## SOUTH SUTTER WATER DISTRICT

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Bradley J. Arnold General Manager / Secretary sswd@hughes.net



October 25, 2019

Via Electronic Submittal (eFile)

Kimberly D. Bose, Secretary Federal Energy Regulatory Commission 888 - 1<sup>st</sup> Street, N.E. Washington, DC 20426-0001

#### Subject: Camp Far West Hydroelectric Project FERC Project No. 2997-031 Amendment #1 to Final License Application

Dear Secretary Bose:

This letter files with the Federal Energy Regulatory Commission (FERC or Commission) South Sutter Water District's (SSWD or Licensee) amendment to its June 2019 Application for New License Major Project – Existing Dam - for the Camp Far West Hydroelectric Project, FERC Project Number 2997 (Project). The amendment revises SSWD'S Proposed Measures AR3, Implement Ramping Rates, and RR1, Recreation Facilities Plan, in Appendix E2 in Exhibit E of SSWD's June 2019 application. This letter also updates the status of two other SSWD Proposed Measures: 1) TR1, Implement a Bald Eagle Management Plan; and 2) CR1, Implement a Historic Properties Management Plan (HPMP). As described below, SSWD has come to agreement with some agencies and a non-governmental organization on revisions to Measures AR3 and RR1. SSWD and Relicensing Participants have agreed-to-disagree on Measure TR1, and, as directed by FERC, SSWD is conducting additional consultation with the State Historic Preservation Officer (SHPO) and interested Indian tribes on the HPMP and will file an amended HPMP under separate cover with FERC by December 30, 2019.

#### BACKGROUND

Appendix E2 in SSWD's June 2019 Application for New License contains eight SSWD proposed conditions for inclusion in the new license. Table E2-1 in Appendix E2 shows that SSWD, the United States Department of the Interior, Fish and Wildlife Service (USFWS), California Department of Fish and Wildlife (CDFW), and Foothill Water Network (FWN) reached agreement on four of the eight measures included in SSWD's June 2019 Application for New License. These are SSWD Proposed Measures: 1) WR1, Implement Water Year Types; 2) AR1, Implement Minimum Flows; 3) AR2, Implement Fall and Spring Pulse Flows; and 4) TR2, Implement Blue Heron Rookery Management. In addition, Appendix E2 states the above parties agreed to continue to collaborate on the remaining measures, excluding measure CR1 that is outside the jurisdiction of the above parties, and intended to file with FERC final agreed-on measures by around the end

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of September 2019. With regards to Measure CR1, page E3.3.1-21 in SSWD's June 2019 Application for New License states that, when the Application for New License was filed, SSWD intended to file with FERC a final HPMP by the end of September 2019, after SSWD received the SHPO's concurrence on the HPMP.

In its August 30, 2019, letter accepting SSWD's June 2019 Application for New License, FERC requested additional information by November 30, 2019, regarding, among other things, the Recreation Facilities Plan in Measure RR1, and directed SSWD to conduct further consultation with SHPO and interested Indian tribes regarding the HPMP and file with FERC a revised HPMP by December 30, 2019.

SSWD did not propose in its FLA an aquatic monitoring plan, and SSWD and the Relicensing Participants did not come to agreement on such a plan. SSWD understands that some of the Relicensing Participants plan to file with FERC a monitoring measure and monitoring plan with their formal terms and conditions submittal.

#### AGREEMENT ON AMENDED MEASURE AR3

After continued collaboration, SSWD, USFWS, CDFW and FWN have reached agreement on Measure AR3. The amended measure is provided in Attachment 1 to this letter, which is an amended Appendix E2 to SSWD's June 2019 Application for New License.<sup>1</sup>

#### AGREEMENT ON AMENDED MEASURE RR1

Addressing FERC's August 2019 additional information requests resulted in some minor changes to the Recreation Facilities Plan in Measure RR1. These changes included correcting Project recreation road widths and surface types at the North Shore and South Shore recreation area facilities. After continued collaboration, SSWD, USFWS, NPS, CDFW and FWN have agreed that the Recreation Facilities Plan in SSWD's Proposed Measure RR1 in its June 2019 Application for New License, with the minor changes described above, satisfies the parties. The amended measure, which includes a revised Recreation Facilities Plan, is provided in Attachment 1 to this letter, which is an amended Appendix E2 to SSWD's June 2019 Application for New License.<sup>2</sup>

<sup>&</sup>lt;sup>1</sup> In Table 6.2-2 in Exhibit D and Table 4.2-3 in Exhibit E of SSWD's June 2019 Application for New License, SSWD estimated the cost to implement Measure AR3 as proposed in SSWD's June 2019 Application for New License as \$60,000 over 30 years, or an average annual cost of \$2,000. SSWD estimates the cost to implement Amended Measure AR3 is not significantly different than the cost to implement Measure AR3.

<sup>&</sup>lt;sup>2</sup> In Table 6.2-2 in Exhibit D and Table 4.2-3 in Exhibit E of SSWD's June 2019 Application for New License, SSWD estimated the cost to implement Measure RR1 as proposed in SSWD's June 2019 Application for New License as \$9,456,000 over 30 years, or an average annual cost of \$315,200. SSWD estimates the cost to implement the revised Recreation Facilities Plan in Amended Measure RR1 is not significantly different than the cost to implement Measure RR1.

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#### NO AGREEMENT ON MEASURE TR1

After continued collaboration, SSWD, USFWS, CDFW and FWN have agreed-to-disagree on SSWD's Proposed Measure TR1. SSWD does not believe additional discussion on the measure would be fruitful at this time. SSWD's Proposed Measure TR1 has not changed from Measure TR1 in Appendix E2 in SSWD's June 2019 Application for New License.

#### AMENDED MEASURE CR1 WILL BE FILED WITH FERC BY DECEMBER 30, 2019

As directed by FERC's August 30, 2019, letter requesting additional information, SSWD is conducting addition consultation with SHPO and interested Indian tribes regarding the HPMP and will file with FERC an amended HPMP by December 30, 2019.

#### AGREEMENT WITH AMENDED MEASURES AR3 AND RR1

The Amended Appendix E2 (Attachment 1 to this letter) to Exhibit E in SSWD's June 2019 Application for New License and this transmittal letter were provided to USFWS, NPS, CDFW and FWN for review. As evidenced by the e-mails in Attachment 2 to this letter, SSWD understands the above parties agree with the contents of this letter.

#### REQUEST

SSWD requests that FERC replace Appendix E2 in Exhibit E of SSWD's June 2019 Application for New License with the Amended Appendix E2 in Attachment 1 to this letter.

Please contact me should you have any questions or comments.

Sincerely,

Brendamold

Brad Arnold General Manager / Secretary sswd@hughes.net

Attachment 1: Amended Appendix E2, SSWD's Proposed Measures, to Exhibit E of the SSWD's June 2019 Application for New License Attachment 2: Support E-Mails for Amended Measures AR3 and RR1

cc: Quinn Emmering, FERC DC
 Parties on FERC's Official Service List for the Camp Far West Hydroelectric
 Project Relicensing, FERC Project No. 2997-031
 Relicensing Participants on Camp Far West Hydroelectric Project's Relicensing
 E-Mail Contact List (via e-mail)

#### **CERTIFICATE OF SERVICE**

I hereby certify that I have this day served the foregoing document upon each person designated on the official service list compiled by the Secretary of the Federal Energy Regulatory Commission in this proceeding (Camp Far West Hydroelectric Project, FERC Project No. 2997-031).

Dated in Sacramento, CA this \_\_25\_\_ day of October, 2019.

Jamos Lynch

James Lynch, Senior Vice President HDR Engineering, Inc. Hydropower Services 2379 Gateway Oaks, Suite 200 Sacramento, CA 95833 (916) 679-8740

## **ATTACHMENT 1**

Amended Appendix E2, SSWD's Proposed Measures, to Exhibit E of the SSWD's June 2019 Application for New License

## AMENDED APPENDIX E2 SSWD'S PROPOSED MEASURES

Provided below are the operations and management activities that South Sutter Water District (SSWD or Licensee) proposes to undertake as measures of the new license for the Project for the purpose of protecting or mitigating impacts that would otherwise result from SSWD's Proposed Project as described in this Application for a New License, or for the purpose of enhancing resources that could be affected by the proposed Project (PM&E measures).

For the purpose of this appendix, SSWD has assumed that the Federal Energy Regulatory Commission's (FERC) requirements regarding inspections of Project facilities (e.g., annual FERC inspections, Part 12 Dam Safety Inspections, and Environmental and Public Use Inspections) and other similar general FERC requirements (e.g., requirement for Emergency Action Plans) will apply to SSWD's Proposed Project if FERC issues a new license. SSWD also has assumed the specific requirements included in related approvals, such as dam certificates issued by the California Division of Safety of Dams (DSOD) for Project dams within DSOD's jurisdiction and appropriative water rights licensed by the California State Water Resources Control Board (SWRCB) for power generation will not change under a new license. Therefore, SSWD has not included proposed measures related to these activities in this Application for New License.

In addition, for the purpose of this appendix, SSWD has assumed that FERC will include in the new license FERC's 37 *Terms and Conditions of License for Constructed Major Project Affecting Navigable Waters and Lands of the United States* (Form L-5 Standard Articles).<sup>3</sup> Therefore, SSWD has not included proposed measures that would otherwise be addressed by FERC's Form L-5 Standard Articles.

SSWD and Relicensing Participants have reached agreement on a number of PM&E measures. The status of each measure proposed by SSWD is described in Table E2-1, for which a detailed PM&E measure is included in this appendix.

<sup>&</sup>lt;sup>3</sup> L–5: *Constructed Major Project Affecting Navigable Waters and Lands of the United States*, 12 F.P.C. 1329 (October 23, 1953), 17 F.P.C. 110 (January 13, 1957), 38 F.P.C. 203 (July 26, 1967), 54 F.P.C. 1832 (October 31, 1975).

PM&E Measure		SSWD and I	Relicensing	Participants	6	
Included in Appendix E2	that Support SSWD's Proposed PM&E Measure <sup>1</sup>		Explanation			
of this Exhibit E	SSWD			FWN	<b>1</b>	
WR1. Implement Water Year Types <sup>2</sup>	X	Х		x	Х	SSWD and the indicated parties have reached agreement on this measure. For the purpose of this Amended FLA, this agreed- on measure is included as SSWD's Proposed Measure in SSWD's Amended FLA
AR1. Implement Minimum Streamflows <sup>2</sup>	Х	Х		Х	Х	SSWD and the indicated parties have reached agreement on this measure. For the purpose of this FLA, this agreed-on measure is included as SSWD's Proposed Measure in SSWD's Amended FLA.
AR2. Implement Fall and Spring Pulse Flows <sup>2</sup>	х	х		х	х	SSWD and the indicated parties have reached agreement on this measure. For the purpose of this FLA, this agreed-on measure is included as SSWD's Proposed Measure in SSWD's Amended FLA
Amended AR3. Implement Ramping Rates <sup>3</sup>	X	Х		X	X	SSWD and the indicated parties have reached agreement on this measure. For the purpose of this FLA, this agreed-on measure is included as SSWD's Proposed Measure in SSWD's Amended FLA
TR1. Implement Bald Eagle Management Plan <sup>2,4</sup>	х					SSWD, CDFW, USFWS and FWN have agreed-to-disagree on this measure at this time.
TR2. Implement Blue Heron Rookery Management <sup>2</sup>	X	Х		X	X	SSWD and the indicated parties have reached agreement on this measure. For the purpose of this FLA, this agreed-on measure is included as SSWD's Proposed Measure in SSWD's FLA.
Amended RR1. Implement Recreation Facilities Plan <sup>2,3,4</sup>	X	Х	Х	Х	X	Addressing FERC's August 2019 additional information requests resulted in some minor changes to the Recreation Facilities Plan in Measure RR1 of SSWD's June 2019 Application for New License. SSWD and the indicated parties have reached agreement on this measure. For the purpose of this FLA, this agreed-on measure is included as SSWD's Proposed Measure in SSWD's Amended FLA
CR1. Implement Historic Properties Management Plan <sup>2,5</sup>	Х					As directed by FERC's August 2019 letter requesting additional information, SSWD is conducting addition consultation with SHPO and interested Indian tribes regarding the HPMP and will file with FERC an amended HPMP.
Subtotal	8	6	1	6	6	
Total		8 SSWD	Proposed I	Measures		

Table E2-1. PM&E measures on which SSWD and Relicensing Participants reached agreement, indicated by an "X" in the respective cell.<sup>4</sup>

<sup>1</sup> The SWRCB participated in the collaboration meetings, but stated that it cannot agree to or take a position on the merits of any PM&E measures at this time.

2 This measure is included in SSWD's Amended Appendix E2, and has not changed from the measure in Appendix E2 in Exhibit E of SSWD's June 2019 Application for New License.

3 This measure is included in SSWD's Amended Appendix E2, and has changed from the measure in Appendix E2 in Exhibit E of SSWD's June 2019 Application for New License.

<sup>4</sup> This plan is included in Amended Appendix E2, and is considered Public information.
 <sup>5</sup> The Amended HPMP will be filed with FERC by December 30, 2019.

<sup>&</sup>lt;sup>4</sup> SSWD Proposed Measures that have changed since SSWD filed its June 2019 Application for New License (FLA) are indicated as "Amended" in this table and throughout this Amended Appendix E2.

SSWD and the Relicensing Participants that agree to a PM&E measure as shown in Table E2-1 agreed to take the following actions for that measure assuming there is no additional information discovered or changes in the Project that affect the measure:

- SSWD will include the agreed-upon PM&E measure unchanged in its FLA, as amended, and SSWD will propose no other measure in the FLA, as amended, related to the issue.
- USFWS and CDFW will include the PM&E measure unchanged and will propose no other measures related to the issue in their respective FPA Section 10(j) and/or FPA Section 10(a) recommendations.
- FWN will propose the PM&E measure and no other measures related to the issue in its comments on SSWD's FLA.

## 1.0 <u>SSWD Proposed Measure WR1, Implement Water Year</u> <u>Types<sup>5</sup></u>

Beginning within 90 days of license issuance, Licensee shall in each year determine the applicable water year type described in this measure. Licensee shall use these determinations to implement articles and measures of the license that are dependent on water year type.

#### October 15 through March 14 Period

The water year type for the October 15 through March 14 period shall be determined by the previous April 1 through September 30 cumulative usable inflow into Camp Far West Reservoir, as specified in Table 1 of this measure. The water year type for the October 15 through March 14 period shall be calculated once each year by October 15, and shall apply to that entire period each year.

## Table 1. Water Year types for the Camp Far West Hydroelectric Project from October 15 through March 14.

Water Year Type	Cumulative Usable Inflow into Camp Far West Reservoir for the Previous April 1 through September 30 Period (acre-feet)
Wet	Greater than or equal to 80,000
Above Normal	41,000 to 79,999
Below Normal	36,000 to 40,999
Dry	20,000 to 35,999
Critically Dry	Less than 20,000

The Camp Far West Reservoir cumulative usable inflow in Table 1 shall be calculated as the sum of the daily canal diversions from April 1 through September 30 at South Sutter Water District's Main Canal and the Camp Far West Irrigation District's North and South canals, in cubic feet per second and multiplied by 1.98347 to convert to acre-feet, minus the difference between Camp Far West Reservoir storage on April 1 and September 30. Camp Far West storage on both dates will

<sup>&</sup>lt;sup>5</sup> As shown in Table E2-1, SSWD, USFWS, CDFW and FWN are in agreement with this measure.

South Sutter Water District Camp Far West Hydroelectric Project FERC Project No. 2997

be limited to a maximum value of 93,737 acre-feet or the maximum storage possible before uncontrolled spill through the dam spillway.

South Sutter Water District's Main Canal diversions and the Camp Far West Irrigation District's North and South canal diversions are to be taken as the average daily flow in cubic feet per second, and storage in Camp Far West Reservoir is determined by converting the published daily reservoir elevation data to storage in acre-feet using the Camp Far West Reservoir area-capacity curve available in Exhibit B of the Licensee's Application For New License. Hourly diversion data for the Main Canal, South Canal, and North Canal diversions will be reported on a weekly basis and will be publicly available by January 1, 2020, in compliance with the California State Water Resources Control Board's Surface Water Measurement and Reporting Regulations (California Code of Regulations, Title 23, Chapters 2.7 and 2.8). The gages used to provide data for these calculations shall be:

- Main Canal Diversion
- South Canal Diversion
- North Canal Diversion
- Camp Far West Storage

#### March 15 through October 14 Period

The water year type for the period from March 15 through October 14, shall be based on the California Department of Water Resources (DWR) 50 percent exceedance forecast of the water year unimpaired runoff in the Yuba River near Smartsville plus Deer Creek, as set forth in DWR's Bulletin 120 entitled "Water Year Conditions in California," as specified in Table 2 of this measure. DWR's forecast published in March and April shall apply from the 15<sup>th</sup> day of that month through the 14<sup>th</sup> day of the next month. From May 15 through October 14, the water year type shall be based on DWR's forecast published in May.

## Table 2. Water Year types for the Camp Far West Hydroelectric Project from March 15 throughOctober 14.

Water Year Type	DWR Forecast of Total Water Year Unimpaired Runoff in the Yuba River near Smartsville plus Deer Creek <sup>1</sup> (acre-feet)
Wet	Greater than 3,240,000
Above Normal	2,191,000 to 3,240,000
Below Normal	1,461,000 to 2,190,000
Dry	901,000 to 1,460,000
Critically Dry	Equal to or less than 900,000

<sup>1</sup> DWR currently rounds Bulletin 120 forecasts to the nearest 1,000 acre-feet, and rounded values to the nearest 1,000 acre-feet will be used.

