

## APPENDIX E3

# WRITTEN COMMENTS RECEIVED REGARDING SSWD'S DRAFT LICENSE APPLICATION

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Table E3-1 lists the six written comments received by the South Sutter Water District (SSWD or Licensee) regarding SSWD's December 29, 2018, Draft License Application (DLA). A copy of each written comment is included in this appendix. No written comments on the DLA were received from Indian tribes.

**Table E3-1. Parties that submitted written comments to SSWD on SSWD's December 29, 2018, DLA.**

Commenter	Date of Comment Letter or E-Mail
FERC	March 29, 2019
USFWS	April 10, 2019
SWRCB	April 12, 2019
CDFW	April 14, 2019
NMFS	April 15, 2019
FWN	April 15, 2019
<b>Total</b>	<b>6 Written Comments</b>

Appendix E4 to this Exhibit E contains SSWD's replies to USFWS's, CDFW's NMFS's and FWN's written comments. The SWRCB's August 25, 2018, e-mail stated the SWRCB did not have any written comments on the DLA. Appendix E5 to this Exhibit E contains SSWD's replies to FERC's written comments.

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# **APPENDIX E3**

## **Attachment 1**

### **DLA Comment Letters**



FEDERAL ENERGY REGULATORY COMMISSION  
WASHINGTON, DC 20426  
March 29, 2019

OFFICE OF ENERGY PROJECTS

Project No. 2997-031 – California  
Camp Far West Hydropower Project  
South Sutter Water District

Brad Arnold  
General Manager  
South Sutter Water District  
2464 Pacific Avenue  
Trowbridge, California 95659

**Subject: Comments on Draft License Application**

Dear Mr. Arnold:

This letter contains comments by Commission staff on the draft license application filed on January 2, 2019, by South Sutter Water District (South Sutter) for relicensing the Camp Far West Hydropower Project No. 2997. In order for Commission staff to have adequate information to assess potential project impacts, please review and address our comments outlined in Appendix A in the final license application.

If you have any questions, please contact Quinn Emmering at (202) 502-6382, or at [quinn.emmering@ferc.gov](mailto:quinn.emmering@ferc.gov).

Sincerely,

Timothy Konnert, Chief  
West Branch  
Division of Hydropower Licensing

Enclosure: Comments on the Draft License Application for the Camp Far West Hydropower Project, FERC No. 2997-031

## **COMMENTS ON THE DRAFT LICENSE APPLICATION FOR THE CAMP FAR WEST HYDROPOWER PROJECT NO. 2997**

Commission staff has identified that your draft license application (DLA) did not contain some of the information that will be required by our regulations for a final license application (FLA). In our comments, we note the areas of the DLA where more specific information will be needed for a complete license application.

### **General Content Requirements**

1. In the Initial Statement, Attachment 1 – the Draft Public Notice currently lists December 2018 as the date South Sutter Water District (SSWD) applied to FERC for a new license. Please ensure the filing date is updated with the correct date before submitting the notice for publication to local newspapers as required by section 4.32(b)(6).

### **Exhibit A – Project Description**

2. In section 3.1.1, the first paragraph lists the main embankment of the existing dam as 185 feet high and figure 3.1-1 lists the height as 181 feet high. Please clarify the height of the dam for this section and figure 3.1-1 in the FLA.
3. Section 5.3 states SSWD proposed to add an existing road that accesses the powerhouse. Based on this language it's unclear if SSWD proposes to construct a new road, modify an existing road, or something else. In addition, no details are provided regarding the physical composition, dimensions, or general configuration of the road. Please amend this section in the FLA as required by section 4.51(b).
4. Section 5.4 *FERC Project Boundary* proposes corrections to the existing project boundary around the Camp Far West Reservoir based on higher accuracy elevation data made available since the creation of the original boundary geometry. The DLA states that boundary corrections would be “defined by the lesser of either the topographic contour of 320 feet, which is 20 feet above the normal maximum water surface elevation (NMWSE), or 200 horizontal feet from the NMWSE.” In section 5.1 *Camp Far West Reservoir Pool Raise*, SSWD proposes to raise the NMWSE by 5 feet to an elevation of 305 feet; however, the DLA does not indicate that the proposed project boundary modification takes into account the new 305-foot NMWSE. The proposed 305-foot NMWSE would increase the boundary defining contour to 325 feet. Please clarify this discrepancy in the FLA. In addition, where other sections of the DLA list acreages within the project boundary (e.g. for a particular resource) please note or modify the listed acreages as necessary.

**Exhibit B – Project Operation**

5. In section 7.1.2 *SSWD's Proposed Conditions in the New License* it appears there is a typographical error under the *SSWD Proposed Condition TR2* subheading where “to exclude boats form” should be modified to “to exclude bats from”. Please amend in the FLA accordingly.

**Exhibit C – Construction History and Proposed Construction Schedule**

6. In Section 3.1.5 *Construction Sequences and Schedule*, Task 4.7, in Table 3.1-3 *Draft preliminary schedule for construction of the Pool Raise* states that relocation of campsites would last for a duration of 5 days. Further, in Section 3.1.5.9 *Campsite Relocation* you state that relocation would include clearing and grading new campsite areas, clearing and paving access, constructing new campfire pits, and relocating features such as tables, benches, and barbecue grills from existing sites to new sites. In the FLA, please clarify the following:
  - a) When you state that the relocation of campsites would last for a duration of 5 days, does that account for all of the work described in Section 3.1.5.9?
  - b) After all of the approximately 104 recreational facilities and features are relocated, rerouted, or realigned, is there a plan to clean or restore those sites before the pool raise or inundation occurs? Is this activity accounted for in the 5-day time period for relocation?

**Exhibit D – Costs and Financing**

7. In section 6.2.2, *O&M Costs Related to Environmental and Recreation Conditions*, you state that SSWD's estimated annual cost to implement the conditions (i.e. AR1, TR1, TR2, RR1, and CR1) is \$464,366; however, Table 6.2-1 and Table 6.2-12 show the estimated annualized cost for these measures to be \$440,433. Please clarify in the FLA which cost estimate is the correct total annualized cost for the five proposed environmental and recreation conditions.

**Exhibit F – Design Drawings**

8. Because design drawings were not included as part of the DLA, staff have no comments on Exhibit F at this time. Please ensure that detailed design drawings are provided in the FLA as required by section 4.51(g).

**Exhibit G – Map**

9. Please ensure that project boundary and feature data is filed in a geo-referenced electronic format (e.g. shapefiles) in the required format and level of accuracy when filing the FLA as required by section 4.41(h).

10. In Exhibit E, section 3.3.7.1.2 *Other Public Lands* the DLA describes Placer County's Kirk Ranch Conservation Easement (KRCE), and Figure 3.3.7-3 (page E3.3.7-10) appears to show the conservation easement parcel located about 0.5 mile southeast of the Camp Far West Dam, directly adjacent to the project boundary along McCourtney Road, and in close proximity to SSWD's South Shore Recreation Area (SSRA). However, the Exhibit G maps do not show the KRCE, but do include other nonfederal land (e.g. Spencerville Wildlife Area). Because the KRCE appears to be directly adjacent to the project boundary and near the SSRA please include the KRCE on the appropriate Exhibit G maps in the FLA for staff to better evaluate this public land easement in its environmental analysis.
11. On the Project Boundary Change Maps, Sheets 1, 3, and 4, and Sheets 6 through 10, you indicate in the map legend "Proposed Additions" to the project boundary. In some instances, you clearly identify land proposed to be added by pointing to it on the map and identifying the affected parcel (e.g. Sheet 1); however, on Sheets 4, 9, and 10 you do not point directly to proposed land additions. In the FLA, please clearly identify the proposed land additions on Sheets 4, 9, and 10.
12. On the Project Boundary Change Maps, Sheets 7 and 8, you clearly identify private lands north of the reservoir (cross-hatched areas, with APN identified), and the proposed modifications to add additional land to the project boundary within those private lands; however, there appear to be proposed additions of land, outside of the existing project boundary, and SSWD-owned lands, that are not identified as occurring within identified private land (e.g. Sheet 7, east of Valley Road). In the FLA, please clarify if these proposed additions on Sheets 7 and 8 occur within the existing project boundary, or are located within private land.

## **Exhibit E – Environmental Report**

### *General*

13. Please include all completed study reports and any supporting materials with the FLA as required by section 4.38(c)(4)(ii).
14. Section 1.4.2.4 *Collaborative Development of PM&E Measures* states that SSWD and interested parties did not reach agreement on any protection, mitigation, and enhancement measures. Although, collaborative agreement was not reached the FLA must include descriptions of any measures or facilities recommended by the agencies consulted for the mitigation of impacts on fish, wildlife, and botanical resources, or for the protection or improvement of those resources as required by section 4.51(f). In addition, the FLA must include an explanation of why SSWD



has rejected any measures or facilities recommended by an agency as required by sections 4.51(f). For clarity, please also indicate if no measures have been recommended for a particular resource area under the appropriate resource section(s) in the FLA.

15. The DLA currently does not appear to include all letters from resource agencies or Indian tribes containing comments, recommendations, and proposed terms and conditions, or letters from the public containing comments and recommendations. In the FLA, please include all such consultation documentation as required by section 16.8(f).
16. Although Attachment 3.3.6B provides several maps displaying where the proposed pool raise would impact recreational facilities it does not display inundation zones for other project areas. In order for staff to better understand potential effects on all environmental resource areas please provide similar maps displaying inundation zones overlaid with project facilities and boundaries in the FLA. Where appropriate, please also include any resources (e.g. terrestrial, cultural) that would be potentially impacted by inundation.
17. In order to aid staff's evaluation of potential project effects on environmental resources, please include the following supporting document as an appendix with the FLA:
  - Sycamore Associates. 2013. Biological Assessment: Camp Far West Reservoir Project. FERC No. P-2997. Sacramento, CA

*Proposed Action and Alternatives*

18. In section 2.1.1.9 *Primary Project Roads and Trails*, and the similar Exhibit A, Section 3.9 *Primary Project Roads and Trails*, you state that there are no primary project roads or primary project trails included as part of the FERC-licensed project facilities; however, in section 3.3.1.3 *Unavoidable Adverse Effects* you state that one, short primary project road is paved and regularly maintained. Additionally, in Exhibit B, section 6.4.2 *Other Facility Maintenance*, you state that routine maintenance activities conducted in the vicinity of project facilities includes road and trail maintenance, and in Exhibit B, section 6.4.2.4 *Road Maintenance* you state that regular inspection of the project access roads occurs during the course of day-to-day project activities and maintenance on project and shared roads occurs as needed. Multiple paved and unpaved roads exist within the North Shore Recreation Area (NSRA) and SSRA, and the Recreation Facilities Plan describes them as access roads and circulation roads, that lead to, and are situated within, formal campgrounds and in what are described as "dispersed use areas" throughout the two recreation areas. You also state that the NSRA and

SSRA do not provide a network of recreational trails, but that the paved and unpaved roads provide a trail experience for visitors. Regardless of the formal or informal nature of the recreational opportunities the NSRA and SSRA provide, recreational visitors and SSWD regularly traverse the paved and unpaved roads to reach destinations throughout the two recreation areas. Additionally, as you state, because the recreation areas do not provide formal trails for hiking, biking, and horseback riding, the roads provide a trail experience for recreational visitors. Please provide the following information as required by section 4.51(f)(5):

- a) The name, location, and purpose(s) of the primary project road mentioned in section 3.3.1.3 *Unavoidable Adverse Effects*.
  - b) The total number of project roads that exist within the project boundary.
  - c) The name, location, and purpose(s) of the shared roads mentioned in Exhibit B, section 6.4.2.4 *Road Maintenance*, related to existing project operations and maintenance.
  - d) The existence or absence of agreements between SSWD and the owner(s) of the shared roads mentioned in Exhibit B, section 6.4.2.4 *Road Maintenance*.
19. In section 2.1.5.2.3 *Bay-Delta Bear River Voluntary Agreement*, the DLA describes the Bear Agreement (a non-license voluntary agreement that expires on December 31, 2035, or sooner if the Bear River agreement were terminated), which provides a transfer of up to 4,400 acre-feet to the California Department of Water Resources during dry and critical water years and calls for the licensee to increase flows in the lower Bear River by no more than 37 cubic feet per second (cfs) from July through September, as measured immediately downstream of the diversion dam. This flow is in addition to the 10 cfs minimum flow required in the project license. At the end of the flow release period, the agreement also calls for a down ramp at a rate not to exceed 25 cfs over a 24-hour period to avoid stranding anadromous fish.

So staff can understand the rational for the implementing the Bear Agreement, please describe in detail:

- a) its objective(s);
  - b) the years in which the agreement was implemented;
  - c) whether the objective(s) were met in years it was implemented; and
  - d) the reasons for not proposing to implement the agreement as a requirement of a new license.
20. In section 2.2.2 *Change to Existing FERC Project Boundary*, you state that the Camp Far West 60-kilovolt (kV) transmission line is part of the Camp Far West

Hydroelectric Project (P-2997). There appears to be a typographical error, because as the paragraph further explains the Camp Far West 60-kV transmission line is no longer part of the Camp Far West Hydroelectric Project, rather it is part of PG&E's Camp Far West Transmission Line Project (P-10821). In the FLA, please correct the typographical error for this section, and any additional sections where this error may occur.

