



REGIONAL TECHNICAL TEAM MEETING FINAL NOVEMBER MEETING SUMMARY

Date: Wednesday, 9 November 2022

Time: 9:00 AM to 11:30 AM

Location: Webinar

Members Present: Kate Terrell, Tom Kahler, Keely Murdoch, Amanda Barg, Joe Lange, Catherine Willard, and Tracy Hillman (Chair)

Others Present: Tracy Bowerman/UCSRB, Ryan Niemeyer/UCSRB, Nicole Jordan/UCSRB, Amanda Ward/UCSRB, Ryan Williams/CCD, Jeff Jorgensen/NOAA, Kristen Kirkby/CF, Mark Sorel/WDFW, Aaron Rosenblum/CF, Michael Dello Russo/TU, Mark Ingman/CCD, Jason Lundgren/CF, Hans Smith/YN, Lisa Pelly/TU, Joe Connor/BPA, and Steve Kolk/BOR

Upcoming meetings and potential topics:

- December:
 - Alexa Whipple: Beaver monitoring results
 - CCRND: RTT review of Clear Creek 15% design
 - CCRND: Alluvial water storage model

Tracy Hillman welcomed everyone to the RTT meeting at 9:00. RTT members reviewed and approved the November draft agenda and September meeting notes.

RTT & UCSRB Updates

Large Cap Grand Round Summary

The combined Okanogan and Chelan CACs met on 28 September to rank the four large-cap funding projects. The CAC ranked the projects in the following order: (1) MSRF Sugar Reach Channel Reconnections, (2) Yakama Nation Nason Creek Highway 207 realignment, (3) CCRND Wenatchee-Chiwawa Irrigation District Instream Flow Improvement Project, and (4) CCRND Icicle and Peshastin Irrigation Districts Instream Flow Improvement Project. The Sugar project ranked number one unanimously in both CACs. The project ranked highly on project scope, as well as socioeconomic factors, such as community support and economic benefit for the region. The project has been cleared by the SRFB state review panel and will now go before the SRF Board in December for funding approval.

Tracy Hillman fielded a lot of questions from RTT members and sponsors after the RTT scoring of the large cap projects. There was some concern from RTT members about how it was possible that all of the projects scored within just a few points of one another when they had such different biological benefits. It was clear that each reviewer saw the projects differently and reviewers ranked projects quite differently. The similarity in scores might also reflect the care that went into the applications on the part of sponsors—they did a good job and all projects ranked relatively high.

Lessons Learned Workshop Summary

The region convened an end of season Lessons Learned workshop on 19 October, which included a morning discussion and afternoon site tours in the Wenatchee basin. The region also held Entiat site tours on 20 October and Methow site tours on 31 October.

Primary topics covered during the lessons learned discussion:

- Low tech restoration approaches: BDA and PALs
- Riparian Planting Discussions
- Permitting Considerations
- Monitoring and Compliance

Lessons learned and points of group discussion:

- Labor availability can be a challenge to secure when large numbers of people are needed, such as for riparian plantings, BDA installations, and other field work.
 - Participants discussed options such as Washington Conservation Corps, and other organizations sponsors have used (pros and cons).
- Various riparian planting strategies and ideas shared.
 - Deep root planting depth and hand watering to decrease mortality during peak summer temperatures.
 - Proposed strategy (when appropriate) to use early successional plants initially such as bunchgrasses, etc. (non-riparian species). Then, in later planting phases/years, return to plant willows and riparian species once the landscape is better prepared.
 - Funding for long-term maintenance is essential.
 - Need to diversify funding sources beyond salmon recovery.
- It would be nice for folks in the region to be able to share equipment and labor resources.
 - Data loggers for monitoring turbidity during construction.
 - Proposal of a shared field crew for regional monitoring and riparian plant watering.
- Training opportunities were a key focus and interest region wide. Desired trainings include:
 - DOE permit training (Alicia Shultz of DOE offered to lead an UC training)
 - WA State mitigation guidance
 - Start to finish training on BDA/PAL installation
 - Chainsaw and winch training by USFS
 - Electrofishing