## 2.0 <u>SSWD Proposed Measure AR1, Implement Minimum</u> <u>Streamflows<sup>6</sup></u>

Licensee shall, within 30 days of issuance of the new license, meet the minimum streamflow requirements for the Bear River downstream of Camp Far West Dam and Powerhouse that are shown in Table 1 of this measure.

Table 1. Minimum Streamflows in cubic feet per second (cfs) for the Camp Far West Hydroelectric
Project by period and by Water Year Type, which is defined in Licensee's Proposed Measure WR1.

			Water Year Type		
Period	Wet Water Year	Above Normal Water Year	Below Normal Water Year	Dry Water Year	Critically Dry Water Year
	(cfs)	(cfs)	(cfs)	(cfs)	(cfs)
Oct 1 – Oct 14	10	10	10	10	10
Oct 15 - Oct 31	50	25	25	10	10
Nov 1 – Nov 14	100	60	30	20	10
Nov 15 - Feb 28 (29)	125	60	30	20	15
Mar 1 – Mar 31	60	40	30	20	15
Apr 1 – Apr 30	40	25	25	20	15
May 1 – May 14	40	25	25	15	15
May 15 – May 31	25	25	20	10	10
Jun 1 – June 14	25	25	15	10	10
June 15 – June 30	20	20	10	10	10
July 1 – Sep 30	10	10	10	10	10

Minimum streamflows of 30 cfs or less shall be measured at the fish release valve off South Sutter Water District's Main Canal (USGS Gage 11423800, Bear River Fish Release below Camp Far West Reservoir, near Wheatland, CA). Minimum streamflows greater than 30 cfs shall be measured as the difference between the Camp Far West Dam release (defined as the sum of the flows through the Camp Far West Powerhouse, Camp Far West Dam Low-Level Outlet, and Camp Far West Dam Spillway) less diversions (defined as the sum of South Sutter Water District Main Canal and Camp Far West Irrigation District's North and South canals). Flow through the Camp Far West Dam Far West Dam Low-Level Outlet shall be measured every 15 minutes, while flow over the Camp Far West Dam Spillway shall be measured once daily. Diversions at the South Sutter Water District's Main Canal and the Camp Far West Irrigation District's Main Canal and the Camp Far West Irrigation District's Main Canal and the Camp Far West Irrigation District's Main Canal and the Camp Far West Irrigation District's Main Canal and the Camp Far West Irrigation District's Main Canal and the Camp Far West Irrigation District's Main Canal and the Camp Far West Irrigation District's Main Canal and the Camp Far West Irrigation District's Main Canal and the Camp Far West Irrigation District's North and South canals shall be measured on an hourly basis. Average daily Camp Far West Dam release and average daily diversions shall be used to measure the average daily minimum streamflows greater than 30 cfs.

Minimum streamflows may be temporarily modified as follows:

• For short periods and upon consultation with and approval by the USFWS, NMFS, CDFW and SWRCB. Licensee shall provide notification to the Commission prior to implementing such modifications.

<sup>&</sup>lt;sup>6</sup> As shown in Table E2-1, SSWD, USFWS, CDFW and FWN are in agreement with this measure.

• Due to an emergency. An emergency is defined as an outage due to an event that is reasonably out of the control of Licensee and requires Licensee to take immediate action, either unilaterally or under instruction of law enforcement, emergency services, California ISO or other regulatory agency staff, including actions to prevent the imminent loss of human life or damage to property. An emergency may include, but is not limited to: natural events such as landslides, storms, or wildfires; vandalism; malfunction or failure of transmission lines or Project works; or other public safety incidents. If Licensee temporarily modifies the requirements of this measure, Licensee shall make all reasonable efforts to promptly resume performance of the requirements, and shall notify the USFWS, NMFS, CDFW and SWRCB within 48 hours of the start of the modification. Licensee shall provide notification to the Commission as soon as possible but no later than 10 days after such incident.

Where a facility must be modified or constructed to allow compliance with the required minimum streamflow, including flow measurement facilities, then, except as otherwise provided, Licensee shall submit applications for permits to modify or construct the facility as soon as reasonably practicable but no later than within the first 2 years of the new license term, and Licensee will complete the work as soon as reasonably practicable but no later than within 2 years after receiving all required permits and approvals for the work. During the period before facility modifications or construction are completed, Licensee shall make a good faith effort to provide the specified minimum streamflows within the reasonable capabilities of the existing facilities.

## 3.0 <u>SSWD Proposed Measure AR2, Implement Fall and</u> <u>Spring Pulse Flows<sup>7</sup></u>

Licensee shall, beginning in the first full calendar year after license issuance, provide the fall and spring pulse flows for the Bear River downstream of Camp Far West Dam and Powerhouse described in this measure.

A fall pulse flow shall occur between November 10 and November 17 in each Wet, Above Normal, and Below Normal water year, as detailed in Table 1 of this measure. In Wet water years, a second fall pulse flow shall occur between December 1 and December 7. Licensee shall determine the specific timing of each pulse flow within the periods of the pulse flows stated above. Modifications to the exact timing of the pulse flow outside of the stated periods in this measure may occur with the approval of the NMFS, USFWS, CDFW and SWRCB. If average daily flows equal to or greater than the pulse flows in Table 1 have occurred between November 1 and November 9, then the first fall pulse flow is not required in that year. If average daily flows equal to or greater than the pulse flow is not required between November 21 and November 30, then the second fall pulse flow is not required in that year. A fall pulse flow is not required in Dry and Critically Dry water years.

<sup>&</sup>lt;sup>7</sup> As shown in Table E2-1, SSWD, USFWS, CDFW and FWN are in agreement with this measure.

	October 15 – March 14 Wa	ter Year Type as Defined in SSWD	's Proposed Measure WR1
Period	Wet	Above Normal	Below Normal
(day)	Water Year	Water Year	Water Year
	(cfs)	(cfs)	(cfs)
	FIRST FALL PUL	SE FLOW PERIOD	
Day 1	≥ 175	≥ 125	≥ 125
Day 2	≥ 175	≥ 125	≥ 125
Day 3	≥ 125	≥ 75	≥ 75
	SECOND FALL PU	LSE FLOW PERIOD	
Day 1	≥ 175	None	None
Day 2	≥ 175	None	None
Day 3	≥ 125	None	None

 Table 1. Fall (i.e., between November 10 and December 7) pulse flow in cubic feet per second (cfs) for the Camp Far West Hydroelectric Project by period and by Water Year Type.

The spring pulse flow shall occur over a 6-day period, as shown in Table 2 in this measure. If an average daily flow equal to or greater than 200 cfs has occurred after April 1 of that year, the required spring pulse flow in Table 2 is not required in that year. A spring pulse flow is not required in Wet and Above Normal water years. The spring pulse flow shall begin and end within a 2-week period, which shall start no earlier than the following date for each water year type: Below Normal – April 27; Dry – April 19; Critically Dry – April 11.

 Table 2. Spring (i.e., between April 11 and May 10) pulse flow in cubic feet per second (cfs) for the Camp Far West Hydroelectric Project by period and by Water Year Type.

	March 15 - October	14 Water Year Type as	s Defined in SSWD's Pr	oposed Measure WR1	
	Below Normal Water Year		Dry Water Year		lly Dry r Year
Period	Flow	Period Flow		Period	Flow
(day) Day 1	(cfs) > 200	(day) Day 1	(cfs) $\geq 200$	(day) Day 1	(cfs) $\geq 200$
Day 2	$\geq 200$ $\geq 200$	Day 1 Day 2	$\geq 200$ $\geq 200$	Day 1 Day 2	$\geq 200$ $\geq 200$
Day 3	≥ 150	Day 3	≥ 150	Day 3	≥ 150
Day 4	$\geq 100$	Day 4	$\geq 100$	Day 4	$\geq 100$
Day 5	≥ 75	Day 5	≥75	Day 5	$\geq 75$
Day 6	$\geq 50$	Day 6	$\geq$ 50	Day 6	$\geq 50$

The fall and spring pulse flows shall be measured as described in SSWD's Proposed Measure AR1, Minimum Streamflows. The fall and spring pulse flows are not additive to the minimum streamflows required in SSWD's Proposed Measure AR1, Minimum Streamflows. Fall and spring pulse flows may be temporarily modified as follows:

- For short periods and upon consultation with and approval by the USFWS, NMFS, CDFW and SWRCB. Licensee shall provide notification to the Commission prior to implementing such modifications.
- Due to an emergency. An emergency is defined as an outage due to an event that is reasonably out of the control of Licensee and requires Licensee to take immediate action, either unilaterally or under instruction of law enforcement, emergency services, California ISO or other regulatory agency staff, including actions to prevent the imminent loss of human life or damage to property. An emergency may include, but is not limited to: natural events such as landslides, storms, or wildfires; vandalism; malfunction or failure of

transmission lines or Project works; or other public safety incidents. If Licensee temporarily modifies the requirements of this measure, Licensee shall make all reasonable efforts to promptly resume performance of the requirements, and shall notify the USFWS, NMFS, CDFW and SWRCB within 48 hours of the start of the modification. Licensee shall provide notification to the Commission as soon as possible but no later than 10 days after such incident.

Where a facility must be modified or constructed to allow compliance with the required pulse flow, including flow measurement facilities, then, except as otherwise provided, Licensee shall submit applications for permits to modify or construct the facility as soon as reasonably practicable but no later than within the first 2 years of the new license term, and Licensee will complete the work as soon as reasonably practicable but no later than within 2 years after receiving all required permits and approvals for the work. During the period before facility modifications or construction are completed, Licensee shall make a good faith effort to provide the specified pulse flow within the reasonable capabilities of the existing facilities.

## 4.0 <u>Amended SSWD Proposed Measure AR3, Implement</u> <u>Ramping Rates<sup>8</sup></u>

Licensee shall, when the average hourly release from Camp Far West Dam is less than 725 cfs from November through May, make a good faith effort to adhere to the ramping rates provided in this condition. The ramping rates in this condition shall also apply when making changes between minimum streamflow releases in Licensee's Proposed Measure AR1 and implementing fall and spring pulse flow releases in Licensee's Proposed Measure AR2. The ramping rates in this condition are targets: if Licensee, after a good faith effort to adhere to the target ramping rates, exceeds one or more target ramping rates, the exceedance shall not be deemed a license violation. In the event that a ramping rate target is exceeded, Licensee shall notify USFWS, NMFS, CDFW, and the SWRCB (Agencies) within 48 hours of the exceedance. This notification shall include the duration of the exceedance, flow levels during exceedance, and the reason for the exceedance (e.g., unexpected upstream releases resulting in imminent spill at Camp Far West dam).

#### Ramping during November 1 through January 31 Period

Licensee shall, from November 1 through January 31 of each year, make a good faith effort not to reduce the combined release from Camp Far West Powerhouse and Camp Far West Dam Low-Level Outlet until such time as flow passes over the Camp Far West Dam Spillway. If the Licensee, at its own discretion, determines it is necessary to reduce the combined release from the powerhouse and low-level outlet prior to flow passing over the Camp Far West Dam Spillway, Licensee shall make a good faith effort to reduce the combined release using the ramping rates specified below in Table 1.

### Ramping during February 1 through May 31 Period

<sup>&</sup>lt;sup>8</sup> As shown in Table E2-1, SSWD, USFWS, CDFW and FWN are in agreement with this amended measure.

Licensee shall, from February 1 through May 31 of each year, make a good faith effort to not reduce the combined release from the Camp Far West Powerhouse and the Camp Far West Low-Level Outlet at a rate greater than the target ramping rates in Table 1 of this condition.

Table 1. Target ramping rates in cubic feet per second (cfs) from February 1 through May 31,
excluding the period of flashboard installation at the downstream non-Project diversion dam.

Average Hourly Release	Target Maximum Reduction in Release		
From Combination of Camp Far West Dam Low-Level Outlet	From Combination of Camp Far West Dam Low-Level		
and Powerhouse for Previous Hour (cfs)	<b>Outlet and Powerhouse for That Hour</b>		
	(maximum of three steps per day) (cfs)		
725 - 600	100		
599 - 450	75		
449 - 330	60		
329 - 230	50		
229 - 150	40		
149 - 100	25		
99 - 60	20		
59 - 30	15		
29 - 10	10		

Ramping during Springtime Installation of Flashboards at Non-Project Diversion Dam (April or May)

During the spring installation of flashboards on the non-Project diversion dam downstream of the Project (i.e., installation includes the activities of drawing down the non-Project diversion dam pool, installing the flashboards, and refilling the non-Project diversion dam pool to initiate diversions), Licensee shall make a good faith effort to not reduce the combined release from the Camp Far West Powerhouse and/or the Camp Far West Low-Level Outlet at a rate greater than the target ramping rates in Table 2. The ramping rate values shown in Table 2 are made in recognition of the physical limitations and challenges that the operator of the non-Project diversion dam automates initiation of diversions at the non-Project diversion dam such that the physical limitation and challenges no longer occur, Licensee shall adhere to the target ramping rates shown in Table 1 of this condition.

 Table 2. Target ramping rates in cubic feet per second (cfs) for springtime flashboard installation at the non-Project diversion dam (April or May)

Average Hourly Release	Target Maximum Reduction in Release	
From Combination of Camp Far West Dam Low-Level Outlet	From Combination of Camp Far West Dam Low-Level	
and Powerhouse for Previous Hour (cfs)	Outlet and Powerhouse for That Hour	
	(unlimited steps per day) (cfs)	
725 - 600	200	
599 - 450	150	
449 - 330	120	
329 - 230	100	
229 - 150	80	
149–100	50	
99 - 60	40	
59 - 30	30	
29 - 10	20	

#### Monitoring during Flashboard Installation

During the first two years of implementation of the targeted ramping rates in Table 2, Licensee shall conduct fish stranding surveys in the reach downstream of the Non-Project diversion dam.

Surveys will take place when flows are reduced for the installation of the flashboards on the non-Project diversion dam during daylight hours. Surveys shall be conducted at the lowest flows of down ramping prior to, or during installation of flashboards on the non-Project Diversion Dam.

Surveys shall be completed before flows begin to increase. Surveys will be conducted by staff trained in identifying Chinook salmon and steelhead. Starting 1,000 feet downstream from the non-Project diversion dam, staff will survey for a distance of 3,000 feet on each bank of the Bear River for stranded fish. Surveys will be by foot or boat and move from upstream to downstream. Surveyors will search interstitial spaces that were wetted and are now dry, or will become dry shortly, edgewater, backwater, perched habitats, and exposed bars for stranded Chinook salmon and/or steelhead. Surveyors will wear polarized sunglasses and, to the extent possible, face the sun or observe at an oblique angle to avoid shadows.

If stranded Chinook salmon or steelhead are found, Licensee shall collect the following information:

- The number of stranded fish by species. All dead fish will be counted. All live adult fish will be counted. If 100 or less juvenile fish are estimated at each stranding location, then all juvenile fish will be counted. If more than 100 live juvenile fish are present, abundance will be estimated.
- Location of stranding or mortality, including GPS coordinate, distance from the wetted edge of the main channel.
- Photographs of where stranding or mortality occurred to document the dimensions, general habitat features, and ability of the fish to return to the main channel. The ability of fish to return to the main river will be visually assessed based on fish size (i.e., body depth) and the depth, continuity, and direction of flow between the stranding location and the main channel.
- Incidental fish stranding observations of species not specifically targeted (e.g., sturgeon and hardhead minnow).

Observations of fish stranding during ramping events shall be compiled in annual reports and filed with FERC and distributed to the Agencies. At the end of the 2 years of monitoring, if fish stranding is observed, Licensee shall meet with representatives from the Agencies. During this meeting, Licensee and the Agencies will work together to make a recommendation to FERC regarding changes to ramping rates in Table 2, or other changes, to prevent stranding. Licensee shall submit to FERC its proposed recommended changes to the measure, as well as copies of the Agencies' responses to their proposed changes if there is disagreement about recommended changes to the ramping rates.

#### General

For the purpose of this condition, the ramping rate targets shall be measured as described in the Licensee's Proposed Measure AR1.

This condition is subject to temporary modification if required for repairs to the dam or associated equipment, by equipment malfunction, as directed by law enforcement authorities, or in emergencies. An emergency is defined as an outage due to an event that is reasonably out of the control of Licensee and requires Licensee to take immediate action, either unilaterally or under instruction of law enforcement, emergency services, or other regulatory agency staff, including actions to prevent or reduce the imminent loss of human life or damage to property. An emergency may include, but is not limited to: natural events such as landslides, storms, or wildfires; vandalism; malfunction or failure of Project works; or other public safety incidents. If Licensee temporarily modifies the requirements of this condition, Licensee shall make all reasonable efforts to promptly resume performance of the requirements and shall notify the Agencies within 48 hours of the modification. Licensee shall provide notification to the Commission as soon as possible but no later than 10 days after such incident.

## 5.0 <u>SSWD Proposed Measure TR1, Implement Bald Eagle</u> <u>Management Plan</u>

The Licensee shall, within 1 year of license issuance, implement the Bald Eagle Management Plan included in Appendix 1 of this Amended Appendix E2.

## 6.0 <u>SSWD Proposed Measure TR3, Implement Great Blue</u> <u>Heron Rookery Management<sup>9</sup></u>

The Licensee shall implement a Limited Operating Period (LOP) from March 15 to July 31 within a 500-foot buffer of the great blue heron (*Ardea herodias*) rookery located presently at the South Shore Recreation Area and other blue heron rookeries that may be identified on Camp Far West Reservoir. Land barriers and appropriate signage shall be placed to designate the buffer zone during the LOP from the edge of the outside nest.