#### *Aquatic Resources*

21. In section 3.3.3.3.2 *Effects of Proposed Project Operations and Maintenance*, the DLA provides an analysis of flows and water temperature at the 80 percent maximum weighted usable area (WUA) for Chinook salmon in the lower Bear River. The analyses suggests that the flows necessary to meet 80 percent maximum WUA results in excessive variability between improved and reduced habitat and increased water temperature detrimental for Chinook salmon. SSWD should consider an analysis of lower minimum flows that achieve less than maximum WUA for Chinook salmon in the lower Bear River that may produce water temperatures within a suitable range for Chinook salmon. Such an analysis should include evaluating WUA and water temperatures using small incremental increases in the existing minimum flows, rather than just the 80 percent WUA analysis presented in the DLA.

#### *Terrestrial Resources*

22. Section 3.3.4.1 *Affected Environment – Vegetation*, states that “the area within the proposed FERC project boundary encompasses 2,661.9 acres”. Please clarify if the acreages reported for the vegetation classifications are based on the proposed project boundary change using the proposed 305-foot NMWSE or the existing 300-foot NMWSE (comment 4 above).
23. Section 3.3.4.1.2 *Special-status Plants* generally describes the 505-acre study area for the Special-status Plants and Non-native Invasive Plants Study, but does not provide a map. Please include a map in the FLA displaying the study area in relation to project features for staff to better understand where the surveys were conducted.
24. In section 3.3.4.1.2 *Special-status Plants* the DLA states that the 505-acre study area selected for SSWD's *Special-Status Plants and Non-Native Invasive Plants Study* consisted of the project's two recreation areas, and areas near the project dam, dikes, spillway, and powerhouse. The DLA explains these areas were selected as this is where SSWD determined that project operations and maintenance activities or project-related recreation could affect special-status plants or spread non-native invasive plant species (NNIP). However, we note that

section 3.3.6.1.1 *Recreation Facilities and Opportunities in and Around the Project Reservoir* describes informal, user-created trails and dispersed camping occurring along the reservoir shoreline. Therefore, it's unclear why such informal recreation activities were not considered as potentially having an effect on special-status plant species or potentially spreading NNIP. Therefore, more detailed information is required in order for staff to better understand and evaluate potential recreation effects on terrestrial resources. In the FLA, please provide additional information on, and effects analysis of, project-related, informal recreation activities on these resources including more detailed information on where, to what extent (e.g. frequency), when, and what activities occur in the project area, including any areas that may occur outside of the existing project boundary.

25. Section 3.3.4.1 *Affected Environment – Vegetation* includes sufficient descriptions and maps of vegetation classifications occurring within the project boundary. Section 3.3.4.3.5 Riparian Habitat below Camp Far West Reservoir provides descriptions and maps of vegetation classifications occurring at two sites (about 0.5 mile each) downstream of the project dam that was selected as part of SSWD's Instream Flow Study, but no further information is provided on vegetation communities occurring on other reaches downstream of the project. Section 3.3.4.2.1 Wildlife Habitat includes a list of wildlife habitats and their respective acreages found within the project boundary.

However, the DLA lacks sufficient information needed for staff to evaluate potential project-related effects on vegetation and terrestrial wildlife in the project area. Operation of the project has the potential to affect riparian vegetation and wildlife habitat downstream of the project as well as habitat outside of the project boundary.

Therefore, in the FLA please provide the information listed below as required by section 4.51(f)(3).

- a) Descriptions and maps of the vegetation communities occurring downstream of the project from the Camp Far West dam to the point of confluence with the Bear River and Feather River.
- b) For all wildlife habitat classifications occurring within and adjacent to the project boundary including downstream of the project dam to the Bear River's confluence with the Feather River provide the following below.
  - Descriptions of the characteristics defining each wildlife habitat classification.
  - A wildlife habitat map displaying all habitat classifications overlaid with project features, facilities, and boundaries.

26. In section 3.3.4.2.4 *Special-status Raptor Study – Swainson’s Hawk*, information pertaining to golden eagles appears to be accidentally included under this subheading. Please modify appropriately in the FLA.
27. In section 3.3.4.3.3 *Wetlands Downstream of Camp Far West Dam*, Table 3.3.4-11 provides basic descriptions of wetlands identified by the National Wetland Inventory (NWI) database as occurring downstream of the project dam to the confluence of the Bear River and Feather River. In order for staff to evaluate potential project-related effects to wetlands occurring downstream of the project please provide a map displaying the locations of all the NWI wetlands listed in table 3.3.4-11.
28. In section 3.3.4.3.1 *Wetlands*, under the subsections Palustrine Unconsolidated Bottom and Lacustrine Unconsolidated Bottom you reference Figure 3.3.4-14, however this figure does not exist, therefore please amend the FLA appropriately.
29. Please define the term “dry season hydrology inputs” used in section 3.3.4.3 *Wetlands, Riparian, and Littoral Habitats of the Project Area*.

#### *Threatened and Endangered Species Resources*

30. Section 3.3.5.2.1 *Screening for Potentially-affected ESA-listed Species* states that on August 25, 2015, SSWD generated a list of ESA-listed species. The USFWS considers lists older than 90 days to be out of date. Because the list included in the DLA was generated over 3.5 years ago, please update the list to ensure the list includes all listed species potentially affected by the project. Please amend the FLA with any changes accordingly.
31. As described in the DLA, Valley Elderberry Longhorn Beetle (VELB) is dependent on its host plant, elderberry, which is commonly found in riparian corridors and adjacent uplands. As part of the relicensing studies SSWD conducted the *ESA-Listed Wildlife - Valley Elderberry Longhorn Beetle Study*. The 505-acre study area where surveys for elderberry were conducted consisted of the project’s two recreation areas, and areas around the project dam, dikes, spillway, and powerhouse. The DLA justifies this study area based on where SSWD’s project operations and maintenance activities or project-related recreation could affect elderberry and VELB. However, the DLA notes potential stressors to VELB/elderberry also include competition from non-native, invasive plant species and inundation from the proposed reservoir pool raise. In addition, section 3.3.6.1.1 *Recreation Facilities and Opportunities in and Around the Project Reservoir* describes informal, user-created trails and dispersed camping occurring along the reservoir shoreline. It’s unclear why these potential project-related

effects are not considered in areas outside of the study area, particularly along the reservoir shoreline. We note that SSWD found one elderberry shrub in the study area east of the dam face, on the shore of reservoir; however there was no indication that the shrub was being used by VELB.

In addition, it's unclear if the study area included the areas where informal recreation activities occur and the extent to which informal recreation occurs along the reservoir shoreline or on other project lands where suitable VELB habitat may be present.

Therefore, in the FLA please provide the additional information listed below.

- a) The rationale and any information for why VELB and elderberry surveys were limited to the study area described above and did not include other areas potentially inhabited by VELB, particularly near the reservoir shoreline.
  - b) An analysis of potential project-related effects on VELB and its host plant, elderberry potentially affected by the project, including areas potentially affected outside of the existing project boundary. The analysis should evaluate the potential effects of non-native or invasive plant species, the proposed reservoir pool raise, and any formal and informal recreation activities on this listed species.
32. Section 3.3.5.2.2 *ESA-listed Species Life Histories* states a total of 83 aquatic features were detected and delineated as they may provide suitable habitat for ESA-listed aquatic species [e.g. vernal pool fairy shrimp and California red-legged frog (CRLF)]. Figure 3.3.5-3 includes a map of these aquatic features, however only about 20 features are visible due to the scale of the map. To aid staff in understanding their relative location and potential connectedness within the project area, please modify the map in the FLA so all of these aquatic features are visible.

In addition, please include and appropriately label the “small seasonal impoundment (i.e. stock pond)” referenced in the *California Red-legged Frog* (CRLF) subsection where the U.S. Fish and Wildlife Service (FWS) reported an observation of a CRLF in May 2017.

33. The CRLF subsection references a “second site visit with FWS on February 15, 2018”, however no specific information is provided about the site visit except a brief summary of a discussion that took place. Please clarify in the FLA the objective and location(s) visited during the February 15, 2018 site visit and whether any ESA-listed species surveys were conducted and if any ESA-listed species were observed, including CRLF.

*Recreational Resources*

34. In Section 3.3.6.1.1 *Recreation Facilities and Opportunities in and Around the Project Reservoir*, subsection NSRA, you cite Figure 3.2.6-1 for the NSRA; however, Figure 3.3.6-1 is the correct figure for the NSRA. In the FLA, please correct the typographical error in this section, and any additional sections where this error may occur.
35. In section 3.3.6.1.1 *Recreation Facilities and Opportunities in and Around the Project Reservoir*, subsection *North Shore Recreation Area, Family Campground*, you state that the facility consists of a total of 80 campsites, including 70 standard sites and 10 recreational vehicle (RV) sites with hookups. You further state that a typical campsite provides opportunities for tent or RV camping, but does not have hookups for water, electric, or sewer. In the FLA, please clarify if RV camping is permitted at all 80 campsites within the NSRA Family Campground.
36. Figure 3.3.6-3 (page E3.3.6-9) appears to show an approximate 4-foot-high cinder-block structure to the right of the concrete picnic table. In the FLA, please identify what purpose that structure serves at that particular campsite, and clarify if a similar structure exists at the second group campsite not pictured in Figure 3.3.6-3, or at any other project campsite.
37. Table 3.3.6-1 (page E3.3.6-2) identifies the Horse Camp as a “Group Campground” located within the NSRA. The subsection Group Campground (page E3.3.6-9) does not describe the Horse Camp; however, the Horse Camp is briefly describe in the Dispersed Use Areas subsection (page E3.3.6-13), although it is not identified as one of the two NSRA Dispersed Use Areas. In the FLA, please clarify which recreational facility area within the NSRA best characterizes the Horse Camp, and describe the existing condition of the Horse Camp site features.
38. Table 3.3.6-1 identifies the picnic sites associated with the SSRA as an amenity located in the Day Use Area. Please clarify if the area described under the *Picnic Area* subsection (page E3.3.6-24) is actually the Day Use Area. Additionally, Table 3.3.6-1, describes the Day Use Area as having a swim beach; however, in the *Picnic Area* subsection, the presence of a swim beach is not mentioned. In the FLA, please clarify if a swim beach is located at this site.
39. On pages E3.3.6-15 and E3.3.6-28, respectively, you describe the NSRA and SSRA Recreational Water System, and state that below-ground components of the system are in fair condition, and above-ground water hydrants and fountains are largely in poor condition. On page E3.3.6-55 you state that the majority of the

underground water distribution system is largely original, and will likely need to be replaced during the new license term to ensure distribution of reliable potable water throughout the NSRA and SSRA. You also state that above-ground water hydrants and fountains will require near-term replacement to meet the demands of the new water treatment facility and upgraded water distribution system.

Additionally, you state that SSWD proposes, in the *Recreation Facilities Plan*, to rehabilitate the Recreational Water System Facilities as they near the end of their useful life; however, in the *Recreation Facilities Plan* you state that SSWD will maintain the system in a condition to meet permit requirements, and upgrade the facilities as needed, depending on equipment life and regulatory requirements.

The DLA does not provide descriptions of a timeframe to replace the components of the system that are in fair and poor condition, any materials to be used, demolition of the existing components, and construction of the new components.

In the FLA, please include the following information listed below.

- a) An approximate timeframe to replace the components of the Recreational Water System described as being in fair and poor condition, and a proposed schedule of construction.
  - b) The processes that would be used when installing the new components.
  - c) The materials that would be used for construction of the new components (e.g. continuously-extruded HDPE pipe).
40. In Section 3.3.6.2.1 *Effects of Construction-Related Activities* you describe potential effects to approximately 104 existing recreational facilities and features caused by SSWD's proposed Camp Far West Reservoir pool raise. On page E3.3.6-50, you describe that the majority of construction would occur outside of peak recreation season, or would be restricted to select areas, and during low-use times, if required during peak recreation season, and would be completed within one calendar year. Although you state that a variety of recreational facilities and features would be relocated, rerouted, or realigned to avoid or mitigate for inundation caused by the pool raise, you do not provide a schedule for relocating, rerouting, or realigning the recreational facilities and features. Additionally, you do not describe potential affects to existing project facilities, not directly affected by the inundation, which could be affected by relocating, rerouting, or realigning the approximately 104 facilities impacted by the inundation. Further, you do not provide drawings showing the proposed relocation, rerouting, or realignment of the approximately 104 affected recreational facilities and features. In the FLA, please provide the following information:
- a) A construction schedule for relocating, rerouting, or realigning the approximately 104 recreational facilities and features.