Amanda Barg indicated that meeting and working through permitting is an ongoing struggle for many projects. She would be willing to help organize a training to walk sponsors through what is needed for HPA requirements. UCSRB could host a training and WDFW could help staff it. There is also a need for greater alignment with Department of Ecology (Ecology offered to hold a training for the UC region). When engaged in a construction project, the basic rule is “Don’t let the brown stuff get in the wet stuff” when the project is adjacent to spawning habitat.

Barrier Prioritization Tool

The Barrier Prioritization Workgroup met on 29 September to review recent changes to the Barrier Prioritization Tool. Most of the changes were to the underlying data layers, with a major overhaul of the IP layer and barrier information. There were also minor changes to core population designations and fish

distribution layers. One major suggestion that we walked away from was using month-specific and life-stage-specific passability based on CTCR's EDT passability model, but only a portion of barriers had sufficient data to estimate this passability. Instead, the tool will retain WDFW's criteria because those passability ratings are available across the region, across species, and for non-culvert barriers. At the meeting, the group decided to focus on barriers with low passability (0% or 33%) for upstream and downstream (longitudinal) connectivity ratings. See Barrier Prioritization Workgroup notes for more details.

The next Barrier Subgroup meeting will be 30 November from 1:00-3:00 PM. Tracy B. will send a link to a draft of the barrier tool before that meeting. She will include RTT members on that distribution so they have a chance to review the scoring rules.

Review Prioritization Updates Timeline

Ryan N. Reviewed the prioritization update timeline.

November 2022:

- PWG met on 1 November
- MaDMC meeting to approve the data gaps list will occur on 22 November. Ryan sent out the data gaps list for review. Please send him any updates before the meeting.

December 2022:

- Review and hopefully approve the Barrier Prioritization Tool (version 2)
- Ryan Niemeyer is working with Ryan Klett to re-run the Okanogan reach prioritization with raw data (previously used EDT output).

January 2023:

- RTT approve updates to the Prioritization Tool and MaDMC data gaps.

February 2023:

- SRFB grant round opens

PWG Meeting Summary

Prioritization Workgroup approved the following changes to the Prioritization Tool and associated timeline.

The following timeline will be used to update the Prioritization Tool and communicate with project sponsors:

- 2022:
 - Riparian: Aspect - Tier 1 and 2 data gaps filled (some remaining due to LiDAR)
 - Pool, Substrate, Wood: Cramer metrics, Level 2 surveys
 - Update Okanogan reaches with raw data
- 2023:
 - Riparian: update based on new LiDAR when it becomes available
 - Pool, Substrate, Wood: Level 2 surveys
 - Off-Channel: Aspect - Tier 1 and 2 data gaps filled
 - **Goal:** Finalize prioritization scores in all (feasible) Tier 1 and 2 reaches (version 2024)
- 2024-2027:
 - Use v2024 same reach ranks (no planned changes for this time period unless there is a major disturbance)
- 2028:
 - Re-visit and update prioritization ranks

The group reviewed and approved the riparian data that Aspect Consulting developed. The riparian metrics added to the prioritization tool are: percent vegetation class per reach, percent canopy cover (tree and shrub) per reach, and percent disturbance (roads and timber harvest) per reach. A link to the [web map can be found here](#). These data sparked a good discussion about how floodplains are currently defined in our data layers, and this is something we will likely want to return to as UCSRB works to develop the floodplain metrics.

The group also reviewed and approved the field and remote sensing data from Cramer Fish Sciences. The metrics were pools, cover-wood, and substrate data. There was some question about the adequacy of the remote sensing data but the group decided to go ahead and use it provisionally, because it is the best information we have at this point, with the hope that it will be overwritten with field data as those become available. A link to the [web map with those data can be found here](#).

