# Chelan River Fishery Forum Conference Call Minutes

Date: August 18, 2015
Time: 9:00 am – 12:00 noon
Location: Chelan PUD Headquarters, Wenatchee, WA
Second Floor Conference Room

Meeting called by: Jeff Osborn, Chelan PUD  Note taker: Debby Bitterman

*Attending Members*

| Name | Agency | Phone | Email |
|---|---|---|---|
| Graham Simon | WDFW | 509-662-0503 | Graham.Simon@dfw.wa.gov |
| Jim Pacheco | Ecology | 360-407-7458 | jpac461@ecy.wa.gov |
| Phil Archibald | LCSA | 509-784-2471 | kim.l.lohse@gmail.com |
| Ray Walton | West Consultants | 425-646-8806 | rwalton@westconsultants.com |
| Paul Picket | Ecology | 360-407-6882 | ppic461@ecy.wa.gov |
| Steve Hays | Chelan PUD | 509-661-4181 | steve.hays@chelanpud.org |
| Jeff Osborn | Chelan PUD | 509-661-4176 | jeff.osborn@chelanpud.org |

Meeting Purpose: Meeting of the Chelan River Fishery Forum to provide input for scenarios to model with the calibrated Chelan River Temperature Model

## Minutes

Jeff Osborn, Chelan PUD, welcomed everyone to the Chelan River Fishery Forum (CRFF) meeting and made known that voice recording of the meeting was initiated for note-taking purposes only.

The goal of this CRFF call was to provide guidance and direction to Ray Walton for running Chelan River temperature modeling scenarios to direct future activities for the Chelan River. After having reviewed the Chelan River Riparian Revegetation Feasibility Assessment and Limiting Factors Analysis reports and the Chelan River Temperature Model Calibration report, the CRFF discussed potential Chelan River modeling scenarios to run thru the temperature model. These scenarios will help to determine whether the Chelan River water temperature can be affected by additional flow, shade; and/or, manipulating channel morphology.

Steve Hays, Chelan PUD, noted that the Chelan River has reached daily maximum temperatures near $27.5^0$ C, this year, and that snorkeling activities were cancelled due to the forest fires nearby. For model scenarios, he recommended that the CRFF consider the following potential scenarios independently and/or consider a combination of different selected scenarios.

Modeling scenarios to be considered:

- Affects of shade on Chelan River water temperature
- Affects of flow on Chelan River water temperature
- Affects of channel modifications on Chelan River water temperature
- Combine shade and flow for a comparison of Chelan River water temperature change

After significant discussion, the CRFF agreed to the following temperature model scenarios for Ray Walton, West Consultants, to run.

Task 1: Flow

Use the hottest time period (water years) currently in the existing model to assess the effects of flow, based on Chelan River flows of 80, 150, 200, 250, 300, 350, and 500 cfs, with a maximum volume released of 5,000 sfd. Water temperatures data will be produced at the following locations: end of Reach 3, end of Reach 1, 1/3 down Reach 1, and 2/3 down Reach 1. Data would be modeled in 7-8 day duration in order to develop a temperature

response curve. The development of a response curve by using multiple flows would help to identify temperature changes in the Chelan River. Water temperature data from 2015 will be added to the model at a later date, likely after October 2015 when a complete data set will be available.

Task 2: Shade

The intent is to model the maximum predicted shading from the Feasibility Assessment of 12 percent at year 20 after plantings have occurred. Additional information, i.e., vegetation height, plant proximity to water, etc., is needed for Ray to model the influence of the vegetation on shading the Chelan River. Jeff noted that Figure 5 in the Chelan River Riparian Revegetation Feasibility Assessment has some of that information.

CRFF recommended investigation of flow, shade, and hyporheic influence before channel modification activities. Channel modification could be considered after the analysis of alternatives (flow and riparian planting).

**Meeting Action Items:**

- Paul Picket, Ecology, will provide methodology for evaluating hyporheic zone.
- Steve will provide to Ray a map indicating the location of probes (1/3 Reach 1 and 2/3 Reach 1).
- Ray will develop a list of data needs for the shade model
- Jeff will coordinate with Herrera for the additional vegetation data that Ray needs for the shade model.
- Steve will provide updated temperature data to Ray.