- b) Drawings for the proposed relocation, reroute, or realignment of the approximately 104 recreational facilities and features affected by the pool raise. These drawings should also indicate potential relocations, reroutes, or realignments of any recreational facilities, not directly affected by the inundation, which could be affected by relocating, rerouting, or realigning the approximately 104 facilities impacted by the inundation.
- c) A description of potential effects to any recreational facilities, not directly affected by the inundation, which could be affected by relocating, rerouting, or realigning the approximately 104 facilities impacted by the inundation.

*Land Management and Aesthetic Resources*

- 41. In Exhibit G, Sheet 3, you indicate three areas of land would be incorporated into the project boundary for the purpose of recreational use. However, you fail to mention this proposed addition of land in the Recreation Resources and Land Use sections. In the FLA, please provide the following information in the appropriate Exhibit E section:
  - a) The current (if available) and proposed recreational uses of the three areas of land proposed for incorporation into the project boundary.
  - b) Environmental effects of incorporating the three areas of land into the project boundary as it relates to recreational use (current and proposed) and land use.
- 42. In Section 3.3.7.2 *Environmental Effects* (page E3.3.7-17) you state SSWD proposes a Pool Raise of five feet, modifications of existing recreation facilities, and modification of the existing project boundary; however, you fail to mention the addition of a new primary project road for accessing the Camp Far West Powerhouse, and the environmental effects associated with the new primary project road. In the FLA, please include your proposal for the addition of the new primary project road, and describe the environmental effects of adding this road, including environmental effects caused by future operations and maintenance activities related to use of the new primary project road.
- 43. In Section 3.3.7.1.2 *Land Use*, you state that no public land occurs within the existing FERC project boundary; however, you further state that an area designated as the California National Historic Trail, that is administered by the National Park Service, runs through the FERC project boundary, and crosses Camp Far West Reservoir in two locations, in the northern portion of the reservoir. You also state that the section of trail within the project boundary is not a “developed” trail. In the FLA, please clarify your statement that no public land occurs within the existing FERC project boundary, and your statement that the trail is not a “developed” trail.

44. In Section 3.3.7.1.4 *Project-Related Land Use Permits and Easements*, you state that SSWD does not require or hold any land use permits or easements for the project, other than from the few private landowners within the project boundary. In Section 3.3.6.2.1, *Camp Far West Reservoir Dam Pool Raise* you do not list or describe permits or easements for the five private parcels where lands are proposed to be added to the project boundary. In the FLA, please list and describe permits or easement agreements that SSWD has procured for the five private parcels that would be impacted by changes to the existing project boundary for the purposes of adding the Camp Far West Dam access road, and for the changes to the NMWSE for the pool raise.
45. In Exhibit A, Section 5.0 *Proposed Changes to Existing Project* you list three changes, including SSWD's proposals to: 1) incorporate an existing, private access road into the project as a primary project road to access the Camp Far West Powerhouse; and 2) modify the existing project boundary (which, in part, would allow SSWD to incorporate the existing, private access road into the project). In Exhibit E, Section 2.2.2 *Change to Existing FERC Project Boundary*, you mention the proposal to modify the project boundary to add areas that encompass rights-of-way for road access to the Camp Far West Powerhouse, in order to maintain the dam outlet and powerhouse. Additionally, in Exhibit E, *Land Use Section 3.3.7.1.5 SSWD's Vehicular Access to Project Facilities for Operation and Maintenance* you mention a short, private access road that is currently used to access the powerhouse and dam; however, in *Land Use Section 3.3.7.2 Environmental Effects*, you fail to describe potential environmental effects related to incorporating the existing private access road into the project as a primary project road. In the FLA, please describe potential environmental effects of incorporating the existing private access road into the project as a primary project road.

**BEFORE THE  
UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION**

**CERTIFICATE OF SERVICE**

I hereby certify that U.S Fish and Wildlife Service's Comments on the Draft License Application for Camp Far West Hydroelectric Project, Federal Energy Regulatory Commission Project #P-2997 has this day been electronically filed with the Federal Energy Regulatory Commission and served, via deposit in U.S. mail or by electronic mail, upon each other person designated on the Service List for Project P-2997 compiled by the Commission Secretary.

Dated at Sacramento, California, this 10<sup>th</sup> of April, 2019.

A handwritten signature in blue ink, reading "Aondrea Leigh Bartoo". The signature is fluid and cursive, with a long horizontal stroke at the end.

Aondrea Leigh Bartoo  
San Francisco Bay-Delta Fish and Wildlife Office  
650 Capitol Mall, Suite 8-300  
Sacramento, CA 95814  
(916) 930-5603



## United States Department of the Interior

FISH AND WILDLIFE SERVICE  
Bay-Delta Fish and Wildlife Office  
650 Capitol Mall, Suite 8-300  
Sacramento, California 95814



In Reply Refer To:  
FERC 2997

Ms. Kimberly Bose, Secretary  
Federal Energy Regulatory Commission  
888 First Street NE  
Washington, DC 20426

APR 10 2019

Mr. Brad Arnold  
South Sutter Water District  
2464 Pacific Ave  
Trowbridge, CA 95659

Subject: U.S. Fish and Wildlife Service Comments on Draft License Application, Camp Far West Hydroelectric Project, FERC Project #P-2997; Yuba, Nevada, and Placer Counties, California

Dear Ms. Bose and Mr. Arnold:

The U.S. Fish and Wildlife Service (USFWS) files the following comments with the Federal Energy Regulatory Commission (Commission or FERC) on South Sutter Water District's (Licensee) Draft License Application (DLA) filed with the Commission on January 2, 2019, for the Camp Far West Hydroelectric Project (Commission P-2997) (Project). The USFWS submits the following comments and recommendations in accordance with the Endangered Species Act (ESA) of 1973, as amended (16 U.S.C. § 1531, *et seq.*), the Federal Power Act (FPA) (16 U.S.C. § 791a, *et seq.*), the Fish and Wildlife Coordination Act, as amended (16 U.S.C. § 661, *et seq.*), the Bald and Golden Eagle Protection Act of 1940, as amended (16 U.S.C. § 668-668d), and the Central Valley Project Improvement Act (CVPIA) ( Pub. L. No. 102-575, 106 Stat. 4600, 4706, Title 34 (1992).

The USFWS appreciates the opportunity to comment on the DLA and looks forward to continuing to work with the Licensee to address issues and concerns raised in our comments. Flows in the lower Bear River are prescribed by the current license. The license requires a minimum of 25 cubic feet per second (cfs) for the lower Bear River from April 1 through June 30 and 10 cfs (or inflow to Camp Far West reservoir) from July 1 through March 31 in every year. Additionally, the Licensee, California Department of Water Resources, and the Camp Far West Irrigation District entered into an agreement that extends until 2035 to provide up to 37 cfs of water from July through September (in addition to that provided in the current license) to support the Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary. The releases to support the Water Quality Control Plan are not made every year, and the DLA does not indicate how often these releases have been made since the agreement has been in place.

Due to staffing time constraints resulting from the 35 day federal government shutdown in December 2018 and January 2019, the following should not be construed as the USFWS's final position on proposed license conditions, but rather information to assist in collaborative discussions. The USFWS has been and will continue to be an active relicensing participant for the Project.

### **Issues and Concerns in the DLA**

The DLA should more thoroughly address: (1) Central Valley Project Improvement Act (CVPIA) doubling goals for Chinook salmon (*Oncorhynchus tshawytscha*); (2) long-term monitoring for assessing Project effects on juvenile salmonid production; (3) aquatic invasive species; (4) California red-legged frog (*Rana draytonii*) conservation and consultation under the ESA; (5) rodenticide and other pesticide use at Project facilities; or (6) protection of the existing heron rookery.

### **CVPIA/AFRP Doubling Goals**

To address the decline of Chinook salmon and steelhead trout populations in California, the CVPIA called for doubling of Chinook salmon runs; the USFWS Anadromous Fish Restoration Program (AFRP) identified CVPIA doubling goals for Chinook salmon in the 2001 *Final Restoration Plan for the Anadromous Fish Restoration Program* (USFWS 2001), which is filed with the Commission as a comprehensive plan. The DLA discounts the AFRP doubling goal for the Bear River of 450 average annual Chinook salmon spawners by stating that the data on which the goal is based is limited. The USFWS recognizes that there is limited data on Chinook salmon in the Bear River; however, the doubling goal is based on the best science available and the doubling goals were developed by an interagency team of recognized experts on salmonids. In the USFWS's September 7, 2016, comment letter (filed with the Commission) on the Pre-Application Document and Proposed Studies for the Project, we proposed a study plan for juvenile Chinook salmon survival. This study was anticipated to provide information on survival of juvenile salmon and Bear River natural production levels. However, the Licensee opted to not conduct this study. As there is no supplemental data available for the Bear River, the USFWS supports the AFRP doubling goal for this system and requests the Commission to implement reasonable Protection, Mitigation, and Enhancement (PME) measures for Chinook salmon within the Final License Application. These measures currently are in negotiation within the Traditional Licensing Process (TLP) for relicensing of the Project, and are anticipated to include actions such as fall pulse flows to support spawning migration, spring pulse flows to support juvenile Chinook outmigration and steelhead attraction, increased minimum instream flows in the winter and spring of wetter water year types, and ramping rates when the Project is either coming off of a spill event or reducing releases to the lower Bear River (as measured immediately downstream of the non-Project diversion dam).

The AFRP is working with Reclamation District 817 and MBK Engineers to develop and implement a levee setback for a portion of the lower Bear River. This Project was developed in response to levee erosion issues in the area and multi-stakeholder pressure to provide an ecosystem benefit solution. The levee setback is anticipated to provide additional flood capacity and riparian habitat, spawning habitat, or juvenile salmonid rearing habitat for the lower Bear River. Agency PME measures for pulse flows and ramping rates for the Project would be anticipated to complement these restoration actions and contribute to the AFRP doubling goal for the Bear River. Additional information on the levee setback project is available upon request.

Additionally, the USFWS completed a habitat assessment for the Beale Air Force Base in 2016 for Dry Creek (tributary to the lower Bear River) for anadromous salmonids. This study identified a number of potential restoration actions that could improve suitability for spawning and rearing of salmonids, several of which are anticipated to be implemented in fiscal year 2020: removing Beale dam (passage impediment), low-flow crossing at the downstream end of Dry Creek (passage impediment), installing a rocky ramp at the upstream end of Beale Lake, and injection of spawning gravel. Sufficient PME measures for minimum flows and pulse flows from the Project would allow fish passage from Bear River into Dry Creek and could potentially support the Dry Creek restoration project and contribute to the AFRP doubling goal for the Bear River. Additional information on the Dry Creek restoration project is available upon request.

### **Long-Term Monitoring**

The DLA contains no proposal to monitor the status of salmonids within the lower Bear River for the new license period. Without periodic monitoring of these populations, the USFWS is unable to ascertain the long-term effects the Project and resulting PME conditions or how these future license conditions may need to be adjusted to better manage salmonid production. The USFWS requests that the Licensee, agencies, and TLP relicensing team collaboratively develop a reasonable monitoring plan for salmonids within the lower Bear River that allows a comparison of juvenile production and survival between years. The monitoring plan should be finalized within one year of license issuance.

### **Aquatic Invasive Species**

Six aquatic invasive species that are known to occur in the Project area were not addressed adequately in the DLA: Asian clam (*Corbicula fluminea*), Brazilian waterweed (*Egeria densa*), floating water primrose (*Ludwigia peploides* ssp. *montevidensis*), parrot's feather milfoil (*Myriophyllum aquaticum*), Eurasian watermilfoil (*Myriophyllum spicatum*), and American bullfrog (*Lithobates catesbeianus*). The Commission and Licensee should develop an Aquatic Invasive Species Management Plan that addresses these and the additional aquatic invasive species that have the potential to occur within the Project area due to their proximal known locations. Management actions related to bullfrogs should be coordinated closely with measures to protect the California red-legged frog. This plan should be developed within one year of license issuance.

### **California Red-Legged Frog Consultation**

The USFWS requested ESA consultation on effects to the California red-legged frog (*Rana draytonii*)(frog) and the vernal pool fairy shrimp (*Branchinecta lynchi*)(shrimp), pursuant to 50 CFR 402.14(a) in a letter filed with the Commission on February 1, 2019. This letter included comments regarding Project effects on the frog as well as the shrimp. The Licensee initiated consultation for the shrimp on February 28, 2019. No ESA consultation has occurred for the frog.

The California red-legged frog was federally listed as threatened on May 23, 1996 (61 **FR** 25813). Critical habitat for the California red-legged frog was established on March 17, 2010 (75 **FR** 12816).

