

State of California  
Department of Fish and Wildlife

## Memorandum

**Date:** January 19, 2018

**To:** Meiling Colombano  
State Water Resources Control Board  
Division of Water Rights – Water Quality Certification Program  
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**From:** Jeff Drongesen, Acting Regional Manager  
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North Central Region  
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**Subject:** **COMMENTS ON DRAFT WATER QUALITY CERTIFICATION, SOUTH FEATHER WATER AND POWER AGENCY'S SOUTH FEATHER POWER PROJECT, FEDERAL ENERGY REGULATORY COMMISSION PROJECT NO. 2088**

The California Department of Fish and Wildlife (Department) appreciates the opportunity to comment on the Draft Water Quality Certification (DWQC) for South Feather Water and Power Agency's (SFWPA) South Feather Power Project (Project) operating under the existing Federal Energy Regulatory Commission (FERC) License No. 2088. The Department was an active participant in relicensing proceedings for this project.

The Department requests that the State Water Resources Control Board (State Water Board)(SWRCB) consider the following comments in the final Water Quality Certification for this project:

### GENERAL COMMENTS

#### General Comment #1:

Attached please find comments the Department sent to SFWPA on March 3, 2010, regarding SFWPA's Initial Study/Environmental Checklist and Proposed Mitigated Negative Declaration (IS/PMND). The Department provided the attached comments as

a trustee and responsible agency pursuant to the Guidelines for the Implementation of the California Environmental Quality Act (Cal. Code Regs., tit. 14, §15000 et seq.; hereafter CEQA Guidelines) section 15082(b), and the Public Resource Code section 21000 et seq. As a trustee for California's fish and wildlife resources, the Department has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and their habitat. As a responsible agency, the Department administers the California Endangered Species Act (CESA), the Native Plant Protection Act, and other provisions of the Fish and Game Code that conserve the State's fish and wildlife public trust resources. In these comments, please note that the Department demonstrated concerns about the use of a Mitigated Negative Declaration for the Project, which has potential significant impacts.

## **General Comment #2**

As discussed in the Department's March 3, 2010, letter described above, Central Valley spring-run Chinook salmon (*Oncorhynchus tshawytscha*)(CVSRSC), a federal and State listed threatened species, are known to naturally reproduce in the Feather and Yuba Rivers. Both the Feather River Hatchery and low flow section of the Feather River are directly influenced by thermal conditions of water discharged from the Kelly Ridge powerhouse to the Diversion Pool on the upper Feather River. Under certain regularly-occurring conditions, warm water released from the SFWPA Project from Kelly Ridge Powerhouse (KRPH) impact the water temperatures in the diversion pool downstream of Lake Oroville (FERC P-2100). This situation forces the California Department of Water Resources (DWR) to coordinate projects by making higher releases from storage or other operational changes at Lake Oroville, to meet downstream hatchery and instream temperature objectives. Although DWR and SFWPA now have come to a "Kelly Ridge Powerhouse Settlement Agreement" described in the DWQC, both FERC licenses discharge to the same water body and have the ability to impact water temperatures and CVSRCS. Regardless of any settlement agreement regarding operations between the two Licensees, both FERC licenses should contain the same downstream temperature compliance points. For the Water Quality Certification and the FERC license, this licensee needs to identify an enforceable discharge point.

Recently, when the Yuba River (P-2246) project's turbine outage caused a significant decrease in streamflows and dewatering of CVSRCS redds, FERC recognized that two project operators, even with a signed coordinated operations agreement, were both responsible for downstream flow compliance. Both operators were responsible for mitigation in this instance. Additionally, in their November 8, 2017, letter to the operators of PG&E's Narrows 1 Project (P-1403) and P-2246, FERC staff clarified gaging requirements on the Yuba River stating that:

*Although the licensee may delegate the rating and maintenance of a given stream gage to another party, the licensee is ultimately responsible for ensuring that minimum flow requirements are being measured and met at a given*

*compliance point. Their responsibility was recently illustrated at the above two projects, when YCWA was found in violation of its project license for not meeting minimum flow requirements, despite the observation and failure to adjust project releases by PG&E staff monitoring both projects.*

Lastly, the license terms for the FERC P-2100 and P-2088 licenses are not coordinated. The licenses will likely expire in different years, and if the temperature compliance location is not also included in this license and, depending on which license expires first, whether SFWPA has an ongoing license or legal obligation to maintain river temperatures appropriate for CVSRCS could be questioned.

To address these concerns, the Department recommends that temperature compliance language from the P-2100 Water Quality Certification be included by reference in SWRCB's Final Water Quality Certification for this process by including the following statement in Section 2.1:

*By following the stipulations of the KRPH Agreement, SFWPA will coordinate with DWR to meet temperature requirements specified in the SWRCB's December 2010 Final Water Quality Certification for the Department of Water Resources Oroville Facilities.*

## **COMMENTS ON LICENSE CONDITIONS**

### **Condition 1: Minimum Instream Flow (MIF) Requirements**

#### **Comment #1**

The Department submitted proposed minimum instream flows on April 14, 2008, in our Federal Power Act (FPA) section 10(j) recommendations. The minimum instream flows outlined in the DWQC adopt the United States Forest Service (Forest Service) flows that were established in the Forest Service March 6, 2009, FPA Final Section 4(e) conditions. The Forest Service initially submitted identical instream flows as the Department in their April 14, 2008, Preliminary Section 4(e) conditions and present very little rationale for modifying flows in their Final 4(e) conditions but acknowledge that:

*Because of these "behind-the-scenes" decisions and the good faith negotiations between the Forest Service and the licensee to balance environmental mitigation and enhancement costs versus project net benefits, the Forest Service believes the measures prescribed in the Section 4(e) conditions (as revised in this document) best maintain and enhance the resources affected by the project.*