## 7.0 <u>Amended SSWD Proposed Measure RR1, Implement</u> <u>Recreation Facilities Plan<sup>10</sup></u>

The Licensee shall, within 1 year of license issuance, implement the Recreation Facilities Plan included in Appendix 2 of this Amended Appendix E2.

<sup>&</sup>lt;sup>9</sup> As shown in Table E2-1, SSWD, USFWS, CDFW and FWN are in agreement with this measure.

<sup>&</sup>lt;sup>10</sup> As shown in Table E2-1, SSWD, USFWS, NPS, CDFW and FWN are in agreement with this amended measure.

## 8.0 <u>Amended SSWD Proposed Measure CR1, Implement</u> <u>Historic Properties Management Plan<sup>11</sup></u>

The Licensee shall, within 1 year of license issuance, implement the Historic Properties Management Plan.

<sup>&</sup>lt;sup>11</sup> As directed by FERC's August 30, 2019, letter requesting additional information, SSWD is conducting addition consultation with SHPO and interested Indian tribes regarding the HPMP and will file with FERC an amended HPMP by December 30, 2019.

## APPENDIX 1 TO AMENDED APPENDIX E2, SSWD'S PROPOSED MEASURES

**Bald Eagle Management Plan** 

## <u>Application for New License</u> <u>Major Project – Existing Dam</u>

## Bald Eagle Management Plan Security Level: Public

Camp Far West Hydroelectric Project FERC Project No. 2997



Prepared by: South Sutter Water District 2464 Pacific Avenue Trowbridge, CA 95659 <u>www.southsutterwd.com</u>

June 2019

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#### **List of Attachments**

Attachment A California Bald Eagle Breeding Survey Instructions and Nesting Territory Survey Form

## GLOSSARY - DEFINITION OF TERMS, ACRONYMS AND ABBREVIATIONS

acres						
Application for New License						
Bald and Golden Eagle Protection Act						
California Department of Fish and Wildlife						
California Endangered Species Act						
Code of Federal Register						
Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq. and 50 CFR 402)						
Federal Energy Regulatory Commission						
Fish and Game Code						
Federal Record						
foot/feet						
Limited Operating Period; time period within which certain Project activities would NOT occur, with pre-defined distance from a sensitive resource area.						
Migratory Bird Treaty Act						
Normal Water Surface Elevation						
operations and maintenance						
Bald Eagle Management Plan						
Camp Far West Hydroelectric Project, FERC Project No. 2997						
The area surrounding the proposed Project on the order of United States Geological Survey 1:24,000 quadrangles.						
section						
Listed under the federal Endangered Species Act as Endangered, Threatened, Proposed or Candidate for listing.						
Designated by the California Department of Fish and Wildlife as a Species of Special Concern.						
Listed under the California Endangered Species Act as Threatened, Endangered or a Candidate for Listing.						
Classified as Fully Protected by the State of California.						
Protected under the Migratory Bird Treaty Act.						
Protected under the Bald and Golden Eagle Protection Act.						
South Sutter Water District						
For bald eagles, 'take' includes pursue, shoot, shoot at, poison, wound, kill, trap, collect, molest, or disturb.						
United States Fish and Wildlife Service						
United States Code						

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# SECTION 1.0 INTRODUCTION

### 1.1 Background

In June 2019, the South Sutter Water District (SSWD), pursuant to Sections (§§) 5.17 and 5.18 of Title 18 of the Code of Federal Regulations (C.F.R.), file with the Federal Energy Regulatory Commission (FERC or Commission) an Application for New License for Major Project – Existing Dam for SSWD's 6.8 megawatt Camp Far West Hydroelectric Project (Project), FERC Project No. 2997. The initial license for the Project was issued by FERC to SSWD on July 2, 1981, effective on July 1, 1981. In its Application for New License (Application), SSWD proposes to continue operating the Project for the next 40 years with one modification to the spillway, a reservoir pool raise of 5 feet (ft) (from 300.0 ft Normal Maximum Water Surface Elevation [NMWSE) to 305.0 ft NMWSE), and the adoption of the resource management measures proposed in its license application.

The proposed FERC Project Boundary<sup>1</sup> encompasses 2,674.0 acres (ac) of land in Nevada, Placer, and Yuba Counties, California. Within the boundary, SSWD is the major landholder with 2,515.2 ac (94.8% of the area within the FERC Project Boundary). The remaining lands (146.7 ac) are privately-owned lands. Neither the existing FERC Project Boundary nor the proposed FERC Project Boundary includes federal lands. Figure 1.1-1 shows the Project Vicinity<sup>2</sup> and the proposed FERC Project Boundary.

<sup>&</sup>lt;sup>1</sup> The Federal Energy Regulatory Commission Project Boundary encompasses all Project facilities and features as well as all land needed by SSWD for the normal operation and maintenance of the Project. The boundary is shown in Exhibit G of SSWD's Application for New License.

<sup>&</sup>lt;sup>2</sup> In this Plan, "Project Vicinity" refers to the area surrounding the Project on the order of United States Geological Survey 1:24,000 scale topographic quadrangle.

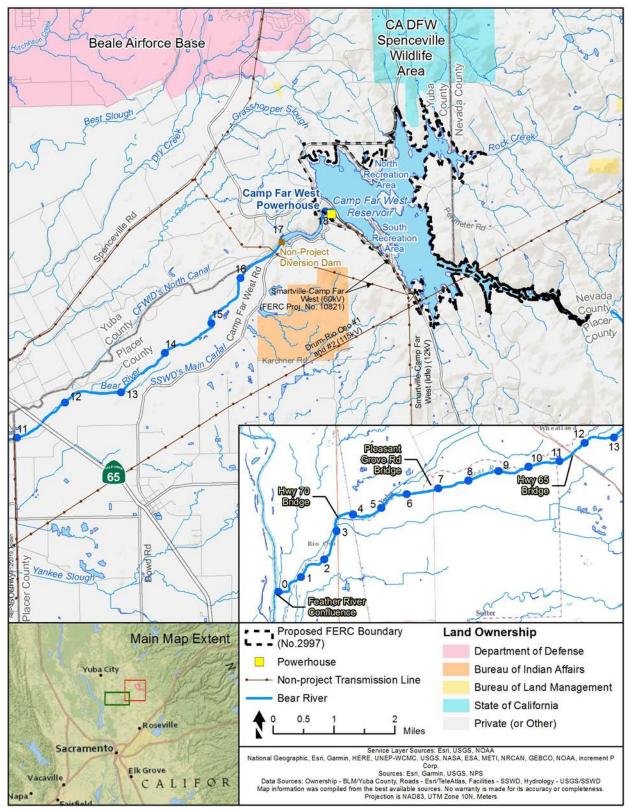


Figure 1.1-1. Camp Far West Hydroelectric Project and Project Vicinity.

### **1.2** Purpose of the Bald Eagle Management Plan

This Bald Eagle Management Plan (Plan) is intended to provide guidance for the protection of bald eagles (*Haliaeetus leucocephalus*) in all areas within the FERC Project Boundary where bald eagles are affected or have the potential to be affected by the Project.

SSWD will coordinate, to the extent appropriate, the efforts required under this Plan with other Project resource efforts, including implementation of other resource management plans and measures included in the new license.

### **1.3** Goals and Objectives of the Bald Eagle Management Plan

The goal of the Plan is to ensure that Project operations and maintenance (O&M), as well as Project-related recreation activities, do not result in "take" of bald eagles and their eggs or nests by implementing measures that are consistent with federal and State of California laws and regulations (see Section 2.1.1 for the definition of "take" under various applicable laws and regulations).

The objective of the Plan is to provide necessary guidelines to meet Plan goals.

### 1.4 Contents of the Bald Eagle Management Plan

This Plan includes the following major sections:

- <u>Section 1.0.</u> Introduction. This section includes introductory information, including the purpose and goals of the Plan.
- <u>Section 2.0. Bald Eagle Distribution and Life History</u>. This section provides a description and life history of bald eagles, as well as occurrences known in the Project vicinity.
- <u>Section 3.0. Bald Eagle Protection</u>. This section describes bald eagle protection measures for the Project.
- <u>Section 4.0. Reporting, Consultation and Plan Revisions</u>. This section details reporting and consultation commitments under the Plan between SSWD and appropriate state and federal agencies.
- <u>Section 5.0. References Cited</u>. This section provides a list of the references cited in the Plan.

South Sutter Water District Camp Far West Hydroelectric Project FERC Project No. 2997

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## SECTION 2.0 BALD EAGLE DISTRIBUTION AND LIFE HISTORY

## 2.1 Bald Eagle

## 2.1.1 Bald Eagle Status



On March 11, 1967, the southern bald eagle was listed as endangered under the Endangered Species Act (ESA) of 1966<sup>3</sup> (32 Federal Record [FR] 4001). This endangered status resulted from a population decline caused primarily by high levels of dichloro-diphenyl-trichloroethane in the food chain that increased egg shell thinning and drastically impaired productivity. On February 14, 1978, the United States Department of the Interior, Fish and Wildlife Service (USFWS) ruled to delete the subspecific names for the southern and northern subspecies, which resulted in the designation of a

single species *Haliaeetus leucocephalus* (43 FR 6230). The February 14, 1978 ruling also listed bald eagle as endangered in 43 of the 48 contiguous United States. Bald eagle in the remaining five States (i.e., Washington, Oregon, Minnesota, Wisconsin, and Michigan) was listed as threatened (43 FR 6230). On July 12, 1995, all bald eagles listed as endangered in the 43 States were reclassified as threatened, while the status of threatened remained in effect for the five other States (60 FR 36000). On August 8, 2007, the USFWS ruled to delist the bald eagle (72 FR 37346). In the ruling, USFWS indicated that a reduction or elimination of threats, as well as habitat protection led to an increase in breeding pairs from an estimated 487 in 1963 to approximately 9,789 in 2007 in the 48 contiguous States (72 FR 37346).

Within California, the bald eagle was listed under the California Endangered Species Act (CESA) as endangered on June 27, 1971.

Section 86 of the California Fish and Game Code (F.G.C.) defines "take" to mean "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill."

In 1971, the State of California also assigned the status of Fully Protected Birds to bald eagle (F.G.C. § 3511). Section 3511 of the F.G.C. states:

Except as provided in Section 2081.7 or 2835, fully protected birds or parts thereof may not be taken or possessed at any time. No provision of this code or any other law shall be construed to authorize the issuance of permits or licenses to take any fully protected bird, and no permits or licenses heretofore issued shall have any force or effect for that purpose. However, the department may authorize the taking of those species for necessary scientific research, including efforts to recover fully protected, threatened, or endangered species, and may authorize the live capture and

<sup>&</sup>lt;sup>3</sup> Endangered Species Preservation Act of 1966 was amended in 1969 by the Endangered Species Conservation Act of December 5, 1969 (P.L. 91-135, 83 Stat. 275), which was repealed by the ESA of 1973 (16 U.S.C. 1531-1544).

relocation of those species pursuant to a permit for the protection of livestock.

Additional protections for bald eagle in California exist under F.G.C. Sections 3503, 3503.5, and 3513, which make it unlawful to take, possess, or needlessly destroy birds' nests or eggs; take possess, or destroy raptors and their eggs and nests; and take or possess any migratory non-game bird or part thereof, designated in the Migratory Bird Treaty Act of 1918 (MBTA) (16 United States Code [U.S.C.] 703-712; Ch. 128; July 13, 1918; 40 Stat 755) as amended).<sup>4</sup>

Since delisting, federal protection of the bald eagle has continued under the MBTA, and the Bald and Golden Eagle Protection Act (BGEPA) (16 U.S.C. 668-668d), as amended.

The MBTA provides protection to migratory birds and includes agreements between the United States, Great Britain on behalf of Canada, Mexico, Japan and Russia for the protection of such birds. The MBTA and its implementing regulations provide authority for the conservation of bald eagles and protect against take if the ESA protections are removed. The MBTA protects most native species of birds in the United States, including those likely to occur in the Project Vicinity (50 C.F.R. 10.13). In short, the MBTA, unless permitted by regulation, prohibits:

... taking, killing, possession, transportation, and importation of migratory birds, their eggs, parts, and nests except as authorized under a valid permit (50 C.F.R. 21.11)

...pursuit, hunt, capture, take, attempt to take, capture or kill, possess, offer for sale, sell, offer to purchase, purchase, deliver for shipment, ship, cause to be shipped, deliver for transportation, transport, cause to be transported, carry, or cause to be carried by any means whatever, receive for shipment, transportation of carriage, or export at any time, or in any manner, any migratory bird, included in the terms of the convention...for the protection of migratory birds...or any part, nest, or egg of such bird." (16 U.S.C. 703).

The MBTA language is clear that actions resulting in a "taking" of a protected species are violations of the MBTA. The MBTA does not specifically authorize the incidental take of migratory birds, and the USFWS does not issue permits authorizing the incidental take of migratory birds<sup>5</sup>. In the absence of a permit from USFWS, the temporary or permanent possession of protected migratory birds and their carcasses is also a violation of the MBTA.

The BGEPA protects bald and golden eagles (*Aquila chrysaetos*),<sup>6</sup> except under specific conditions, from take and includes their parts (feathers), nests or eggs. Under BGEPA, "take" is

<sup>&</sup>lt;sup>4</sup> Take under F.G.C. Section 3513 defers to the "rules and regulations adopted by the Secretary of the Interior under provisions of the Migratory Bird Treaty Act."

<sup>&</sup>lt;sup>5</sup> On December 22, 2017 the Department of the Interior issued a legal memorandum that declared that the MBTA applies only to the purposeful actions that kill migratory birds, not to "incidental take" (U.S. DOI 2017). This memorandum is currently under litigation.

<sup>&</sup>lt;sup>6</sup> Bald Eagle Protection Act of 1940 was amended in 1978 (P.L. 95-616 [92 Stat. 3114]) to include golden eagles.

defined as "*pursue, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb.*" Furthermore, disturb is defined as:

...to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available, 1) injury to an eagle, 2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or 3) nest abandonment, by substantially interfering with normal breeding, feeding or sheltering behavior.

The BGEPA authorizes the USFWS to permit the take of eagles for certain purposes and under certain circumstances, including scientific or exhibition purposes, religious purposes of Native American tribes, and the protection of wildlife, agricultural, or other interests, so long as that take is compatible with the preservation of eagles (16 U.S.C. 668a). On December 14, 2016, the USFWS announced a final rule revising the regulations for permits for incidental take of eagles and take of eagle nests. The USFWS analyzed various alternative management options and rule revisions, including the final rule revisions, in a programmatic environmental impact statement (PEIS).

Among other revisions, the final rule addresses criteria for permit issuance, compensatory mitigation requirements, permit duration, and data standards for submitting permit applications. See https://www.fws.gov/birds/management/managed-species/eagle-management.php

The USFWS carries out its mission to protect wildlife and plant resources by fostering relationships with entities that have taken effective steps to avoid take, by encouraging others to implement measures to avoid take, and through investigations and enforcement when appropriate. The USFWS encourages companies to work closely with the USFWS to identify available protective measures when developing project plans to safeguard wildlife and to implement those measures where applicable. In addition, USFWS strongly encourages companies to apply for permits authorizing otherwise prohibited activity, including eagle programmatic take permits where eagle take is possible.

The development and implementation of an avian plan to avoid take of migratory birds, including bald and golden eagles, does not limit or preclude the USFWS from exercising its authority under any law, statute, or regulation. However, the USFWS Office of Law Enforcement focuses its resources on investigating and prosecuting those individuals and companies that do not identify and implement all reasonable, prudent and effective measures to avoid the take of migratory birds (including eagles) and then subsequently take individuals of such species.

Ideally, a high quality, scientifically valid, and robust avian protection plan that is implemented in a timely and effective manner, and regularly reviewed and revised as needed, will maximize avoidance of species protected under various federal laws while allowing for project development in the most environmentally conscientious ways practicable. Ultimately, it is the responsibility of those involved with the planning, design, construction, operation, maintenance, and decommissioning of projects to conduct relevant wildlife and habitat evaluation and determine, which, if any, species may be affected, and to seek and obtain necessary permits to avoid liability.

Violation of the BGEPA can result in criminal penalties that can result in a fine of \$100,000 for an individual (\$200,000 for organizations), imprisonment for 1 year, or both, for a first offense. Penalties increase for additional offenses, and a second offense is a felony.

## 2.1.2 Physical Characteristics

The bald eagle is a large raptor with a wingspan between 6 and 8 ft, and can weigh up to 14 pounds. According to McCollough (1989), bald eagles molt through five plumage phases. These five phases are important for establishing the age of an individual as well as distinguishing them from golden eagles. The five plumage phases are:

- Juvenile (first year) mostly dark including head and beak.
- Basic I (second year) mottled with white belly and inverted triangle on back and head crown is tan.
- Basic II (third year) body is mottled and variable with the head having a light crown and throat and dark eye stripe similar to an osprey's (*Pandion haliaetus*) head.
- Basic III (fourth year) plumage is mostly adult like with brown flecking on head and fading eye stripe, mostly yellow beak, some white flecking on belly and chest, and a brown terminal band on an otherwise white tail.
- Basic IV (fifth year) often indistinguishable from adult plumage, but does contain some brown flecking on the head and tail.

In addition to the plumage phases listed above, bald eagles may be further distinguished from golden eagles by their proportionately larger head and bill.

