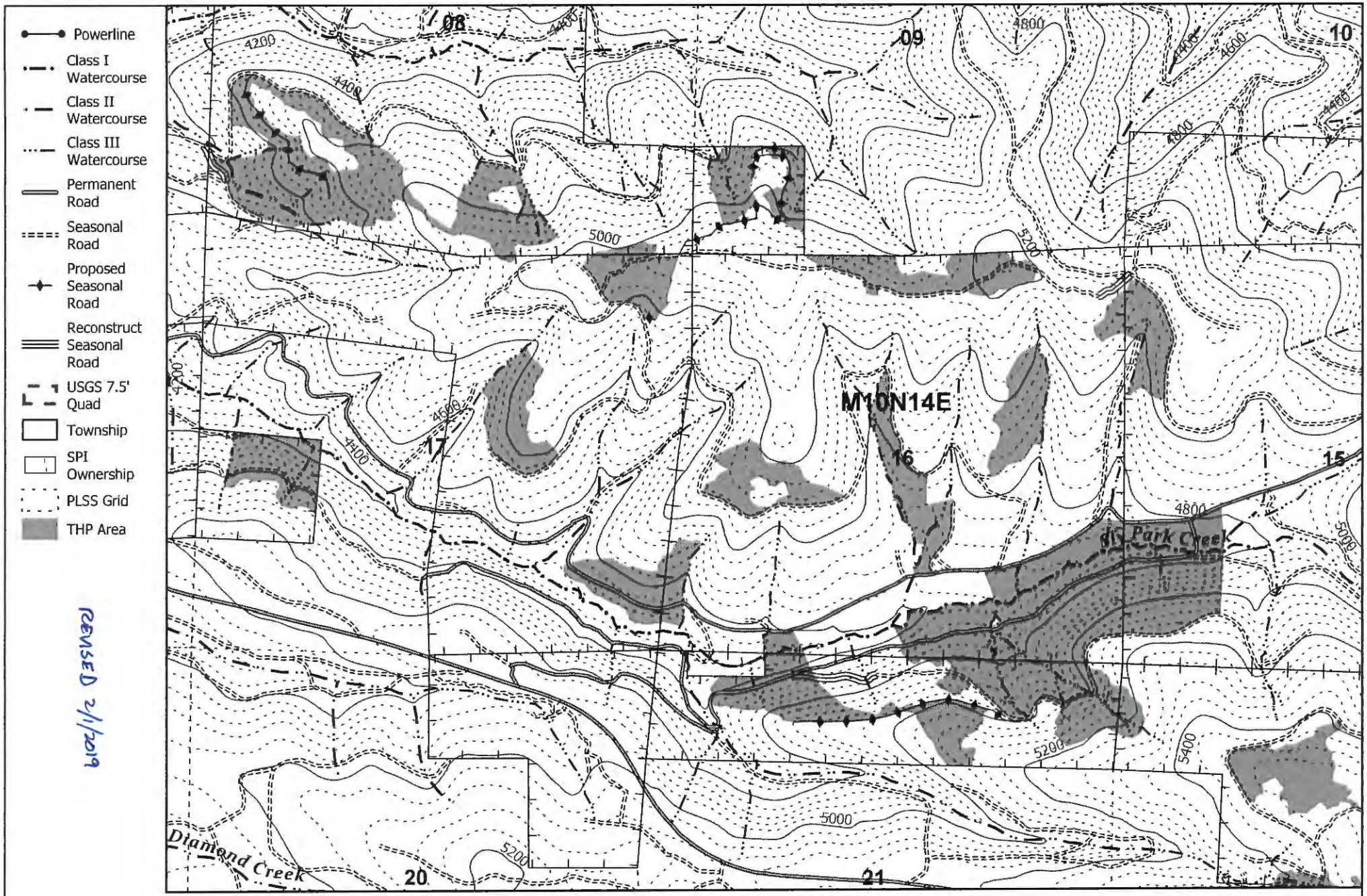
Old Iron Mountain 7.5' USGS Quad

Scale: 1:24,000

Feet

0 1,000 2,000

Created By:
James Woodside
RPF #3065



REVISED 2/1/2019

Uber THP

Plan Area Map 3 of 4

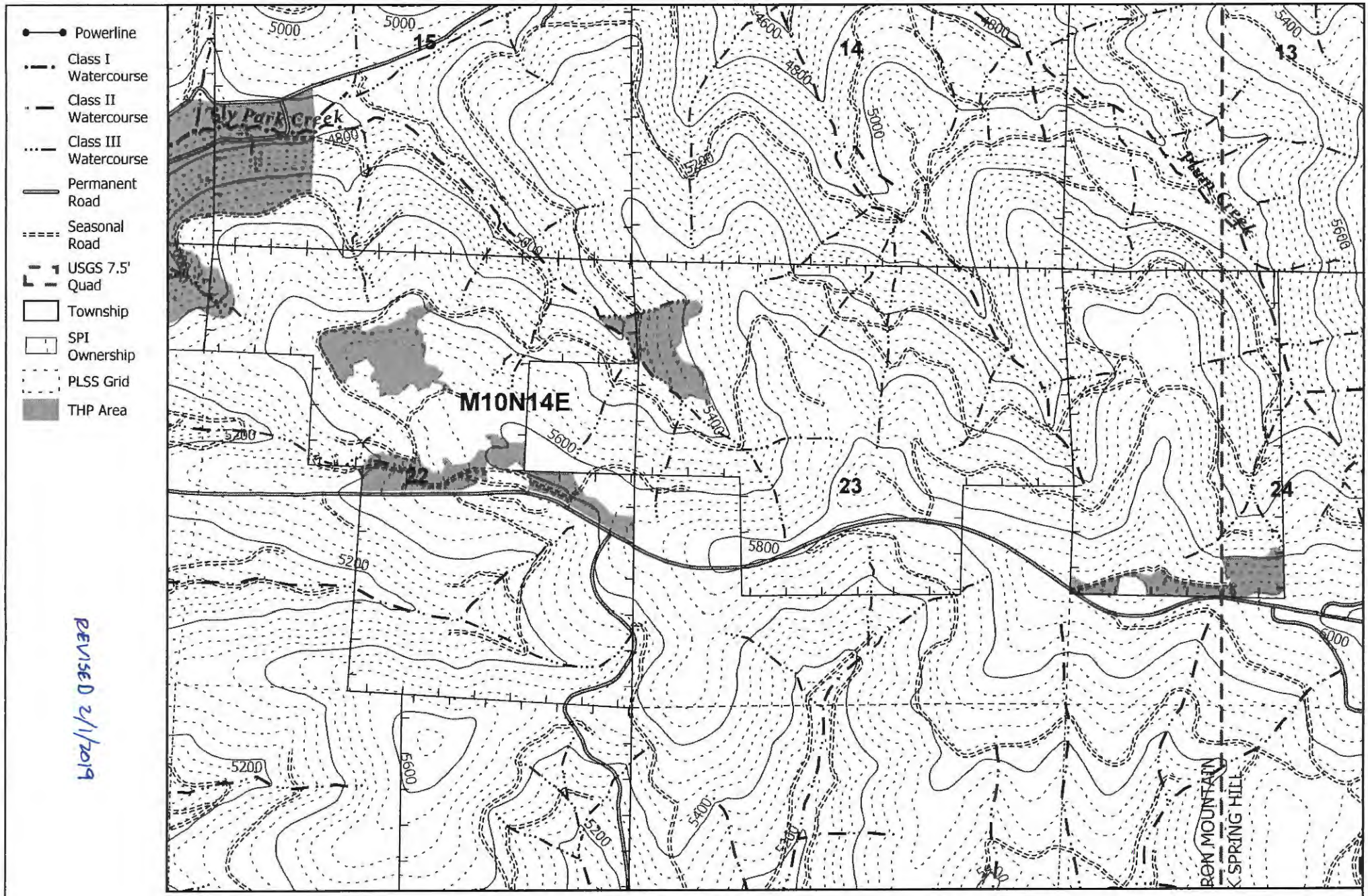
Old Iron Mountain 7.5' USGS Quad

Scale: 1:24,000

Feet

0 1,000 2,000

Created By:
James Woodside
RPF #3065



REVISED 2/1/2019

Uber THP

Plan Area Map 4 of 4

Old Iron Mountain and Leek Spring Hill 7.5' USGS Quads

Scale: 1:24,000

Feet

0 1,000 2,000

Created By:
James Woodside
RPF #3065

The following Individuals and organizations own property within 300 feet of Plan boundaries for the Uber THP:

El Dorado Irrigation District
2890 Mosquito Road
Placerville, CA 95667
Parcel# 042-030-005-000
042-030-018-000

USA Forest Service
100 Forni Road
Placerville, CA 95667
Parcel# 042-030-078-000
042-030-081-000
042-070-035-000
042-070-036-000
042-070-039-000
042-090-033-000
042-090-034-000
042-090-038-000
042-100-056-000
042-100-057-000
042-100-058-000
042-100-060-000
042-160-014-000

Chris Bonnet
19850 Milton Road
Farmington, CA 95230
Parcel# 042-070-031-000

Verna Minton (DECD)
10752 Pedro Way
Rancho Cordova, CA 95670
Parcel# 042-250-001-000

Jan Londahl
3138 Land Park Drive
Sacramento, CA 95818
Parcel# 042-100-052-000

Roberta Nightengale
P.O. Box 232
Wheatland, CA 95692
Parcel# 042-090-031-000

Tyler Street Church of Christ
5029 Tyler Street
Sacramento, CA 95841
Parcel# 042-070-045-000

This Information was compiled from ParcelQuest.com on 1 November 2018

CAL FIRE

Utility Notice Contact List

March 16, 2017

Pacific Gas & Electric Co.
Attn: Mark Stewart
4636 Missouri Flat Rd.
Placerville, CA 95667
(530) 621-4100
M9S5@pge.com

Pacific Power
Josh Hooley
1420 Williams Hwy.
Grants Pass, Oregon 97527
(541) 955-7941
Josh.Hooley@pacificorp.com

Plumas – Sierra Rural Electric Cooperative
Wesley W. Gray, P.E.
Assistant General Manager
73233 State Route 70
Portola, CA 96122-7064
(530) 832-6026
wgray@psrec.coop

Liberty Utilities
Eliot Jones, Vegetation Program
701 National Ave
PO Box 107
Tahoe Vista, CA 96148
(530) 546-1741
eliot.jones@libertyutilities.com

Western Area Power Administration
Heidi Miller
114 Parkshore Drive
Folsom, CA. 95630
916-353-4420
HMiller@WAPA.gov

Trinity PUD
Andy Lethbridge
P.O. Box 1216
Weaverville, Ca. 96093-1216
530-623-5537
alethbridge@trinitypud.com

Sacramento MUD
Steve Hallmark
Vegetation Management
P. O. 15830
Sacramento, CA 95852-0830
Steve.Hallmark@smud.org

Southern California Edison Co.
Attn: Manager of Land Acquisition
Services and Government Lands
2 Innovation Way
Pomona, CA 91768
(800) 655-4555

San Diego Gas & Electric
Michael Daleo
SDG&E System Forester
8315 Century Park Ct. CP22C
San Diego, CA 92123
(858) 654-8630
mdaleo@semprautilities.com

Transmission Agency of Northern California
Don Wagenet
Environmental and Lands Manager
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Sacramento, CA 95851-0129
(916) 852-1673
dwagenet@tanc.us

Truckee Donner PUD
Jim Wilson
Electric Superintendent
11570 Donner Pass Road
Truckee, CA 96161
(530) 582-3925
jimwilson@tdpud.org

Please contact Bill Solinsky Bill.Solinsky@fire.ca.gov (916-531-2173) with questions or to provide updated Information.

NOTICE OF INTENT TO HARVEST TIMBER

A Timber Harvesting Plan (Plan) or Amendment has been submitted to the California Department of Forestry & Fire Protection (CAL FIRE). CAL FIRE will be reviewing the proposed timber operation for compliance with State law and rules of the Board of Forestry and Fire Protection. The following briefly describes the proposed timber operation and where and how to get more information. In accordance with the timeline stated under Public Resources Code Section 4582.7, you may submit written public comments on the Plan or Amendment for CAL FIRE to consider.

