Wells, Rocky Reach, and Rock Island HCP Tributary Committees Notes 13 July 2023

Members Present: Jeremy Cram (WDFW), Chris Fisher (CTCR), Tom Kahler (Douglas PUD), Brandon Rogers (Yakama Nation), Kate Terrell (USFWS), Catherine Willard (Chelan PUD), and Tracy Hillman (Committees' Chair).

Members Absent: Justin Yeager (NOAA Fisheries)[1].

Others Present: Becky Sadler (Tributary Project Coordinator) and Shelby Fowler (USFWS alternate). Nick Legg (Wolf Water Resources) and Aaron Rosenblum (Cascade Fisheries) joined the discussion on the Upper Columbia Sediment Study. Laura Zanetto (Natural Systems Design) and Scott Bailey (Chelan County Natural Resources Department) joined the discussion on the Nason Creek RM 12 Design project.

The Wells, Rocky Reach, and Rock Island Hydroelectric Projects Habitat Conservation Plans Tributary Committees met at Douglas PUD in East Wenatchee, Washington, on Thursday, 13 July 2023 from 10:00 am to 12:30 pm.

I. Welcome and Introductions

Tracy Hillman welcomed everyone to the HCP Tributary Committees (Committees) meeting and participants introduced themselves.

II. Review and Adopt July Agenda

Members of the Committees reviewed and adopted the proposed agenda with the following additions: Time Extension on the Peshastin Creek RM 2.5 Project and 2023 Okanagan Tour.

III. Review and Approval of the June Meeting Minutes

The draft 8 June 2023 meeting notes were reviewed and approved by the Tributary Committees.

IV. Monthly Update on Ongoing Projects

Becky Sadler gave an update on funded projects. Most are progressing well or had no salient activity in the past month.

- Johnson Creek Habitat Restoration Project – The sponsor (Trout Unlimited; TU) reported that there was no new activity on this project. Construction is scheduled to begin in mid-September and should be completed by late October.

[1] Justin Yeager provided his votes on decision items after the meeting.

- Lower Wenatchee Instream Flow Enhancement Project – The sponsor (TU) reported that they signed the agreement with the Jones Shotwell Ditch Company (JSDC). They are now finalizing the Irrigation Efficiency Grant Program application.
- Nason Kahler Instream Complexity Project – The sponsor (Chelan County Natural Resources Department; CCNRD) did not provide an update this month.
- Big Meadow Creek Fish Passage Project – The sponsor (Cascade Fisheries; CF) reported that construction is underway and should be completed by 20 July.
- Wenatchee Entiat Beaver-Powered Restoration Project – The sponsor (TU) reported that the restoration project is moving forward with implementation planned for mid-August. The sponsor also identified a potential restoration site on Potato Creek. They asked the Rocky Reach Tributary Committee whether they approve restoration work in Potato Creek in 2024. The Rocky Reach Tributary Committee approved work in Potato Creek.
- Mission Wood Amendment Project – The sponsor (CF) reported that there was no new activity on this project. They indicated that field work will begin in July 2023.
- Thirteen Fish Passage Designs Project – The sponsor (CF) reported that there was no new activity on this project.
- Nason RM 12 Floodplain Reconnection Project – The sponsor (CCNRD) reported that they completed preliminary designs. They discussed the designs with the Committees during the meeting (see Nason RM 12 Floodplain Reconnection discussion below).
- Salmon Creek Channel Realignment Project – The sponsor (City of Okanogan and Methow Salmon Recovery Foundation; MSRF) did not provide an update on this project.
- Peshastin Creek RM 2.5 Project – The sponsor (CF) reported that they will reconvene the design team in August. The sponsor indicated that they did not receive a cost share from the Salmon Recovery Funding Board. Therefore, they will likely ask the Tributary Committees to help fill the funding gap. They also requested a time extension on this project (see Time Extension below).
- Level II Surveys in Priority Reaches Project – The sponsor (CF) reported that there was no new activity on this project. Surveys will begin in July and should be completed in late September.
- Goodwin Side Channel Design Project – The sponsor (CF) reported that they will complete conceptual designs by late summer.
- Goose Creek Watershed Restoration Project – The sponsor (CF) reported that implementation will begin in August.
- M2@3R Project to Advance Preferred Concepts – The sponsor (MSRF) reported that they held a site visit with two landowners. They discussed current design plans, objectives, and opportunities with the landowners. The sponsor received support from both landowners. In addition, the sponsor continues wetland delineation work.
- Entiat Tributary Baseflow Project – The sponsor (Cascadia Conservation District; CCD) reported that they are working on designs, landowner agreements, permitting, and material acquisition.
- Twisp to Carlton Reach Side Channel Project – The sponsor (CF) reported that their contractor (RIO ASE) will conduct a site visit in July that will help them finalize initial concepts and develop the hydraulic model.
- COIC Flow Restoration Project – The contract for this project is on hold pending the Committee's review of Ecology's responses to comments on the updated draft Report of Examination.