Additionally, in their analysis of the alternative conditions, the Forest Service staff state that:

*We acknowledge that these flows are less than the optimal temperature yet in attempting to balance resource needs with power production felt these flows were a good compromise. However, we realize that the SWRCB has the ultimate authority to set flows to meet Basin Plan standards and may require higher flows in their Section 401 certification. The Forest Service's Section 4(e) Condition No. 1 provides for the FS to modify our conditions to conform to the requirements set by the SWRCB.*

The DWQC does not show the analysis used to determine appropriate instream flows in the Little Grass Valley, South Fork Diversion, Forbestown Diversion, and Lost Creek reaches. The Department is concerned that the flows proposed to be adopted here would perpetuate a process where Licensees can put pressure on the Forest Service to negotiate "behind-the-scenes" with the Licensee through applying for alternate conditions pursuant to the provisions of the FPA section 33, and 7 CFR sections 1.604, and 1.671. The State Water Board should exercise their independent authority to protect public trust resources under section 401 of the Clean Water Act (33 U.S.C. § 1341) by requiring instream flows that are more protective of aquatic resources, after conducting an independent and thorough analysis of instream flows. The Department recommends the Final WQC include the analysis used to determine the appropriate instream flows.

**Comment #2:**

The Water Year Types description in the DWQC includes the description of how the Licensee shall determine the water year type, but does not include the actual breakdown of water year types. We recommend the following language also be included in the Final 401 Certification:

*Water year types (from water year DWR estimate of total unimpaired runoff type in the Feather River at Oroville in acre-feet) are defined as follows: Dry: less than or equal to 2,400,000; Below Normal: greater than 2,400,000 and less than 4,000,000; Above Normal: greater than or equal to 4,000,000 and less than 7,100,000; and Wet: greater than or equal to 7,100,000.*

**Comment #3:**

The DWQC includes a condition that allows the Licensee to modify the water year type, after consultation with the Relicensing Participants, and with the approval of the Deputy Director. Department staff recognize that water year type modification due to climate change may be necessary in the future due to shifting weather and snowpack patterns in the Sierra, however modifying water year types during the License timeline could impact instream flows, recreation releases, reservoir elevations, and geomorphic pulses. We recommend that any changes to water year type do not occur until at least 15 years into the license term, which should be long enough to develop additional information, including more recent climate conditions. Any changes to water year type

should be based on at least a 50-year period of record, and should include the same breakdown of percentages of water year types in each agreed-upon bin. The water year type bins in this proposal include: Dry (driest 17% of water years), Below Normal (32% of water years), Above Normal (40% of water years), and Wet (wettest 12% of water years).

Department staff recommend that the following changes be included in the Final Water Quality Certification:

*Any changes to water year type definitions recommended by either the Licensee or other active participants in the licensing process should be based on hydrology from the previous 50 years of water year runoff data. Additionally, any changes should preserve the breakdown of percentage of each water year agreed upon during relicensing. The water year type bins in this license are: Dry (driest 17% of water years), Below Normal (32% of water years), Above Normal (40% of water years), and Wet (wettest 12% of water years).*

**Comment #4:**

The DWQC includes a condition that after six years of MIF implementation, associated monitoring, and data collection, the Licensee shall consult with State Water Board staff, participating agencies, and interested stakeholders, to evaluate the MIFs in meeting resource goals and objectives, and to determine if adjustments are needed.

Instream flows negotiation were one of the central points of negotiation and discussions during the relicensing process, and recommendations made by the Department and other Relicensing Participants were based on detailed review of temperature, hydrology, fisheries and other aquatic resource surveys, and instream flows studies. Department staff strongly recommend that modifications to the instream flows within the course of the license not be allowed by the State Water Board. Several other FERC licenses have incorporated flow changes during the license term that have been tied to “test periods” of interim flows. For example, even with 5-year data blocks on the Rock Creek–Cresta Project, it has been difficult to determine the specific impacts of changing streamflows amongst varying hydrology, multi-year species life spans, and various operational challenges that have impacted the aquatic biota. In short, looking at project influences on aquatic biota is best done using longer-term monitoring datasets.

Additionally, Department staff believe that the State Water Board inserting the option within a license to request permanent license changes during the license term could lead to never-ending FERC licensing, which would require a heavy investment in time and staff resources for all concerned.

The recommended term of a FERC license is 30-50 years. Department staff recommend that instream flows be evaluated again, as part of the normal FERC process when the next FERC relicensing period allows. Should the State Water Board

decide to leave this condition in the Final WQC, at the very least the language should be modified to include consultation with the Department as was included in Condition 2.

If State Water Board opts to leave this language in Condition 1, Department staff recommends that the following be included in the Final Water Quality Certification:

The Licensee shall include in any request for modification of MIF: documentation of consultation with Forest Service, California Department of Fish and Wildlife, US Fish and Wildlife Service, and State Water Board staff; copies of comments and recommendations made in connection with the recommendation; and a description of how the request incorporates or addresses the comments and recommendations of the Forest Service, the California Department of Fish and Wildlife, US Fish and Wildlife Service, and State Water Board staff.

***Condition 3: Ramping Rates***  
*Interim Ramping Rates*

Page 26 of the DWQC states:

*Within 30 days of license issuance, the Licensee shall, to the extent feasible, implement ramping rates that limit the stage height change to 0.5 foot per hour.*

The DWQC also notes on page 15 in *Rationale for Condition 3: Ramping Rates* that this ramping rate was recommended by the Department in its *Recommendations Pursuant to Federal Power Act section 10(j)* dated April 2008.