This notice applies to (select one): ☒ New Timber Harvesting Plan ☐ Amendment Approved Timber Harvesting Plan

Applicant Information (Timberland Owner(s), Registered Professional Forester who prepared the plan and Plan Submitter should match those listed in the plan or amendment.)

1. The name(s) of the Timberland Owner(s) where timber operations are to occur: **Sierra Pacific Land & Timber**

2. Registered Professional Forester who prepared the plan or amendment: **Robert G. Little , RPF # 2651**

   Registered Professional Forester Phone (optional): _____

3. The name of the Plan or Amendment Submitter: **Sierra Pacific Industries**

Project Summary *(County, legal description, acres proposed to be harvested and treatments to be used should match those listed in the plan or amendment.)*

4. Location of the proposed timber operation: County **ELDORADO** Legal description: **T8N, R13E, Sec 3,4,9,11,12,13, T8N,R14E, Sec 17,18,19,20 T9N, R13E, Sec 32,33.** Approximate direction & approximate distance of the timber operation from the nearest community or well-known landmark): **The nearest portion of the THP area is approximately 0.5 air miles East of the Community of OMO RANCH. The furthest portion of the THP area is 7.2 air miles South-east of the Community of OMO RANCH.**

5. The name of, and distance from, the nearest perennial stream and major watercourse flowing through or downstream from the timber operation: **SOPIAGO CREEK is in the immediate vicinity of, and flows through the proposed Timber Harvest Plan areas.**

6. Acres proposed to be harvested: **"Harvest Area" = 1096 Acres**

7. The regeneration methods: **Alternative Prescription, having the nearest appropriate silvicultural method of Clearcut.**
Intermediate treatments to be used: **Commercial Thinning and Sanitation Salvage.**
Other Silviculture: **Selection, Shelterwood Removal, Fuelbreak, Road Right-of-way.**

POWERLINES: 14 CCR 1032.7(d)(10) & (e) (provide name and mailing addresses of the utilities for department distribution)
Pacific Gas & Electric Co. 4636 Missouri Flat Road, Placerville CA 95667. *Attn: Mark Stewart*

8. ☒ Yes ☐ No Overhead electrical power lines within the plan boundary? (except lines from transformers to service panels)
9. ☒ Yes ☐ No Overhead powerlines within 200 feet outside the plan boundary?

Public Information: The review times allowed for CAL FIRE to review the proposed timber operation are variable in length, but limited. To ensure CAL FIRE receives your comments please read the following:

The estimated earliest possible date CAL FIRE may APPROVE the Plan or Amendment is: MAR 17 2020
(This date is 15 calendar days from receipt of the Plan or Amendment by CAL FIRE, except in counties for which special rules have been adopted where the earliest date is 45 calendar days after receipt.)

NOTE: THE ESTIMATED EARLIEST APPROVAL DATE IS PROBABLY NOT THE ACTUAL APPROVAL DATE. Normally, a much longer period of time is available for public comment and preparation of CAL FIRE's responses to public comments. Please check with CAL FIRE, prior to the above listed date, to determine the actual date that the public comment period closes.

The public may review, or purchase a copy of, the Plan or Amendment at the CAL FIRE Review Team Office shown below. The cost to obtain a copy is 37 cents for each page, $2.50 minimum per request. The cost to obtain a copy of this plan or amendment is: $ 129.13
(to be completed by CAL FIRE upon receipt of plan).

Questions or concerns regarding this plan should be directed to the CAL FIRE Review Team Office shown below or emailed to **FresnoPublicComment@fire.ca.gov** for incorporation into an Official Response Document. Please include the plan number on all correspondence.

