



## REGIONAL TECHNICAL TEAM MEETING DRAFT JANUARY MEETING SUMMARY

**Date:** Wednesday, January 8, 2020

**Time:** 9:00 AM to 1:00 PM (Prioritization Workgroup from 1:30-4:30 PM)

**Location:** Community Foundation of NCW

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**Members Present:** Jeremy Cram, Keely Murdoch, John Arterburn, Kate Terrell, Catherine Willard, Justin Yeager, Steve Fortney, Catherine Willard, Tracy Hillman (Chair).

**Others Present:** Jeff Jorgensen/NOAA, Greer Maier/UCSRB, Pete Teigen/UCSRB, Sarah Walker/UCSRB, Jamie Cleveland/BPA, Katie McDonald/BPA, Russell Scranton/BPA, Mike Kaputa/CCNRD, Jason Lundgren/CCFEG, Allison Lutes/CCNRD, Kevin See/Biomark, Ken Muir/CCD, Tabatha Rood/BPA, Aaron Rosenblum/CCFEG, Mike Ackerman/Biomark, Steve Kolk/BOR, MarySutton Carruthers/CCD, and Robyn Pepin/Aspect.

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Tracy Hillman welcomed everyone to the meeting and participants introduced themselves.

Members present reviewed and approved the draft agenda. December meeting notes and action items were reviewed and approved (as revised). Carry-over action items are identified below.

***Carry-Over Action Items:***

None

### UCSRB and RTT Updates

#### UCSRB December Meeting

Greer Maier reported that the UCSRB met in December and approved the RTT recommendation of the Mainstem Wenatchee HUC10 as the priority watershed for the Fish Barrier Removal Board. Jeremy Cram and Robyn Pepin also presented Step 1 of prioritization to the Board.

#### BPA Response to M&E Request

Tracy Hillman reported that BPA responded to the RTT and UCSRB request for access to ISEMP and CHaMP data. There will be a conference call on Friday, 10 January with BPA to discuss their response and next steps. UCSRB and RTT will be coordinating with BPA on next steps.

***Action Item:***

- Tracy Hillman will send the BPA letter to the RTT. Anyone with input for BPA can send comments to Tracy or participate on the call on Friday, 10 January.

## **SRFB Kick-Off Meeting**

Pete Teigen, Lead Entity Coordinator, said the SRFB kick-off meeting will be held after the RTT meeting on 12 February (1:00-4:00 pm). There are several changes in the SRFB process that will be discussed. If RTT members are interested, they are welcome to attend. Pete will provide more information prior to the meeting.

## **Upper Columbia Science Conference**

Greer Maier reminded RTT members about the upcoming 2020 Science Conference. The agenda is available online. Greer asked that people register and make their hotel reservations if they plan to attend. There is still an opportunity to present (two talks have been cancelled) and the UCSRB is still seeking sponsors, exhibitors, and silent auction donations. All information is at [www.uc2020.org](http://www.uc2020.org).

## **Estimating Carrying Capacity Using Quantile Regression Forest Models**

Kevin See from Biomark presented his research on estimating carrying capacity using Quantile Regression Forest (QRF) modeling. The QRF model uses the relationship between fish density and habitat metrics to estimate carrying capacity. The random forest component accounts for potential non-linear relationships by incorporating habitat correlations. Kevin is using the model to estimate capacity for summer parr, spawners, and winter pre-smolts. He presented some of the relationships between Chinook parr and wetted width, cover, temperature, and channel unit frequency. Kevin presented how the QRF relationships can be extrapolated to larger areas. There are globally available attributes like drainage area and temperature that can be fed into the model. The QRF estimates of carrying capacity line up with other methods of assessing carrying capacity (e.g. stock-recruitment modeling).

The QRF model is being used in the Upper Salmon watershed to help prioritize restoration actions. The QRF estimates are compared with the mean and max observed densities and recovery goals. They are looking across watersheds at different life stages to see where carrying capacity is not adequate to meet goals and identify where there is a need to increase capacity.