While the Department did make those recommendations in 2008, our collective scientific understanding of how ramping rates affect biota – particularly the egg mass and tadpole life stages of foothill yellow-legged frog (*Rana boylei*)(FYLF) – has significantly evolved since 2008 based on work done in this watershed and other Sierran streams. FYLF has been listed as a State Species of Special Concern since 1994. On June 27, 2017, the FYLF became a candidate for listing as threatened under CESA as defined by Fish and Game Code section 2068. To more fully protect this species, the Department recommends that State Water Board staff work with the Licensee, the Department, the Forest Service, the US Fish and Wildlife Service, and other interested parties to develop interim ramping rates for the time of year that the sensitive life stages are present (April through September) prior to license issuance. These ramping rates should be more consistent with the natural recession rates for these rivers.

*Long-Term Ramping Rate Adaptive Management Plan*

The Department supports the State Water Board's proposed development of the Long-Term Ramping Rate Adaptive Management Plan (RAMP). The Department recommends including other interested stakeholders in the consultation process.

### ***Condition 7. Fish Monitoring***

The Department supports much of the State Water Board's proposed development of a Fish Monitoring Plan (Fish Plan) and provides the following recommendations:

- Include other interested stakeholders in the consultation process, and
- Clarify the terms "monitoring" and "mitigation". They appear to be used interchangeably. Monitoring is not mitigation under CEQA, and therefore fish supplementation should not be included in this monitoring plan.

### **Comments on Entrainment Mitigation**

The Rationale for Section (G) of Condition 7 on pg. 16 of the DWQC states:

*Fish entrainment can occur at power tunnels and diversion intakes. To mitigate for the potential for lost fish resources through entrainment, USFS 4(e), Condition 18, Part 6, requires development and implementation of a wild fish supplementation program, if fish exclusion devices (e.g., screens) are not required by the Commission in the Project license. Condition 7 incorporates the USFS 4(e) requirements into the Fish Monitoring Plan.*

The Department has several issues with a fish supplementation program as mitigation for entrainment at Project facilities. This approach does not address the Department's attached 2010 IS/PMND comments (page 7-8), summarized below:

- The large capacity diversions likely entrain significant numbers of fish,
- The rainbow trout (*Oncorhynchus mykiss*) population number and biomass in the Project reaches are considered by the Department to be impaired,
- Concerns about capturing and holding/spawning of wild rainbow trout, release of hatchery-reared young, and disease potential, and
- A Mitigated Negative Declaration must incorporate mitigation measures that will avoid or mitigate impacts to a point where **clearly no significant impacts on the environment would occur**. As explained in the comment letter, the Department cannot determine whether the impact of entrainment would be mitigated to "less than significant" with fish augmentation.

In addition to the above concerns, the Final WQC should analyze the potential impacts of the proposed fish supplementation on FYLF populations, and disclose how potential impacts will be reduced.

No direct study of entrainment was ever completed as part of the SFWPA Project. In a recent entrainment study on the Yuba River for a similar configuration diversion, the Licensee conducted an entrainment study at the Lohman Ridge Diversion Tunnel and Camptonville Diversion Tunnel intakes. The study involved the Passive Integrated Transponders (PIT) tagging of 159 rainbow trout and 2 brown trout (*Salmo trutta*) in the

Middle Yuba River above Lohman Ridge Diversion Tunnel and 369 rainbow trout and 2 WPT in Oregon Creek above Camptonville Diversion Tunnel. Only adult salmonids were studied and the study did not include younger salmonids, smaller fish species, or benthic macroinvertebrates. Due to minimum fish size limitations required for successful PIT tag application and to minimize tag induced mortality, no fry were PIT tagged as part of the study. The study occurred over approximately a 12-month time period between October 22, 2012, and November 7 2013, (YCWA 2013). The relicensing data revealed two time periods of high levels of entrainment: 1) Fall – October, November and December which included fall freshets and high flow events in early winter; and 2) Spring – April, May and June which included the end of spring recession flows and the spawning period. Thirty percent of rainbow trout tagged were entrained during the study period into Lohman Ridge Tunnel on the Middle Yuba River.

The Department recommends a far more in-depth evaluation of this entrainment mitigation proposal. The alternative should be the more protective measure of requiring fish exclusion devices, or cessation of diversion during the times of high levels of entrainment as was recommended on the YCWA project.

### **Condition 8. Amphibian Monitoring**

DWQC states on pg. 31:

*Amphibian surveys shall be implemented in accordance with the Deputy Director approved Amphibian Plan beginning in the fifth full year after implementation of new MIFs [Minimum Instream Flows] (Condition 1). Amphibian surveys shall be implemented during the same years as fish surveys (Condition 7): Years 5, 6, 11, 12, 17, 18, 23, 24, and 29 following implementation of the new MIFs, unless otherwise approved by the Deputy Director as part of approval of the Fish Plan.*

The Department is concerned that amphibian surveys in the Project area have not been conducted for over ten years. As has been documented by other studies conducted for FERC licensed projects, FYLF egg mass and tadpole life stages are highly susceptible to both stranding and scouring events and therefore the frog populations may have been affected by numerous flow events in that time period. Additionally, the original surveyors may have missed egg masses as FYLF egg masses have been documented to occur farther from shore and therefore often at greater depths than previously thought (PG&E and GANDA 2017).

Part 2 - Foothill Yellow-legged Frog Monitoring Plan on pg. 21 of the Department's section 10(j) recommendations states in part:

*Within one year of license issuance, and after consultation with the Department and other interested governmental agencies, the Licensee shall file with the Commission an amphibian monitoring plan approved by the Department. The Plan shall outline sampling to be conducted in the South Fork Feather River/Lost*



*Creek reach, Forbestown Diversion Dam reach, and the Slate Creek Diversion Dam reach. The Licensee shall develop and implement a plan to monitor the numbers of FYLF egg masses, tadpoles and adults on an annual basis for the first ten years of the Project License and every five years thereafter for the term of the license.*

The Forest Service's FPA Final Section 4(e) Terms and Conditions also include a similar FYLF monitoring plan. The Department respectfully requests that to more fully understand and protect populations of this State Species of Special Concern and current Candidate CESA species, within the Project area, the Amphibian Monitoring Plan be modified to include FYLF surveys for the first ten years of the Project license and every five years thereafter for the term of the license.