## 2.1.3 Life History

### 2.1.3.1 Nesting and Breeding

Bald eagles typically nest within 1 mile of water bodies. Their nests are large structures (i.e., approximately 6 ft in diameter), and are constructed with sticks. Nests are often found in the upper third of live, dominant or co-dominant trees, with some canopy above the nest that provides shade.<sup>7</sup> Most nest trees exceed 100 ft in height. A single pair will use the same nest each year, and will often have alternate nests within their breeding territory (USFWS 2011).

Bald eagles can breed as early as 4 to 5 years of age, but in healthy populations may not breed until much older (USFWS 2011). The breeding period for bald eagles varies throughout their

<sup>&</sup>lt;sup>7</sup> Dominant or co-dominant trees are the most significant trees, in terms of size, within a stand of timber.

range and can often be influenced by weather but typically begins between January and mid-March with courtship and nest initiation, and ends when young fledge sometime in June or July (Jackman and Jenkins 2004). Table 2.2-1 outlines breeding chronology in northern California.

usie in Dura cugie si ceang en onorogy in rior inern camorinai											
Breeding Activity	Dec/Jan	Feb	Mar	Apr	May	June	July	Aug			
Courtship, Nest Initiation	X <sup>1</sup>	Х	Х								
Egg Laying		Х	Х								
Incubation		Х	Х	Х							
Hatching			Х	Х	Х						
Nestlings			Х	Х	Х	Х	Х				
Fledging						X	Х				
Post Fledging						X	X	Х			
Migration							Х	Х			

 Table 2.2-1. Bald eagle breeding chronology in Northern California.

Source: Jackman and Jenkins 2004

<sup>1</sup> X indicates the month in which breeding, nesting or rearing activities generally occur.

According to Stalmaster (1987), bald eagles lay one to three eggs asynchronously, 2 to 4 days apart. Eggs typically require 35 days of incubation and nestlings remain in the nest for about 12 weeks until they are fledged. After they are fully fledged juvenile birds remain in the vicinity of the nest for about 1 month.

#### 2.1.3.2 Foraging

Bald eagles are opportunistic feeders and will forage on fish, waterfowl, small mammals, and carrion. Generally, foraging occurs in the morning and evening hours. Hunting perches are used and have the following attributes: close proximity to potential prey; isolation from disturbance; good visibility of surrounding terrain; and accessibility for landing and departing (Stalmaster 1987). Caton et al. (1992) believed that the location of a hunting perch relative to shallow water was very important at deep water lakes because shallow water tends to concentrate fish and makes them more visible and accessible to bald eagles.

### 2.1.3.3 Wintering

Prior to the onset of winter, many bald eagles will migrate from colder northern climates to warmer southern climates or from higher elevations that experience complete ice coverage of water bodies to lower elevations where water bodies remain ice free. During the winter bald eagles spend the night in a roost. Paired adults will night roost within their nesting territory, and have been observed roosting in the tree containing their nest (Jackman and Jenkins 2004, Merced Irrigation District 2010).<sup>8</sup> According to the USFWS (2011) and Keister et al. (1987), communal roosts: 1) are areas where bald eagles gather and perch overnight, and sometimes during the day during inclement weather; 2) are in stands of trees that contain the largest, oldest, and most open-structured trees available; 3) are as close as possible to food; 4) may be used year after year; and 5) may be occupied by non-breeding migrant birds, both adult and subadult.

<sup>&</sup>lt;sup>8</sup> A nest stand is a patch of timber that includes the tree on which a bald eagle nest was constructed.

### 2.1.4 Distribution

#### 2.1.4.1 California

Bald eagles range throughout California and can be found at most lakes, reservoirs, rivers, and some rangelands and coastal wetlands. The largest concentration of wintering bald eagles has historically been in the Klamath Basin, located on the border of California and Oregon. A majority of breeding pairs are found in northern California, while a smaller number of pairs can be found in the central and southern Sierra Nevada mountains and foothills, the Central Coast range and inland southern California. Breeding pairs are also found on Santa Catalina Island. (CDFW 2016).

#### 2.1.4.2 Camp Far West Hydroelectric Project

SSWD completed the *Special Status Wildlife – Raptors* study as part of the relicensing. Specifically, SSWD identified and mapped known nest sites for three special-status raptor species: bald eagle, golden eagle, and Swainson's hawk (*Buteo swainsoni*) and conducted nesting surveys. Surveys included an area up to approximately 0.25-mile inland from the edge of the shoreline of Camp Far West Reservoir. Nesting bald eagle surveys were performed according to the *Bald Eagle Breeding Survey Instructions* (CDFW 2017) and *Protocol for Evaluating Bald Eagle Habitat and Populations in California* (Jackman and Jenkins 2004).

Bald eagle surveys were conducted on December 20-22, 2016; January 16-18; February 15, 23-24; March 16; April 6, 25; May 2; and June 16, 2017.

Forty-seven bald eagle occurrences (including multiple at the same site) were observed during surveys. Two active bald eagle nests were found within the proposed FERC Project Boundary in 2017. One nest is historic, previously found on the Bear River Arm of Camp Far West Reservoir in adjacent trees. It was previously documented in a 2013 report by Sycamore Associates. A second active bald eagle nest was found on the Rock Creek Arm of the reservoir, east of the North Shore Recreation Area boat ramp. Figure 2.2-1 shows recorded special-status raptor sightings on Camp Far West Reservoir during the 2017 surveys.

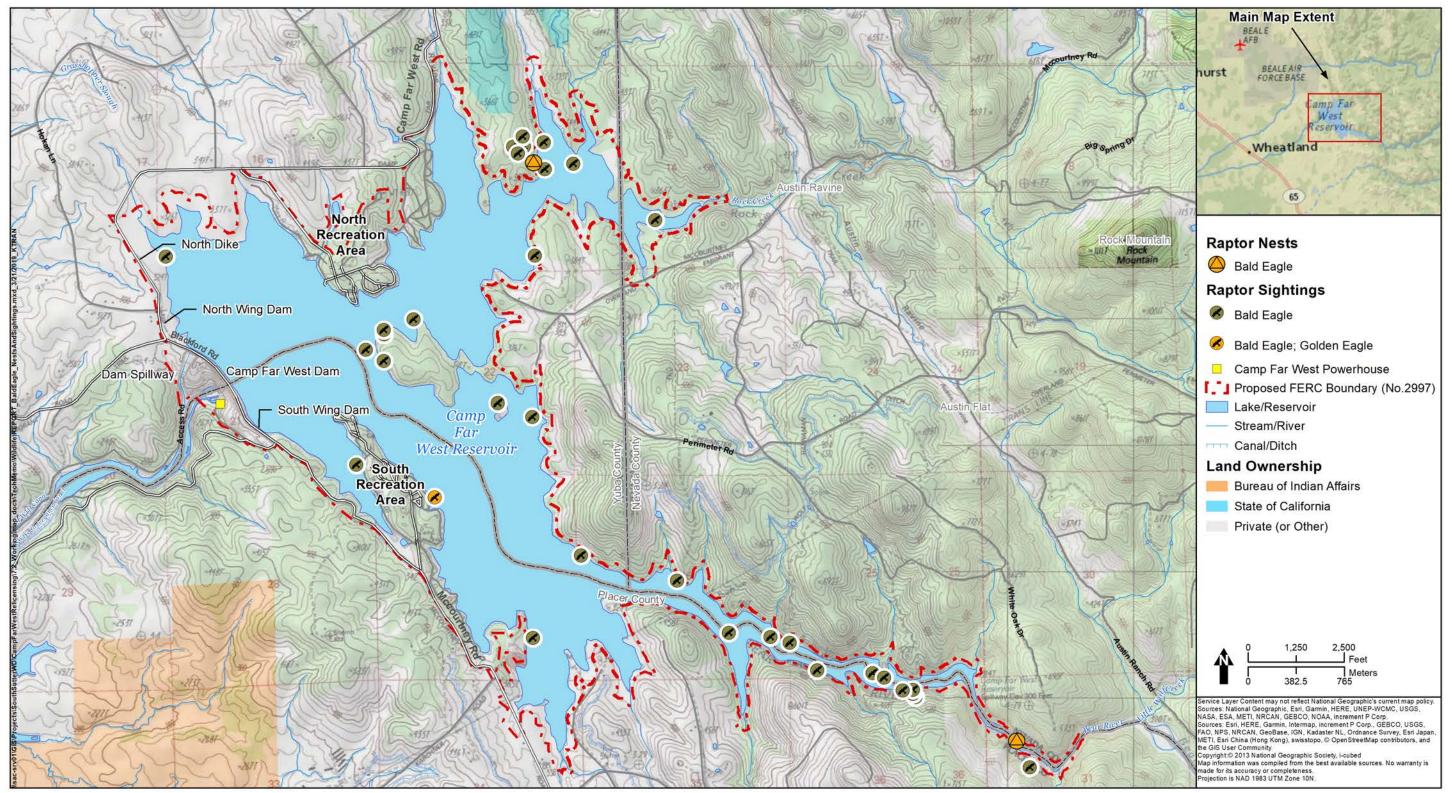


Figure 2.2-1. Bald Eagle Sightings and Nests Located During 2017 Surveys.

# SECTION 3.0 BALD EAGLE PROTECTION

### **3.1 Bald Eagle Protection Guidelines**

SSWD will conduct surveys and implement protection guidelines described in this Plan to ensure that Project-related activities do not result in the take of bald eagles.

### 3.1.1 Surveys

SSWD will conduct nesting surveys via boat on Camp Far West Reservoir in the first calendar year after license issuance and in years 10, 20, 30<sup>9</sup>, and thereafter. Nesting surveys will be conducted in general accordance with the *Bald Eagle Breeding Survey Instructions* (CDFW 2017) and the *Protocol for Evaluating Bald Eagle Habitat and Populations in California* (Jackman and Jenkins 2004). The bald eagle nesting survey will occur in April or early May (as weather conditions allow) to ensure capturing the mid-point of a typical nesting season.

All data collected during nesting surveys will be recorded on the California Bald Eagle Nesting Territory Survey Form (CDFW 2017, Attachment A). Data collected at each site will include: 1) presence of adults; 2) courtship behavior; 3) evidence of nest repair or construction; 4) incubation; and 5) observation of old nests. Location data will be recorded, and photographs will be taken for all nests observed in a manner that does not disturb the breeding pair.

### **3.1.2 Establish Buffers and Limited Operating Periods**

Upon completion of the nest survey, SSWD will develop a map showing a 0.25 mile buffer around all documented active bald eagle nests for implementation of buffers by SSWD operators/staff, except as noted or otherwise agreed to by SSWD, USFWS and CDFW. The buffer will encompass all SWWD-owned land and water that falls within the FERC Project Boundary in an approximate 0.25 mile radius of a documented nest or logical topographical boundary. SSWD will place markers along the shoreline (markers to be placed every 500 feet along the shoreline buffer area within the FERC Project Boundary, in a manner that would be expected to be durable) indicating that no watercraft are to be brought onto shore or anchored in the area, and pedestrians are not permitted on the shore.

The Bear River Arm nest will be protected from recreational uses and other Project activities with a 660 foot buffer within the FERC Project Boundary. SSWD will place permanent signage in the Camp Far West Reservoir approximately 660 feet downstream of the nest stating 'no wake and quiet zone.'

In years when nesting surveys do not occur throughout the Project (e.g., License Years 2-9, 11-19, and 21-29), SSWD will visit each nest identified during the previous survey to establish if the nest is active for the given year. If it is active, SSWD will establish the buffers and limited

<sup>&</sup>lt;sup>9</sup> Surveys will continue every 10 years if SSWD receives a license for a term greater than 30 years.

operating periods (LOPs) described in this Plan. If it is inactive, SSWD will document that for the report.

Beginning January 1 through August 31 of each year where there is a nest(s) with an established buffer, SSWD will institute a LOP for all SSWD Project-related activities, as well as restrict public access, on SSWD land within the buffer areas in the FERC Project Boundary. If a new nest is documented, SSWD will institute a LOP and implement buffers for that nest as soon as practicable, but not more than 7 working days after the initial sighting. If more time is required, SSWD will consult with the CDFW and USFWS.

Additional water barriers (e.g., buoys and signage) and land barriers (e.g., fencing and signage) around known occupied bald eagle nests will be installed within the FERC Project Boundary reservoir and SSWD-owned land (i.e., not on private land without the approval of the landowner), as determined appropriate by the CDFW and USFWS, to delineate the buffers in order to restrict Project O&M and recreation activities in the vicinity of nests. The buffers may be expanded to 1 mile for Project-related activities requiring the use of helicopters or blasting. The 1 mile buffer may be adjusted (i.e., reduced) in consideration of logical topographical boundaries. It is recognized that SSWD cannot control the activities of other parties (i.e., SSWD does not have enforcement authority) within the buffer areas during the LOP period.

Nest buffers may be removed, adjusted or new buffers may be established if subsequent nesting surveys demonstrate that a nesting territory is no longer occupied or new nests are identified. Additionally, any information provided to SSWD by USFWS or CDFW regarding previously unidentified or existing nests will be used to inform the establishment of nest buffers. Requests to remove established nest buffers at any time will be submitted to USFWS and CDFW for approval. Requests to remove a nest buffer shall include a justification for the removal, including dates of eagle surveys/checks and results from that year.

SSWD O&M staff will be trained to recognize nesting bald eagles exhibiting signs of disturbance or distress and to be knowledgeable of bald eagle LOPs and associated buffers. If SSWD O&M staff incidentally observe signs of disturbance or distress to bald eagles in response to conducting routine Project O&M activities, staff will immediately cease the activities that are causing the disturbance/distress and contact SSWD Management. SSWD Management will send a qualified biologist to the area where the disturbed/distressed eagles were observed to determine if there is a nest in the area. If an active nest is detected, SSWD will establish a buffer and LOP around the nest. SSWD will contact the USFWS's FERC Coordinator or BGEPA Coordinator, as well as the CDFW's FERC Coordinator, within 1 business day after the biologist completes an assessment. The activities that disturbed/distressed the bald eagles may resume with USFWS and CDFW approval or in 1 week, whichever occurs first, if no active nest is observed.

If non-routine Project activities are scheduled on or near the Camp Far West Reservoir where an active nest is not known during the normal LOP, SSWD will survey for active nests within a 1 mi radius no more than a week prior to the start of Project activities. If an active nest is located, a buffer will be established for the remainder of the LOP.

SSWD shall annually review this Plan with Operations staff, focusing on: 1) the locations and purpose of bald eagle protection measures; 2) potential signs and identification of bald eagles; and 3) the reporting of any newly discovered individual sightings or nests.

### **3.2** Incidental Sightings

SSWD shall record incidental observations of other nesting raptors within and just outside (within 500 ft) the FERC Project Boundary area while conducting bald eagle nest surveys and performing O&M activities. An incidental sighting should include approximate coordinates (if possible) or a description of the location, any behavior observed, and a photograph (if possible). The purpose of this effort is to opportunistically gather data through incidental observations, not to expand the specific monitoring described in this Plan, or for SSWD staff to perform additional surveys. SSWD shall maintain a map of incidentally observed nesting raptors within the Project.

# SECTION 4.0 REPORTING, CONSULTATION AND PLAN REVISIONS

### 4.1 **Reporting and Consultation**

By December 31 of each year in which surveys were conducted or buffers and LOPs were implemented under this Plan, SSWD will provide to the USFWS and CDFW a draft annual report for that calendar year. The report will include five components. The first component will include the results of all surveys that occurred in that calendar year, including: 1) a description of the surveys and methods; 2) the results of those surveys, including maps with occurrence information for each species and their nests surveyed or incidentally observed including alternate, unused nests within the territory; and 3) if nesting is documented, a description of the proposed buffers and LOPs. The second component will be a summary of observed disturbance or distress to bald eagles recorded during that calendar year. The third component will be a brief summary of results from all previous surveys conducted. The fourth component will be any additional, relevant information regarding bald eagle and nesting within the FERC Project Boundary and adjacent areas that was provided to SSWD by the USFWS and CDFW at least 45 days in advance of the report preparation. This information is intended to inform potential changes to existing buffers and LOPs, if appropriate. The last component of the report will be a summary of specific protection measures that were applied to Project O&M and construction activities, as appropriate, during that calendar year and include a discussion of the effectiveness of those protection measures, including vandalism of signs and buoys, during the bald eagle nesting season. This will also contain a description of emergency activities undertaken, if any, within a nest buffer area during the LOP. The report will also include an appendix containing information regarding incidental sightings of special-status raptors.

In the event that an emergency activity is undertaken within an active nest buffer area, SSWD shall notify USFWS and CDFW as soon as practicable once the emergency has been identified, but not more than 48 hours after the emergency has been identified. Unless otherwise approved by CDFW and USFWS, an Avian biologist will be present during all emergency activities that take place within the buffer, or shall be present as soon as practicable after the emergency has begun. When reporting on the emergency activity during the end of year summary, SSWD shall include all observed behaviors of the nesting eagles and young during the activities, distance from the nest for any activities that occurred within the buffer, and number of young known to have fledged or likely to have fledged.

Sixty days will be allowed for the USFWS and CDFW to comment before SSWD files the final report with FERC. SSWD will include all relevant documentation of coordination/consultation with the report filed with FERC. If SSWD does not adopt a particular recommendation made by CDFW or USFWS, the filing would include the reasons for not doing so, based on Project-specific information.

### 4.2 Plan Revisions

SSWD, in consultation with CDFW and USFWS, will review, update, and/or revise the Plan, as needed, when significant changes in the existing conditions occur, which may include, but not be limited to: changes in the State or Federal listing status of bald eagle; changes in the occurrence of bald eagles within the Project vicinity; changes in accepted survey protocols for bald eagle; changes in State and/or Federal laws or management plans related to bald eagle; changes in Project O&M activities; and repairs to existing or new construction of Project facilities.