Ryan Niemeyer developed a spreadsheet to track prioritization scores as they change over time. This spreadsheet will allow sponsors and RTT to quickly look up how an assessment unit was ranked in the past, and any future changes in reach and AU rankings. The PWG suggested this information get included on the web map, which UCSRB will develop in the future.

The group also reviewed and approved the Tier 2 reach ranks that were sent out earlier in the fall. Ryan will incorporate new riparian and Cramer data into prioritization and share updated reach ranks when that is available.

The IP layers for steelhead and spring Chinook are finalized; the bull trout IP layers are still going through some minor changes. These are available [on the web here](#).

See Prioritization Workgroup notes for more details.

Wenatchee Spring Chinook Population Model

Mark Sorel, recent UW graduate and current WDFW employee, presented his dissertation research. Main take-home messages from his work on modeling Wenatchee spring Chinook are as follows (please reach out to Tracy H. or Tracy B. if you would like a copy of Mark's dissertation):

1. Effects of population density on life-history expression in Wenatchee spring Chinook.
 - a. There was evidence of positive density dependence in spring age-0 emigrants. In contrast, there was evidence of negative density dependence for summer age-0 emigrants and spring age-1 emigrants, suggesting that as you get more spawners, there is a higher proportion of younger age emigrants using downstream habitats for rearing and overwintering.
2. Juvenile life history diversity and survival.
 - a. Downstream rearing/younger emigrants return from the ocean at higher rates than natal-reach rearing fish but also return at younger ages (which may in part account for their higher survival). In contrast, natal reach rearing/older emigrants return at higher proportions of older ages.
3. Integrating individual heterogeneity into the population model to inform viability analysis.
 - a. The 2020-2069 projected abundance for the Wenatchee population was well below recovery criteria (with no climate change included).
 - b. Multiple life history pathways contribute to adult returns.

4. Informing salmon habitat restoration and hatchery management with management modeling.
 - a. Restoring natal habitat had a greater effect than restoring downstream habitat but the effect of restoring both was greater than the sum of the two.
 - b. Reducing hatchery broodstock had a positive effect on abundance for the Chiwawa population (and therefore the overall population, because the Chiwawa was the largest sub-population studied).
 - c. There is a need for empirical estimates of demographic changes associated with habitat restoration and management actions.

Coordinated Resource Management Agreement: A Partnership Between Cascade Fisheries, Trout Unlimited, and Cascadia Conservation District

This newly established management agreement was funded by the Bureau of Reclamation. The three groups have aligned missions but have different focuses, and this agreement supports engagement in complementary work and relationships, such as landowner relationships. For example, TU is the lead on beaver work, and the other two organizations support them on beaver-related projects. The three groups are meeting regularly to share information and resources and have developed a 10-year Conservation Resource Management strategy with a focus on cold perennial streams in Chelan County including some very small streams in the region. The goal is to conduct wholistic watershed restoration in these smaller tributaries. The group is realizing a tremendous benefit of working together and pooling resources, such as sharing field work. For example, many projects are extremely labor intensive and benefit from large groups working together, such as riparian plantings.

The benefits of CRM can be summarized as follows:

- Allows scaling up of work (start with a project and allow it to grow by bringing in other groups' expertise)
- Helps develop a partnership with USFS
- Implement a long-term strategy to have more of a coordinated focused approach
- Sharing knowledge and expertise
- Leverage funding and landowner contacts
- Projects completed by staff who live and work in the community
- Shared project costs mean that projects are less expensive

Upcoming Regional Workshops

The Floodplain Workshop has been scheduled for Tuesday, 24 January at the Wenatchee Convention Center. This is the same week of the year that the Science Conference has been held in past years so hopefully that date works for everyone. It is important that RTT members and sponsors attend.

Tracy Hillman adjourned the meeting at 11:30 AM. The next RTT meeting will be held on 14 December 2022.