**Condition 9. Benthic Macroinvertebrate Monitoring**

The Department supports the State Water Board's proposed development of a Benthic Macroinvertebrate Monitoring Plan; however, other interested stakeholders should be included in the consultation process.

**Condition 14: Annual Consultation**

The Annual Consultation meeting in the DWQC is open to "State Water Board staff, participating agencies, and interested stakeholders" however, we note that most of the other post-licensing implementation plans that are recommended in the DWQC (Drought Year Revised Operations Plan, Water Year Modifications, Gaging Plan, Long-Term Ramping Rate Adaptive Management Plan, Water Quality Plan, Slate Creek Sediment Management Plan, Fish Monitoring Plan, Amphibian Monitoring Plan, Benthic Macroinvertebrate Monitoring Plan, Riparian Vegetation Monitoring and Management Plan, and Recreation Management Plan) provide no specific ability for public stakeholders to either comment or otherwise participate in development of the plans. It is the experience of Department staff that many of the "interested stakeholders" (public participants or representatives from Non-Governmental Organizations) in FERC processes bring years of relevant experience in the watershed, and are active and thoughtful participants in the relicensing and post-licensing processes. In our experience, it seems to function well in the post-licensing process to allow the interested stakeholders the ability to participate and comment on developing implementation plans, while retaining the regulatory authorities held by state and federal resource and mandatory conditioning agencies final approval authority of each of the monitoring plans.

The Department recommends that footnote nine be removed from the document, and the term "interested stakeholders" be included wherever plan development language allows comment from the participating agencies.

## **Conclusion**

Thank you again for your consideration of these comments. The Department looks forward to participating in future discussions regarding this project. If you have any questions, please contact Laurie Hatton, Senior Environmental Scientist (Specialist) at (916) 358-2847 or [Laurie.Hatton@wildlife.ca.gov](mailto:Laurie.Hatton@wildlife.ca.gov).

## **Attachments (1)**

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## **References**

Pacific Gas and Electric and Garcia and Associates (GANDA). 2017. 10-Year Summary Report, Stream Ecology Monitoring Program (SEMP), Amphibian Monitoring. Mokelumne River Project (FERC Project No. 137).

YCWA. 2013. Technical Memorandum 3-11 Entrainment. Yuba River Development Project, FERC Project No. 2246.



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March 3, 2010

Mr. Michael Glaze  
South Feather Water and Power Agency  
c/o HDR/DTA  
2379 Gateway Oaks Drive, Suite 200  
Sacramento, CA 95833

Subject: COMMENTS ON THE INITIAL STUDY/ENVIRONMENTAL CHECKLIST AND PROPOSED MITIGATED NEGATIVE DECLARATION FOR LICENSING OF THE SOUTH FEATHER POWER PROJECT (FERC PROJECT NO. 2088)

Dear Mr. Glaze:

The Department of Fish and Game (Department), as trustee agency for the fish and wildlife resources of the State of California, has received the Initial Study and Environmental Checklist (IS/EC) and Notice of Intent to Adopt a Mitigated Negative Declaration for the South Feather Power Project (SFPP), for relicensing of this hydroelectric project (FERC Project No. 2088). These documents have been prepared and circulated by the licensee, South Feather Water and Power Agency (SFWPA), in partial compliance with the California Environmental Quality Act (CEQA).

The SFPP is a power and water supply project constructed in the late 1950's and early 1960's and is currently owned and operated by the SFWPA. The project is located in Butte, Plumas, and Yuba Counties on the South Fork Feather River (SFFR), Lost Creek, and Slate Creek. The project includes eight dams and diversions, five reservoirs, four powerhouses, and a system of tunnels, penstocks, conduits, and switchyards. According to the IS/EC, the project can store about 170,650 acre-feet (af) of water and has generated an average of about 5.14 gigawatt hours (GWh) of power annually over the last 20 years (after the addition of Sly Creek Powerhouse).

This letter identifies Department concerns, including: 1) the inappropriate use of a Mitigated Negative Declaration for a project that has potential for significant impacts, 2) deficiencies in the analysis of impacts on plants and other terrestrial species, 3) inappropriate use of monitoring plans as mitigation for potentially significant impacts, and 4) the inadequacy of species lists used to determine significance of project impacts. In addition, we provide information on the incidental take permit process under the California Endangered Species Act and the Streambed Alteration Agreement process under Section 1600 of the California Fish and Game Code.

*Inappropriate Use of a Mitigated Negative Declaration*

We strongly believe that the complex nature and the level of potential significant impacts to natural resources resulting from the SFPP warrants the preparation of an Environmental

*Conserving California's Wildlife Since 1870*

Impact Report (EIR) and not a Mitigated Negative Declaration. CEQA guidelines require that when a project may substantially reduce the number or restrict the range of an endangered, rare, or threatened species, an EIR is to be completed (CEQA Guidelines Section 15065). In this case, potential significant impacts to numerous natural resources, including those that are listed as threatened or endangered, are likely to occur.

Central Valley spring-run Chinook salmon, a federal and State listed threatened species,<sup>1</sup> are known to naturally reproduce in the Feather and Yuba Rivers. Both the Feather River Hatchery and low flow section of the Feather River are directly influenced by thermal conditions of water discharged from the Kelly Ridge powerhouse to the diversion pool on the upper Feather River. On the Yuba River, there is the potential for cumulative impacts from the project on the ability to meet instream flows necessary to protect spring-run Chinook salmon and steelhead. Pursuant to CEQA, the potential significant adverse effects of Kelly Ridge tailrace water temperatures in the Feather River and the potential for cumulative impacts on the Yuba River on the health and viability of the threatened spring-run Chinook require that the lead agency prepare an EIR.