- East Fork Mission Creek Stream Restoration Project – The sponsor (CCNRD) reported that they conducted fieldwork with their consultant (Natural Systems Design) to further refine construction sequencing and site isolation plans as well as determine on-site tree availability. Most of the wood for the project will be sourced on-site, with some additional wood sourced from forest health thinning occurring on Chelan County lands. The sponsor also met with the Forest Service and WDFW to review the construction approach and continued working on the Hydraulic Project Approval Permit application.
- Wilson Side Channel Adaptive Management Project – The sponsor (CCNRD) reported that they selected Natural Systems Design to help design the project. The sponsor is working on a scope of work.
- Floodplain Restoration Monitoring Project – The sponsor (Hinchinbrook, Inc.) reported that they continued sampling through June. They have three crews with one crew working in each of Nason Creek, the Entiat River, and the Twisp River. They sampled four reaches within each subbasin. Fish captured throughout June were generally too small to PIT tag; therefore, they marked the fish with Visible Implant Elastomer (VIE) tags. VIE tags are being used in mark-recapture studies to estimate abundance and weekly growth rates.

V. Upper Columbia Sediment Budget Assessment

Last month, Shelby Fowler asked the Committees whether they would be interested in reviewing a proposal that will develop a sediment budget for the upper Wenatchee River basin. He said this effort would be based on the work conducted by Nick Legg (Wolf Water Resources), who evaluated the volume of "lost" sediment within the Grande Ronde River basin and recently presented his results to the Upper Columbia Regional Technical Team. Because the Committees were unclear on how this work will feed into prioritization and inform future habitat actions, Shelby invited Nick Legg and Aaron Rosenblum (CF) to further describe the approach and its use.

Nick gave a presentation titled, "Benefits of Planning for Sediment in Restoration" (see Attachment 1). Nick began by describing why sediment budgets are important in salmon recovery efforts. Understanding sediment dynamics determines whether there is too much or not enough sediment to restore tributary habitat. Nick provided an example of where not enough sediment recruited to the stream resulted in a failed action, which was designed to aggrade the stream channel. He showed that gravel supply is regionally variable and that it would take tens to hundreds of years for some streams to aggrade. He then focused on the sediment budget work he did in the Upper Grande Ronde River basin.

Nick stated that the goal of the Upper Grande Ronde study was to develop a coarse sediment budget (identify sources, supply, sinks, and transfer), identify meaningful scales for restoration decision making, and create a tool that allows one to run management and restoration scenarios. He said the analysis uses SIAM (sediment impact assessment model), which works with 1D HEC-RAS (hydraulic) models and can be applied in a cost-effective way over large areas. The model calculates a sediment budget and size of sediment available (i.e., both the amount of sediment moving through a reach and potential sediment inputs). The tool can be used to estimate the percent of sediment contribution for each reach/stream and identify depositional and transport reaches. The model can also estimate average transit times. It integrates existing pebble count data, which are readily available in many locations. Nick showed figures that displayed the sediment budget and sizes, source areas, and transport rates. He indicated that the model-based approach allows for comparison of different management approaches (e.g., effects of roads on reduced gravel supply). Importantly, the relationship between sediment delivery rate/natural recovery potential and degree of degradation determines whether active restoration or passive restoration is most appropriate for a given stream reach.

Nick described how the approach could be applied to the Upper Columbia. There is readily available data to populate the model (e.g., mapped reaches, pebble counts, LiDAR, existing models) and the approach

will augment and inform the prioritization strategy developed by the Upper Columbia Regional Technical Team. That is, it will help identify limiting factors and recovery potential and will help refine priority actions. Nick concluded by stating that sediment is a building block in stream recovery and that the approach provides a cost-effective tool for developing process-based restoration strategies that maximize stream investments. Shelby added that the approach would be applied to the Wenatchee basin upstream from the Town of Plain.