Sixty days will be allowed for CDFW and USFWS to comment and make recommendations before SSWD files the updated plan with FERC for FERC's approval. SSWD would include all relevant documentation of coordination/consultation with the updated Plan filed with FERC. If SSWD does not adopt a particular recommendation by CDFW and USFWS, the filing would include the reasons for not doing so, based on Project-specific information. SSWD will implement the Plan as approved by FERC.<sup>10</sup>

<sup>&</sup>lt;sup>10</sup> The Plan will not be considered revised until FERC issues its approval.

# SECTION 5.0 **REFERENCES CITED**

- California Department of Fish and Wildlife (CDFW). 2017. Bald Eagle Breeding Survey Instructions and Nesting Territory Survey Form. Available online: <file:///C:/Users/spitts/Downloads/Bald%20Eagle%20Nest%20Instructions%20and%20F orm\_Sept\_2017-fillable.pdf>. Accessed March 19, 2019. Last updated September 2017. State of California, The Resource Agency, Department of Fish and Wildlife, Wildlife Branch, Sacramento, CA.
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- United States Department of Interior (U.S. DOI), Office of the Solicitor. 2017. "The Migratory Bird Treaty Act Does Not Prohibit Incidental Take". Memorandum M- 37050.

Attachment A

California Bald Eagle Breeding Survey Instructions and Nesting Territory Survey Form

#### STATE OF CALIFORNIA THE RESOURCE AGENCY DEPARTMENT OF FISH AND WILDLIFE

### **BALD EAGLE BREEDING SURVEY INSTRUCTIONS**

#### BACKGROUND

The breeding season of Bald Eagles in California extends primarily from February through July. In past years, cooperating agencies, organizations, and private individuals participated in monitoring this species statewide to document nesting activities at each nesting territory. Though a coordinated monitoring is no longer occuring, the California Department of Fish and Wildlife continues to track nesting territory status based on reported data.

Breeding season surveys are an important part of the population recovery effort. Survey information is used by resource agencies to aid breeding territory management or protection activities. Additionally, population status and trends can be monitored to provide the data needed for assessing population recovery.

#### SURVEY TIMING AND INSTRUCTIONS

Territories should be checked at least three times during the nesting season, although more frequent checking is preferred. Emphasis should be placed on checking during incubation and early nesting periods.

- 1. Early March (early incubation) Territories in northern California should be checked in the first half of March, if possible, or as soon thereafter as road or weather conditions allow. The purpose of the first check is to determine whether a territory is occupied (record presence of adults, courtship behavior, evidence of nest repair or construction, incubation).
- 2. Late April or early May (early nesting period) This check is needed to confirm that a territory is unoccupied, or if occupied in March, to determine whether the breeding pair is still tending the nest (incubating eggs or tending young nestlings).
- 3. **Mid June (late nesting period)** The main purpose of this check is to determine how many nestlings are approaching fledgling age.

Survey dates maybe modified from these recommended time periods if the territories can be checked more frequently or if particular breeding pairs are known to begin nesting especially early or late in the season.

We recommend that observers report the stage of development of nestlings in accordance with <u>An Illustrated Guide for</u> <u>Identifying Developmental Stages of Bald Eagle Nestlings in the Field</u>, by G.P. Carpenter (April 1990). This booklet is available from the San Francisco Zoological Society, Sloat Blvd. At the Pacific Ocean, San Francisco, CA 94132 (415-753-7080).

#### SUBMITTION OF SURVEY FORMS

Please report observations on the **CALIFORNIA BALD EALGE NESTING TERRITORY FORM (revised 4/2010)**. Electronic forms can be found at <u>http://www.dfg.ca.gov/wildlife/nongame/survey\_monitor.html</u>.Forms will be maintained in Department files and annual survey results will be compiled on the basis of these reports.

Please email completed forms by September 1 of survey year to <u>Carie.Battistone@wildlife.ca.gov</u>, or mail them to:

California Department of Fish and Wildlife Wildlife Branch 1812 Ninth Street Sacramento, CA 95814 ATTN: Carie Battistone

In place of field forms, you may also submit data using the Department's Online Field Entry Form – found here: <u>http://www.wildlife.ca.gov/Data/CNDDB/Submitting-Data</u>. This application allows users to submit data online to CNDDB. First time users will need to set up a free account. The appleiation contains a mapping tool, allows users to generate reports of their data submissions, and saves all past and current submissions with your account. When entering data, if there are no field that exactly match to the data you wish to submit (e.g. # of young fledged, # of adults incubating, etc.), please include this information in the notes field.

If you have any questions please contact Carie Battistone at the above address or at Carie.Battistone@wildlife.ca.gov.

### California Department of Fish and Game CALIFORNIA BALD EAGLE

### NESTING TERRITORY SURVEY FORM

Territory Code:		
County:	Survey Year:	
Property Owner:	If USFS:	National Forest
Name (or general location of territory)	:	
Name of nearest water body:		
Location of Nest Site: LAT:	LONG:	
Other location info:		
No. of nests in territory - Intact:	Remnant:	_
Nest Tree: Species:	Year last Used:	
Nest: Year last used		
NOTE: Please attach a map showing th	he location of any newly c	documented nest tree.
Describe tree and nest condition and si	ize, and add other remarl	ks:

For each visit to a territory, note, in detail, the times, number and age of birds, behavior of birds (lying, perching, etc.), evidence of nesting (nest maintenance, courtship, incubation posture), disturbances, and other pertinent information:

Initials of Observer	Date of Visit	Observations

Revised 9/2017

Initials of Observer	Date of Visit	Observations

(Attach additional pages, if necessary)

### General Remarks:

### **PLEASE SUMMARIZE:**

A. Successful Nestings: No. of young known fledged \_\_\_\_\_ or probably fledged \_\_\_\_\_

### B. If no fledglings were produced this season please answer the following:

How many adults were seen in the territory?	
Was there evidence of nest repair or construction? Yes No	
Were adults seen in the nest? Yes No	
Were adults in incubating posture? Yes No	
Number of nestlings observed?	
Failed during incubation:    or nestling stage:	
Other remarks:	
Observer(s) name:	
Affiliation:	
Address:	
Phone: ( )         Fax: ( )         Email:	

Mail all completed forms by September 1 of survey year to: ATTN: Carie Battistone, California Department of Fish and Wildlife, Wildlife Branch, 1812 Ninth Street, Sacramento, CA 95814. Or email completed forms to Carie.Battistone@wildlife.ca.gov.

### **ADDITIONAL OBSERVATIONS:**

T۵	rritory	
16	1 I ILUI Y (	•

Territory:		Year:
Initials of Observer	Date of Visit	Observations (continued)

# APPENDIX 2 TO AMENDED APPENDIX E2, SSWD'S PROPOSED MEASURES

**Amended Recreation Facilities Plan** 

# <u>Application for New License</u> <u>Major Project – Existing Dam</u>

# **Recreation Facilities Plan**

# Security Level: Public

Camp Far West Hydroelectric Project FERC Project No. 2997



Prepared by: South Sutter Water District 2464 Pacific Avenue Trowbridge, CA 95659 <u>www.southsutterwd.com</u>

October 2019

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None.

# GLOSSARY - DEFINITION OF TERMS, ACRONYMS AND ABBREVIATIONS

ac	acre		
Application	Application for New License		
Capital Improvement	The construction, installation, or assembly of a new fixed asset, or the significant alteration, expansion, or extension of an existing fixed asset to accommodate a change of purpose.		
DBAW	California Department of Boating and Waterways		
Design Narrative	Describes the management objectives, design criteria, and constraints associated with the development or major rehabilitation of a recreation facility. The Design Narrative should include: (a) management objectives; (b) design criteria, including criteria on type and color of materials and accessibility; (c) existing physical conditions; (d) any rehabilitation and new construction; (e) anticipated management problems that design may minimize; (f) site capacity, durability, and protection; (g) user safety; and (h) interpretive services.		
FERC	Federal Energy Regulatory Commission		
ft	feet or foot		
Major Rehabilitation Replacement Recondition Reconstruction	Making capital improvements and reconditioning or replacing an existing fixed asset or any of its components in order to restore the functionality or life of the asset. Replacement is the substitution or exchange of an existing fixed asset or component with one having essentially the same capacity and purpose. The decision to replace or rehabilitate a fixed asset or component is usually reached when replacement is more cost effective or more environmentally sound. Replacement of an asset or component usually occurs when it nears or has exceeded its useful life.		
SSWD	South Sutter Water District		
mi	mile		
Minor Rehabilitation	Minor rehabilitation includes repairs, and replacement of parts that result in fewer breakdowns and few premature replacements, and help achieve the expected life of the fixed asset. Minor rehabilitation do not include construction of new facilities or the replacement of an existing fixed asset. Min rehabilitation activities will arrest deterioration and appreciably prolong the life of a property. Example include: installing a new roof, new floor, or new siding, replacing electrical wiring or heating system repairing or replacing pipes, pumps and motors, and repairing the paths, walks, or walls of recreati facilities.		
Non-Peak Season	Non-peak season extends from January up to the Memorial Day holiday weekend and after Labor Day through December.		
NMWSE	Normal Maximum Water Surface Elevation		
Operational Maintenance	Keeping fixed assets in acceptable condition, including repairs, painting, replacement of minor parts and minor structural components. Operation maintenance, or reconditioning, neither materially adds to the value of the property nor appreciably prolongs its life. Operational maintenance excludes activities aimed at expanding the capacity of an asset or otherwise upgrading it to serve needs different from, or significantly greater than those originally intended. The work serves only to keep the facility in an ordinary, efficient operation condition. Examples include: interior painting, repair of broken windows, light bulb replacement, cleaning, unplugging drains, greasing, servicing, inspecting, oiling, adjusting, tightening, aligning, sweeping, and general snow removal. Maintenance activities may include: work needed to meet laws, regulations, codes, and other legal direction (such as compliance with ADA) as long as the original intent or purpose of the fixed asset is not changed.		
O&M	operation and maintenance		
Peak Season	Peak season extends from the Memorial Day to Labor Day holiday weekends.		
RA	Recreation Area		
RD	Recreation Day: Each visit by a person to a development for recreation purposes during any portion of a 24-hour period.		

# SECTION 1.0 INTRODUCTION

# 1.1 <u>Background</u>

In June 2019, the South Sutter Water District (SSWD), pursuant to Sections (§§) 5.17 and 5.18 of Title 18 of the Code of Federal Regulations (C.F.R.), plans to file with the Federal Energy Regulatory Commission (FERC) an Application for a New License for Major Project – Existing Dam for SSWD's 6.8 megawatt Camp Far West Hydroelectric Project (Project), FERC Project No. 2997. The initial license for the Project was issued by FERC to SSWD on July 2, 1981, effective on July 1, 1981. In its Application for New License (Application), SSWD proposes to continue operating the Project for the next 40 years with one modification to the spillway, a reservoir pool raise of 5 feet (ft) (from 300.0 ft [Normal Maximum Water Surface Elevation] NMWSE to 305.0 ft NMWSE), and the adoption of the resource management measures proposed in its license application.

The existing and Proposed Project consists of one development - Camp Far West – that, in total, includes: one main dam; one powerhouse with an associated switchyard with a capacity of 6.8 megawatts; and appurtenant facilities and structures, including recreation facilities and gages. Table 1.1-1 summarize key information for the Project's reservoir.

Tuble III II IIey	mormatio	n i cgui unig	Cump I ui	vest ny ar		Jeet reserve	11.54
Project Reservoir	NMWSE (ft)	Gross Storage <sup>1</sup> (ac-ft)	Usable Storage <sup>2</sup> (ac-ft)	Surface Area (ac)	Maximum Depth (ft)	Shoreline Length (mi)	Drainage Area At Dam (sq mi)
Camp Far West	300	93,737	92,430	1,886	155	29	284

Table 1.1-1. Key information regarding Camp Far West Hydroelectric Project reservoirs.

The proposed FERC Project Boundary<sup>1</sup> encompasses 2.674.0 acres (ac) of land in Nevada, Yuba, and Placer counties in northern California. Within the boundary, SSWD is the major landholder with 2,515.2 ac (94.8% of the area within the FERC Project Boundary). The remaining lands (146.7 ac) are privately-owned lands. Neither the existing FERC Project Boundary nor the proposed FERC Project Boundary includes federal lands. Figure 1.1-1 shows the Project Vicinity,<sup>2</sup> Project facilities, and the proposed FERC Project Boundary.

<sup>&</sup>lt;sup>1</sup> The Federal Energy Regulatory Commission (FERC) Project Boundary encompasses all Project facilities and features as well as all land needed by SSWD for the normal operation and maintenance (O&M) of the Project. The boundary is shown in Exhibit G of SSWD's Application for New License.

<sup>&</sup>lt;sup>2</sup> In this Plan, "Project Vicinity" refers to the area surrounding the Project on the order of United States Geological Survey (USGS) 1:24,000 scale topographic quadrangle.

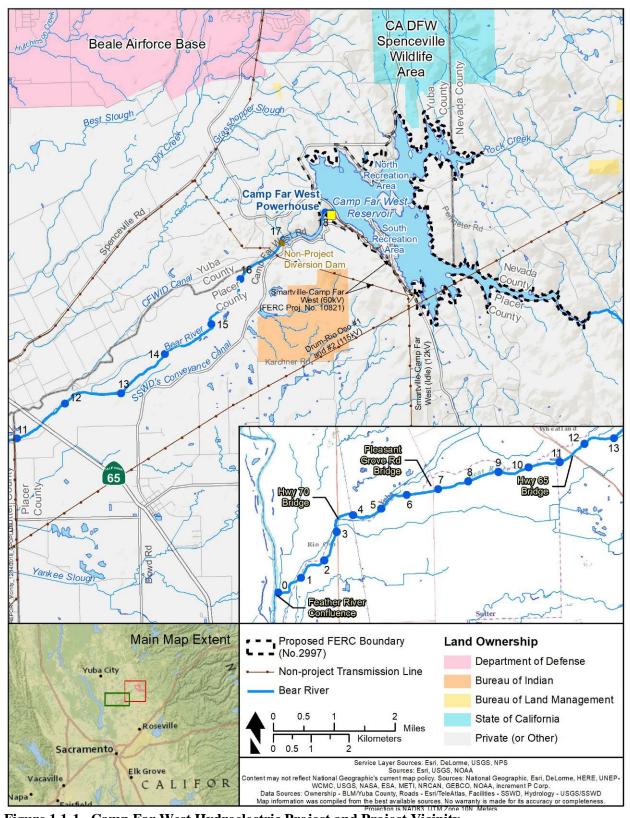


Figure 1.1-1. Camp Far West Hydroelectric Project and Project Vicinity.

## **1.2 Purpose of the Recreation Facilities Plan**

As part of its Application, SSWD will continue to maintain and operate recreation facilities on the Project. Specifically, SSWD will include the following requirement in a new license for the Project: SSWD will implement this Recreation Facilities Plan (Plan), as outlined within to maintain, rehabilitate, and upgrade the existing Project recreation facilities over the course of the new license term. This Plan describes SSWD's responsibilities regarding recreation facilities under the new Project license.

### **1.3** Goals and Objectives of the Recreation Facilities Plan

The primary goal of the Plan is to guide public recreation use of the Project's recreation facilities over the term of the license, while minimizing recreation use impacts to natural, historic, and prehistoric resources within the Project Area. The Plan includes the following objectives to help achieve this goal:

- 1. To provide a description and plan for recreation facilities that meet the needs of Project recreation users and are designed to meet federal, state, and local legal requirements, as applicable.
- 2. To describe in detail SSWD's responsibilities regarding recreation facilities under the new license.

### 1.4 <u>Contents of the Recreation Facilities Plan</u>

- <u>Section 1.0. Introduction</u>. This section includes introductory information, including the purpose and goal of the Plan.
- <u>Section 2.0.</u> Existing Recreation Use and Facilities. This section describes the existing Project recreation facilities, including condition, land ownership, and 2017 use levels.
- <u>Section 3.0.</u> Facility Operation and Rehabilitation. This section describes the recreational facility annual operational maintenance and major rehabilitation guidelines.
- <u>Section 4.0. Reporting and Plan Revisions.</u> This section describes the Plan revision process.
- <u>Section 5.0. References Cited.</u> This section provides a bibliography of the references listed in this exhibit.

# SECTION 2.0 EXISTING RECREATION USE AND FACILITIES

The Project provides developed and undeveloped recreation opportunities at Camp Far West Reservoir. Water-related recreational opportunities include water skiing, wakeboarding, power boating, jet-skiing, wildlife viewing, non-motorized boating and warmwater fishing. Boating use and launching occurs year-round. Yuba County Ordinance 8.51.010 limits the speed of boats to 20 miles per hour on the reservoir (Yuba County 2010). Camp Far West Reservoir offers anglers shoreline and boat-based fishing opportunities for smallmouth bass, largemouth bass, striped bass, catfish and panfish (CDFW 2018a). The reservoir does not have any site-specific fishing regulations or limits (CDFW 2018b). Historically, Cal Fish and Wildlife stocked Camp Far West Reservoir with warmwater game fish species from 1964 to 1985 (CDFW 2015).