Forest Practice Program Manager
CAL FIRE
1234 East Shaw Avenue
Fresno, CA 93710
(559) 222-3714

The plan may be viewed online at https://caltreesplans.resources.ca.gov/caltrees/ **A map showing the approximate boundary of the THP area, a map legend, and a scale is attached to help in locating where the proposed timber operation is to occur.**

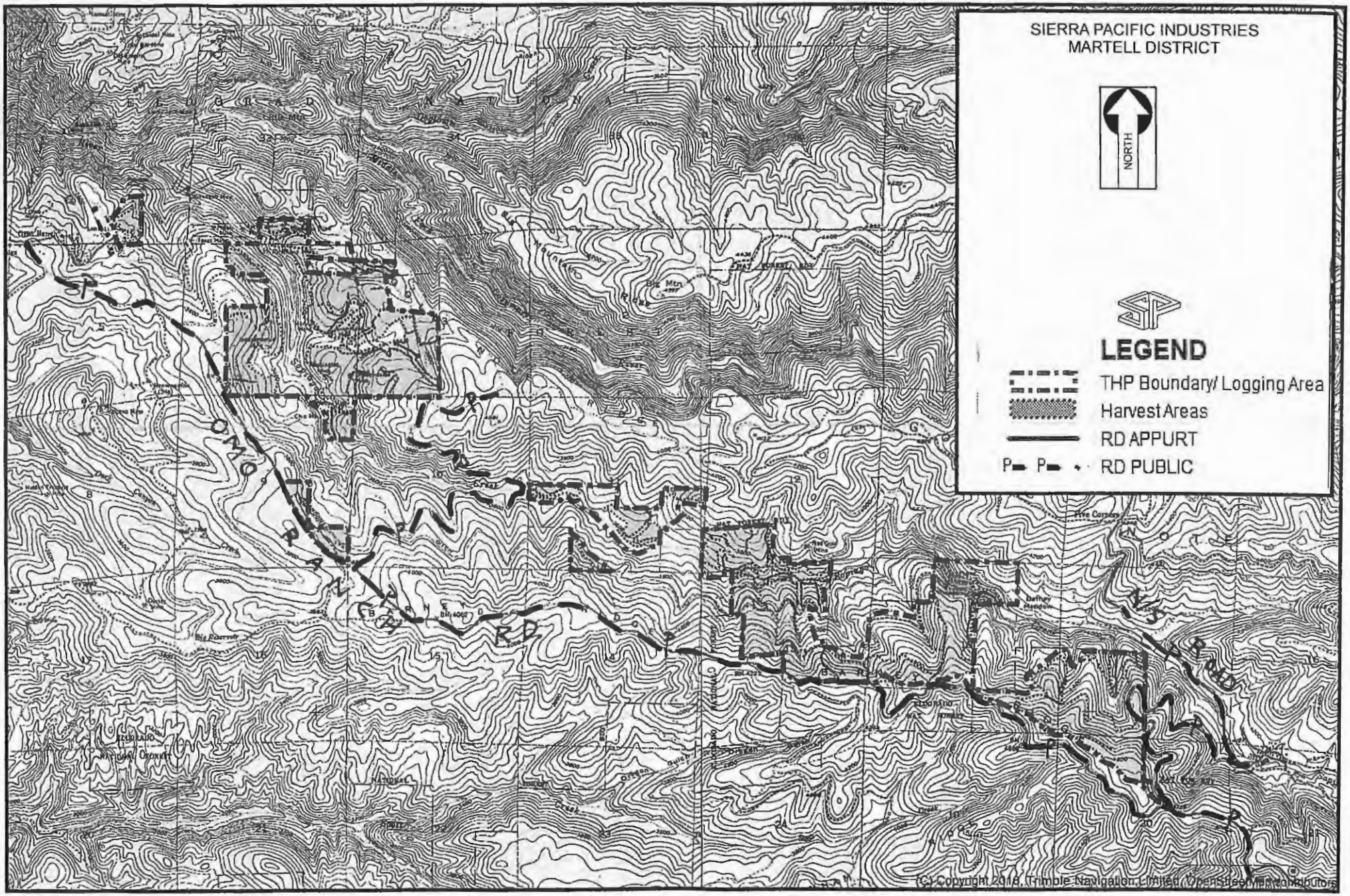
For CAL FIRE Use Only

Timber Harvest Plan Number: 4-20-00017-ELD

Date of Receipt: MAR 02 2020

RECEIVED
MAR 02 2020
CA. DEPT. OF FORESTRY
RESOURCE MANAGEMENT

8-17



GO FOR GOLD TIMBER HARVEST PLAN
ASSESSMENT AREA OVERVIEW

OMO RANCH & CALDOR 7.5 ' QUADS

SCALE 1:48000

0 1

Mile

GO 4 GOLD THP – List of Adjacent Landowners.