At issue are the current management practices for the sewage treatment ponds associated with the recreational areas. Bullfrogs are established at the North Area sewage pond. Bullfrogs are well-

known invasive, non-native predators that eat and compete with native frogs, such as the California red-legged frog. At the time of ESA-listing of the California red-legged frog, bullfrogs were “considered to be a significant and widespread threat” (USFWS 1996). Introduced bullfrogs have been, and continue to be, a significant factor in the decline of the California red-legged frog (USFWS 1996, USFWS 2002). In spite of the population pressures that bullfrogs place on them, California red-legged frogs are typically able to persist: (1) In sub-optimal habitat where conditions are unfavorable to bullfrogs; (2) in marginal habitat adjacent to bullfrog-occupied areas; (3) where habitat is managed to reduce establishment of bullfrogs; or (4) where bullfrog depredation has been implemented. In areas where bullfrogs and California red-legged frogs co-occur, surveys typically detect high numbers of bullfrogs and low or undetectable numbers of California red-legged frogs. In these same areas, bullfrog removal and/or management have led to resurgence in the California red-legged frog population.

In our September 7, 2016, Pre-Application Document comment letter, we submitted a proposal for a California red-legged frog survey at locations within the Project area with suitable habitat. While the Commission and the Licensee chose not to conduct the survey, this does not mean that the species is not within the FERC Project boundary or in the area affected by the Project. As indicated in the USFWS September 7, 2016 letter, USFWS staff with more than 20 years of experience surveying and identifying the species identified a single, adult California red-legged frog at a small, ephemeral agricultural impoundment immediately adjacent to the North Area sewage pond, in addition to more than 100 bullfrogs at the sewage pond. This occurrence was submitted to California Natural Diversity Database (CNDDDB) by the USFWS. Subsequent site visits to the vicinity of the North Area sewage treatment pond by USFWS staff revealed that the North Area sewage pond is actively managed to restrict growth of vegetation in and around the pond. Although the method for vegetation control is not included in the DLA, use of herbicides or mechanical methods would both be anticipated to have impacts on any California red-legged frogs in the area. On May 20, 2017, four great blue herons were observed sitting at the edge of the sewage pond, presumably foraging on the frogs present following a recent mowing event. Any California red-legged frogs present would have been susceptible to these predators.

The South Area sewage treatment pond appears to have had different management activities than the North Area sewage treatment pond. The management practice of restricting vegetation growth at the ponds could further impact the California red-legged frog by removing available cover from predators. If managed appropriately, both ponds have the potential to support the California red-legged frog while fulfilling their sewage-treatment function.

Due to these potential ongoing impacts to the California red-legged frog, the USFWS requests that the Commission or the Licensee complete ESA consultation for the species prior to license issuance.

### **Rodenticide Use at Project Facilities**

Within the DLA, the Licensee described the current and future planned use of rodenticides (D-Con) at the Camp Far West powerhouse. Prior to the use of any rodenticides within the Project area, the USFWS recommends the development of an Integrated Pest Management Plan that includes sanitation and exclusion methods as primary prevention. The Licensee should minimize the use of products containing second generation anticoagulants, in favor of other methods with fewer impacts to non-target animals that may feed on the target organisms.

### **Protection of the Existing Heron Rookery**

A great blue heron (*Ardea herodias*) rookery exists within the Project area. The USFWS recommends the protection of this rookery during the breeding season by the implementation of a Limited Operating Period from March 15 to July 31 within a buffer of 0.25 mile of the rookery. Project activities, including recreation, should be limited to those which will have a low-likelihood of impacting the nesting herons. The USFWS would like to collaborate with the relicensing team to determine what activities would be appropriate.

### **Comments on Proposed License Conditions**

Licensee Proposed Condition AR1 maintains the current license instream flow conditions for the lower Bear River. The USFWS, CDFW, Non-Governmental Organization groups, and the Licensee are actively negotiating instream flow conditions based on new (in process of negotiation) water year type for the Project, pursuant to the TLP. Agency proposals generally maintain the current license conditions for the drier water year types and provide higher flows in the winter and spring as well as pulse flows in the fall and spring for the wetter water year types to better support salmonid production in the lower Bear River and more closely mimic natural hydrology. The agency proposals also have included ramping rates for some months of the year when the Project reduces flows to the lower Bear River to minimize impacts to salmonid redds and fry that may be present downstream. The USFWS encourages the Commission to adopt into the Final License Application (FLA) the final instream flow conditions that result from these negotiations. Should the TLP negotiations result in a lack of agreement among parties, the USFWS will file an instream flow proposal to the Commission as part of their FLA comment package.

Licensee Proposed Condition TR1 provides that within one year of license issuance and in consultation with CDFW and USFWS, the Licensee will develop a Bald Eagle and Osprey Management Plan that will provide for the protection of bald eagles and osprey during nesting at Camp Far West Reservoir. The USFWS supports the inclusion of this measure in the FLA and appreciates the Licensee's efforts to develop this plan ahead of schedule. The USFWS looks forward to development of the plan.

Licensee Proposed Condition TR2 provides that within one year of license issuance and in consultation with CDFW, the Licensee will install and thereafter maintain devices to exclude bats from Project facilities. The USFWS is concerned that improper use of excluding devices can have large impacts to bats, especially when a maternity colony is present. The USFWS would like to assist in the development of this plan.

### **Other Comments**

#### **White and Green Sturgeon eDNA Sampling**

The Licensee conducted an eDNA study that targeted four species: Chinook salmon (*Oncorhynchus tshawytscha*), steelhead (*Oncorhynchus mykiss*), green sturgeon (*Acipenser medirostris*), and white sturgeon (*Acipenser transmontanus*). Sampling occurred in February and March of 2017, during periods of high flow and high suspended sediments (flows ranged from 1,500 to 5,600 cfs). The Licensee reported that because of the flow and suspended sediment levels, the volume of water that could be filtered



for each sample was reduced by half over the required amount as identified in the January 2017 Stream Fish Study plan. The result of sampling during periods of high turbidity could lead to a false negative interpretation of eDNA data (Goldberg *et. al* 2016). The USFWS questions the validity of the resulting negative detection of eDNA for white and green sturgeon, due to this major variance to the study protocol and because samples were taken during adverse hydrology conditions and requests that the Licensee conduct an additional survey for green and white sturgeon. The Licensee should ensure their sampling events occur as closely as practicable with historic sightings of these two species within the lower Bear River (late March through June), during appropriate hydrological conditions for the sampling, and in accordance with the approved study plan.

### **Conclusion**

The USFWS appreciates the opportunity to comment on the DLA. We have focused on major issues and concerns, and not editorial review, because of staffing and time constraints resulting from the federal government shutdown from December 23, 2018 through January 27, 2019. The USFWS looks forward to conducting and concluding ESA consultation on the California red-legged frog and in developing conservation measures consistent with sections 2(b and c), 3 (conserve), and 7(a)(1) of the ESA. If you have any questions regarding this response, please contact A. Leigh Bartoo of my staff at (916) 930-5621.

Sincerely,



Kaylee Allen  
Field Supervisor

cc:

FERC #2997 Service List, Camp Far West Hydroelectric Project  
Sarah Lose, CDFW, Rancho Cordova  
Beth Lawson, CDFW, Rancho Cordova  
Thomas Holley, NMFS, Sacramento  
Meiling Roddam, SWRCB, Sacramento

### References

- Goldberg, C.S., C.R. Turner, K. Deiner, K.E. Klymus, P.F. Thomsen, M.A. Murphy, and M.B. Laramie. 2016. Critical considerations for the application of environmental DNA methods to detect aquatic species. *Methods in Ecology and Evolution* 7(11):1299-1307.
- United States Fish and Wildlife Service. 1996. Endangered and Threatened Wildlife and Plants; Determination of Threatened Status for the California Red-Legged Frog. *Federal Register* 61(101): 25813-25833
- , 2001. Final Restoration Plan for the Anadromous Fish Restoration Program: a plan to increase natural production of anadromous fish in the Central Valley of California.
- , 2002. Recovery Plan for the California Red-Legged Frog (*Rana draytonii*). Region 1, Portland, Oregon.

## Vertucci, Charles

---

**From:** Lynch, Jim  
**Sent:** Friday, April 12, 2019 11:21 AM  
**To:** Vertucci, Charles  
**Subject:** FW: State Water Board Review of DLA for Camp Far West

FYI

**James Lynch**

**D** 916.679.8740 **M** 916.802.6247

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**From:** Padgett, Karmina@Waterboards [mailto:Karmina.Padgett@Waterboards.ca.gov]  
**Sent:** Friday, April 12, 2019 11:19 AM  
**To:** Brad Arnold (sswd@hughes.net) <sswd@hughes.net>  
**Cc:** Monheit, Susan@Waterboards <Susan.Monheit@waterboards.ca.gov>; Lynch, Jim <Jim.Lynch@hdrinc.com>; Colombano, Meiling <Meiling.Colombano@Waterboards.ca.gov>; Hoobler, Sean@Wildlife <Sean.Hoobler@wildlife.ca.gov>; Lose, Sarah@Wildlife <Sarah.Lose@wildlife.ca.gov>; 'aondrea\_bartoo@fws.gov' <aondrea\_bartoo@fws.gov>; Lawson, Beth@Wildlife <Beth.Lawson@wildlife.ca.gov>; thomas.holley@noaa.gov  
**Subject:** State Water Board Review of DLA for Camp Far West

Mr. Arnold,

On January 2, 2019 the State Water Board received a copy of the Draft License Application for New License (application) filed by South Sutter Water District for the Camp Far West Hydroelectric Project (Project), Federal Energy Regulatory Commission (FERC) Project No. 2997. State Water Board staff have reviewed the draft license application and have no comments.

Thank you,  
Karmina Padgett  
Water Resource Control Engineer  
Division of Water Rights  
State Water Resources Control Board  
Phone: (916) 323-4642





State of California – Natural Resources Agency  
DEPARTMENT OF FISH AND WILDLIFE  
North Central Region  
1701 Nimbus Road, Suite A  
Rancho Cordova, CA 95670-4599  
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GAVIN NEWSOM, Governor  
CHARLTON H. BONHAM, Director



April 15, 2019

Brad Arnold, General Manager  
South Sutter Water District  
2464 Pacific Ave.  
Trowbridge, CA. 95659

**SUBJECT: COMMENTS FROM THE CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE ON SOUTH SUTTER WATER DISTRICT'S DRAFT LICENSE APPLICATION FOR THE RELICENSING OF THE CAMP FAR WEST HYDROELECTRIC PROJECT, FERC PROJECT NO. 2997**

Dear Mr. Arnold:

The California Department of Fish and Wildlife (Department) has received and reviewed the Draft License Application (DLA) filed by the South Sutter Water District (SSWD) (Licensee) for the relicensing of the Camp Far West Hydroelectric Project (Project, FERC No. 2997). The DLA was filed by the Licensee with the Federal Energy Regulatory Commission (FERC) on January 2, 2019. Pursuant to paragraph (e) of section 5.16 of Title 18 of the Code of Federal Regulations, the Department provides the following comments on the DLA.

**AUTHORITIES**

The Department is the appropriate State fish and wildlife agency for resource consultation and Federal Power Act Section 10(j) (16 U.S.C. section 803 (j)) purposes. The fish and wildlife resources of the State of California are held in trust for the people of the State by and through the Department (Fish & G. Code § 711.7). The Department has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and the habitat necessary for biologically sustainable populations of those species (Fish & G. Code § 1802). The mission of the Department is to manage California's diverse fish, wildlife, and plant resources, and the habitats on which they depend, for their ecological values and for their use and enjoyment by the public. It is the goal of the Department to preserve, protect, and as needed, to restore habitat necessary to support native fish, wildlife, and plant species within the FERC-designated boundaries of the Project, as well as the areas adjacent to the Project in which resources are affected by ongoing Project operations and maintenance activities and recreational use.

**General Statement:**

The Relicensing Participants (RP) (Licensee, Department, National Oceanic Atmospheric Administration, United States Fish and Wildlife Service, Non-Governmental Organizations and members of the public) have been meeting for several months to

*Conserving California's Wildlife Since 1870*

discuss operations of the Project and determine if there are areas where collaborative agreement can be reached on a comprehensive package of protection, mitigation, and enhancement measures that can be included in the license. The Department plans to continue to work with the Licensee and other RP's to determine where plans can be agreed upon before the filing of the Final License Application (FLA).

## **VOLUME I**

### **Initial Statement**

#### **Section 2.0 Applicant and Requested Term of New License**

Licensee is requesting a new license term of 40-50 years in this section and throughout the document. Pursuant to 16 U.S.C. § 808(e) any license issued by FERC shall be for a term of not less than 30 years and no more than 50 years from the date the license is issued. FERC issued a "Policy Statement on Establishing License Terms for Hydroelectric Projects" on October 19, 2017. In that Policy, FERC sets 40 years as the "default" term with three circumstances where a shorter or longer license may be issued. In this case, none of these circumstances are applicable or anticipated, therefore there is no justification for a term longer than 40 years.