### *Inappropriate Mitigation*

The IS/EC provided does not indicate that any of the impacts of the SFPP are significant. The Determination Section (5.3) indicates that a Mitigated Negative Declaration will be prepared and a "Summary of Mitigation Measures" is included as Attachment 1. Presumably these mitigation measures are proposed to reduce levels of some impacts to a less-than-significant level.

Attachment 1 *Summary of Mitigation Measures* contains many "Mitigation Measures" not associated with impacts listed in the Initial Study (IS) (e.g. Measure 5, 8, 10, 12, 13, etc). This "summary" appears to exclude, misquote, and/or contradict measures mentioned and cited in the text of the IS, (ie Section 3.2.2 *Staff Alternative*.) For example, Measure 34 under Section 3.2.2 states that it was "*modified to include annual consultation regarding the status of measure implementation, the results of monitoring studies, discussion of both routine and non-routine maintenance, foreseeable changes in project facilities, review of any necessary revisions or modification of plans included in the project license, and discussion of any measures needed to protect sensitive species or changes to existing management plans. Also modified to require that U.S. Fish and Wildlife Service (USFWS), CDFG, and the SWRCB be afforded the opportunity to participate in the consultation meeting and included in the distribution of all monitoring reports and correspondence relating to the meeting, and that recommendations by these agencies be included in the record of the meeting.*" Attachment 1 states that Measure 34 is only consultation with the United States Forest Service (USFSP. Throughout the IS, it is not clear which measures are being proposed to mitigate impacts; is it the measure "proposed by the licensee", the "staff alternative", the USFS 4(e) conditions, or alternative conditions filed under Energy Policy Act of 2005? All of these separate classifications are irrelevant to the need for mitigation under CEQA. The Attachment 1 *Summary of Mitigation Measures* should have been just that, a simple summary of specific mitigation associated with a specific identified potential impact.

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<sup>1</sup> The ESU includes all naturally spawned populations of spring-run Chinook salmon in the Sacramento River and its tributaries in California, including the Feather River, as well as the Feather River Hatchery spring-run Chinook program.  
<http://www.nwr.noaa.gov/FSA-Salmon-Listings/Salmon-Populations/Chinook/CKCVS.cfm>

In the IS/EC Summary of Mitigation Measures, Attachment 1 lists several mitigation measures which do not meet the definition of "mitigation" under CEQA Guidelines 15370. In particular, consultation, review, and monitoring do not constitute mitigation under CEQA. Specifically, Mitigation Measure 40 "Foothill Yellow-Legged Frog Monitoring Plan", Forest Service Condition 19 "Benthic Macroinvertebrate Monitoring Plan", and "Fish Population Monitoring Plan", Mitigation Measure 57 "Minimum Streamflow Monitoring Plan", Mitigation Measure 35 "Terrestrial Wildlife Monitoring Plan", Mitigation Measure 37 "Water Temperature Monitoring Plan", and Forest Service Condition 18 "Wild Fish Supplementation Monitoring Plan" do not meet the definition.

Section 4.0 "Environmental Protection Measures" states: *In addition to conditions required by the FERC, the license for the project also contains mandatory conditions required by the USFS under Section 4(e) of the Federal Power Act [Section 4(e)] and by the SWRCB contained in the Water Quality Certificate that is being sought and are summarized respectively, in Attachments 1 and 2. Attachment 2, however, does not appear to be conditions the SWRCB contained in a Draft or Final Water Quality Certificate.*

#### Impacts and Mitigation for Impacts to Sensitive Plant Species

Impacts to plants are not discussed in the environmental document. Since the project involves ground-disturbing activity, such as the construction of a trail and other expansion of recreational facilities, such impacts should be discussed and methods to reduce any significant impacts to a level below significance should be put forth.

The IS/EC indicates that all impacts to biological resources under the proposed project are "less than significant," through use of the following statement: "Special studies were conducted in support of the South Feather Power Project FEWS to assess the potential of special status aquatic species, botanical species, and terrestrial wildlife to occur in the project area." Such studies did indicate the presence of sensitive plant species but there is no analysis of the nature and extent of impacts. Page 24 of the IS, Section 5.4.5 (Biological Resources) inappropriately states that impacts to special status species are less than significant, as an appropriate analysis has not been conducted.

According to the Environmental Impact Statement (EIS) prepared for the project, ten special status plant species were identified during a 2004 plant survey. Three of the plants, Brandegee's clarkia (*Clarkia biloba* ssp. *Brandegeae*), Mosquin's clarkia (*Clarkia mosquinii*) and northern California black walnut (*Juglans hindsii*) are listed by the California Native Plant Society as 1B – Plants that are rare, threatened or endangered in California and elsewhere. The Department believes that impacts to 1B species may be considered significant under the CEQA.

#### Special Status Species

In its role as a trustee agency for California's fish and wildlife resources, the Department reviews CEQA projects for their impacts to sensitive and special status species, in addition to those that are State and federally-listed or candidate species. These include California Species of Special Concern as well as those species that are fully-protected under the California Fish and Game Code. The document does not address impacts to the complete suite of species.