LANDOWNER	APN
BUREAU OF LAND MANAGEMENT 2800 COTTAGE WAY SACRAMENTO CA 95825	MULT
U S A FOREST SERVICE 100 FORNI RD PLACERVILLE CA 95667	MULT
SILLER BROS. INC 1255 SMITH RD. YUBA CITY CA 95991	040-191-014
ROGER D & KATHLEEN M LIPP 4662 COLUMBIA RIVER CT SAN JOSE CA 95136	041-191-018
PETER & SHARON SARELLANA 4000 CENTRAL AVE FAIR OAKS CA, 95628	040-230-024
BRUCE & MARGARET NIELSON PO BOX 223 MOUNT AUKUM CA 95656	040-230-025
RICHARD E HALL SURVIVOR TRUST 5016 OLIVE OAK WAY CARMICHAEL CA 95608	040-230-026
EDWIN & KATHLEEN BOCHENSKI 427 W. HIGHLAND AVE TRACY CA 95376	040-011-013
BRENT 7 SUZANNE FOX CHANDLER 2483 SUNRISE BL. GOLD RIVER CA 95670	040-011-025
RICHARD & JEANNE BALDWIN TR. 2924 HIGHLAND AVE SACRAMENTO CA 95818	040-011-026
STEVEN P HUTCHINSON SUC TR 8000 OMO RANCH RD SOMERSET CA 95684	040-011-027
GEORGE & CYNTHIA VADNEY 23205 SW HOLLY HILL RD HILLSBORO OR 97123	040-260-008 AND 010
DAVID L & MARY VADNEY 16550 NOBLE DR OREGON CITY OR 97045	040-260-007 AND 009
GLORIA AND MARTIN BELINDA SUTHERLAND PO BOX 946 FOLSOM CA 95763	040-011-011
STEVEN R SUTHERLAND & DAVID C MARTIN PO BOX 2138 CLEARLAKE CA 95422	
ELIZABETH CELIA LOWGREN SUC TRUST 6029 ELSA AVE ROHNERT PARK CA 94928	040-260-006
ERIC KAI SALVISBERG 11 DENNING AVE SAN RAFAEL CA 94903	040-310-007

Mr. Brent Fox
5086 Debron Ct.
Pollock Pines CA 95726

NOTICE OF INTENT TO HARVEST TIMBER

A Timber Harvesting Plan (Plan) or Amendment has been submitted to the California Department of Forestry & Fire Protection (CAL FIRE). CAL FIRE will be reviewing the proposed timber operation for compliance with State law and rules of the Board of Forestry and Fire Protection. The following briefly describes the proposed timber operation and where and how to get more information. In accordance with the timeline stated under Public Resources Code Section 4582.7, you may submit written public comments on the Plan or Amendment for CAL FIRE to consider.

This notice applies to (select one): ☒ New Timber Harvesting Plan ☐ Amendment Approved Timber Harvesting Plan

Applicant Information (Timberland Owner(s), Registered Professional Forester who prepared the plan and Plan Submitter should match those listed in the plan or amendment.)

1. The name(s) of the Timberland Owner(s) where timber operations are to occur: **Sierra Pacific Land & Timber**

2. Registered Professional Forester who prepared the plan or amendment: **Robert G. Little , RPF # 2651**

   Registered Professional Forester Phone (optional): _____

3. The name of the Plan or Amendment Submitter: **Sierra Pacific Industries**

Project Summary *(County, legal description, acres proposed to be harvested and treatments to be used should match those listed in the plan or amendment.)*