#### **Section 7.0 Pertinent Statutory and Regulatory Requirements of the State of California**

The Department recommends the addition of several applicable sections of Fish and Game Code (FGC). The Department recommends the addition of;

*FGC §5937 which states the following: "Sufficient Water for Fish Existing Below Dams- The owner of any dam shall allow sufficient water at all times to pass through a fishway, or in the absence of a fishway, allow sufficient water to pass over, around or through the dam, to keep in good condition any fish that may be planted or exist below the dam. During the minimum flow of water in any river or stream, permission may be granted by the department to the owner of any dam to allow sufficient water to pass through a culvert, waste gate, or over or around the dam, to keep in good condition any fish that may be planted or exist below the dam, when, in the judgment of the department, it is impracticable or detrimental to the owner to pass the water through the fishway."*

*FGC §2302 which states: "Dreissenid Mussel; Responsibilities of Reservoir Managers or Owners- (a) Any person, or federal, state, or local agency, district, or authority that owns or manages a reservoir, as defined in Section 6004.5 of the Water Code, where recreational, boating, or fishing activities are permitted, except a privately owned reservoir that is not open to the public, shall do both of the following:*

*(1) Assess the vulnerability of the reservoir for the introduction of nonnative dreissenid mussel species.*

*(2) Develop and implement a program designed to prevent the introduction of nonnative dreissenid mussel species.*

*(b) The program shall include, at a minimum, all of the following:*



- (1) *Public education.*
- (2) *Monitoring.*
- (3) *Management of those recreational, boating, or fishing activities that are permitted.*
- (c) *Any person, or federal, state, or local agency, district, or authority, that owns or manages a reservoir, as defined in [Section 6004.5 of the Water Code](#), where recreational, boating, or fishing activities of any kind are not permitted, except a privately owned reservoir that is not open to the public, shall, based on its available resources and staffing, include visual monitoring for the presence of mussels as part of its routine field activities.*
- (d) *Any entity that owns or manages a reservoir, as defined in [Section 6004.5 of the Water Code](#), except a privately owned reservoir that is not open to the public for recreational, boating, or fishing activities, may refuse the planting of fish in that reservoir by the department unless the department can demonstrate that the fish are not known to be infected with nonnative dreissenid mussels.*
- (e) *Except as specifically set forth in this section, this section applies both to reservoirs that are owned or managed by governmental entities and reservoirs that are owned or managed by private persons or entities.*
- (f) *Violation of this section is not subject to the sanctions set forth in [Section 12000](#). In lieu of any other penalty provided by law, a person who violates this section shall, instead, be subject to a civil penalty, in an amount not to exceed one thousand dollars (\$1,000) per violation, that is imposed administratively by the department. To the extent that sufficient funds and personnel are available to do so, the department may adopt regulations establishing procedures to implement this subdivision and enforce this section.*
- (g) *This section shall not apply to a reservoir in which nonnative dreissenid mussels have been detected."*

FGC §5943 which states: "Public Access of Dam Waters-(a) The owner of the dam shall accord to the public for the purpose of fishing, the right of access to the waters impounded by the dam during the open season for the taking of fish in the stream or river, subject to the regulations of the commission..."

## **Exhibit B Project Operations**

### **Section 4.1 Relicensing Hydrology Datasets-Proposed Project (Future Conditions)**

Licensee analyzed the proposed Project under future conditions. The Department recommends inclusion of the Nevada Irrigation District (NID) water rights application #5634X01 which seeks to appropriate up to 221,400-acre feet annually (afa) from the Bear River. NID proposes to construct a new onstream storage reservoir capable of impounding up to 110,000 afa of water as well as directly divert up to 400 cubic feet per second or 111,400 afa. The proposed onstream storage reservoir will require the construction of a new dam approximately 275 feet in height with an anticipated water depth at the dam of 255 feet. This amount of additional water storage and changes to the Bear River hydrologic conditions will likely result in impacts to water availability at Camp Far West Reservoir, the Department would like to work with the Licensee to

negotiate specific terms to include in the FERC license that address changes to water year type classifications if/when a new onstream storage reservoir is constructed upstream of the Project.

### **Section 5.2.5 Water Transfers**

The Licensee conducted an additional water transfer in July of 2018 that should be included in this section. The water transfer was greater than 10,602-acre feet. The Department recommends the addition to this section as well as other applicable sections.

### **Section 6.1 Operations in Typical Dry, Normal and Wet Years**

The Licensee has proposed a revision to the water year type that is reflective of its placement in the watershed and dependency on inflow from upstream purveyors. The Department is considering this proposal as well as its implications and continuing to work through its revision until consensus is reached. Additional information on water year type discussions, and relationship with instream flow and other fisheries flow measures is discussed below in our response to Volume II Section 2.2.4.1.

### **Section 6.4.2.3 Vertebrate Pest Management**

Licensee described the following methods of vertebrate pest control:

*"SSWD implements rodent control as needed in facility interiors using non-restricted rodenticides (e.g., D-Con®), which are applied in accordance with the label instructions. Rodent control occurs within the Camp Far West Powerhouse".*

CDFW recommends this section be amended to state the following:

*"SSWD implements rodent control as needed in facility interiors using an Integrated Pest Management approach that includes sanitation and exclusion. General Use rodenticides, applied in accordance with the label instructions, may be used when necessary. Rodent control occurs within the Camp Far West Powerhouse".*

The California Department of Pesticide Regulation (CDPR) developed mitigation measures in 2014 for second generation anticoagulants rodenticide (SGAR's) to protect non-target animals such as raptors, owls, foxes, mountain lions, etc. SGAR's, such as brodifacoum and bromadiolone, can be found in many commonly used products such as D-Con® and their use should be restricted, and other alternatives considered.

### **Exhibit D**

### **Section 5.1.8 Transmission Line Access Costs**

This section as well as the associated Table 5.1-1 describes the Licensee's estimated annual average costs. In addition, the Licensee has requested that this Project be



omitted from the FERC Project Boundary in a list of corrections/changes that have been proposed in Exhibit A. The Department recommends that the costs of the transmission line should not be included in this estimation as it is a separate FERC project under FERC project number #10821.

## **Volume II**

### **Recreation Facilities Plan**

The Licensee has a proposed a condition regarding recreation (RR1) which states the following: *"Implement the Recreation Facilities Plan included in SSWD's Application for New License. The plan describes how SSWD will manage recreation at Camp Far West Reservoir, including the maintenance of Project recreation facilities."*

The Recreation Facilities Plan is included as an appendix in Volume II of the DLA. At a March 1<sup>st</sup>, 2019, meeting between the Department, SSWD, and other RP's, the Department made several recommendations that are under consideration by the Licensee. These recommendations include the following;

- improving the boat ramp at the South Shore Recreation Area (SSRA) to allow for better access to visitors
- a 1:1 campground replacement and less condensed sites
- replacement of the swim beach
- opening the SSRA for a longer season
- permanent fish cleaning stations
- wildlife proof trash cans

The Department plans to work with Licensee and other Relicensing Participants in the next several months to attempt to reach a collaborative agreement on this measure for inclusion in the new license.

#### **1.4.2.4 Collaborative Development of PM&E Measures**

The Licensee did not propose any Protection, Mitigation & Enhancement (PM&E) measures in their Draft Licensee Application stating that "SSWD and licensing participants did not reach agreement on any PM&E measures that SSWD could propose in its Draft Application for New License". However, the Licensee further stated that they are "fully committed to reaching collaborative agreement on as many measures as possible with as many agencies as possible and include those collaboratively-agreed to measures in its final Application for New License that will be filed with FERC in June 2018".

The Department looks forward to continuing to work with the Licensee and other RPs to fully develop and agree on the following plans/measures for inclusion into the Final License Application prior to submittal to FERC:

- Bald Eagle and Osprey Management
- Aquatic Invasive Species Management
- Recreation Plan
- Instream Flow
- Pulse Flows
- Ramping Rate Plan

Additionally, the Department recommends the Licensee develop a framework for the monitoring of aquatic and water resources. At a minimum, an aquatic and water resources monitoring plan should address the following areas: stream fish, benthic macroinvertebrates, water temperature, and water quality (potentially including mercury bioaccumulation) so that the Licensee and the RP can obtain a baseline and determine if the revised flow and ramping schedule is impacting these suggested parameters.

#### **Section 2.2.4.1 SSWD's Proposed Conditions in the FERC license**

##### **Measure AR1 (Instream Flow)**

Licensee and Relicensing Participants have not had the opportunity to complete discussions including operations, water temperature, and instream flow modeling to determine appropriate protection, mitigation and enhancement measures related to instream flows and water year types. The Licensee's DLA application does not contain any recommendations to include changes to any measures to improve ramping, instream flows, or pulse flows in the Bear River below Camp Far West Reservoir. The Department has expressed an interest during discussions with the Licensee in developing conditions that would provide for higher minimum instream flows to be released during winter and spring months, fall and spring pulse flows and other measures to improve conditions for native aquatic species in the lower Bear River. The Department plans to work with the Licensee and other Relicensing Participants in the next several months to attempt to reach a comprehensive and collaborative agreement on instream flow measures and other protection, mitigation and enhancement measures for the new license.

In addition to instream flow measures, the accompanying water year types for this Project are still in discussion. For most FERC projects in the Sierra, water year types recommended by the Department are based on rain and snowmelt runoff or calculated runoff values throughout the water year. In higher water year types, the Department's instream flow, pulse flow, and geomorphic flow recommendations are higher in attempt to mimic more natural watershed conditions. The California State Water Resources Control Board's (SWRCB) 2017 Scientific Basis Report states that:

*"Fish species have continued to experience precipitous declines since the last major update and implementation of the Bay-Delta Plan in 1995 that was intended to halt and reverse the aquatic species declines occurring at that time. In the early 2000s, scientists noted a steep and lasting decline in population abundance of several native estuarine fish species that has continued and worsened during the recent drought. Simultaneously, natural production of all*

*runs of Central Valley salmon and steelhead remains near all-time low levels. These declines are attributed in part to flow modifications due to dams and water diversions and related operations. At certain times in some streams, flows are completely eliminated or significantly reduced by direct water diversions and impoundment in reservoirs. At other times, flows are increased from reservoirs, but then exported from the watershed before contributing to Delta outflows. At the same time, the dams that impound that water block access to upstream cold water habitat and may cause significant warming of water downstream. Further, water project operations in the southern Delta alter circulation patterns, interfering with fish migration, changing water quality, and entraining fish and other aquatic organisms. A significant and compelling amount of scientific information indicates that restoration of more natural flow functions throughout the watershed from natal streams to the nearshore ocean is needed now to reverse the species declines in an integrated fashion with physical habitat improvements and other actions. While it is not possible to replicate natural flows or the natural landscapes in which those flows occurred and interacted in the Bay-Delta, it is possible to take actions to provide more natural functional flows in coordination with other complementary actions to improve and restore habitat functions to support a resilient ecosystem."*

Because of the large amount of impairment upstream of this reservoir in the Yuba and Bear watersheds, the Department staff are considering the Licensee's proposal to base fall and winter water year types and resulting instream flows on the amount of water available at Camp Far West Reservoir. It is the goal of the Department to provide more natural flow regimes that include higher flows in larger water year types so that aquatic resources can benefit from more natural flow functions. In dry water year types, it is the goal of the Department to recommend minimum protections for aquatic species based on preserving as much habitat as possible given water availability constraints.

In addition, the Department staff recognize that water year types developed for the existing condition may not represent conditions in the watershed in the future. In particular, the potential development of an upstream storage reservoir could significantly affect the amount of water available to Camp Far West Reservoir. Department staff intend to continue to discuss water year types under existing conditions in this watershed, as well as required potential changes to the water year types under foreseeable development conditions during the FERC license term.

#### **Section 3.3.3.1.2 Aquatic Invasive Species**

The Department recommends the Licensee develop an Aquatic Invasive Species Management Plan in order to comply with Fish and Game Code 2302. Per the DLA, a search of the USGS Non-indigenous Aquatic Animals database and the CalWeedMapper database and other information, six aquatic invasive species (AIS) occur in Camp Far West Reservoir.

### **Section 3.3.3.1.3 Aquatic Resources of the Bear River Area**

#### **SSWD's Relicensing eDNA Sampling**

The Licensee conducted an eDNA study that sampled four targeted species: 1) chinook salmon (*Oncorhynchus tshawytscha*); 2) steelhead (*Oncorhynchus mykiss*); 3) green sturgeon (*Acipenser medirostris*); and 4) white sturgeon (*Acipenser transmontanus*). Sampling occurred between February 22 and March 1, 2017 and was followed by a second survey that occurred on March 8, 2017, and March 15, 2017. The Licensee reports that samples were collected during high flows in the Bear River that ranged from 1,523 to 5,659 cfs throughout sampling events in accordance with the approved study plan. However, the Licensee reported that because of high flows, turbidity was also high, which severely limited the volume of water that could be filtered for each sample. *"Suspended sediment clogged the filter quickly. As a result, the field team used five filters for each sample and recorded the volume of water filtered by each filter. On average, this was approximately 1 liter (total of five filters) for each sample."* Lastly, the Licensee reports that they did not detect or observe any sturgeon in the Lower Bear River during their studies.