The QRF model can be used to estimate carrying capacity at some life stages at different spatial scales. One can use it to estimate the change in capacity due to restoration. You can also estimate capacity for newly opened areas. Kevin agreed to summarize the outputs of the model for the upcoming Life Stage prioritization workshops.

### **Action Item:**

- Greer Maier will work with Kevin See to get QRF information that might be helpful for the prioritization workshops.

## **Alluvial Water Storage Model**

Allison Lutes from CCNRD and Susan Dickerson-Lange from NSD presented their alluvial storage model, which estimates incision and the effects of incision on groundwater storage. CCNRD ran the model to look at the potential to restore stream incision in the Wenatchee River basin. They found that there is potential to fix incision and the potential exists on both private and public lands. The model uses geometric calculations from Lidar and a model builder to estimate water potential storage. There are two key inputs to the model: size of valley bottom (from DEM slope) and channel incision (from Lidar-based relative elevation (REM) extrapolation). Model outputs include NHD stream attributes, land ownership, infrastructure intensity, valley width, incision estimate, water storage, and approximate flux,

all at the stream segment scale. The results have been aggregated at the HUC 8 scale in the Wenatchee River basin.

CCNRD and NSD are conducting site visits to further investigate enhancement opportunities (e.g., Camas meadows in the Peshastin Creek watershed). They are looking at using wood to aggregate channels. CCNRD is doing pilot projects in Poison Creek (Mission Creek watershed), Eagle Creek (Chumstick Creek watershed), and Kahler Creek (Nason Creek watershed). CCNRD is considering how to aggrade the channels and provide fish passage.

**Action Item:**

- Greer Maier will work with Ally and Susan to look for opportunities to use the AWS model or its outputs in Step 2 of the prioritization process and with the UW GIS class project.

## Scoring Criteria and Biological Strategy

**SRFB Abstract Review** - The RTT has the capacity to evaluate adequately no more than 20 SRFB applications per year. During previous meetings, the RTT discussed ways to reduce the number of final SRFB applications. During a joint RTT/CACs meeting, it was suggested that abstracts submitted by project sponsors early in the process be evaluated (or filtered) by the RTT/CACs. Proposed projects would be categorized as “competitive” or “non-competitive.” The RTT would score final applications of “competitive” projects. During the joint RTT/CACs meeting, Tracy Hillman was tasked with drafting criteria for scoring abstracts to achieve this goal. The abstract scoring criteria are a streamlined version of the full scoring criteria. The abstract scoring criteria would only be used if there are more than 20 abstracts submitted in a given year and the total ask of all applications exceeds the allocation. The RTT discussed the abstract scoring criteria and how the CACs will be involved in screening abstracts. The RTT would like to beta test the filtering process this year. Pete Teigen will share the abstract scoring criteria with the CACs and ask if they (CACs) have suggestions, concerns, or comments. Depending on feedback from the CACs, the RTT and CACs will score the abstracts after presentations on 11 and 12 March.

**SRFB Scoring Criteria**- The RTT approved the revised scoring criteria for project proposals. Greer Maier will provide a link to the updated AU scores on the UCSRB website. [CLICK HERE FOR LINK TO THE MAP OF SCORES](#)

**Biological Strategy** – The change to scoring is reflected in an updated Biological Strategy. Greer Maier will upload the updated Biological Strategy to the UCSRB website.

**Action Item:**

- Greer Maier will upload the revised scoring AU map and the revised Biological Strategy to the UCSRB website.

## Next Meeting

The next regular meeting will be on Wednesday, 12 February 2020. There will be prioritization workshops for each subbasin in January (15 January – Entiat; 17 January – Wenatchee; 13 February – Methow).

**Suggested Agenda Items for Future Meetings:**

- Columbia River Treaty- Shane Bickford (Douglas PUD)