Land-based recreation opportunities provided in the Project Vicinity include camping, wildlife viewing, hiking, biking and horseback riding. Facilities developed to support camping and other land-based recreation activities are described below. While the recreation areas (RA) do not provide formal trails for hiking, biking and horseback riding, the dispersed use areas provide a network of unpaved roads that provide a trail experience for visitors. In addition, informal trails occur within the FERC Project Boundary, primarily near the NMWSE, which are a result of non-Project cattle and ranch trails as well as Project user-created trails and paths due to the gentle sloping terrain adjacent to the shoreline. Dispersed camping is allowed outside the developed RAs.

The concessionaire that operates the two developed RAs at Camp Far West Reservoir provides numerous and varied events at the RAs and reservoir, including bi-monthly fishing tournaments, boating and fishing club events, equestrian events and other group events.

As a condition of its FERC license, SSWD provides recreational opportunities and facilities within the FERC Project Boundary. Below is a description of the developed facilities and recreation opportunities at Camp Far West Reservoir. SSWD owns and maintains two developed recreation areas at Camp Far West Reservoir – the North Shore Recreation Area (NSRA) and South Shore Recreation Area (SSRA) (Table 2.0-1). The NSRA and SSRA are the only public vehicular access points to the reservoir for recreation due to private lands. Outside of the RAs, the remaining shoreline is only accessible by foot or boat. All of these facilities are located on SSWD-owned land and operated through a concessionaire. The recreation facilities were originally constructed using Davis-Grunsky Act funding and the NSRA boat ramp was reconstructed in 2005 using the California Division of Boating and Waterways (DBAW) boat launching facilities grant funding.

Facility	Amenity	North Shore Recreation Area	South Shore Recreation Area		
Family Campgrounds	No. Sites (standard)	70	67		
	Sites (RV with hookups)	10	none		
	Parking Spurs	1 spur per site	1 spur per site		
	Overflow Parking Spaces	None	18 single		

### Table 2.0-1. Summary of the Camp Far West Hydroelectric Project recreation facilities.

Facility	Amenity	North Shore Recreation Area	South Shore Recreation Area			
Family	Restrooms	2 flush	1 flush, 2 vault			
Family Campgrounds	Recreation Roads	0.8 mi, 20 ft wide, paved 0.3 mi, 12 ft wide, dirt	0.5 mi, 20 ft wide, paved 0.7 mi, 10 ft wide, paved			
Group Campgrounds	Sites	2, 25-person group sites, 1, 50-person horse camp site	1, 50-person group site			
	Parking Spaces	None <sup>1</sup>	10			
	Restrooms	4 portable chemical toilets	None <sup>2</sup>			
	Recreation Roads	0.05 mi, 10 ft wide, dirt	0.2 mi, 20 ft wide, paved			
	Picnic Sites	20	33			
	Swim Beaches	1	1			
Day Use and Picnic	Parking Spaces	None <sup>4</sup>	44			
Areas <sup>3</sup>	Restrooms	1 flush	None <sup>5</sup>			
11000	Recreation Roads	0.05 mi, 20 ft wide, paved	Swim Beach: 0.1 mi, 10 ft wide, dirt Picnic Area: 0.3 mi, 10 ft wide, dirt; 0.1 n 10 ft wide, paved			
Boat Ramps	Number	1, 4-lane concrete ramp	1, 2-lane concrete ramp			
	Parking Spaces	82 single, 73 vehicle with trailer	52 vehicle with trailer			
	Restrooms	1 flush	1 flush			
	Recreation Roads	0.2 mi, 24 ft wide, paved	None (entrance road access facility)			
D' 111	Sites	2	2			
Dispersed Use Areas <sup>6</sup>	Restrooms	6 portable chemical toilets	6 portable chemical toilets			
	Recreation Roads	3.7 mi, 10 ft wide, dirt	1.7 mi, 10 ft wide, dirt			
	RV Dump Station & Sewage Pond	1	1			
Recreational Water	Water Treatment Plant	1	None <sup>7</sup>			
System Facilities	Water Storage Tank	1, 60,000-gallon tank	None <sup>7</sup>			
	Recreation Roads	0.8 mi, 10 ft wide, dirt	0.1 mi, 10 ft wide, dirt			
Entrance Facilities	Entrance Station	1	1			
	Store	1	1			
	Recreation Roads	0.75 mi, 20 ft wide, paved	0.5 mi, 20 ft wide, paved			
Other Facilities	Concessionaire Trailers	2	1			
Other Facilities	Recreation Roads	0.4 mi, 10 ft wide, dirt	0.3 mi, 10 ft wide, dirt			

<sup>1</sup> Parking is available in open areas adjacent to the group sites, but is not designated or defined.

 $^{2}$   $\,$  The group campsites use the adjoining family campground restroom building.

<sup>3</sup> At NSRA, the picnic sites and swim beach are combined at one site; therefore, the site is categorized as a "day use area". At SSRA, the picnic sites and swim beach are separate sites on opposite sides of the recreation area; therefore, each site is called a "picnic area" and a "swim beach", respectively.

<sup>4</sup> The day use area (picnic area and swim beach) uses the adjoining boat ramp parking area for parking.

<sup>5</sup> The picnic area uses the adjoining boat ramp restroom building.

<sup>6</sup> The dispersed use areas provide day use and overnight opportunities with minimal facilities (roads, portable chemical toilets and trash cans).

<sup>7</sup> Water is piped under the reservoir to South Shore Recreation Area from the North Shore Recreation Area treatment plant and storage tank.

### 2.1 <u>Existing Project Recreation Use Levels</u>

All of the Project's recreation facilities occur at the two Project RAs, and include overnight camping, picnicking, swimming and boating facilities. Recreation activities within the FERC Project Boundary are numerous and varied and include, but are not limited to, camping, fishing, boating, swimming, hiking, picnicking, sightseeing and wildlife viewing.

In 2017, the total Project recreation use was 78,641 Recreation Days (RDs) with the majority of that use occurring in the peak season (66.6% or 52,397 RDs) compared to the non-peak season (33.4% or 26,244 RDs) (Table 2.1-1). Day-use (70.6% or 55,5181RDs) accounted for the

majority of total use as compared to overnight use (29.4% or 23,123 RDs); and this day-use-toovernight use ratio was similar during both the peak and non-peak season. When comparing use by day type overall, total use was highest on the weekends (39,599 RDs) as compared to weekdays (26,217 RDs) and holidays (12,825 RDs). When comparing overall use by recreation, NSRA accounted for the highest percentage of use (81.9% or 64,429 RDs) compared to the SSRA (18.1% or 14,212 RDs), which was open on a limited bases in 2017 on select weekdays, weekends and holidays during the peak season. The SSRA was closed during the non-peak season.

	Day Type	Use Estimate in Recreation Days (RDs)								
Recreation Area		Peak Season		Non-peak Season		Overall <sup>1</sup>				
		Overnight Use	Day Use	Total Use	Overnight Use	Day Use	Total Use	Overnight Use	Day Use	Total Use
North Shore Recreation Area	Overall	10,690	27,495	38,185	7,267	18,977	26,244	17,957	46,472	64,429
	Weekday	5,602	7,665	13,267	4,214	5,417	9,631	9,816	13,082	22,898
	Weekend	2,937	12,207	15,144	3,053	13,560	16,613	5,990	25,767	31,757
	Holiday	2,151	7,623	9,774	n/a	n/a	n/a	2,151	7,623	9,774
South Shore Recreation Area	Overall	5,166	9,046	14,212	closed	closed	closed	5,166	9,046	14,212
	Weekday	2,408	911	3,319	closed	closed	closed	2,408	911	3,319
	Weekend	1,820	6,022	7,842	closed	closed	closed	1,820	6,022	7,842
	Holiday	938	2,113	3,051	closed	closed	closed	938	2,113	3,051
Project Total	Overall	15,856	36,541	52,397	7,267	18,977	26,244	23,123	55,518	78,641
	Weekday	8,010	8,576	16,586	4,214	5,417	9,631	12,224	13,993	26,217
	Weekend	4,757	18,229	22,986	3,053	13,560	16,613	7,810	31,789	39,599
	Holiday	3,089	9,736	12,825	n/a	n/a	n/a	3,089	9,736	12,825

Table 2.1-1. Project recreation use estimate in Recreation Days by season and day type.

Source: Camp Far West Reservoir recreation concessionaire entrance gate records (SSWD 2016). Legend: n/a = no holidays during non-peak season.

# 2.2 <u>Existing Project Recreation Facilities at Project</u> <u>Reservoirs</u>

The following section includes a description of the existing Project recreation facilities and opportunities at each recreation area. This section also provides a brief summary of each primary recreation facility's (campground, picnic area, boat launch, etc.) condition based on a 2015 condition assessment by SSWD. Facilities and site elements (e.g., vehicle spurs, tables, fire rings, ramps) are in "good" condition if they are functional, well-maintained, showed no signs of deterioration and have the majority of their useful life remaining. Facilities and components are considered in "poor" condition if they are non-functional, had missing or broken parts and/or major structural damage is evident. A facility is considered to be in "fair" condition when it has some minor structural damage that could be repaired with ease or is functional, but shows signs of wear and tear (cracked wood, broken windows or door handles, etc.). Facilities in "fair" condition generally have a portion of their useful life remaining, but do not need immediate replacement.

### 2.2.1 North Shore Recreation Area

The NSRA is located on the north shoreline of the reservoir on a large peninsula. The NSRA is accessible by vehicle from the west and north via Camp Far West Road (Yuba Co. 42) and Spenceville Road. The access road is gated and an entrance station is located along the access road that regulates public access to the recreation area. The NSRA consists of a family campground, group campground, day use area with swimming beach, boat ramp and dispersed use areas (Figure 2.2-1). The NSRA also includes a general store at the entrance station for use by the public. The NSRA is open year-round for day use and overnight recreation opportunities. The NSRA is set in a partially wooded oak and grassland setting. The oak trees provide substantial shading throughout the recreation area, especially within the campgrounds. Due to the predominant grasses and lack of other ground-level vegetation, there is minimal screening between the individual sites with the campgrounds and day use areas.



Figure 2.2-1. Aerial site map of the North Shore Recreation Area.

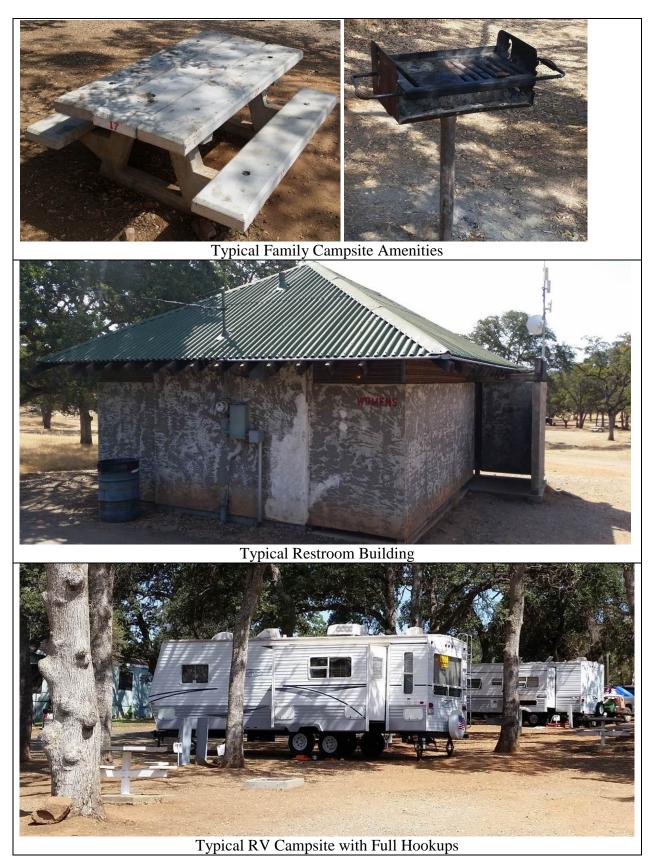
### 2.2.1.1 Family Campground

The family campground is located in a semi-forested setting along the south shoreline of the NSRA. The facility consists of a total of 80 campsites including 70 standard sites and 10 recreational vehicle (RV) sites with hookups. Representative photographs are provided in Figure 2.2-2. Each of the standard campsites consists of a table (i.e., concrete or wood-metal construction), a rock fire ring, a parking spur (i.e., dirt or gravel), several tent pads and a trash can. Most of the sites also have a pedestal grill. Overall, the campsite amenities are in fair condition, with the exception of the remaining wood-metal construction tables and most pedestal grills that are aging and in poor condition. Potable water<sup>3</sup> is provided at seven spigots dispersed throughout the campground. The facility includes two flush restroom buildings each with eight stalls (i.e., 7 toilets and 1 urinal) and four sinks; and both are in aging and in fair-to-poor condition. A typical campsite provides opportunities for tent or RV camping, but does not have hookups for water, electric or sewer. The circulation roads consist of one-way, 10-ft wide and two-way, 20-ft wide road segments; and are a combination of paved and dirt surfacing; and in fair condition overall (SSWD 2016).

The family campground also includes a loop with 10 RV sites each with full-service hookups including water, electric and sewer. In addition to the hookups, each site consists of a gravel spur, metal table, concrete fire ring, and a trash can. The RV campsites utilize a restroom facility at the adjacent standard campsite loop. The circulation roads consist of a one-way, 12-ft-wide dirt road (0.3 mi long) and a two-way, 20-ft-wide paved road (0.8 mi long). Overall, the RV camping facilities are new construction and in good condition (SSWD 2016).



<sup>&</sup>lt;sup>3</sup> Currently, temporary drinking restrictions are in place while SSWD completes water treatment infrastructure improvements.





Typical Circulation Roads

Figure 2.2-2. Photographs (dated 7/21/15) of the family campground at the North Shore Recreation Area.

# 2.2.1.2 Group Campground

The group campground is located in an open setting along the west shoreline of the NSRA to the north of the boat ramp and day use area. The facility consists of two group campsites (i.e., Tree and Point sites) serving 25 people–at–one-time. Each of the campsites consists of a concrete table, rock fire ring, water spigot, portable chemical toilet, and two trash cans. The Tree site also includes a cinder-block preparation/storage area that does not exist at the other group site. The access road to the sites is a 10-ft-wide, one way dirt surface road (0.05 mi long). Overall, the facilities are aging and in fair-to-poor condition (SSWD 2016). Representative photographs are provided in Figure 2.2-3.



Tree Site

Figure 2.2-3. Photograph (dated 7/21/15) of the group campsites at the North Shore Recreation Area.

# Horse Camp

The Horse Camp is located in the midst of the Boss Point dispersed use area and is tailored specifically for equestrian use with hitch-and-post facilities; as well as two portable chemical toilets, a large concrete fire ring, and trash cans. Overall, the facilities provided are in good condition. A representative photograph is provided in Figure 2.2-4.

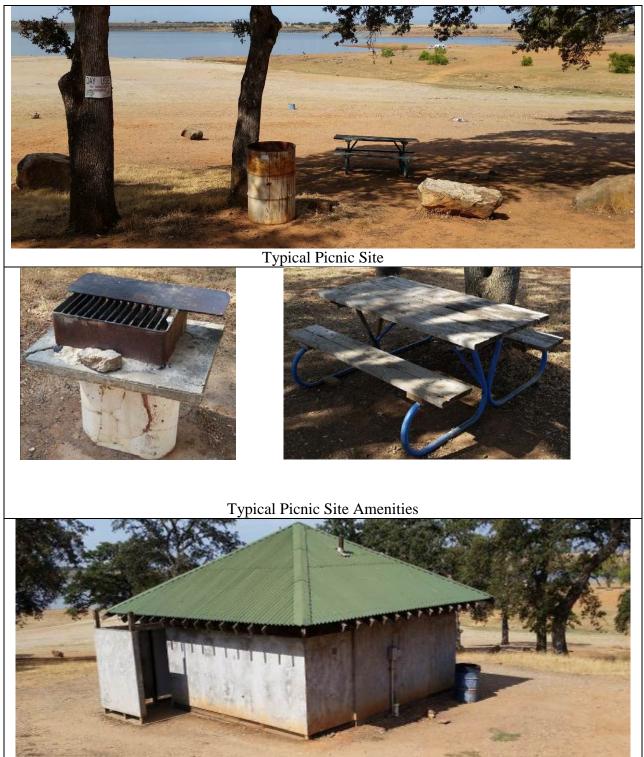


Horse Camp

Figure 2.2-4. Photograph (dated 7/21/15) of the dispersed use areas at the North Shore Recreation Area.

### 2.2.1.3 Day Use Area

The day use area is located in a semi-forested setting along the west shoreline of the NSRA to the north of the boat ramp. The facility consists of 20 picnic sites, a swim beach and shares a parking area with the boat ramp. Each picnic site consists of a table and a trash can. Pedestal grills and water spigots are also dispersed throughout the area. The swim beach is located between the picnic sites and the reservoir. The facility includes one flush restroom building with eight stalls (i.e., 7 toilets and 1 urinal) and four sinks. The short access road is a 20-ft-wide, two-way paved road (0.05 mi long). Overall, the facilities are aging and in fair condition (SSWD 2016). A representative photograph is provided in Figure 2.2-5.



Typical Restroom Building

Figure 2.2-5. Photographs (dated 7/21/15) of the day use area at the North Shore Recreation Area.