The Department is concerned that the Licensee's eDNA study was not completed in accordance with the January 2017 approved "Stream Fish Study" plan. The approved study plan required the Licensee collect the following: *"For each sample, 2 liters of water will be filtered using sterile tubing and a portable peristaltic pump."* (Stream Fish Study). The Licensee only collected 1 liter at each sample location, or half the required volume of water per sample. The Department considers this a major variance to the study.

Unfortunately, the Licensee did not consult with the Department and other resource agencies regarding the high suspended sedimentation in the water during sampling. Although the Licensee did reach out to a third-party "analysis lab" to discuss possible alternatives, they ultimately decided on reducing the sample volume. Had consultation occurred, the Department may have recommended delaying sample collection out of concerns for potential dilution of eDNA and possible sample contamination.

Three important processes contribute to the removal of eDNA from the aquatic environment and influences the length of time a target organism can be detected. First, eDNA transport during high water flows in lotic systems. Second, eDNA becomes unavailable for survey as the DNA is degraded (i.e., decay of genetic material). Third, eDNA can be transported vertically out of suspension by binding to particulate matter, settling and becoming incorporated into substrates (Buxton et.al 2017) and therefore not available for sampling from the vertical water column. The result of sampling during periods of high turbidity could lead to a false negative interpretation eDNA data (Goldberg et. al 2016). Given the circumstances of the sampling summarized in the top paragraph of this section, we have reason to suspect a false negative interpretation in this case and recommend that SSWD conduct another survey for Green and White Sturgeon. Moreover, anecdotal evidence of the presence of sturgeon is reported on Page E3.3.3-35 of Exhibit E – Environmental Report:

*“...March 28, 2017, DWR biologists reported detecting 24 adult sturgeons while conducting DIDSON surveys in the lower 1 mile of the Bear River. During that same time period, DWR staff reported they received anecdotal reports of anglers landing sturgeon in Wheatland just above the Highway 65 Bridge”.*

Sturgeon sightings reported by DWR occurred less than 13 days after the last sampling event. Additionally, the angler reports of sturgeon landings occurred in proximity to eDNA sampling locations Reaches 3, 4, and 5 (DLA Figures 3.3.3-11 and 3.3.3-12). It is not clear to the Department if the false negative observations surrounding sturgeon detection were a result of the study plan variance (reduce volume of sample) or the Licensee's decision to collect samples during periods of reported high turbidity (dilution of eDNA). Regardless of the cause, resampling is warranted if for no other reason than to determine the species of sturgeon present in the Bear River.

The Department recommends that the Licensee complete a second year of an eDNA study to determine the species of sturgeon. The Licensee should align sampling events with reported temporal occurrences of sturgeon sighted in the Lower Bear River (Late March to June) and in accordance with the approved study plan.

#### **Section 3.3.3.4 Wildlife Resources**

##### **Section 3.3.3.4.2 Bald Eagles and Osprey**

As a part of a study filed with FERC on January 9, 2017, Special-status Wildlife, Raptor Study Plan, the Licensee identified and mapped known raptor nesting sites, conducted surveys with specific protocols for special status raptors, and performed a QA/QC review. During this period of study, 47 bald eagle (*Haliaeetus leucocephalus*) occurrences were reported and two active nests. In addition, three osprey (*Pandeion haliaetus*) nests were discovered during this time period.

Licensee conducted winter surveys and nesting surveys by following the *Protocol for Evaluating Bald Eagle Habitat and Populations in California* (Jackman and Jenkins 2004), *Bald Eagle Breeding Survey Instructions* (CDFG 1999). Nesting territories for bald eagles were checked at least three times during the nesting season (primarily February through July). 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. During the study, SSWD recorded any raptor sightings and nests observed looking inland within 0.25-mi from the edge of the shoreline at the Camp Far West Reservoir, photographed the nest, and recorded the location using GPS. Incidental sightings of other special-status raptors including northern harrier (*Circus hudsonius*), short-eared owl (*Asio flammeus*), long-eared owl (*Asio otus*), and white-tailed kite (*Elanus leucurus*) were recorded when they were seen. If reasonably possible, SSWD made determinations as to whether the raptor nest was active or inactive during the survey year. Additionally, SSWD biologists recorded all bird species observations throughout the special-status raptor study, and these species are documented in Table 3.3.4-7 of the DLA. As mentioned above, forty-seven bald eagle occurrences (including multiple bald eagles at the same site), six golden eagles (*Aquila chrysaetos*), and three

Swainson's hawks (*Buteo swainsoni*) were observed during surveys. A map of these special-status raptor 2017 sightings within the FERC Project Boundary is included in Figure 3.3.4-2 of the DLA. Two active bald eagle nests were found within the proposed 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 (NSRA) boat ramp. Both active bald eagle nests and the three osprey nests found within the FERC Project Boundary are identified on the map included in Figure 3.3.4-3.

Bald eagle is a State listed endangered species and fully protected bird species. Osprey is a State watch list species. The DLA contains Licensee's proposed conditions for bald eagle (SSWD Proposed Condition TR 1) and states that, "SSWD shall within one year of license issuance and in consultation with CDFW and USFWS develop a Bald Eagle Management Plan that will provide for the protection of bald eagles during nesting at Camp Far West Reservoir." The Department appreciates the fact that the Licensee is developing a Bald Eagle/Osprey Management Plan (per proposed condition TR-1) earlier than the proposed 1-year timeframe, in order to expedite protection of the resource. The Department and other resource agency partners will continue to work with the Licensee to develop this plan.

A great blue heron (*Ardea herodias*) rookery was also located in the SSRA, near the site location of the bald and golden eagles. The Department recommends the protection of this rookery during the breeding season by the implementation of a Limited Operating Period from March 15 to July 31 within a buffer of 0.25-mile around the rookery.

#### **Section 3.3.4.2.3 Special-Status Bat Species**

The Licensee has proposed the following;

*"SSWD Proposed Condition TR2. SSWD shall within one year of license issuance and in consultation with CDFW install and thereafter maintain devices to exclude bats from Project facilities within 1 year of license issuance."*

The Department recommends the following addition to this proposed condition to ensure continued protection of the resource:

*"TR2-1: Prior to initiating any Project operations and maintenance activities (including exclusion), a qualified biologist will inspect the facilities for bats immediately prior to initiating activities. If winter hibernacula of special-status bats are present and likely to be affected by the activities (e.g., noise disturbance, structure modification), work will be limited to avoid the hibernacula season when bats are sensitive to disturbance (November through March) or consultation with the agencies about protective measures will be initiated. If construction is planned for the hibernacula season, exclusion methods may be planned before construction has occurred."*

The Department appreciates the opportunity to provide comments on the DLA. The Department looks forward to working collaboratively with the Licensee and other Project relicensing participants to review and discuss the results of studies, determine Project effects on fish, wildlife, and plants resources, and develop appropriate PM&E measures for the new FERC license. If you have questions regarding our comments or would like to discuss the contents of this letter further, please contact Sarah Lose, Senior Environmental Scientist, at [Sarah.Lose@wildlife.ca.gov](mailto:Sarah.Lose@wildlife.ca.gov) or (916) 747-5226.

Sincerely,



Kevin Thomas  
Regional Manager

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### **Literature Cited**

Buxton A.S., Groombridge J.J., Griffiths R.A. 2017. Is the detection of aquatic environmental DNA influenced by substrate type? PLoS ONE 12 (8): e0183371. <https://doi.org/10.1371/journal.pone.0183371>

CDFW (CDFG). 1999. Bald Eagle Breeding Survey Instructions. <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83706>.

Goldberg, C. S., Turner, C. R., Deiner, K. , Klymus, K. E., Thomsen, P. F., Murphy, M. A., Spear, S. F., McKee, A. , Oyler-McCance, S. J., Cornman, R. S., Laramie, M. B., Mahon, A. R., Lance, R. F., Pilliod, D. S., Strickler, K. M., Waits, L. P., Fremier, A. K., Takahara, T. , Herder, J. E. and Taberlet, P. (2016). Critical considerations for the application of environmental DNA methods to detect aquatic species. *Methods Ecol Evol*, 7: 1299-1307. doi:[10.1111/2041-210X.12595](https://doi.org/10.1111/2041-210X.12595)

Jackman and Jenkins. 2004. Protocol for Evaluating Bald Eagle Habitat and Populations in California. Prepared for U.S. Fish and Wildlife Service.

HDR. 2017. Stream Fish Populations Study 3.2. Camp Far West Project (FERC #2997). Prepared for South Sutter Water District, Trowbridge, California. Available online at: <https://sswdrelicensing.com/home/quick-links/>.

SWRCB. 2017. Scientific Basis Report in Support of New and Modified Requirements for Inflows from the Sacramento River and its Tributaries and Eastside Tributaries to the Delta, Delta Outflows, Cold Water Habitat, and Interior Delta Flows. Available online at: [https://www.waterboards.ca.gov/water\\_issues/programs/peer\\_review/docs/scientific\\_basis\\_phase\\_ii/201710\\_bdphaseII\\_sciencereport.pdf](https://www.waterboards.ca.gov/water_issues/programs/peer_review/docs/scientific_basis_phase_ii/201710_bdphaseII_sciencereport.pdf).





**UNITED STATES DEPARTMENT OF COMMERCE**  
**National Oceanic and Atmospheric Administration**  
NATIONAL MARINE FISHERIES SERVICE  
WEST COAST REGION  
650 Capitol Mall, Suite 5-100  
Sacramento, California 95814-4706

April 15, 2019

In response refer to:  
TH:WCR:FERC P-2997-031

Kimberly D. Bose, Secretary  
Federal Energy Regulatory Commission  
888 First Street, NE  
Washington, D.C. 20426

Re: NOAA's National Marine Fisheries Service, West Coast Region, Comments on the Draft Final License Application for the Camp Far West Hydroelectric Project, Federal Energy Regulatory Commission Project No. P-2997-031.

The U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service (NMFS) has reviewed the Draft License Application (DLA) filed by South Sutter Water District (SSWD or Licensee) for the Camp Far West Hydroelectric Project, FERC No. 2997-031 (Project) filed December 31, 2018, and hereby provides our comments below.

If you have questions regarding this letter, please contact Mr. Tom Holley at (916) 930-5592. (Thomas.Holley@noaa.gov).

Sincerely,

A handwritten signature in black ink, appearing to read "SE", written over a horizontal line.

Steve Edmondson  
FERC Hydropower Branch Supervisor  
NMFS, WCR, Sacramento Area Office

cc: FERC Service List for P-2997

## 1.0 Introduction

NMFS has statutory responsibility for the protection and enhancement of living marine resources, including anadromous fish and their supporting habitats, under the Federal Endangered Species Act (ESA) (16 U.S.C. §1531 *et seq.*), Magnuson-Stevens Fishery Conservation and Management Act (MSA) (16 U.S.C. §1801 *et seq.*), Fish and Wildlife Coordination Act (16 U.S.C. §661 *et seq.*), and Reorganization Plan No.4 of 1970 (84 Stat. 2090). NMFS has authority to prescribe fish passage at licensed projects under the Federal Power Act (FPA) §18, and the duty to provide recommendations for the protection, mitigation of damage to, and enhancement of fish and their habitats under FPA § 10(j) and 10(a). NMFS submits these comments pursuant to its authorities under these statutes.

The anadromous fish and anadromous fish habitat potentially impacted by facilities and operations of the Camp Far West Hydroelectric Project (P-2997) are preliminarily determined to be those occurring in the lower Bear River watershed, including Dry Creek, and in areas downstream in the Feather River, Sacramento River, and the Sacramento-San Joaquin Delta; these resources are identified below:

Anadromous fish and habitat resources protected under the Endangered Species Act (ESA):

- 1) Central Valley (CV) spring-run Chinook salmon evolutionarily significant unit (ESU) (*Oncorhynchus tshawytscha*), threatened (June 28, 2005, 70 FR 37160);
- 2) CV spring-run Chinook salmon critical habitat (September 2, 2005, 70 FR 52488);
- 3) California CV (CCV) steelhead distinct population segment (DPS) (*Oncorhynchus mykiss*), threatened (January 5, 2006, 71 FR 834);
- 4) CCV steelhead critical habitat (September 2, 2005, 70 FR 52488);
- 5) Southern DPS of North American (NA) green sturgeon (*Acipenser medirostris*), threatened (April 7, 2006, 71 FR 17757); and
- 6) Southern DPS of NA green sturgeon critical habitat (October 9, 2009, 74 FR 52300);

Anadromous fish habitat resources protected under the Magnuson-Stevens Fishery Conservation and Management Act (MSA):

- 1) CV fall/late fall-run (fall-run) Chinook salmon ESU, Species of Concern (those species about which NMFS has concerns regarding status and threats, but for which insufficient information is available to indicate a need to list the species under the ESA): April 15, 2004, 69 FR 19975 and
- 2) Chinook salmon “Essential Fish Habitat” (EFH), (October 15, 2008 73 FR 60987); EFH has been identified in the Bear River extending upstream to approximately Camp

Far West Dam and in areas downstream in the Feather and Sacramento Rivers, and the Sacramento-San Joaquin Delta.

