



REGIONAL TECHNICAL TEAM MEETING SEPTEMBER MEETING SUMMARY

Date: Wednesday, 9 September 2020

Time: 9:00 AM to 12:30 PM

Location: Webinar

Members Present: Catherine Willard, Kate Terrell, Keely Murdoch, John Arterburn, Jeremy Cram, Steve Fortney, Tom Kahler, and Tracy Hillman (Chair)

Others Present: Greer Maier/UCSRB, Ryan Niemeyer/UCSRB, Melody Kreimes/UCSRB, Sarah Walker/UCSRB, MarySutton Carruthers/CCD, Jaimie Cleveland/BPA, Sean Welch/BPA, Steve Kolk/BOR, Michael Sowa/UW GIS Class, Marco Evert/UW GIS Class, Mariah Mayfield/USFS, Jeff Jorgensen/NOAA, Paul Powers/USFS, Mike Kaputa/CCNRD, Erin Kuttel/USFWS, McKay/CCNRD, Graham Simon/WDFW, Robyn Pepin/Aspect, and Aaron Rosenblum/CF.

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

Members present reviewed and approved the draft agenda. The August meeting notes were reviewed, and Tracy reviewed the action items. Carry-over action items are listed below. The August meeting were approved by the RTT.

Carry-over action items:

- Greer Maier/UCSRB and Tracy Hillman/RTT will work with Marc Duboiski/RCO to develop milestones in future SRFB contracts in the region.

UCSRB Updates

UCSRB Regional Evaluation

Melody Kreimes/UCSRB updated the RTT on the status of the regional evaluation, which is underway. The UCSRB has funding from the Bonneville Environmental Foundation for the review of our regional recovery process and organizational structure. They have contracted with the Ruckelshaus Center to carry out the review. The Ruckelshaus Center may be reaching out to the RTT as a group through their regular meetings or through individual members of the RTT to provide input. Input will be given through interviews, with answers communicated anonymously.

Stage-0 Suitability Modeling

Michael Sowa and Marco Evert were students in the UW GIS certificate program this past spring collaborating with the region to evaluate off-channel and floodplain reconnection opportunities and the suitability of sites for potential application of a Stage-0 restoration approach. Greer Maier initiated the project, the second GIS project the RTT has engaged in with UW. The project was also a collaboration

with Paul Powers and Matt Helstab with the U.S. Forest Service. Paul and Matt contributed to the model development.

Michael and Marco summarized their analysis, which included: (1) an analysis of vegetation changes as a result of floodplain disconnection; (2) the development of a suitability model for stage-0 restoration; (3) an analysis of causation for disconnection; and (4) the application of relative elevation at 21 sites across four watersheds. Stage-0 type restoration suitability was assessed based on valley confinement, slope and soil type, flow accumulation, and stream order. The model was validated using the grade-line GGL GIS tool (USFS). The model identified a large number of suitable projects across all four subbasins.

The UW group evaluated several potential factors of causation, including fire, roads, and disturbance. They developed a stream incision causal index (ICI) to represent causes at individual sites where the GGL tool had been run. This information can be used in conjunction with the GGL tool result to help develop restoration goals at these sites.

Use of the model-builder framework allows transparent access to code, inputs-outputs, and format for updates. A draft report is forthcoming to the RTT-UCSRB and the hope is to eventually write this up for publication. RTT members can contact Michael and Marco directly with follow-up questions about their analyses or results.

Paul Powers is working with BOR data in the Entiat to identify areas of floodplain disconnection. He will be publishing that work and can present it to the RTT during a future meeting. The RTT discussed the potential of using the model and model results to evaluate sediment evacuation and the need for sediment budgets and rates of potential recovery.

Contacts:

- Michael Sowa michaelpsowa91@gmail.com
- Marco Evert evertmarco@gmail.com
- Greer Maier greer.maier@ucsr.org

Action Items:

- Greer Maier will post suitability results on the UCSRB data portal and tool page along with the final report and will follow-up via email to RTT members.
- Greer Maier will include a point file in the map showing where REM results are available. Those results will be available by request due to their large file sizes.

UCSRB Harvest Background Summary

Greer Maier gave a short presentation on the UCSRB integrated recovery effort and the history of development of background summaries on each of the “Hs” (Habitat, Hatcheries, Hydropower, and Harvest). The Harvest Background Summary is the final document in the series. Several people and organizations contributed to the development of the Harvest Background Summary. Greer highlighted what is in the Summary including history, harvest management frameworks, harvest areas, stock groups and seasons, as well as specific data on harvest for the UC spring Chinook ESU and summer steelhead DPS.

