Chelan River Fishery Forum Meeting Minutes

Presentations by Herrera Environmental Consultants (Riparian) and

West Consultants (Temperature Model)

Date: June 25, 2015 Time: 9:00 am – 4:00 pm

Location: Chelan PUD Headquarters, Wenatchee, WA

Second Floor Conference Room

Call in number: 1-509-661-4844, Access Code is 4000

| Meeting called by: Jef | f Osborn, Chelan PUD | Note taker: | Debby Bitterman |
|-------------------------|--|-------------------|---------------------------------|
| Attendees | | | |
| <u>Name</u> | <u>Agency</u> | <u>Phone</u> | <u>Email</u> |
| Graham Simon | WDFW | 509-662-0503 | Graham.Simon@dfw.wa.gov |
| Travis Maitland | WDFW | 509-665-3337 | Travis.Maitland@dfw.wa.gov |
| Justin Yeager | NOAA | 509-925-2618 x224 | Justin.Yeager@noaa.gov |
| Catherine Willard | Chelan PUD | 509-661-4179 | catherine.willard@chelanpud.org |
| Joy Michaud | Herrera | 360-292-1221 | jmichaud@herrerainc.com |
| Phil Archibald | LCSA | 509-784-2471 | kim.l.lohse@gmail.com |
| Jeremy Bun | Herrera | 206-787-8302 | jbunn@herrerainc.com |
| Alene Underwood | Chelan PUD | 509-661-4364 | alene.underwood@chelanpud.org |
| Ray Walton | West Consultants | 425-646-8806 | rwalton@westconsultants.com |
| Steve Hays | Chelan PUD | 509-661-4181 | steve.hays@chelanpud.org |
| Jeff Osborn | Chelan PUD | 509-661-4176 | jeff.osborn@chelanpud.org |
| Len Ballek | Herrera | 406-721-4204 | lballek@herrerainc.com |
| Charlie McKinney (phone | e) Ecology | 509-457-7107 | cmck461@ecy.wa.gov |
| Chris Coffin (phone) | Ecology | 509-575-2821 | cco461@ecy.wa.gov |
| Jim Pacheco (phone) | Ecology | 360-407-7458 | jpac461@ecy.wa.gov |
| Marcie Steinmetz | Chelan PPUD | 509-661-4186 | marcie.steinmetz@chelanpud.org |
| Paul Pickett | Ecology | | |
| Meeting Purpose: | Meeting of the Chelan River Fishery Forum to review Chelan River Riparian Revegetation Feasibility Assessment/Limiting Factors Analysis ar Chelan River Temperature Model Calibration Report | | |

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.

Chelan River Riparian Revegetation Feasibility Assessment/Limiting Factors Analysis

Joy Michaud, Jeremy Bun, and Len Ballek (phone), Herrera, provided a presentation of their Chelan River Riparian Revegetation Feasibility Investigation and Limiting Factors report.

The following topics were discussed:

- Site Visit and Data Acquisition
- Limiting Factors Analysis
 - Plant List
 - Physical Constraints
- Feasibility Assessment
 - o Map/Overlay Constraints
 - o Match Plants to Constraints
 - Develop Planting Concepts

Conclusions from the investigation include:

- There are plants that can be established in Reach 1 without supplemental water.
- The greatest opportunity for riparian vegetation establishment is in Sub-reach A.
- Potential revegetation plan is estimated to provide ~10,000 LF of willow/cottonwood band and ~1,500 LF of diverse riparian plant community.
- In 20 years, proposed revegetation plan could increase late summer afternoon shaded area in the Chelan River by 8 12% of the low-flow water surface.
- There are numerous natural limitations to revegetating the Chelan River; it will not be a lush riparian corridor.

Len Ballek, Herrera, noted that if Chelan PUD moves from the study to Chelan River revegetation project work, , he would recommend on-site field fitting planting locations, versus just planting according to a planting plan figure, to increase planting success.

Action Item:

- CRFF will provide additional questions/comments regarding the Chelan River Riparian Revegetation Feasibility Assessment/Limiting Factors Analysis Report to Jeff.
- Herrera will address comments and questions from the CRFF
- Herrera will submit the final Chelan River Riparian Revegetation Feasibility Assessment/Limiting Factors Analysis Report to Jeff.
- CRFF will review final report and make next steps recommendations.

Chelan River Temperature Model Calibration Report

Ray Walton, West Consultants, provided a presentation of the Chelan River Temperature Model Calibration report. The following topics were outlined:

- Background
- Model Selection
 - Evaluation of Processes
 - Model candidates
 - Model selection
- Quality Assurance Project Plan
- Temperature Model Development and Calibration
 - Selection of temperature reaches
 - Selection of calibration and validation periods
 - o Flow and temperature data
- Meteorological data
- Next Steps
 - o Review model calibration report
 - o Define UAA alternatives
 - Simulate UAA alternatives
 - o Recommendations, Report, Meetings

After Ray's presentation, conclusions included the following:

- Temperature model includes the hyporheic zone module
- Month-to-month results may have groundwater temperature influence
- Calibration/validation graphs and statistics support accurate calibrated model
- Temperature model considered only topographic shading, not vegetative shading
- If a low-flow channel (excavation) is proposed, need to consider impact on hyporheic zone

Steve Hays, Chelan PUD, noted that 2 additional probes for tracking water temperatures roughly 1/3 and 2/3 down Reach 1 have been added. Reach 1 now has 4 points of temperature measurement. He also added 4 probes in the braided section, 1 at the top of the braid, and 1 on each of the braids (3). This is an attempt to get a better idea of any variability in water temperature in the braided channels that may be due to hyporheic zone and ground water influence.

After significant discussion, the CRFF agreed that the model was an accurate representation of actual conditions. After the CRFF finalizes the calibration report, they will be able to consider potential scenarios that the model could run.

Action Items:

- CRFF provide comments regarding the Chelan River Temperature Model Calibration Report to Steve Hays
- Ray will address comments regarding the Chelan River Temperature Model Calibration Report.
- Ray will submit the final report to Steve.

Next Steps:

The next CRFF meeting will be in August to discuss potential different temperature model scenarios for Ray to run.