## 2.0 General Comments on the Draft License Application

The Licensee did not propose any protection, mitigation and enhancement (PM&E) measures in their Draft Licensee Application stating that “SSWD and licensing participants did not reach agreement on any PM&E measures that SSWD could propose in its Draft Application for New License”. However, the Licensee further stated that they are “fully committed to reaching collaborative agreement on as many measures as possible with as many agencies as possible and include those collaboratively-agreed to measures in its final Application for New License that will be filed with FERC in June 2018.” (DLA p.E1-37)

NMFS, along with fellow Federal and State Agencies and non-governmental organizations, have been meeting with the Licensee for several months to determine if there are areas where collaborative agreement can be reached on protection, mitigation, and enhancement measures that can be included a new license for the Camp Far West Project. NMFS plans to continue to work with the TLP participants to reach agreement on as many issues as possible before filing the Final License Application (FLA).

NMFS expects FERC will adopt PM&E measures that fully mitigate the Project’s effects to anadromous fish and their habitat. These measures should include:

- 1) Instream flows that mitigate the Project’s alteration of the natural hydrograph including ramping/rate of change and temperature effects.
- 2) Large wood and spawning gravel augmentation that mitigate the Project’s disruption of downstream transport of these important elements of salmonid habitat.
- 3) An aquatic monitoring plan that can document the effectiveness of the PM&E measures and adaptively manage license conditions during the period of the new FERC license.

## 3.0 Specific Comments on the Draft License Application

DLA p.E2-50 SSWD Proposed Conditions in the FERC License:

*“SSWD Proposed Conditions ARI. SSWD shall maintain a continuous minimum flow of 25 cfs from April 1 through June 30 and 10 cfs from July 1 through March 31 or inflow to Camp Far West Reservoir, whichever is less, as measured immediately below the non-Project diversion dam downstream of Camp Far West Dam.”*

**NMFS Comment:** The Licensee’s DLA does not include changes to the current flow regime in the Bear River below Camp Far West Reservoir. NMFS plans to work with the Licensee and other TLP Participants to attempt to reach a collaborative agreement on instream flow measures as well as other PM&E measures for a new FERC license. It is NMFS’ goal to provide a more natural flow regime that includes higher flows in wetter water year types so that aquatic resources can benefit from more natural flow functions. In dry water year types, NMFS’ goal is

to provide minimum protections for aquatic species based on preserving as much habitat as possible given water availability constraints.

Because of the high degree of impairment upstream of the Project in the Yuba and Bear watersheds, the Licensee has proposed to base fall and winter water year types and resulting instream flows on the amount of water available at Camp Far West Reservoir. NMFS recognizes that water year types developed for the existing condition may not represent conditions in the watershed in the future. In particular, the potential development of an upstream Centennial Reservoir could significantly affect the amount of water available to Camp Far West Reservoir. NMFS intends to continue to discuss water year types under existing conditions in this watershed, as well as required potential changes to the water year types under foreseeable development conditions during the new FERC license term.

DLA p. E3.3.3-84:

*“The Instream Flow Study does not consider temperature as a parameter of suitability and assumes that water temperatures for each life stage of CV fall-run Chinook salmon ESU is adequate. However, this is not true at all times in the lower Bear River. The lower Bear River is a relatively small, valley floor tributary to the Feather River that is a rain-fed watershed and lacks any access to snowpack or water-on-snow freshet runoff. As a result, summer conditions, even pre-Project, would typically be represented by warm, low flows, more akin to a coastal stream than a coldwater Sierran stream. The system can respond rapidly to precipitation, but is highly influenced by ambient warming from late spring into early fall and from releases from upstream water projects. As a result, water temperature is currently a limiting factor to salmonids.”*

**NMFS Comment:**

The Bear River below the Project does not provide suitable water temperatures for year-round use by salmonids. However, the Bear River currently supports seasonal salmonid use as adults enter the system in the fall and outmigrate in the spring. The Project affects water temperatures in the lower Bear River during the fall where water releases from the dam can be warmer than pre-project conditions, as well as during the winter and spring when the Project is storing and releasing water.

DLA p.E3.3.3-87:

*“temperature in the lower Bear River that has not fully chilled due to seasonal ambient cooling. The low elevation of the Bear River and relatively smaller reservoir does not cool the water as quickly as other watersheds. As a result, as shown in Table 3.3.3-31, water temperatures are not suitable for spawning in October, marginal at best in November (i.e., 30% to 48% of the days suitable, most of which occurs in the wetter water years), and become suitable in December and January. Temperature results appear to correlate with significant spawning activity observed in January during SSWD’s redd surveys with moderate amounts or spawning in November and December.”*

**NMFS Comment:**

As discussed above, the Project affects water temperatures in the lower Bear River during the peak months for fall-run Chinook salmon spawning (Oct-Dec). In addition, the Project also captures and stores inflow during these months; as a result migration cues and pulse flows that would have occurred in absence of the Project are altered or captured by the reservoir. In this way the Project effects initiation and timing of fall-run upstream migration and spawning—this project effect should be mitigated to the maximum extent possible.

DLA p.E3.3.3-95 Effects on Fish in the Lower Bear River:

*“The Proposed Project would have a beneficial effect on fish in the lower Bear River.”  
 “...with seasonal utilization by CV fall-run Chinook salmon ESU. Given that CV fall-run Chinook salmon ESU is the species in the lower Bear River that is most sensitive to flow and temperature, the discussion below focuses on this species.”*

**NMFS Comment:**

NMFS does not agree that the Project is beneficial to anadromous fish resources in the Bear River. While currently there are some suitable amounts of large woody material (LWM) and spawning gravels downstream, the Project’s dam blocks any ongoing recruitment of LWM and spawning gravels. Without augmentation, LWM and gravel will continue to be depleted as seasonal high flows transport these materials downstream and into the Feather River. While NMFS acknowledges that water projects upstream divert water flows seasonally, the Project’s operations (and associated non-project dam) further alter the natural hydrograph of the lower Bear River, including the natural recession rates from high to low flows.

In addition, NMFS believes that fall-run Chinook salmon are not the only anadromous fish, “*that is most sensitive to flow and temperature.*” In addition, CCV steelhead, North American (NA) green sturgeon, and CV spring-run Chinook salmon juveniles, listed as threatened under the ESA, are also seasonally present. All of these NMFS resources are sensitive to changes in water flow and water temperature.

DLA p.E3.3.3-96 Table 3.3.3.35: Proposed 80% WUA Flow Schedule:

**NMFS Comment:**

Table 3.3.3-35 presents an average percentage of suitable water temperature days, based on USEPA (2003) criteria, for only CV Chinook salmon, and under a specific flow schedule (“80% WUA”). Although “WY [water years] 1976-2014” is mentioned, it is not clear why an average of all water years is shown, as averaging may mask seasonally important periods for anadromous fish life stages. In addition, separating this information by water years would likely show how the suitability of water temperatures for anadromous fish varies between wetter years and dryer years. The 80%WUA proposed flow schedule does not mimic all components of a natural hydrograph, including wet-season initiation flows that stimulate upstream salmonid migration, flush gravel and cycle nutrients. Gradual recession from high to low flow levels that more

closely mimics natural rates of fluctuation should also be considered as a Project effect that should be mitigated.

DLA p.E3.3.3-102:

*“The cumulative effects resulting from past, present, and reasonably foreseeable future actions, including the proposed Project, have the potential to affect fisheries resources in the lower Bear River. These activities include timber harvest, livestock grazing, mining, and operation of upstream and downstream water projects.”*

*“The proposed Project will continue to capture sediment, truncate high flows, and alter flow and water temperature in the lower Bear River, which may affect fish (and habitat) downstream of the Project.”*

**NMFS Comment:**

NMFS agrees with these sections. See NMFS comments below for DLA Sections 3.3.5.3 and 3.3.5.4 (Effects/Aggregate Effects, respectively), on threatened and endangered species. Similar language was used in both sections.

DLA p.E3.3.5-51:

*“Camp Far West Dam will continue to store water and capture sediment and large woody material that would otherwise move downstream. The general effects of reduced sediment and large woody debris in streams below other impoundments include changes in instream habitat structure, such as fewer pools and loss of spawning gravel, and indirect effects on riparian vegetation. However SSWD’s relicensing studies showed that there is available sediment of suitable size and quality for ESA-listed fish spawning and large woody material is present.”*

**NMFS Comment:**

SSWD implies that no sediment or LWM augmentation is needed over the potentially decades-long license term. However, while there may be some acceptable amounts and quality of sediment and LWM “available” now, hydrologic conditions will change due to changing climate and reoperation of upstream hydropower projects. During the term of the next license, the Project will continue to block downstream transport of all bedload material. Given the Project can have significant spill events that would transport some of the existing substrate downstream, it is reasonable to consider that future sediment/LWM surveys and new substrate augmentations are likely to be needed over the decades-long term of the new license. This Project effect should be acknowledged and long-term mitigation measures should be developed.

DLA p.E3.3.5-52:

*“The Proposed Action will continue to release minimum instream flows below Camp Far West Dam, as measured downstream of the non-Project diversion dam and described in measure ARI. ... Minimum flows have the potential to affect ESA-listed fish in the lower Bear River by changing the amount of available habitat and water temperature. These impacts are considered cumulative when considering the upstream water projects and the downstream non-Project diversion dam.”*

**NMFS Comment:**

The anadromous fish resources which are seasonally present in the Bear River consists of those anadromous fish not listed under the ESA (CV fall-run Chinook, resident *O. mykiss*, and white sturgeon) and those that are ESA-listed as threatened (CCV steelhead, CV spring-run Chinook salmon (juveniles) and NA green sturgeon). These fish opportunistically utilize the Bear River when seasonally available habitat conditions become favorable. However, measures that improve instream flow and manage the recession of uncontrolled spill could maximize and enhance existing anadromous fish habitat. In addition, improved seasonal flows would also ensure that any existing and augmented-as-needed spawning gravels and LWM would be sorted and transported for the benefit of anadromous fish resources and related riparian habitats.

DLA p.E3.3.5-58:

*“The aggregate effects resulting from past, present, and reasonably foreseeable future actions, including the Proposed Action, have the potential to affect ESA-listed fish (and habitat) in the lower Bear River. These activities include timber harvest, livestock grazing, mining, and operation of upstream and downstream water projects.”*

**NMFS Comment:**

SSWD uses the term “aggregate effects” instead of the more commonly used “cumulative effects” it is unclear why SSWD chose to make this distinction. The term “cumulative effects” should be used to maintain consistency with other sections of the DLA.

DLA p.E5-1 Conclusions:

*“This section compares the developmental and non-developmental effects of SSWD’s Proposed Project and the No Action Alternative... FERC will complete this section in its draft EA or draft EIS, if FERC decides to prepare an EIS instead of an EA.”*

**NMFS Comment:**

NMFS and other resource agencies are currently meeting with South Sutter Water District to address the Project effects and jointly develop terms and conditions for the new license. NMFS looks forward to working with the Licensee and FERC to develop license terms that mitigates the Projects’ effects and enhances anadromous resources in the Bear River.

## DLA p.E5-10 Consistency with NMFS' (2014) Central Valley Salmonid Recovery Plan

**NMFS Comment:**

This section repeats pertinent information for the Bear River from NMFS' (2014) Recovery Plan for Sacramento River winter-run Chinook salmon, CV spring-run Chinook salmon ESU, and CV steelhead Distinct Population Segment (DPS). However, there is no discussion regarding how the Project facilities, operations and maintenance are consistent with NMFS' Recovery Plan.

NMFS' *Final Recovery Plan for Sacramento River Winter-run Chinook Salmon, Central Valley Spring-run Chinook Salmon, and California Central Valley Steelhead* (Recovery Plan) (NMFS 2014), classified the Bear River as a core 3 watershed for steelhead. This means that the Bear River is part of the steelhead recovery process, but it is considered a lower priority watershed. Core 3 watersheds support populations that are characterized as being small, possibly intermittent, and dependent on other nearby populations for their existence. Although the Bear River is considered a low priority for CCV steelhead recovery, its persistence does increase the species' viability by providing increased habitat and life history diversity and serving as a buffer against local catastrophic occurrences that could affect other nearby populations (e.g., Feather or Yuba river populations).

Inadequate streamflow in the Bear River prevents the establishment of a self-sustaining CCV steelhead population (JSA 2004 as cited in NMFS 2014). The minimum flows released below Camp Far West (CFW) diversion dam to meet current FERC license requirements are likely to warm to support all freshwater life-stages of CCV steelhead. However, during periods of high flows, CCV steelhead are known to utilize the river for limited spawning (JSA 2004 as cited in NMFS 2014). The present system of diversions results in abnormal flow fluctuations, in contrast to historical natural seasonal flow variations. The presence of the diversion dam limits upstream migration and any habitat that may have occurred upstream of the Project is now inundated by the CFW Reservoir.