Harvest of UC listed fish occurs in numerous fisheries and fishing areas from the ocean to the tributaries. These fisheries include both treaty and non-treaty fisheries and are managed under the umbrella of the U.S. v. Oregon management agreement. Ocean harvest on UC listed fish is considered to be negligible. Most harvest occurs in the Lower Columbia river through both target and non-target fisheries. A large

proportion of harvest mortality for UC listed fish occurs as a result of incidental mortality (escaped or released fish that later die as a result of their encounter with fishing gear) rather than direct mortality (fish caught and landed).

UC spring Chinook and steelhead are part of larger stock groups called “Upriver spring Chinook” and “Summer Steelhead.” Harvest of UC listed fish is not specifically enumerated but rather assessed as a component of the larger stock group. Harvest occurs in commercial, recreational, ceremonial and subsistence (C&S), and conservation fisheries. Non-treaty state entities allocated their harvest to recreational, commercial, conservation, and non-treaty tribal fishing. Treaty partners allocate their harvest to C&S and commercial fisheries. Commercial fisheries only occur below the Highway 395 bridge. Harvest allocations and take limits for ESA-listed fish are closely tracked to manage fisheries on an annual cycle. Composite harvest of UC spring Chinook is between 10-20% and harvest of UC steelhead is estimated to be between 7-16%.

The Harvest Background Summary and other “All-H” Reports are available online at <https://www.ucsrb.org/mdocuments-library/reports/>.

Lastly, Greer presented a draft list of topics the UCSRB Board of Directors (BOD) will discuss at their 24 September meeting. Now that all four “H” summaries are complete, the BOD will be discussing specific topics of interest to recovery that arose during development of the summaries. UCSRB is soliciting partner ideas regarding ‘All-H’ integration topics for future discussions with the BOD.

Action Items:

- Partners interested in discussing potential “All-H” discussion topics need to contact Greer Maier (greer.maier@ucsrb.org).

Prioritization

Step 1

The RTT reviewed the updated Tiers proposed for HUC12 assessment units. The tiers are based on scores generated in Step 1 of prioritization with a threshold score of 80 used to define Tier 1 watersheds for spring Chinook and steelhead and 70 for bull trout. The old tiering used seven tiers to align with the RTT’s scoring criteria for AUs. The updated tiers are based on three levels: Tier 1 (high priority), Tier 2 (medium priority), and Tier 3 (low priority). AUs can also be classified as “Not a Priority.” The updated system is easier to understand and opens up more opportunities for projects in watersheds, given that only high priority AUs move through to Step 2. Greer showed the map of the updated tiering system. The draft tiers were sent out for review and no comments were received over the past month. The RTT approved the tiers as drafted. A map and table of the approved tiers is available at <https://www.ucsrb.org/prioritization-products/>.

Step 2

Greer Maier and Tracy Hillman gave a brief update on Step 2 progress. The step 2 analysis is based on barrier assessment and prioritization, reach assessment, Level 2 survey, and CHaMP data compiled by UCSRB staff at the reach scale. After compiling the information, the Prioritization Workgroup developed a set of steps for analysis. The analysis looks at habitat quality, limiting factors, and fish passage barriers. Because of the complexity of this analysis, the UCSRB has developed a python script to automate the tool. This allows the RTT to easily update the tool and generate results quickly. Ryan Niemeyer showed the RTT the documentation he developed to accompany the script. The RTT had a brief discussion about the pros and cons of having some parts of the tool in python or R-code. Ryan talked about both the python

notebooks he developed for the Habitat Quality pathway as well as the Limiting Factor pathway. Ryan also shared the output of those python scripts.

Greer summarized the three Step 2 pathways:

Habitat quality is evaluated alongside geomorphic potential and life stage use. Reaches that are unconfined, have most or all life stages present, and have moderately functional habitat quality (based on reach-based REI indicator values) are prioritized for restoration. The rating system is taken from Reach Assessments; “unacceptable,” “at risk,” and “adequate.” Scores across a suite of habitat attributes are summed and scored to represent total habitat quality in the reach. The PWG will be discussing several steps in this analysis at their meeting on the 15th including what range of habitat quality should be scored the highest. Greer presented an example of this analysis in the Methow River-Fawn Creek HUC12. Several reaches within this AU met the criteria for prioritization. Within these reaches, the specific habitat attributes that were deemed “unacceptable” were assigned an appropriate habitat action category for restoring that type of habitat attribute. For example, in the priority Fawn Creek 02 reach, pools and substrate were deemed “unacceptable” and the associated project action types were Channel Complexity Restoration, Channel Modification, Fine Sediment Management. There are substantial data gaps in this analysis and the PWG is looking at ways to inform this part of the analysis. There was some discussion about elevating the ranking of reaches with high levels of fish use and reaches located lower in the watersheds.