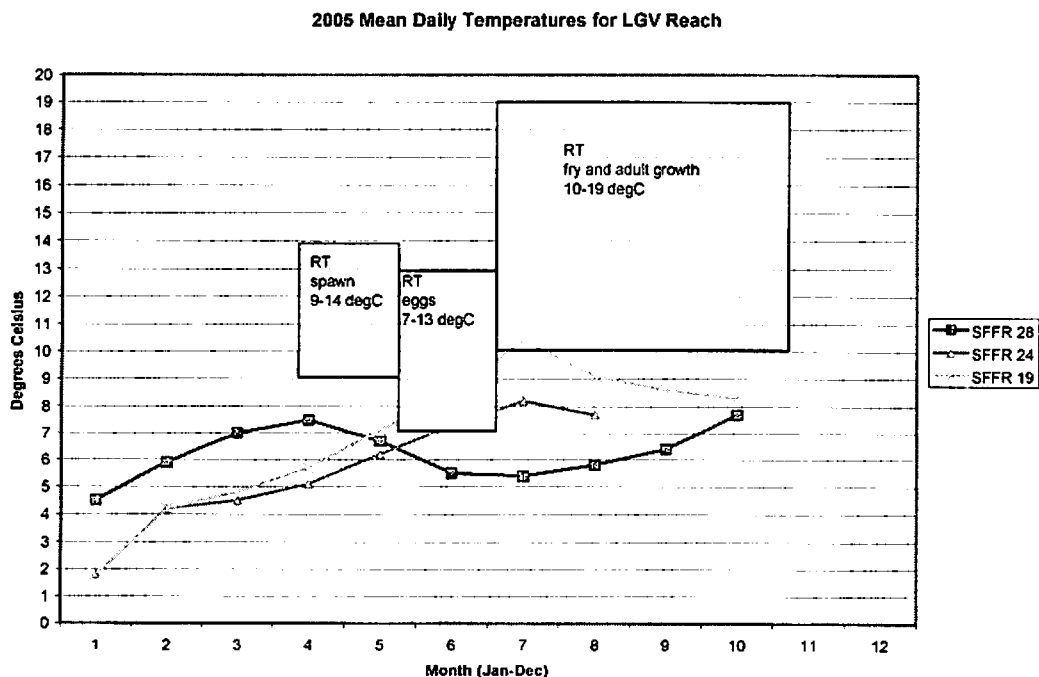
Process for Identifying Special Status Wildlife Species

The EIS states that a search of federal and State databases and consultation with federal biologists indicated that there were 68 vertebrate and 2 invertebrate special status species with potential to occur in the project vicinity. Fourteen vertebrate and one invertebrate species were on record as having occurred in or near project facilities. The document does not analyze or discuss which of the 70 species have the potential to occur within the project area, based on habitat preferences, life history, or other considerations. It is not clear how the IS/EC reaches the conclusion that impacts are less than significant, when a complete assessment of what species have the potential to occur in the project area has not been put forth.

Little Grass Valley Dam Reach

In Section 5.4.9 of the IS, in response to Question F asking whether the project has the ability to otherwise substantially degrade water quality; the licensee states that the project has a "Less than Significant Impact." Water temperature in Little Grass Valley reach remains unseasonably cold all year. Rainbow trout (RT) are the native coldwater fish species for the project area and a valuable indicator of habitat quality for a host of aquatic organisms in Sierra Nevada westslope streams. Rainbow trout biomass and density estimates in Little Grass Valley reach are depressed when compared to other Sierran streams. Rainbow trout require a water temperature of 10-19°C for growth, with optimum temperatures for growth ranging from 14-19°C (Moyle 2002, Bell 1980, Myrich and Cech 2000). Due to the low level release from Little Grass Valley reservoir, water temperature in the bypass reach rarely exceeds 10°C and may not adequately support RT growth and recruitment (Figure 1).

Figure 1. Water in Little Grass Valley Dam reach at three monitoring sites rarely reaches temperatures adequate for healthy rainbow trout growth and development.



Such low temperatures may delay spawning and reduce egg development (Moyle 2002, Bell 1980). Smaller-sized fish have lower winter survival (Overton and McDonald 1998). Low water temperature during the critical period for growth is likely a contributing factor to low RT biomass. The licensee states that implementation of the Water Temperature Monitoring Plan will ensure that there is "Less than Significant Impact". There are indications that the current low water temperature may impair the quality of rainbow trout habitat. Monitoring alone does not provide protection of aquatic habitat.

*Kelly Ridge Powerhouse Releases to the Feather River*

In Section 5.4.9 of the IS, Question F asks whether the SFPP has the ability to otherwise substantially degrade water quality; the licensee states that the project has a "Less than Significant Impact." In the discussion below, the licensee states that:

*Besides the SFPP, three other water projects occur in the watershed. Two of the three have large storage reservoirs which dwarf the SFWPA project making active coordination of the projects unnecessary. The larger projects are the California Department of Water Resources' Feather River Project (FERC Project No. 2100), and Yuba County Water Agency's Yuba River Development Project (FERC Project No. 2246). Because releases from the Kelly Ridge Powerhouse may, in combination with the Feather River Project, have affects on downstream water temperature in the Feather River, the SFWPA proposes continuous monitoring (Measure 37) that will be performed in accordance with the Water Temperature Monitoring Plan.*

The statement above that the "large storage reservoir dwarf the SFWPA project making active coordination of the projects unnecessary" is misleading. Under certain regularly occurring conditions, warm water released from the SFWPA project from Kelly Ridge Powerhouse (KRP) impact the water temperatures in the diversion pool downstream of Lake Oroville and force the California Department of Water Resources (DWR) to coordinate projects by making higher releases from storage or other operational changes at Lake Oroville, to meet downstream hatchery and instream temperature objectives. This may represent a significant impact as temperatures that are too warm can alter the natural production of populations of Endangered Species Act (ESA) listed and non-listed native anadromous species in the Lower Feather River.