4. Location of the proposed timber operation: County **ELDORADO** Legal description: **T9N R16E Sec 6. T10N,R16E, Sec 31. T10N,R15E, Sec 19, 27, 28, 29, 34, 36. MDM.** Approximate direction & approximate distance of the timber operation from the nearest community or well-known landmark): **The nearest portion of the THP area is approximately 27 air-miles east of Placerville, and 5 miles west of HWY 88 intersection with Mormon Emigrant Trail.**

5. The name of, and distance from, the nearest perennial stream and major watercourse flowing through or downstream from the timber operation: **ALDER CREEK is in the immediate vicinity of, and flows through the proposed Timber Harvest Plan areas.**

6. Acres proposed to be harvested: **"Harvest Area" = 473 Acres**

7. The regeneration methods: **Clearcut.** Intermediate treatments to be used: **None.** Other Silviculture: **Selection, Fuelbreak, Road Right-of-way.**

POWERLINES: 14 CCR 1032.7(d)(10) & (e) (provide name and mailing addresses of the utilities for department distribution)
Pacific Gas & Electric Co. 4636 Missouri Flat Road, Placerville CA 95667. *Attn: Mark Stewart*

8. ☐ Yes ☒ No Overhead electrical power lines within the plan boundary? (except lines from transformers to service panels)
9. ☐ Yes ☒ No Overhead powerlines within 200 feet outside the plan boundary?

Public Information: The review times allowed for CAL FIRE to review the proposed timber operation are variable in length, but limited. To ensure CAL FIRE receives your comments please read the following:

The estimated earliest possible date CAL FIRE may **APPROVE** the Plan or Amendment is: JUN 10 2021
(This date is 15 calendar days from receipt of the Plan or Amendment by CAL FIRE, except in counties for which special rules have been adopted where the earliest date is 45 calendar days after receipt.)

NOTE: THE ESTIMATED EARLIEST APPROVAL DATE IS PROBABLY NOT THE ACTUAL APPROVAL DATE. Normally, a much longer period of time is available for public comment and preparation of CAL FIRE's responses to public comments. Please check with CAL FIRE, prior to the above listed date, to determine the actual date that the public comment period closes.

The public may review, or purchase a copy of, the Plan or Amendment at the CAL FIRE Review Team Office shown below. The cost to obtain a copy is 37 cents for each page, $2.50 minimum per request. The cost to obtain a copy of this plan or amendment is: $98.79
(to be completed by CAL FIRE upon receipt of plan).

Questions or concerns regarding this plan should be directed to the CAL FIRE Review Team Office shown below or emailed to **FresnoPublicComment@fire.ca.gov** for incorporation into an Official Response Document. Please include the plan number on all correspondence.

Forest Practice Program Manager
CAL FIRE
1234 East Shaw Avenue
Fresno, CA 93710
(559) 222-3714

