

Memo of Teleconference

To: Public Files

From: Phil Leapley, Tetra Tech

Date: January 21, 2015

Dockets: P-12496-002

Project: Lassen Lodge Hydroelectric Project

Subject: Telephone conference with John Wooster (NMFS), Phil Leapley (Tetra Tech) and Mike Deas (Watercourse) regarding questions from NMFS on selection of proposed water temperature model

On January 13, 2015, the individuals noted in the subject line, participated in a telephone conference call. On January 14, 2015, Phil Leapley spoke with John Wooster a second time as a follow-up to the first call. The purpose of the calls was to address questions that NMFS had with regard to the proposed selection of a water temperature model WT3. In an email exchange with John prior to the call, he asked that the following question be addressed. "If you are developing HEC-RAS models for sediment transport, why not use the same platform for water temp modeling?" During the conference call, John indicated that he has not used the WT3 model, and asked for specifics on the transparency of the calibration process and parameters.

Conference call January 13

Mike provided the following information as to why WT3 was selected over HEC-RAS:

- The HEC-RAS model used for the sediment transport analysis was only developed for short, representative reaches of South Fork Battle Creek in the vicinity of the proposed intake and the at the Power house. Thus a model for the entire reach was not developed.
- John acknowledged that implementing HEC-RAS for the entire reach would be a considerable undertaking for a small project. He noted that, possibly, an abbreviated survey could have been completed to get some representative data during collection of the data used in the hydraulic geometry analysis.
- Mike noted that he joined the project team in August 2014, and during his first field visit in late-August, the stream was dry from above Angel Falls downstream to just above the Powerhouse. Collecting data to support a HEC-RAS application would be difficult in a dry stream channel.
- The WT3 model was selected as a model that could use the available existing data over the entire stream reach.

Upon further discussion, John indicated, as noted above, that he has not used the WT3 model, and asked for specifics on the transparency of the calibration process and parameters. It was important to him that he have a chance to see the calibration data, and specifically requested to see calibration data before he would be comfortable in supporting the approach. Phil and Mike indicated that we would be happy to share modeling information with John; however, we first needed to discuss this request with the internal team regarding the status of model development

and calibration. At this point we ended the conversation and Phil indicated that he would get back to John on Wednesday.

Conference call January 14

Phil called John on Wednesday and relayed a follow-up discussion with the internal team. The situation is that the model development and calibration have not progressed to a point that this data is ready for review. Watercourse has been waiting for FERC to provide comments on the draft modeling plan before completing model development and calibration. Following review and consideration of FERC comments, full model development and calibration will proceed.

Phil suggested that once FERC comments are received and the model plan revised, if needed, Watercourse would propose to sit down with John and review the model and calibration data. The plan would be to do this before detailed model runs and final preparation of the modeling report. John agreed to review the model and calibration data in a meeting once that data was available.

Given that the model calibration was not ready for review, John proposed a couple of paths to move forward and asked Phil which path he preferred. Phil responded by saying FERC is waiting to hear whatever further comments NMFS has on the proposed water temperature model so they can issue their comments on the proposed modeling plan very soon. John indicated that he was reviewing a draft comment letter prepared by Bill Foster of NMFS and would be submitting the letter to FERC. Phil requested that John understand that FERC is looking to issue comments very soon and it would be good to get the comments to FERC by Friday, January 16.