Water from the KRP is released into the diversion pool below Lake Oroville approximately 1000 feet downstream from the location where DWR's Hyatt Power Plant releases water to the Feather River. Water from the diversion pool is then either released into the Low Flow Channel section of the Feather River or diverted through DWR's Thermalito system and eventually released into the Feather River from the Thermalito Afterbay. The intake for water supply to the Feather River Hatchery is collected at the diversion dam. While the releases from Hyatt are typically much higher than those from KRP, particularly during off-peak hours, Hyatt Powerhouse is often shut down or releasing water into the diversion pool by DWR only for the purpose of meeting instream flow and hatchery flow requirements. Under these conditions, the warmer water from KRP does impact water temperatures in the Thermalito Diversion Pool and at points downstream, including the Feather River Fish Hatchery.

The following plots were submitted to the Department by DWR in response to a data request for temperature and flow information from DWR's Hyatt Powerplant. DWR collects temperature data in the diversion pool downstream of Hyatt Powerplant, upstream of the release point of KRPH, and downstream of the release point of KRPH. Similar plots were submitted in a memo from Fraser R. Sime to William Cochran titled "Addendum to the Fall 2008 Thermalito Diversion Pool Temperature Study;" this memo was submitted on March 24, 2009, by counsel to DWR to FERC as an attachment to a letter titled "California Department of Water Resources' Submission of Thermalito Diversion Pool Temperature Data."

Figure 2. Difference between Temperature of Water Released from KRPH and Water in Diversion Pool Downstream of Hyatt Powerhouse

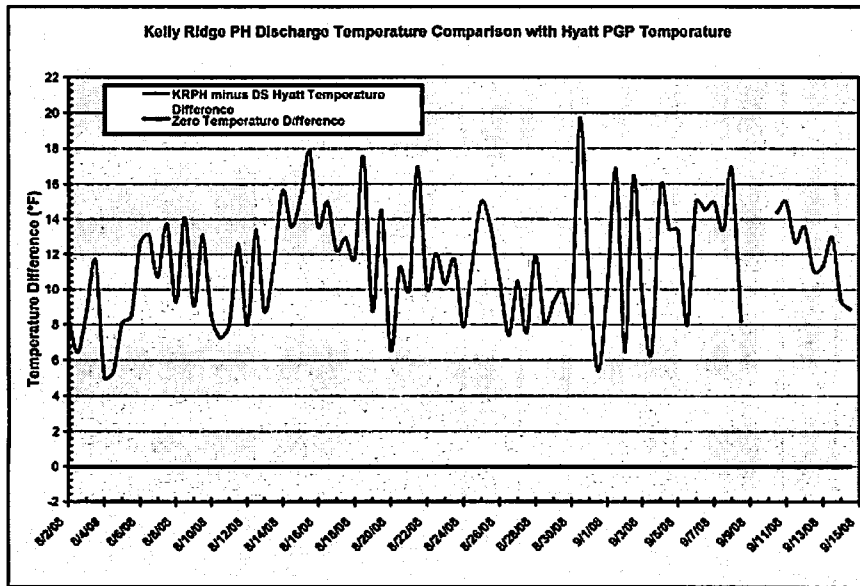
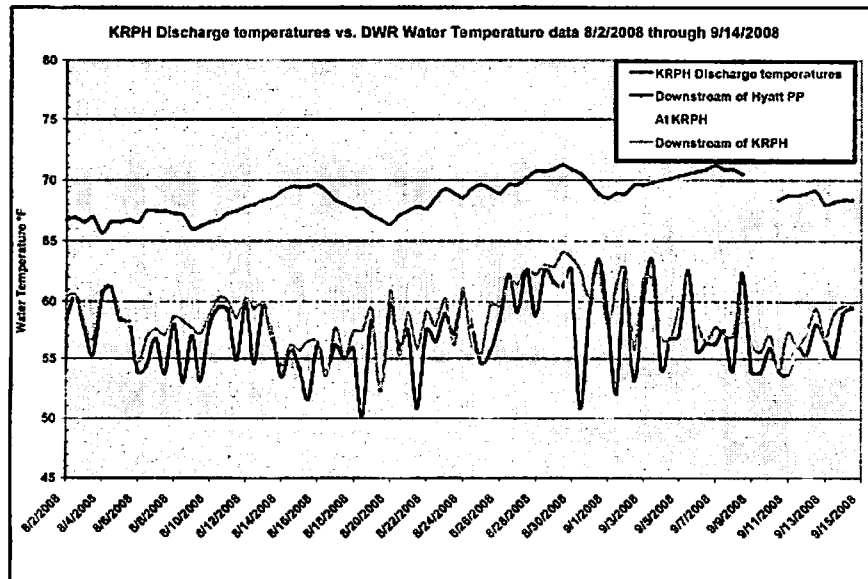


Figure 3. Plot showing Temperature (°F) of Water Released from KRPH, Water Downstream of Hyatt Powerplant yet Upstream of KRPH, Water Released from KRPH, and Water Downstream of KRPH.





The plots above illustrate the conditions which occurred in the summer of 2008, where temperatures discharged from KRPH were as much as 20°F warmer than temperatures in the Diversion Pool downstream from DWR's Hyatt Powerhouse. Additionally they show that diversion pool temperatures were heated as much as 12°F by the addition of flow from KRPH.

Furthermore, it is our understanding that under current conditions these projects are informally coordinated. DWR and SFWPA have both stated that DWR has in the past called upon SFWPA to curtail releases from KRPH and has subsequently reimbursed SFWPA for lost generation at KRPH. Although this may not be represented in a formal agreement between licensees, it certainly demonstrates that under certain circumstances the two projects are coordinated. The Department recommends that SFWPA acknowledge that their releases from KRPH have at least a potentially significant impact on ESA species, and should be further examined in the licensees CEQA analysis.