RECEIVED
MAY 25 2021
CA. DEPT. OF FORESTRY
RESOURCE MANAGEMENT

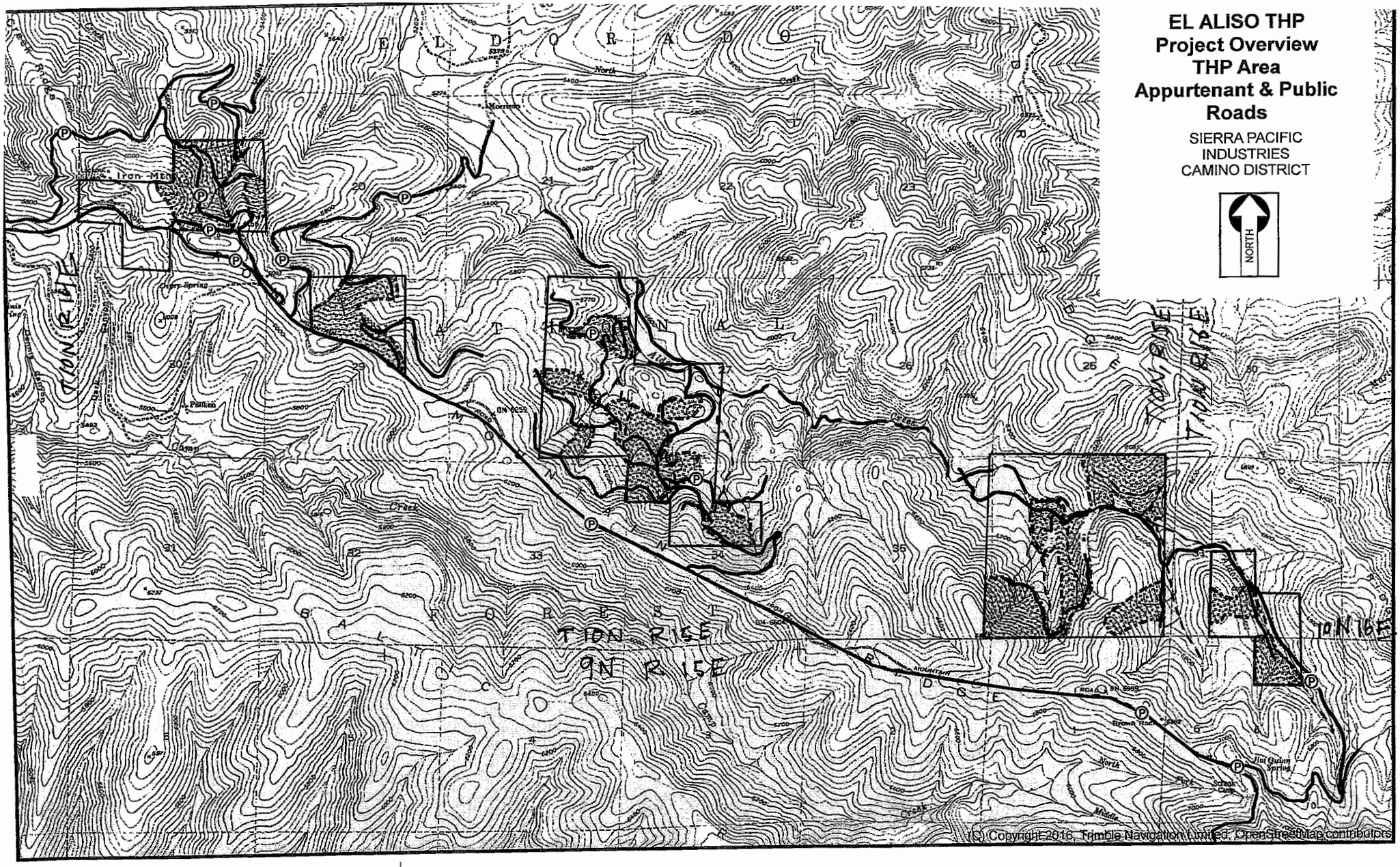
The plan may be viewed online at https://caltreesplans.resources.ca.gov/caltrees/ **A map showing the approximate location of the THP area, a map legend, and a scale is attached to help in locating where the proposed timber operation is to occur.**

For CAL FIRE Use Only

Timber Harvest Plan Number: 4-21-00079-ELD Date of Receipt: MAY 25 2021

EL ALISO THP
Project Overview
THP Area
Appurtenant & Public Roads

SIERRA PACIFIC INDUSTRIES
CAMINO DISTRICT



LEGEND

- THP Boundary/ Logging Area
- RD Seas./ APPURTENANT RD
- RD Public
- Class 1 WATERCOURSE
- Class 2 WATERCOURSE
- Class 3 WATERCOURSE

Map Name: PLACERVILLE
USGS 7.5' QUAD
1952 -Photorevised 1973
EL DORADO County CA.

SCALE 1:45000

0 1000 2000 3000 4000 5000 6000
Feet

EL ALISO THP

List of Adjacent Landowners.

LANDOWNER	APN
U S A FOREST SERVICE 100 FORNI RD PLACERVILLE CA 95667	MULT

CAL FIRE

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March 16, 2017

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Plumas – Sierra Rural Electric Cooperative
Wesley W. Gray, P.E.
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73233 State Route 70
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(530) 832-6026
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Liberty Utilities
Eliot Jones, Vegetation Program
701 National Ave
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Heidi Miller
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HMiller@WAPA.gov

Trinity PUD
Andy Lethbridge
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Michael Daleo
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RJL ✓ 2021 Webpage version 5-21-21