### 2.2.1.4 Boat Ramp

The boat ramp is located on the south shoreline between the family campground and the day use area. The facility consists of a boat launching ramp, parking area, restroom building and picnic site. The boat ramp is a 4-lane concrete ramp with a floating courtesy dock and a 4-lane boat preparation area. The end of the concrete ramp is at 236.0 ft elevation; however, informal boat launching is still available down to 188.0 ft elevation. The parking area is divided into three separate lots, all of which are paved with striped spaces; and provides a total of 82 single vehicle spaces, including two accessible spaces, and 73 vehicle with trailer spaces, including three accessible spaces. At lower water levels, parking is allowed adjacent to the boat ramp in dirt parking areas. The facility includes one flush restroom building with four stalls, each with a toilet and sink. A water spigot, water fountain and trash receptacles are located at the restroom building. The accessible restroom building area includes an accessible picnic table connected by an accessible ramp. The access road is a 24-ft-wide, two-way paved road (0.2 mi long). This facility was reconstructed in 2005 using a DBAW Boat Launch Facilities grant. The facilities are in good condition (SSWD 2016). Representative photographs are provided in Figure 2.2-6.

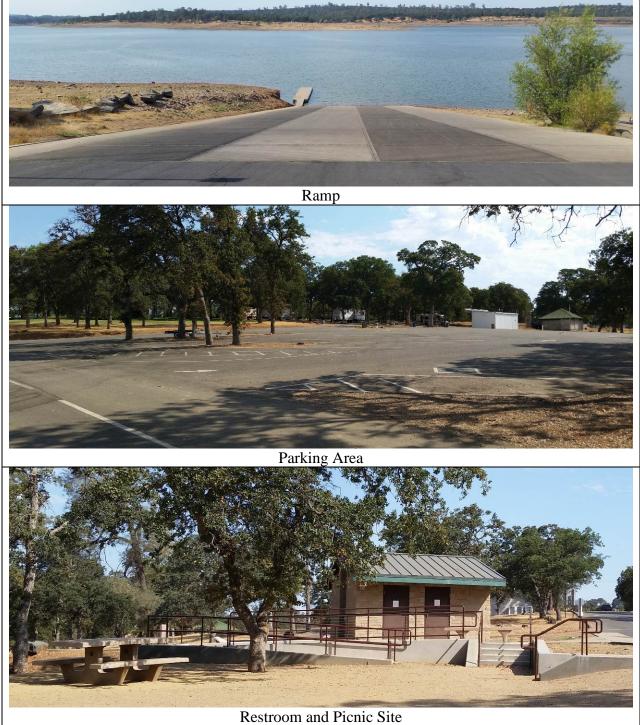


Figure 2.2-6. Photographs (dated 7/21/15) of the boat ramp facilities at the North Shore Recreation Area.

#### 2.2.1.5 **Dispersed Use Areas**

The NSRA has two dispersed use areas within the recreation area, which are accessed by oneway and two-way dirt roads. Jet Ski Cove dispersed use area is located on the northwest portion of the recreation area. Facilities include two portable chemical toilets and trash cans dispersed In all, Jet Ski Cove dispersed use area encompasses 15 ac with throughout the area. approximately 0.5 mi of shoreline; all of which are accessed using a 12-ft-wide dirt road (0.6 mi in length). The second dispersed use area, Boss Point, is located in the northeast portion of the recreation area. Facilities include four portable chemical toilets and trash cans dispersed throughout the area. In all, Boss Point dispersed use area encompasses 55 ac with approximately 1.6 mi of shoreline; all of which are accessed using a network of 10-ft-wide dirt roads (3.1 mi in The dispersed use areas provide for largely undeveloped, dispersed day-use length). opportunities and overnight camping with minimal facilities and direct access to the reservoir shoreline. Overall, the few facilities provided are in good condition (SSWD 2016). Representative photographs are provided in Figure 2.2-7.



Typical View of the Boss Point Area Dispersed Use Area

Figure 2.2-7. Photographs (dated 7/21/15) of the dispersed use areas at the North Shore Recreation Area.

## 2.2.1.6 Recreational Water System

A recreational water system provides water throughout the NSRA, excluding the dispersed use area. The water system source is the reservoir, where two pumps in the reservoir deliver water at 70 gallons/minute (5,000,000 gallons or 15.3 ac-ft per year) uphill via underground piping to the water treatment facility atop a hill within the NSRA. After being treated, the water is piped nearby to a 60,000-gallon storage tank constructed of belted steel and recently installed in 2011. From the storage tank, underground distribution piping sends the water throughout the NSRA, where water is accessible via water hydrants dispersed throughout the recreation area facilities. The system also includes a sewage pond with an aerator to handle the sanitary needs of the flush restroom buildings and the RV dump station. The sewage system uses a gravity-feed operation and is supplemented by a pump to get the sewage to the sewage pond. The recreational water system is accessed using 10-ft-wide dirt roads (0.8 mi in length). (Figure 2.2-8)

Overall, much of the major above-ground components (i.e., water treatment plants, water storage tank, sewage ponds and aeration facilities) are in good condition with the treatment plant and storage tank having been reconstructed or replaced recently (SSWD 2016). The below-ground components (i.e., distribution piping) are largely original construction are in fair condition; and the above-ground water hydrants and fountains are largely in poor condition (SSWD 2016).



Figure 2.2-8. Photographs (dated 4/2/18) of the recreational water system components.

### 2.2.1.7 Other Facilities

The NSRA also includes a general store, RV dump station, private ranger residences and maintenance buildings. The store is located near the entrance to the NSRA facilities and also serves as the entrance station for the NSRA. The RV dump station is located near the family campground and boat ramp; and provides a 1-lane facility connected to a sewer system for disposing of RV holding tanks. Overall, these facilities are in good condition (SSWD 2016). Private concessionaire residences are also located between the entrance station and the boat ramp facilities that include residences and maintenance buildings, which are accessed via a 0.4 mi long, 10-ft-wide dirt road. Photographs of these facilities are provided in Figure 2.2-9.



Figure 2.2-9. Photographs (dated 7/21/15) of the entrance station and RV dump station at the North Shore Recreation Area.

# 2.2.2 South Shore Recreation Area

The SSRA is located on the southwest shoreline of the reservoir on a long narrow peninsula. The SSRA is accessible by vehicle from the north and south via McCourtney Road (Placer Co. C6037). The access road is gated and an entrance station is located after the gate that regulates public access to the recreation area. The SSRA consists of a family campground, group campground, day use area, swim beach, boat ramp and dispersed use areas (Figure 2.2-10). The SSRA also includes a general store at the entrance station for use by the public located. The SSRA is generally open seasonally from April through October for day use and overnight recreation opportunities.<sup>4</sup> Similar to the NSRA, the SSRA is set in a partially wooded oak and grassland setting. The oak trees provide substantial shading throughout the recreation area. Due to the predominant grasses and lack of other ground-level vegetation there is minimal screening between the individual sites with the campgrounds and day use areas.

<sup>&</sup>lt;sup>4</sup> The NSRA is open year-round for public use.



Figure 2.2-10. Aerial site map of the South Shore Recreation Area.

# 2.2.2.1 Family Campground

The family campground is located in a semi-forested setting on the north end of the recreation area. The facility consists of 67 standard campsites for either tent or RV camping, but the sites do not provide RV hookups. Each campsite consists of a table (i.e., concrete or wood-metal construction), a rock fire ring, a parking spur (i.e., dirt or gravel), several tent pads and a trash can. Most of the sites also have a pedestal grill. Six of the sites include a pull-through parking spur, whereas the remaining sites utilize back-in parking spurs. Water is provided at 12 spigots dispersed throughout the campground. Overall, the campsite amenities are in good condition, with the exception of the wood-metal construction tables that are aging and in fair-to-poor condition (SSWD 2016). The facility also includes one flush restroom buildings (i.e., 7 toilets, 1 urinal and 4 sinks) and two vault restroom buildings (i.e., each with 4 toilets), all of which are aging and in fair condition overall. The facility includes two overflow parking areas (paved) for a total of 18 single vehicles. The circulation roads consist of one-way, 10-ft-wide, and two-way, 20-ft-wide paved roads (1.2 mi in length). The parking areas and roads are in good condition (SSWD 2016). Representative photographs are provided in Figure 2.2-11.



Figure 2.2-11. Photographs (dated 7/21/15) of the family campground at the South Shore Recreation Area.

# 2.2.2.2 Group Campground

The group campground consists of a single group campsite located in a forested setting on a bluff along the west shoreline of the SSRA. The facility consists of one group campsite serving 50 people–at–one-time. This site consists of a wood-metal table, large concrete fire ring, large food preparation table/area, a pedestal grill, trash cans and a gravel parking area for 10 vehicles. The access road to the sites is a two-way paved road. A water spigot is located at the start of the access road to the group campsite. Overall, the amenities are in good condition, with the exception of the wood-metal construction table that is in poor condition (SSWD 2016). A restroom building is available at the nearby family campground. The access road is a 20-ft-wide, two-way paved road (0.2 mi in length). A representative photograph of the facility is provided in Figure 2.2-12.





Figure 2.2-12. Photograph (dated 7/21/15) of the group campsite at the South Shore Recreation Area.

# 2.2.2.3 Picnic Area

The picnic area is located in a semi-forested setting along the east shoreline of the SSRA. The facility consists of 33 picnic sites, each with a table, and a parking area for 44 single vehicles. Pedestal grills, water spigots and trash cans are dispersed throughout the area for picnickers. The facility utilizes the boat ramp's flush restroom building (i.e., 7 toilets, 1 urinal and 4 sinks) located at the top of the boat ramp facility. The circulation road consists of a 10-ft-wide, one-way dirt road segment (0.3 mi in length) and a 10-ft-wide, one-way paved asphalt road segment (0.1 mi in length). Overall, the facilities are in good condition (SSWD 2016). Representative photographs of the facilities are provided in Figure 2.2-13.

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Picnic Area



Picnic Site Amenities



Figure 2.2-13. Photographs (dated 7/21/15) of the picnic area at the South Shore Recreation Area.

### 2.2.2.4 Swim Beach

The swim beach is located in an open setting along the west shoreline of the SSRA in a cove commonly referred to as "Quarter Mile Cove" (Figure 2.2-14). The site provides direct water access for swimming and other water play activities for the campground visitors. Trash cans are dispersed throughout the area. The circulation road is a 10-ft-wide, one-way dirt road (0.1 mi in length). Overall, the few facilities provided (i.e., trash cans) are in good condition (SSWD 2016). The facility utilizes the family campground's vault restroom buildings located near the swim beach area.



Figure 2.2-14. Photograph (dated 7/21/15) of the swim beach at the South Shore Recreation Area.

### 2.2.2.5 Boat Ramp

The boat ramp is located on the northeast shoreline between the family campground and the day use area. The facility consists of a boat launching ramp, parking area and restroom building. The boat ramp is a 2-lane concrete and asphalt ramp with a floating courtesy dock. The end of the concrete/asphalt ramp is at 220.0 ft elevation and boat launching below this level is not advisable. The concrete section of the ramp and the courtesy dock are in good condition; whereas the lower asphalt section of the ramp is in poor condition with eroding edges and extensive cracking (SSWD 2016). The parking area provides a total of 52 vehicles with trailer spaces in a gravel lot and paved lot paralleling the top of the ramp access road. The parking areas are in good condition (SSWD 2016). The facility includes one flush restroom building with seven toilets, one urinal and four sinks. The restroom building is in fair condition (SSWD 2016). The boat launch uses the main entrance access road is a 20-ft-wide, two-way paved road (0.5 mi in length), which is the main entrance road into the SSRA. Representative photographs of the facilities are provided in Figure 2.2-15.



Figure 2.2-15. Photographs (dated 7/21/15) of the boat ramp facility at the South Shore Recreation Area.

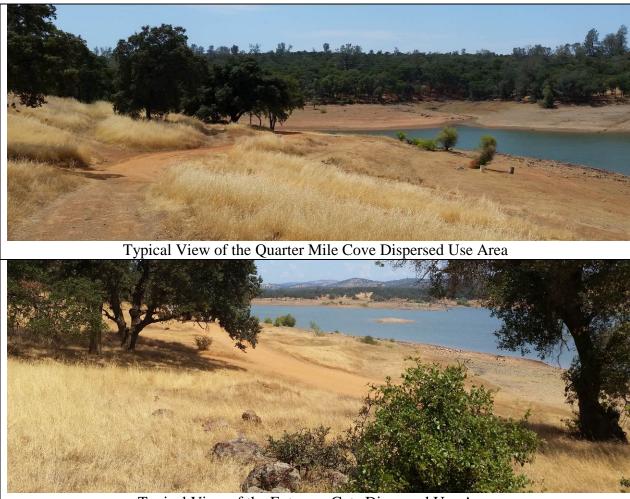
# 2.2.2.6 Dispersed Use Areas

The SSRA has two dispersed use areas located on the west shoreline (Quarter Mile Cove dispersed use area) and southeast shoreline adjacent to the entrance station (Entrance Gate dispersed use area). Both areas are accessed by 10-ft-wide dirt roads (1.7 mi in length). These

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areas allow for dispersed day use and overnight camping, but provide minimal facilities – roads, trash cans and six portable chemical toilets. Overall, the facilities are good condition (SSWD 2016). Representative photographs of the facilities are provided in Figure 2.2-16.



Typical View of the Entrance Gate Dispersed Use Area

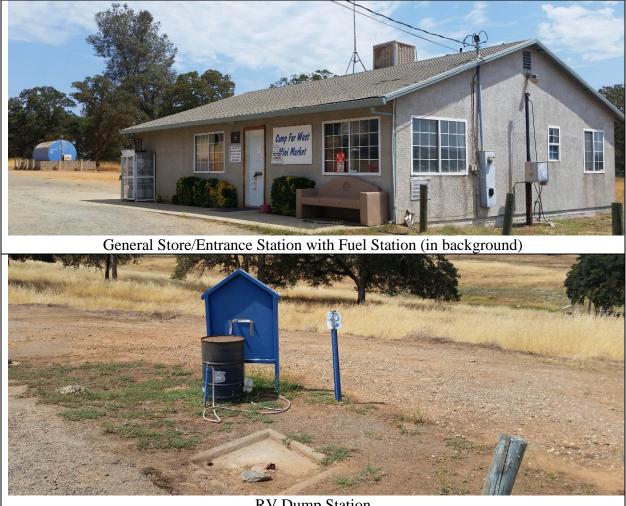
Figure 2.2-16. Photographs (dated 7/21/15) of the dispersed use areas at the South Shore Recreation Area.

### 2.2.2.7 Recreational Water System

A recreational water system provides water throughout the SSRA, excluding the dispersed use area. The SSRA receives water from the NSRA water treatment plant and storage tank via two pipes under the reservoir. The water is dispersed throughout the SSRA via underground distribution piping, where water is accessible via water hydrants dispersed throughout the recreation area facilities. The SSRA system also includes a sewage pond with an aerator to handle the sanitary needs of the flush restroom buildings and the RV dump station. The SSRA sewage system is a gravity-fed system. The sewage pond is accessed using a 10-ft-wide dirt road (0.1 mi in length). Overall, these facilities are in good condition (SSWD 2016).

#### 2.2.2.8 **Other Facilities**

The SSRA also includes an entrance station, general store, RV dump station, and private ranger residences and maintenance buildings. The store is located near the entrance to the SSRA facilities and also serves as the entrance station for the recreation area. A fuel station is also located at the general store. The RV dump station is located across from the general store and provides a 1-lane facility connected to a sewer system for RV holding tank disposal. The main entrance access road is a 20-ft-wide, two way asphalt road (0.5 mi long). Overall, these facilities are in good-to-very good condition. Private ranger residences are also located between the entrance station and the boat ramp facilities that include residences and maintenance buildings, which is accessed by a 10-ft-wide, one way dirt road (0.3 mi long). Photographs of these facilities are provided in Figure 2.2-17.



**RV** Dump Station

Figure 2.2-17. Photographs (dated 7/21/15) of the entrance station and RV dump station at the South Shore Recreation Area.

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# SECTION 3.0 FACILITY OPERATION & REHABILITATION

This section describes the recreation facility measures that will be implemented by SSWD for the Project during the new license. This section is divided into two sub-sections, including: 1) recreational facility annual operational maintenance and activities; and 2) recreational facility major rehabilitation.

# 3.1 <u>Recreational Facility Operational Maintenance</u>

# **3.1.1 Operational Maintenance Responsibility**

SSWD shall be responsible for the annual maintenance, rehabilitation, and replacement of all the Project recreational facilities at the Camp Far West Reservoir Recreation Areas (RAs). SSWD intends to use a concessionaire for the administration, O&M of the Project's recreation facilities.

# **3.1.2 Operational Maintenance Activities**

Operational maintenance activities keep permanent assets in an acceptable condition and include repairs, painting, replacement of minor parts and minor structural components. Operational maintenance, or reconditioning, neither materially adds to the value of the property nor appreciably prolongs its life. Operational maintenance excludes activities aimed at expanding the capacity of an asset or otherwise upgrading it to serve needs different from, or significantly greater than those originally intended. The work serves only to keep the facility in an ordinary, efficient operating condition.

Examples of regular or routine operational maintenance activities include, but are not limited to interior painting, repair of broken windows, light bulb replacement, cleaning, unplugging drains, greasing, servicing, inspecting, oiling, adjusting, tightening, aligning, sweeping and general snow removal. Maintenance activities may include work needed to meet applicable laws, regulations, codes, and other legal direction (such as compliance with the Americans with Disabilities Act) as long as the original intent or purpose of the fixed asset is not changed.

Annual operational maintenance includes those activities that are expected to occur on an annual or semi-annual schedule, as conditions warrant. Annual maintenance activities include, but are not limited to: straightening all vehicle barriers and signs, rehabilitating picnic tables, pumping or servicing vault or portable toilets, and conducting state and local required water quality testing of the water supply system.