Jeremy Cram asked whether the model can use data collected from road analyses. Nick said yes, the model can use those data. Tom Kahler recommended that they include road data collected by CCNRD. Kate Terrell asked what it would cost to populate and run the model. Nick said it would cost about $100K. That was the cost to use the model in the Upper Grande Ronde, which is about 525 mi^2. Chris Fisher asked how much additional data would be needed to run the model for the upper Wenatchee. Nick said it would depend on the available LiDAR data. Chris asked how long it would take to complete the model for the upper Wenatchee. Nick said about two years but maybe less depending on available data. Chris asked whether implementers would use the results to plan restoration actions in the upper Wenatchee. Aaron Rosenblum responded that they would use the information and that there are many projects planned for the upper Wenatchee. The design of those projects would benefit from an analysis of sediment budgets. Brandon Rogers admitted that he is struggling with the utility of the tool and is unclear on exactly what the tool will provide that would inform restoration planning. Tracy indicated that the tool would be useful in determining the type of restoration to implement, for example, passive versus active restoration.

The Committees thanked Nick for the presentation and discussion and recommended that if a proposal is submitted, it needs to be very clear on how the tool informs the existing prioritization strategy and what information the tool will provide to better inform restoration work.

VI. Time Extension

Peshastin Creek RM 2.5 Project

The Rocky Reach Tributary Committee received a time extension request from Cascade Fisheries on the Peshastin Creek RM 2.5 Project. The sponsor indicated that they would like to extend the contract from 30 August 2023 to 31 December 2023 because they were unable to secure a cost share from the Salmon Recovery Funding Board. Thus, they need additional time to find a cost share. The Rocky Reach Tributary Committee agreed to extend the contract period to 31 December 2023.

VII. Nason Creek RM 12 Floodplain Reconnection Design Presentation

Scott Bailey (CCNRD) and Laura Zanetto (NSD) provided an update on the Nason Creek RM 12 Floodplain Reconnection Design project. The purpose of the presentation is to inform the Committees on the conceptual designs for the project and seek feedback from the Committees.

Scott gave a presentation titled, “Lower Nason Creek AU RM 12 Floodplain Reconnection: Conceptual and Preliminary Design Phase” (see Attachment 2). He provided an overview of the project and its location in Nason Creek. He described current conditions and identified limiting habitat conditions and life stages within the reach. Based on reach assessments, he described the recommended restoration strategies and identified funding sources. Scott identified the project goals, which are to increase spring Chinook Salmon adult holding habitat, increase quantity and quality of juvenile rearing habitat, improve floodplain connectivity to improve water storage and riparian condition, and reduce the negative effects of high-water temperatures. Scott reviewed the data they have collected to inform the conceptual designs (e.g., temperature monitoring, RTK-GPS data, and stream flows). He then walked the Committees through the conceptual design process including the development of the Basis of Design Report, hydraulic model outputs, design sheets, construction cost estimates, and restoration opportunities memo.

Following Scott, Laura gave a presentation titled, "Nason Creek RM 12 Floodplain Reconnection" (see Attachment 2). Like Scott, she provided a quick overview of existing conditions and reach limiting factors. Given the goals of the project, she provided an overview of the preliminary designs. She described the two floodplain reconnection projects (pilot channel excavation and side channel excavation) and the instream habitat improvement elements (engineered log jams, rock-log riffles, and stabilization of the existing log structure). She talked about the effects of the proposed actions on the 2-year and 10-year water-surface profile and shared details about each of the design elements and their effects on water depths at different stream flows (e.g., typical winter flow, 10-year flow, and 100-year flow). She concluded by identifying the next steps, which include incorporation of 2023 green LiDAR, delineation of wetlands and the ordinary high-water mark, cultural resources, "No Rise" assessment, coordination with Washington Department of Transportation, and continued coordination with project stakeholders and landowners.

