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SECRETARY FOR
ENVIRONMENTAL PROTECTION

State Water Resources Control Board

NOV 20 2015

Mr. Charlie Kuffner
Rugraw, LLC
70 Paseo Mirasol
Tiburon, CA 94920

Dear Mr. Kuffner:

COMMENTS ON THE LASSEN LODGE PROJECT REACH SURVEY AT 34 CUBIC FEET PER SECOND, LASSEN LODGE HYDROELECTRIC PROJECT; FEDERAL ENERGY REGULATORY COMMISSION PROJECT NO. 12496; TEHAMA COUNTY

Background

On July 29, 2015, State Water Resources Control Board (State Water Board) staff received an email from Mr. Charlie Kuffner of Rugraw, LLC requesting comments on the Lassen Lodge Project Reach Survey at 34 cubic feet per second (cfs)¹ (Report). The Lassen Lodge Hydroelectric Project (Project) is a new hydroelectric project that would be located on South Fork Battle Creek in Tehama County. The purpose of the Project is to generate electricity through hydropower. The Report contains information about the survey conducted by Cramer Fish Sciences of spawning and rearing habitat in the proposed Project reach of the South Fork of Battle Creek at 34 cfs between March 18-21, 2015.

Specific Comments

State Water Board staff conducted a review of the Report. The Report and associated request for comment do not provide a clearly defined purpose for the Report. Therefore, it is difficult to determine whether the information and conclusions of the Report are adequate. If the purpose of the Report is to establish whether anadromous fish can potentially reach the Project area or to show that the proposed Project will not impact fish habitat, then additional elements must be addressed in the Report, and State Water Board staff will have additional comments. The comments below presume the purpose of the Report is solely to define currently existing baseline conditions and to quantify potential fish habitat within the Project area. The comments are as follows:

1. Please clearly state the purpose of the Report in the introduction.
2. The Report states that water temperatures within the Project area exceed a lethal level for Chinook eggs. However, no supporting data or reference citation is provided to support this statement. Please specify the water temperatures measured in the Project area, the date(s) temperatures were measured, and cite the reference(s) for the lethal threshold.

¹ Full report title is *Lassen Lodge Hydroelectric Project Fish Habitat Survey at 34 cfs on the Project Reach, South Fork Battle Creek*, dated June 26, 2015.

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3. Although it is evident that water temperature and dissolved oxygen were monitored during the fish habitat survey, the Report does not contain an analysis or discussion of these monitoring results. The Report also does not evaluate how those results impact potential fish habitat in the Project area. A separate water temperature study was conducted by Watercourse Engineering, Inc. in May 2015; however, no reference to that study is provided in the Report. As water temperature and dissolved oxygen are an integral part of fish habitat suitability, please address these water quality parameters in the Project area and how they may influence fish habitat suitability. In addition, relevant water temperature and dissolved oxygen monitoring data should be included in the Report.
4. Water quality is a vital parameter in assessing fish habitat and the Report mentions that water temperature and dissolved oxygen were measured twice daily. However, pH and turbidity are not addressed within the Report. Please provide a rationale for why pH and turbidity were not monitored as part of water quality assessment of fish habitat in the Project area.
5. Between the 2013 study referenced in the Report and 2015, when the data for this Report was collected, the flows within the Project area nearly tripled from 13 cfs to 34 cfs. The Report lacks a discussion addressing why flows in the Project area increased. Considering that the state of California is in the fourth year of severe drought, it is counterintuitive that flows would increase three-fold in two years. Please provide insight into the reasons for this occurrence.
6. The section regarding Spawner Capacity states that the basis for minimum criteria for depth, area, and velocity is reviewed in detail in Cramer and Ceder 2013. The specific minimum criteria for depth, area, and velocity should be included in the Report.

State Water Board staff appreciates the opportunity to provide comments on the Report and looks forward to continued consultation with Rugraw, LLC on the development of this Project.

If you have questions regarding this letter please contact Ms. Kristen Gangl, Project Manager, by phone: (916) 323-9389, or email: kristen.gangl@waterboards.ca.gov. Written correspondence should be directed to:

State Water Resources Control Board
Division of Water Rights
Water Quality Certification Program
Attention: Kristen Gangl
P.O. Box 2000
Sacramento, CA 95812-2000.

Sincerely,



Kristen Gangl
Environmental Scientist
Water Quality Certification Program

Document Content(s)

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