## 4.0 References

Beamesderfer, R., Simpson, M., Kopp, G., Inman, J., Fuller, A., and D. Demko. 2004. Historical and Current Information on Green Sturgeon Occurrence in the Sacramento and San Joaquin Rivers and Tributaries. Prepared for State Water Contractors, Sacramento, CA by S.P. Cramer and Associates, Oakdale, CA.

Beamesderfer, R.C.P., Kopp, G., and D. Demko. 2005. Review of the Distribution, Life History and Population Dynamics of Green Sturgeon with Reference to California's Central Valley. S.P. Cramer and Associates, Gresham, OR and Oakdale, CA.

National Marine Fisheries Service (NMFS). 2014. Recovery Plan for the Evolutionarily Significant Units of Sacramento River Winter-run Chinook Salmon and Central Valley Spring-run Chinook salmon and the Distinct Population Segment of California Central Valley Steelhead. California Central Valley Area Office. July 2014.

Sterman and Massa, 2015. Redd Monitoring and Mapping in the Englebright Dam Reach of the Lower Yuba River, CA. Pacific States Marine Fisheries Commission, prepared for the U.S. Army Corps of Engineers.

South Sutter Water District (SSWD). 2018. Draft License Application for the Relicensing of the South Sutter Water District's Camp Far West Hydroelectric Project, Federal Energy Regulatory Commission's Project (P-2997). SSWD, Trowbridge, CA December 2018.

United States Fish and Wildlife Service (USFWS). 1995. Working Paper on Restoration Needs: Habitat Restoration Actions to Double Natural Production of Anadromous Fish in the Central Valley of California, Vol. 2. Stockton, CA.

United States Environmental Protection Agency (USEPA). 2003. *USEPA Region 10 Guidance for Pacific Northwest State and Tribal Temperature Water Quality Standards*. EPA 910-B-03-002. Region 10 Office of Water, Seattle, Washington.

Yoshiyama, R.M., E.R. Gerstung, F.W. Fisher, and P.B. Moyle. 2001. Historical and Present Distribution of Chinook Salmon in the Central Valley Drainage of California *in* Contributions to the Biology of Central Valley Salmonids. Vol. 1. California Department of Fish and Game, Fish Bulletin 179, R.L. Brown, ed.

Enclosure A

**UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION**

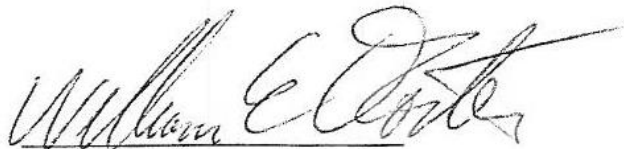
**South Sutter Water District** )  
**Camp Far West Hydroelectric Project** )  
**Bear River** )

**Project No. 2997-031**

**CERTIFICATE OF SERVICE**

I hereby certify that I have this day served the foregoing document, by first class mail or electronic mail, a letter to Secretary Bose, Federal Energy Regulatory Commission (FERC), the National Marine Fisheries Service's comments on the South Sutter Water District's Draft License Application and this Certificate of Service upon each person designated on the official service list compiled by FERC in the above-captioned proceeding.

Dated this 15th day of April 2019



William E. Foster  
National Marine Fisheries Service



## Foothills Water Network

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### COMMENTS ON DRAFT LICENSE APPLICATION FOR THE CAMP FAR WEST PROJECT (P-2997-031)

April 17, 2019

Hon. Kimberly D. Bose, Secretary  
Federal Energy Regulatory Commission  
888 First Street, N.E.  
Washington, DC 20426

*Via Electronic Submittal*

Dear Ms. Bose:

Attached you will find a copy of comments made by the Foothills Water Network on the Draft License Application (DLA) for the Camp Far West Project (P-2997-031). Our comments were delivered to the South Sutter Water District (SSWD) on April 15<sup>th</sup>. The Network appreciates the opportunity to provide comments on the DLA. We look forward to continuing discussions with South Sutter Water District (SSWD or Licensee) and the Resource Agencies to find agreement on more license terms and conditions.

Respectfully submitted,



Foothills Water Network

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Traci Sheehan Van Thull  
Coordinator, Foothills Water Network  
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## Foothills Water Network

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### COMMENTS ON DRAFT LICENSE APPLICATION FOR THE CAMP FAR WEST PROJECT (P-2997-031)

April 15, 2019

Mr. Brad Arnold, General Manager  
South Sutter Water District  
2464 Pacific Avenue  
Trowbridge, CA 95659  
Via U.S. Mail/hand delivery

Dear Mr. Arnold:

The Foothills Water Network (Network) submits these Comments on the Draft License Application (DLA) for the Camp Far West Project (CFW or Project) as filed on December 31, 2018 by the South Sutter Water District (SSWD or licensee).<sup>1</sup>

#### **Foothills Water Network**

This response was jointly developed and signed by non-governmental organizations and individuals participating in the Camp Far West Project relicensing. The Network represents a broad coalition of non-governmental organizations and water resource stakeholders in the Yuba, Bear, and American watersheds. The overall goal of the Foothills Water Network is to provide a forum that increases the effectiveness of non-profit conservation organizations to achieve river and watershed restoration and protection benefits for the Yuba, Bear, and American Rivers. This includes negotiations at the county, state, and federal levels, with an immediate focus on the FERC relicensing processes.

#### **BACKGROUND**

The initial license for the Project was issued to SSWD by FERC on July 2, 1981 for a period of 40 years.<sup>2</sup> On March 14, 2016, SSWD filed with FERC a Notice of Intent to File an Application for a New License for the Project on or before June 30, 2019, 2 years prior to the expiration of the existing FERC license.<sup>3</sup> In its DLA, 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, and the adoption of the resource management measures proposed in its license application.<sup>4</sup>

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<sup>1</sup> eLibrary no: 20190102-5329. All subsequent footnote citations or references to the DLA omit the eLibrary Accession number.

<sup>2</sup> DLA, p. IS-1.

<sup>3</sup> *Id.*

<sup>4</sup> *Id.*

## **COMMENTS ON SPECIFIC PRIORITY ISSUES AND SECTIONS OF THE DLA**

### **FLOW REQUIREMENTS**

In the DLA, SSWD propose no changes to current flow requirements. SSWD did not provide any measures or recommendations to improve ramping, instream flows or pulse flows in the lower Bear River.

In discussions with licensee, stakeholders and consultants, the Network has focused on opportunities to improve conditions in the lower Bear River for fall-run Chinook salmon, primarily during the November 15<sup>th</sup> thru April 1<sup>st</sup> time period. Because the Camp Far West reservoir is low in the watershed and does not maintain a year-long cold water pool, opportunities to improve fisheries in the summer and early fall are limited between May 15<sup>th</sup> and November 15<sup>th</sup> in most years.

The greatest opportunities to improve conditions for fall-run salmon are in water years with substantial carryover storage going into November. Fall-run salmon are the main target species for management, because the project is able to provide flows from storage to enhance spawning, incubation and rearing habitat in the winter.

Opportunities to improve the *O. mykiss* fishery are limited due to the need of the species to spend at least a year in fresh water, combined with consistently elevated water temperatures in the summer in the lower Bear River.

Sturgeon use the lower Bear occasionally for spawning and also for juvenile rearing. Most of the opportunities for the Bear River to provide sturgeon habitat are related to spill. In addition, juvenile salmon and steelhead from adjacent watershed use the lower reaches of the Bear River for rearing in the winter and spring. The Network therefore recommends ramping rates to avoid the stranding of sturgeon or rearing salmonids as spill flows recede.

Working with the licensee and consultants, FWN and the resource agencies have identified a framework for determining water year types that allows enhancement of conditions for fall-run salmon while limiting the risk to loss of project water supply. This framework relies on evaluation of April-September “project usable inflow” in any given year. The usable inflow is the inflow during this time period that can be stored or delivered for irrigation. Spill does not count as usable inflow.

The Network recommends that the Final License Application adopt this approach to water-year types and also adopt specific flow augmentations in the November 15 – April 1 time period that enhance conditions for fall-run salmon in the lower Bear River. The Network is committed to working with the licensee and other stakeholders to develop the details of a recommendation prior to the filing of a Final License Application.

In addition, discussions among the licensee, consultants, resource agencies and the Network have sought to identify and limit operations that might induce spawning in locations that are likely to be subsequently dewatered prior to fry emergence.

The Network looks forward to working with the district to identify these high-value, low-cost, and low-risk opportunities to enhance the anadromous fisheries of the lower Bear River while maintaining the water supply benefit for which the project was created.

## **IMPACTS OF FUTURE PROJECTS**

In our conversations with the licensee, consultant and other stakeholders, the Network has approached opportunities for fisheries improvements in the framework of the existing facilities in the watershed. The Network is concerned that the construction of the proposed Centennial reservoir by the Nevada Irrigation District upstream of the Camp Far West Reservoir could limit these opportunities for improvements that are mutually acceptable to the Network, the Resource Agencies and to SSWD. The Network would like to work with relicensing participants to find specific terms to include in the license that address changes to water year type classifications. The Network believes that the Final License Application should evaluate the impacts of the construction and operation of Centennial Reservoir (if built) on SSWD's current and proposed operations. The Network believes that FERC will need to analyze the construction of Centennial as an alternative under the National Environmental Protection Act.

## **AQUATIC MONITORING**

The DLA does not contain any recommendations or a proposal for monitoring of salmonids in the lower Bear River. The Network believes that monitoring is important in determining the actual benefits of the proposed actions. FWN would like to work with the Licensee and agencies to develop a proposal that can effectively measure and monitor this fish population.

## **COMMENTS ON SPECIFIC MEASURES**

### **IMPLEMENT MINIMUM INSTREAM FLOWS: Proposed Condition AR1**

In its DLA, SSWD proposes no changes to its current flow schedule in its license. Relicensing participants are now actively discussing flow conditions in the lower Bear River, as discussed above.

### **RECREATION FACILITIES PLAN: Proposed Condition RR1**

#### **Provide adequate facilities for public use**

In general, the Network supports the Recreation Facilities Plan (Plan) and the work done to date by SSWD and consultants in its development. However, the current plan does not take into account the growing demand for recreation opportunities in the area and the need for diverse

types of recreation for jet skiers, boaters and families. The current practice is for the South Shore facilities to be closed unless the North Shore facilities fill to capacity during the peak season.

For this reason, the Network recommends opening the South Shore facilities for a longer season and improvement of the South Shore boat ramp to allow better access for recreational users. The Network looks forward to working with SSWD and the resource agencies towards a collaborative agreement on recreational issues for inclusion in the new license.

## **GENERAL COMMENTS ON THE DLA**

### **Requested Term of New License: Section 2.0**

Licensee is requesting a new license term of 40-50 years. On October 19, 2017 FERC issued a “Policy Statement on Establishing License Terms for Hydroelectric Projects.” That policy set a term of 40 years as the “default” term for licensees. The policy did set forth three circumstances where a shorter license could be issued; however none of those circumstances fit in this case. There does not appear to be proposed development at the project that would warrant a 50-year license term. Accordingly, a 40-year license terms appears appropriate.

### **Relicensing Hydrology Datasets-Proposed Project (Future Conditions) Exhibit B Project Operations, Section 4.1**

As mentioned previously, the Network recommends including the Centennial Reservoir Project in this Project Operations section of the FLA. The Nevada Irrigation District proposes to construct a new 275-foot dam upstream of the existing CFW project. NID’s application for 5634 states that it will store or divert up to 221,400 acre-feet annually (afa) and directly divert 400 cubic feet per second (cfs) or 111,400 afa. The amount of water that could be diverted or stored upstream would likely impact water availability of water flow water supply and instream purposes at CFW.

### **Water Year Types: Section 6.1**

As discussed above, SSWD has proposed setting new Water Year Types based on the conditions of the watershed and upstream reservoirs and operations. The Network is engaged in conversations with the licensee and the resource agencies on this topic.

## **CONCLUSION**

Thank you for considering these comments. If you have comments or questions, please contact Traci Sheehan Van Thull, Coordinator, Foothills Water Network.

Respectfully submitted,

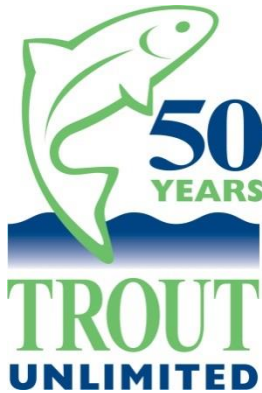


Foothills Water Network

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A handwritten signature in black ink, appearing to read 'Chandra Ferrari'.

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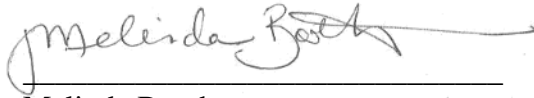


SIERRA  
CLUB  
FOUNDED 1892

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