Chris Fisher asked whether the removal of the lower riffles was to avoid risks to the downstream landowner and to allow more flow into the side channels. Laura said yes. There was undue risk to the downstream landowner with construction of the lower-most riffles. Chris asked why it is necessary to construct one of the side channels. Laura responded that although there is a channel scar on the floodplain, there is a need to construct a channel to help guide the stream flows onto the floodplain. Jeremy Cram asked whether the downstream landowner is concerned about flooding. Laura said, yes, but it also has to do with FEMA regulations. Brandon Rogers asked whether the side channels will be connected during low flow or at least connected to groundwater. Laura said the side channel should be connected at most flows. She is unsure whether they will intercept groundwater. Brandon recommended that they check the depth to groundwater and try to capture groundwater in the side channels during low flows. Tracy Hillman asked whether the side channels constructed by the Yakama Nation upstream from the project site intercept groundwater. Brandon said yes. Tracy recommended that the sponsor evaluate the depth to groundwater at the Yakama Nation site as it may be a surrogate for depth to groundwater in the proposed treatment site. Tom Kahler said he is having difficulty visualizing the constructed riffles as portrayed in the design. Laura said they place large wood across the channel and then bury the wood with coarse sediment. No wood is exposed once the riffle is completed. Laura provided a slide that shows an example of the log-rock riffle, which was constructed in Upper Fobes Creek.

With no further questions, the Tributary Committees thanked Scott and Laura for the presentation and discussion. Scott indicated that they appreciated the feedback from the Committees and will keep the Committees posted on further design development.

VIII. Information Updates

The following information updates were provided during the meeting.

1. Approved Payment Requests received in June and July 2023:

   Rock Island Plan Species Account:

   - $288.75 to Clifton Larson Allen for Rock Island financial administration in June 2023.
   - $963.57 to Chelan PUD for Rock Island project coordination and administration during the second quarter of 2023.
   - $1,858.26 to Cascade Fisheries for work on the Level II Surveys in Priority Reaches Project.
   - $185,989.43 to Cascade Fisheries for work on the Big Meadow Creek Fish Passage Project.

- $4,871.82 to Cascade Conservation District for work on the Entiat Tributary Baseflow Project.

Rocky Reach Plan Species Account:

- $288.75 to Clifton Larson Allen for Rocky Reach financial administration in June 2023.
- $887.46 to Chelan PUD for Rocky Reach project coordination and administration during the second quarter of 2023.
- $5,138.77 to Cascade Fisheries for work on the Peshastin Creek RM 2.5 Project.
- $81,268.97 to Cascade Fisheries for work on the Goose Creek Watershed Restoration Project.
- $96,619.92 to Hinchinbrook, Inc. for work on the Floodplain Restoration Monitoring Project.
- $21,223.99 to Trout Unlimited for work on the Wenatchee Entiat Beaver Restoration Project.

Wells Plan Species Account:

- $579.17 to Chelan PUD for Wells project coordination and administration during the second quarter of 2023.
- $8,615.47 to Cascade Fisheries for work on the Twisp to Carlton Reach Side Channel Project.

2. Last month, Tracy Hillman reported that the NOAA Science Center is developing a life cycle (Habitat Assessment and Restoration Planning; HARP) model for a large portion of the Columbia River Basin. The model will be used to evaluate tributary habitat restoration scenarios. The Science Center will develop the Columbia Basin model starting in the upper Columbia. They will discuss the model with the habitat and hatchery technical folks and implementers in the upper Columbia and answer any questions participants may have regarding the HARP model. In addition, they will be asking for data or information that can be used to populate the model with local information. Tracy said this will be a combined meeting with the Tributary Committees, Habitat Subcommittee, Upper Columbia Regional Technical Team, the Hatchery Committees, and implementers. The meeting is scheduled for Wednesday, 9 August and will be held in the Douglas PUD Auditorium.
3. Tracy Hillman shared the ranked list of Salmon Recovery Funding Board projects (some of which have cost shares with the Tributary Committees) as ranked by the Citizens Advisory Committees (see Attachment 3). Some of the projects supported by the Tributary Committees (e.g., Peshastin Creek RM 2.5 project) were not selected for funding by the Salmon Recovery Funding Board. Thus, the sponsors of those projects may request additional funding from the Tributary Committees.
4. Chris Fisher reported that the Okanagan Nation Alliance (ONA) is willing to host a tour of potential projects in the Okanagan Basin on 11-12 October. Most of the tour will focus on potential projects in tributaries to Okanagan Lake. This includes but is not limited to Trout Creek, Trepanier Creek, Mill Creek, Equesis Creek, and Mission Creek. Members that are able to attend the tour indicated that 11-12 October works for them.

IX. Next Steps

The next meeting of the Tributary Committees will be on 10 August 2023.

Meeting notes submitted by Tracy Hillman (tracy.hillman@bioanalysts.net).