### Wild fish supplementation

In Section 3.2.2., additional measures for Aquatic Resources, the licensee states the SFWPA will "Develop and implement a wild fish supplementation program to augment fish populations, when warranted, in the SFFR, Slate Creek, and in Sly Creek and Lost Creek Reservoirs." This measure was in response to concerns regarding the potential loss of fish at Project diversions. During the spring and summer when adult RT move up and downstream to spawning habitat and fry emerge from gravels and disperse downstream, most of the water in South Fork Feather and Slate is diverted out of the basins. The large capacity diversions divert the majority of the inflow from the streams (up to 94% and 86% of total inflow, respectively). The diversions result in significant inter-basin transfers of water out of the two watersheds. It is a reasonable assumption that the number of fish entering a diversion tunnel is proportional to the amount of flow that is diverted. Flow that is diverted from SFFR and Slate Creek (a tributary to the Yuba River) is delivered to Sly Creek Reservoir, and eventually into the Sly Creek Powerhouse and the Woodleaf Powerhouse. High rates of fish mortality are associated with Pelton Wheel turbines, such as at the Woodleaf Powerhouse. RT entrained into the Woodleaf power intake at Lost Creek Reservoir would not likely survive.

Population number and biomass data contained in the license application for project affected streams (as compared with fish population data of unimpaired reference reaches that are similar in size, elevation, and hydrologic regime in the North Central Sierra Mountains) are judged by the Department to be impaired. There is inadequate information to assess the degree that entrainment occurs on any of the diversions, nor to assess the impacts that entrainment may have on the 16 populations of RT in project reaches. Given the substantial proportion of flow that is diverted into inter-basin transfers at South Fork Diversion and Slate Creek and the expected high mortality of entrained fish at Woodleaf Powerhouse, fish exclusion devices are necessary to protect aquatic resource at these diversions.

Rather than install fish exclusion devices, the licensee proposes to mitigate for the loss of fish resources by developing and implementing a "wild fish supplementation program." No description of the program is provided to enable us to evaluate the efficacy and potential environmental impacts of the program. Primary concerns include the capture and holding of

wild rainbow trout, the release of hatchery-reared young, and the potential for disease transmission. As this measure is offered as mitigation for the potentially great loss of fish resources due to the large volume of water diversion, and as it is being considered instead of the more certain protective measure of screening the intakes, it is imperative that the proposed program be carefully evaluated before being accepted. Without this scrutiny, determining that the impact has been mitigated to "less than significant" is not possible.

### Cumulative Impacts

The interbasin water diversion of an average of 70,000 ac-at/year and a maximum 150,000 Ac-ft/Year from Slate Creek into the SFWPA Project decreases the total amount of flow into Yuba County Water Agency's (YCWA) New Bullards Bar Reservoir. This storage reservoir has a capacity of 966,000 ac-ft and is the main source of water used by YCWA at their Yuba River Project (FERC Project #2246) to meet Lower Yuba River minimum instream flow requirements necessary to protect ESA-listed spring run Chinook salmon and steelhead. Although New Bullards Bar certainly receives the largest amount of water annually from the North Yuba River, the potential for cumulative impacts due to water diversions from Slate Creek must be analyzed in SFWPA's CEQA documentation.

### CESA Permits

A California Endangered Species Act (CESA) Permit must be obtained if the project has the potential to result in take of species of plants or animals listed under CESA, either during construction, or over the life of the project. Issuance of a CEQA permit is subject to CEQA documentation; therefore the document must specify not only impacts and mitigation measures but also a mitigation monitoring and reporting program. Early consultation is encouraged, as significant modification to the project and mitigation measures may be required in order to obtain a CESA permit. A CESA permit may only be obtained if the impacts of the authorized take of the species are minimized and fully mitigated and adequate funding has been ensured to implement the mitigation permits. The Department may only issue a CESA permit if it is determined that issuance of the permit does not jeopardize the continued existence of the species. The Department will make this determination based on the best scientific information available, and shall include consideration of the species capability to survive and reproduce, including the species known population trends and known threats to the species. CEQA documentation should include a mitigation, monitoring and reporting program, which at a minimum includes a range of enforceable mitigation measures, including identifying how the measures will be carried out; who will perform these tasks; when the tasks will be performed; and provide details for achieving success, including funding to establish and manage any identified mitigation lands.

### Streambed Alteration Agreements

The Mitigated Negative Declaration should consider and analyze whether implementation of the proposed project will result in reasonably foreseeable potentially significant impacts subject to regulation under Section 1600 et. seq. of the Fish and Game Code. Several project features could result in such impacts. In general, such impacts result whenever a proposed project involves work undertaken in or near a river, stream, or lake that flows at least intermittently through a bed or channel, including ephemeral streams and water

courses. Impacts triggering regulation by the Department under these provisions of the Fish and Game Code typically result from activities that:

- Divert, obstruct, or change the natural flow or the bed, channel or bank of any river, stream, or lake;
- Use material from a streambed; or
- Result in the disposal or deposition of debris, waste, or other material where it may pass into any river, stream, or lake.

This project may involve such activities, which may result in reasonable foreseeable substantial adverse effects on fish or wildlife. Therefore a Lake or Streambed Alteration Agreement (LSAA) may be required by the Department. In order to facilitate development of the LSAA concurrently and consistently with the current environmental review process, we recommend that the lead agency initiate the process as soon as practicable.

Pursuant to Public Resources Code Sections 21092 and 21092.2, the Department requests written notification of proposed actions and pending decisions regarding this project. Written notifications should be directed to this office.

Thank you for the opportunity to review this project. If the Department can be of further assistance, please contact MaryLisa Lynch, Senior Environmental Scientist, at (916) 358-2921 or, Jeff Drongesen at (916) 358-2919.

Sincerely,



Kent Smith  
Acting Regional Manager

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