# **3.1.3 Recreation Area Campfire Policy**

SSWD will allow wood burning campfires when contained within approved fire containment "fire-rings" and/or burn-barrels, and may restrict such use based on existing conditions and other local agency fire restriction policies.

# 3.2 <u>Recreational Facility Major Rehabilitation</u>

This section identifies what and how SSWD will rehabilitate and replace the existing Project recreation facilities – all located on SSWD land. Rehabilitation includes reconditioning or replacing an existing fixed asset or any of its components in order to restore the functionality or life of the asset. Replacement is the substitution or exchange of an existing fixed asset or component with one having essentially the same capacity and purpose. The decision to replace or rehabilitate a fixed asset or component is usually reached when replacement is more cost effective or more environmentally sound. Replacement of an asset or component usually occurs when it nears or has exceeded its useful life.

SSWD shall be responsible for the full cost for major rehabilitation or replacement of existing recreation facilities listed in Section 2.2. SSWD shall be responsible for performing all needed rehabilitation activities through the provision of necessary personnel, equipment, materials and management. SSWD shall be responsible to replace/rehabilitate recreation features which currently exist at their recreation facilities. All the facilities are located on SSWD land, and all new, rehabilitated, and reconstructed Project recreation facilities will meet applicable standards in place at the time of design and construction including any applicable Americans with Disabilities Act guidelines and any other applicable accessibility guidelines at the time of design.

SSWD shall rehabilitate facilities the individual facilities and components at each Project RA facility in accordance with the specifications in Table 3.2-1 when the facilities near the end of their useful life.

Table 3.2-1.	Major rehabilitation	guidelines for Pro	ject recreation facilities.
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Type of Facility	Major Rehabilitation Guidelines
Roads, Parking Areas and Campground Vehicle Spurs	<ul> <li>As needed, SSWD shall rehabilitate all existing roads and parking areas within the Project RAs. Specifically, SSWD shall:</li> <li>Repave (asphalt) and re-stripe parking areas, including installing vehicle barriers at each parking area and accessible parking designation;</li> <li>Repave/overlay existing asphalt circulation roads with asphalt; and install vehicle barriers, where necessary;</li> <li>Grade all existing dirt circulation roads; and install vehicle barriers, where necessary.</li> <li>Where unpaved, gravel or dirt parking areas exist, re-grade and clear the parking area and re-install vehicle barriers, as needed; and</li> <li>Repave or overlay existing asphalt campsite spurs or grade existing dirt campsite spurs and install vehicle barriers at each new spur, as needed.</li> <li>Rehabilitation of roads, parking areas, and vehicle spurs shall occur on a site-by-site or facility-by-facility basis at all Project RAs. Roads, parking areas, and vehicle spurs shall be scheduled for rehabilitation near the end of their useful life based on the findings during regular or annual inspections.</li> </ul>
Fire Rings, Grills,	SSWD will replace fire rings, grills, picnic tables, and other constructed features near the end of their useful life based
and Picnic Tables	on regular or annual inspections.
Signs	SSWD shall replace all existing entrance signs, directional signs, information/bulletin signs and trailhead signs, as needed, near the end of their useful life based on regular or annual inspections. SSWD shall replace signs with a sign of a similar design, and at least to the same construction as currently exist. Alternative materials may be used (i.e. recycled plastic, metal, etc.).

Table 3.2-1. (C	Junucu)
Restroom and Sewage Pond Facilities	SSWD shall replace the existing restroom facilities, as needed, near the end of their useful life. Each restroom facility shall maintain the same general current footprint and number of toilets, sinks, and stalls, unless SSWD determines that the location and layout of the restroom facility should be modified. The flush restroom facilities throughout the Project RAs discharge to a sewer collection system that routes sewage to the respective RA sewage ponds. The sewage ponds are permitted by the State and include operating, monitoring and reporting requirements. Sewage ponds will be maintained in acceptable condition to meet permit requirements and upgraded as needed depending on equipment life and regulatory requirements.
Recreation Area Water Systems	SSWD shall maintained the recreational water system (i.e., distribution piping, system connections, water hydrants, storage tanks and treatment facility) in condition to meet permit requirements and upgrade the facilities as needed depending on equipment life and regulatory requirements.
	SSWD will replace segments or portions of the underground distribution piping as condition warrants or leaks or inefficiencies in the system are identified, which will occur on a case-by-case basis. Overall, SSWD anticipates that all of the underground distribution system will be replaced or rehabilitated before the end of the new license term.
	SSWD will replace all the above-ground facilities (i.e., water hydrants and fountains) within the first 3 years of the new license based on the specific condition of each individual hydrant or fountain.
Boat Launch Floating Boat Docks and Boat Ramps	SSWD shall replace the floating boat docks and concrete launch ramps as each facility nears the end of its useful life. At the NSRA boat launch facility (reconstructed in 2005 with DBAW grant funding), SSWD shall include the replacement of the existing floating boat dock and concrete launch ramp with structures that meet the DBAW standards at the time of design.
	At the SSRA boat launch facility, SSWD shall include the replacement of the existing floating boat dock and launch ramp with structures that consider user demand, resource concerns, reservoir drawdown, and design standards of the time.
Trash Receptacles and Dumpsters	SSWD shall replace the existing trash receptacles and dumpsters, as needed, near the end of their useful life. For the existing trash receptacles, SSWD will install attached lids to each receptacle within the first 2 years of the new license.

#### Table 3.2-1. (continued)

Importantly, at any time during the new license when major rehabilitation is planned, the work and placement will not occur in sensitive resource areas (e.g. wetlands, culturally sensitive sites, critical wildlife habitats, sensitive botanical sites). In addition, for any ground disturbing work related to minor rehabilitation, major rehabilitation, or capital improvements, SSWD will follow the invasive weed prevention and vegetation management practices. Specifically, SSWD will follow all applicable measures related to invasive weed and aquatic invasive species prevention, revegetation of recreation facility lands, and sensitive resource buffers and/or limited operating periods.

# 3.3 <u>Replacement of Existing Facilities Due to Camp Far West</u> <u>Reservoir Pool Raise</u>

Construction of the Camp Far West Reservoir pool raise from 300 ft to 305 ft would inundate or impact the function of select recreational facilities along the shoreline at both the NSRA and SSRA. Overall, the pool raise would affect 104 recreational facilities or site features along the shoreline at the NSRA and SSRA. Most of the affected features would be directly affected by the pool raise by either partially or fully inundating the features (i.e., campsite living space and amenities, circulation road, etc.). Some of the features would be indirectly affected, whereby the pool raise would not inundate the feature, but would closely abut the feature likely resulting in flooding and/or erosion impacts to the features due to wind, wave or high flow events.

SSWD will replace all the impacted recreation facilities in-kind (i.e., one-to-one replacement) within each respective recreation area. SSWD anticipates that all of the affected facilities will be relocated within each existing respective recreation area boundary and FERC boundary. However, if necessary, SSWD would utilize lands outside the recreation area and FERC

boundary to replace all of the impacted facilities in-kind (and update the FERC boundary if necessary). The construction work to relocate, re-route or realign the affected features would be completed in one calendar year. Overall, the majority of the construction would occur outside the peak recreation season (i.e., Memorial Day through Labor Day holiday weekends). In instances where construction would be necessary during the peak season, the work would be restricted to select areas and conducted during low-use periods (i.e., weekdays) to minimize any impacts to the recreation facilities and visitor experiences. SSWD will comply with any pertinent sensitive resource buffers and/or limited operating periods (e.g., great blue heron rookery in the SSRA).

# SECTION 4.0 PLAN REVISION

# 4.1 <u>Plan Revision</u>

SSWD will review, update, and/or revise the Plan if changes in recreation use or resources create the need to update the plan. A need may arise from day-to-day O&M of the Project, or, from other anticipated and unanticipated events that may arise during the license period. Examples of such events that may trigger a need to update the plan include unforeseen recreation needs, new recreation technologies, or significant changes in the amount and types of recreation uses. South Sutter Water District Camp Far West Hydroelectric Project FERC Project No. 2997

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# SECTION 5.0 **REFERENCES CITED**

- California Department of Fish and Wildlife (CDFW). 2018a. Online Fishing Guide. Sacramento, California. https://www.wildlife.ca.gov/Fishing/Guide. Accessed on June 20, 2018.
- California Department of Fish and Wildlife (CDFW). 2018b. 2018-2019 California Freshwater Sport Fishing Regulations. Sacramento, California.
- California Department of Fish and Wildlife (CDFW). 2015. Unpublished stocking and fish survey records at Camp Far West Reservoir from 1964 to 1985. Obtained from CDFW employees on 6/30/2015.
- South Sutter Water District (SSWD). 2016. Pre-Application Document: Section 2.3.6 -Recreation Resources. Prepared by HDR for South Sutter Water District. Trowbridge, California.
- Yuba County. 2010. Yuba County Code of Ordinances, Chapter 8.51 Camp Far West Lake. Marysville, California. Adopted August 24, 2010.

South Sutter Water District Camp Far West Hydroelectric Project FERC Project No. 2997

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# **ATTACHMENT 2**

# Support for SSWD's Amended Measure AR3 and Measure RR1

# **Robinson, Shakara**

From:	Lose, Sarah@Wildlife <sarah.lose@wildlife.ca.gov></sarah.lose@wildlife.ca.gov>
Sent:	Monday, October 21, 2019 2:48 PM
То:	Lynch, Jim; Aondrea_Bartoo@fws.gov; Stephen_Bowes@nps.gov; Hoobler,
Cc:	Sean@Wildlife; Lawson, Beth@Wildlife; 'traci@foothillswaternetwork.org'; Chris Shutes Vertucci, Charles; Rosemary Bluett (sswd@hughes.net); Robinson, Shakara; Tansey- Rodarmel, Jenna
Subject:	RE: Camp Far West Relicensing: E-Mail Approvals for FERC Letter - Need by COB 10/23

Jim and Chuck-

CDFW approves these edits and is ready to move forward. Thank you for incorporating our edits!

Sarah C. Lose Senior Environmental Scientist (Specialist) CA. Dept of Fish and Wildlife/North Central Region Water Program-FERC Coordinator 1701 Nimbus Rd. Rancho Cordova, CA. 95670 (916) 747-5226: cell

From: Lynch, Jim <Jim.Lynch@hdrinc.com>

Sent: Saturday, October 19, 2019 7:43 AM

To: Aondrea\_Bartoo@fws.gov; Stephen\_Bowes@nps.gov; Lose, Sarah@Wildlife <Sarah.Lose@wildlife.ca.gov>; Hoobler, Sean@Wildlife <Sean.Hoobler@wildlife.ca.gov>; Lawson, Beth@Wildlife <Beth.Lawson@wildlife.ca.gov>;
 'traci@foothillswaternetwork.org' <traci@foothillswaternetwork.org>; Chris Shutes <blancapaloma@msn.com>
 Cc: Vertucci, Charles <Charles.Vertucci@hdrinc.com>; Rosemary Bluett (sswd@hughes.net) <sswd@hughes.net>;
 Robinson, Shakara <Shakara.Robinson@hdrinc.com>; Tansey-Rodarmel, Jenna <Jenna.Tansey-Rodarmel@hdrinc.com>
 Subject: Camp Far West Relicensing: E-Mail Approvals for FERC Letter - Need by COB 10/23

All – As you recall, about a month ago I distributed a draft letter to FERC from SSWD that would file the agreed to Camp Far West Project relicensing AR3 (Implement Ramping Rates) and RR1 (Recreation Facilities Plan) measures and provide FERC the status of other items. I asked for comments on the letter, including e-mail approvals that I can attach to the letter to document agreement, by October 16. I received some comments from Sarah, which we have adopted with some minor word changes in the attached letter (Sarah – Please check to be sure we did not compromise the intended message), but no approval e-mails. I really need those to file the letter, which is already a few weeks late.

I'd like to file the attached letter by October 25 (since we are late now), and need the following e-mail approvals of the letter and two measures based on the discussions we have had and as reflected in the attached letter:

- AR3, Implement Ramping Rates USFWS, CDFW and FWN
- RR1, Recreation Facilities Plan USFWS, NPS, CDFW and FWN

I apologize in advance if you already sent the e-mail to me and I misplaced it.

<u>Please send those e-mails to me copying Chuck by COB on Wednesday, October 23, and we'll file the letter with FERC</u> <u>on Friday, October 25.</u> Thanks, and let me or Chuck know if you have any questions.

James Lynch D 916.679.8740 M 916.802.6247

hdrinc.com/follow-us

# **Robinson, Shakara**

From:	Traci Sheehan <traci.sheehan@gmail.com></traci.sheehan@gmail.com>	
Sent:	Tuesday, October 22, 2019 10:21 AM	
То:	Bartoo, Aondrea	
Cc:	Lose, Sarah@Wildlife; Lynch, Jim; Stephen_Bowes@nps.gov; Hoobler, Sean@Wildlife; Lawson, Beth@Wildlife; Chris Shutes; Vertucci, Charles; Rosemary Bluett	
Subject:	(sswd@hughes.net); Robinson, Shakara; Tansey-Rodarmel, Jenna Re: [EXTERNAL] RE: Camp Far West Relicensing: E-Mail Approvals for FERC Letter - Need by COB 10/23	

Thank you Jim. The Network supports the two measures. take care, Traci

On Tue, Oct 22, 2019 at 8:47 AM Bartoo, Aondrea <<u>aondrea\_bartoo@fws.gov</u>> wrote: Thanks for the reminder, Jim!

The USFWS approves the submittal of the aforementioned AR3 ramping rate measure to FERC. The USFWS does not oppose the submittal of RR1 recreation plan.

Glad to be able to move forward on these!

On Mon, Oct 21, 2019 at 2:48 PM Lose, Sarah@Wildlife <<u>Sarah.Lose@wildlife.ca.gov</u>> wrote:

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Sarah C. Lose Senior Environmental Scientist (Specialist) CA. Dept of Fish and Wildlife/North Central Region Water Program-FERC Coordinator 1701 Nimbus Rd. Rancho Cordova, CA. 95670 From: Lynch, Jim <<u>Jim.Lynch@hdrinc.com</u>> Sent: Saturday, October 19, 2019 7:43 AM To: <u>Aondrea\_Bartoo@fws.gov</u>; <u>Stephen\_Bowes@nps.gov</u>; Lose, Sarah@Wildlife <<u>Sarah.Lose@wildlife.ca.gov</u>>; Hoobler, Sean@Wildlife <<u>Sean.Hoobler@wildlife.ca.gov</u>>; Lawson, Beth@Wildlife <<u>Beth.Lawson@wildlife.ca.gov</u>>; 'traci@foothillswaternetwork.org' <<u>traci@foothillswaternetwork.org</u>>; Chris Shutes <<u>blancapaloma@msn.com</u>> Cc: Vertucci, Charles <<u>Charles.Vertucci@hdrinc.com</u>>; Rosemary Bluett (<u>sswd@hughes.net</u>) <<u>sswd@hughes.net</u>>; Robinson, Shakara <<u>Shakara.Robinson@hdrinc.com</u>>; Tansey-Rodarmel, Jenna <<u>Jenna.Tansey-Rodarmel@hdrinc.com</u>>

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#### James Lynch

D 916.679.8740 M 916.802.6247

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A. Leigh Bartoo Fish and Wildlife Biologist Bay-Delta Fish and Wildlife Office U.S. Fish and Wildlife Service 650 Capitol Mall, 8-300 Sacramento, CA 95814 916-930-5621

--Traci Sheehan

--

We cannot live only for ourselves. A thousand fibers connect us with our fellow men; and among those fibers, as sympathetic threads, our actions run as causes, and they come back to us as effects. --Herman Melville

### **Robinson, Shakara**

From:Lynch, JimSent:Monday, October 21, 2019 1:49 PMTo:Robinson, Shakara; Tansey-Rodarmel, Jenna; Vertucci, CharlesSubject:FW: [EXTERNAL] Camp Far West Relicensing: E-Mail Approvals for FERC Letter - Need<br/>by COB 10/23

Here is one

James Lynch D 916.679.8740 M 916.802.6247

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From: Bowes, Stephen [mailto:stephen\_bowes@nps.gov]
Sent: Monday, October 21, 2019 1:34 PM
To: Lynch, Jim <Jim.Lynch@hdrinc.com>
Subject: Re: [EXTERNAL] Camp Far West Relicensing: E-Mail Approvals for FERC Letter - Need by COB 10/23

I'm fine with it.

Stephen M. Bowes Hydropower Assistance Program National Park Service 333 Bush Street, Suite 500 San Francisco, CA 94104 Phone: 415-623-2321 Fax: 415-623-2387

On Sat, Oct 19, 2019 at 7:55 AM Lynch, Jim <<u>Jim.Lynch@hdrinc.com</u>> wrote:

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То:	Lose, Sarah@Wildlife
Cc:	Lynch, Jim; Stephen_Bowes@nps.gov; Hoobler, Sean@Wildlife; Lawson, Beth@Wildlife;
	traci@foothillswaternetwork.org; Chris Shutes; Vertucci, Charles; Rosemary Bluett
	(sswd@hughes.net); Robinson, Shakara; Tansey-Rodarmel, Jenna
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Jim and Chuck-

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Sarah C. Lose

Senior Environmental Scientist (Specialist)

CA. Dept of Fish and Wildlife/North Central Region

Water Program-FERC Coordinator

1701 Nimbus Rd.

Rancho Cordova, CA. 95670

(916) 747-5226: cell

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A. Leigh Bartoo Fish and Wildlife Biologist Bay-Delta Fish and Wildlife Office U.S. Fish and Wildlife Service 650 Capitol Mall, 8-300 Sacramento, CA 95814 916-930-5621