Limiting life stages and factors are being evaluated at the reach scale using a rating system for limiting life stages and associated habitat attributes. HUC12 with high priority life stages are evaluated for potential limiting factors. Habitat attributes associated with high priority life stages with a rating of “unacceptable” are assigned actions. For example, summer and winter rearing in Lower Twisp are considered high priority life stages. Based on an evaluation of habitat requirements for these life stages, habitat impairments include cover, pool/riffle, edge habitat, summer base flows, and off-channel habitat in this HUC12. Habitat action priorities include channel complexity restoration, channel modification, instream flow acquisition, protection, restoration, riparian restoration, and floodplain reconnection. Ryan showed the results of this analysis (using python code) at both the reach and AU scale.

Fish passage barriers have already been prioritized through the Cascade Fisheries regional fish passage prioritization process. The PWG is currently proposing to use these priority ratings when considering fish passage projects. The draft process that the PWG will consider on the 15th is to adopt all Tier 1 (high priority) barriers regardless of where they occur within the subbasins and all Tier 2 (moderate priority) barriers in Tier 1 watersheds. The PWG will look at barrier prioritization at their meeting on the 15th and decide whether to adopt this draft approach.

The PWG will meet to discuss Step 2 results and analyses on 15 September. The watershed workgroups will meet on the dates identified below (also see email forwarded from Tracy or contact Greer Maier (greer.maier@ucsr.org) for more information).

Sept. 23rd- Methow - 9am-2pm

Sept. 28th- Okanogan- 9am-2pm (in conjunction with SOWAT)

Oct. 1st- Wenatchee – 9am-2pm

Oct. 2nd- Entiat – 9am-1pm

The RTT will review and approve the Step 2 process and draft results during their 14 October meeting.

Next Steps: Tracking and Planning of Prioritized Actions

Greer Maier reviewed the current plan for tracking prioritized actions after Step 2 is completed. This step was conceptualized in the original draft Habitat Restoration Prioritization Strategy. The UCSRB is proposing to use the Implementation Schedule process (which includes the RTT, WATs, IT, and UCSRB BOD) to track prioritized projects and help facilitate discussion around planning and feasibility. Greer showed how the Implementation Schedule may be modified to capture information. The Implementation Schedule will be developed between now and December. UCSRB staff will be talking about this approach with the Watershed Action Teams later this month. That input will be brought to a regional workshop the last week of October. More information on the workshop will be provided to the RTT later this month.

Action Items:

- RTT members interested in providing input on Step 2 should participate in the Step 2 meetings later this month.
- RTT members interested in providing input on tracking and feasibility should participate in the WAT meetings and October workshop on the topic.

Bull Trout 5-year Status Review

Erin Kuttel, USFWS/Spokane office, is the lead for the State of Washington on completing the bull trout 5-year status review. She is recruiting members to serve on core teams across the state, including from the Upper-Mid Columbia DPS. Erin is seeking participants for an Upper Columbia bull trout Core Area team (Entiat, Methow, Wenatchee, Chelan). The intent is to schedule two meetings per Core Area with regional partners to: (1) review existing bull trout demographics data and status based on recovery actions since 2008 (to be completed by October 2020) and (2) convene a workshop to complete the threats assessment as defined in the Bull trout Recovery Plan for each Core Area (target completion Jan/Feb 2021). UC Core team participants would continue to meet into the future, beyond completion of the 5-year review.

Action Items:

- RTT members or others interested in serving on the UC Core Team can email Erin at Erin_brittonkuttel@fws.gov.

Next Meeting

The next RTT meeting will be 14 October.

Agenda Items for Future Meetings:

- Columbia River Treaty-Shane Bickford
- River Health-Joe Wheaton
- Habitat Suitability Index (HSI) Model-BPA and Cramer Fish Sciences
- Entiat Floodplain Analysis Results-Paul Powers
- Use of Remote Sensing in Monitoring-Phil Roni