Wells, Rocky Reach, and Rock Island HCP Tributary Committees Notes 12 December 2020

Members Present: Jeremy Cram (WDFW), Chris Fisher (Colville Tribes), Tom Kahler (Douglas PUD), Brandon Rogers (Yakama Nation), Kate Terrell (USFWS), Catherine Willard (Chelan PUD), Justin Yeager (NOAA Fisheries), and Tracy Hillman (Committees Chair).

Others Present: Becky Gallaher (Tributary Project Coordinator), Hans Smith (Yakama Nation alternate), and Scott Hopkins (Chelan PUD alternate). Chris Johnson (MSRF), Jessica Goldberg (MSRF), Tara Gregg (MSRF), Jen Bountry (BOR), Steve Kolk (BOR), Emily Alcott (Inter-Fluve), Mike McAllister (Inter-Fluve), Mackenzie Butler (Inter-Fluve), and Mike Brunfelt (Inter-Fluve) joined the call for the Sugar Project discussion. Lori White (DOE), Rick Mraz (Ecology), and Denny Rohr (PRCC Habitat Subcommittee facilitator) joined the call for the wetland discussion. Bill Norris (Parr Excellence), Chris Butler (YN), and Denny Rohr (PRCC Habitat Subcommittee facilitator) joined the call for the Upper Nason Fish Passage Evaluation discussion.

The Wells, Rocky Reach, and Rock Island Hydroelectric Projects Habitat Conservation Plans Tributary Committees held a conference call on Thursday, 10 December 2020 from 9:00 am to 1:00 pm.

I. Review and Adopt November Agenda

Tracy Hillman welcomed everyone to the meeting and the Committees adopted the proposed agenda.

II. Review and Approval of October Meeting Minutes

The draft 12 November 2020 meeting notes were reviewed and approved by the Tributary Committees.

III. Monthly Update on Ongoing Projects

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

- Barkley Irrigation – Under Pressure Project – The sponsor (Trout Unlimited; TU) reported that their contractor continues to make progress on preparing the ditch for new pipe. By the second week of November, they had several thousand feet of pipe welded and in position to be bedded and backfilled.
- Icicle Boulder Field Project – The sponsor (TU) reported that the installation of the waterline and step-pool channel are complete.
- Peshastin Creek RM 10.5 PIT-Tag Detection Site Project – This project is complete. The sponsor (Washington Department of Fish and Wildlife; WDFW) provided the 2019 annual report, which was uploaded to the Extranet site.

- Beaver Fever Project – The sponsor (TU) reported they are working on end-of-season reports and permitting for next season.
- Derby Creek Fish Passage Project – The sponsor (Cascade Fisheries; CF) reported there was no new activity on this project
- Chiwawa Nutrient Enhancement Project – The Sponsor (CF) reported there was no new activity on this project.
- Twisp River Floodplain Left Bank Spring-fed Alcove Restoration Project – The sponsor (Methow Salmon Recovery Foundation; MSRF) reported there was no new activity on this project.
- Johnson Creek Habitat Restoration Project – The sponsor (TU) reported they are working on completing the 60% design. They hope to have it completed by mid-December.
- Cottonwood Flats Floodplain Restoration Project – This project is complete. The sponsor (Chelan County Natural Resources Department; CCNRD) submitted the final report, which was uploaded to the Extranet site.
- Lower Wenatchee Instream Flow Enhancement Project – The sponsor (TU) reported there was no new activity on this project.
- Peshastin RM 3.4 Side Channel Project – The Sponsor (CCNRD) reported that they continue to collect groundwater data. The engineers completed the existing conditions model and began identifying alternatives. They are currently developing conceptual designs.
- Napeequa Side Channel Connection Project – The sponsor (CF) reported they contacted the acting executive director at Tall Timbers. At this time, the director is re-evaluating priorities and trying to keep the camp running in response to the COVID-19 pandemic. The director committed to a site walk this spring to discuss a possible pathway forward.
- Monitor Side Channel Project – The sponsor (CCNRD) reported they are working on permit documents.
- Restore Chiwaukum Creek Project – The sponsor (CF) reported that the next design team meeting is scheduled for 16 December. The sponsor will share revised concepts with both the design team and USFS.
- City of Leavenworth Fish Screen Project – The sponsor (TU) reported that the placement of the waterline from the screenhouse to the City of Leavenworth treatment plant was completed on 27 November. The screen was set in place and the manufacturer will be on site in early December to assist with startup and fine tuning.
- Goodwin Side Channel Assessment Project – The Sponsor (CF) reported that in addition to collecting data, two temperature loggers were installed in the side channel adjacent to the piezometer locations. This will allow for comparisons of groundwater and side channel temperatures.
- Sugar Reach Habitat Enhancement Early Implementation Project – The Sponsor (MSRF) reported they are preparing a report that summarizes monitoring data and observations.
- Enloe Dam Removal Concept Plan Project – Because of delays associated with the COVID-19 pandemic, the contractor (Inter-Fluve) has requested a time extension on this project (see discussion below).
- Upper Beaver Creek Final Design and Restoration Project – The Sponsor (MSRF) reported that the project design is moving forward and is on schedule.

- Vandervort Appraisal Project – This project is complete. The sponsor (MSRF) noted that a third and final letter was sent to the new owners (the new owners did not respond to the first two letters). The sponsor also talked to WDFW and they (WDFW) declined interest in future ownership.
- Big Meadow Creek Fish Passage Project – The sponsor (CF) reported they continue to have conversations with project partners about the installation of a bridge instead of a culvert. The Wenatchee River Ranger District is supportive but they still need approval from the forest supervisor. They also began the process of securing a Special Use Permit.

IV. Time Extension Request

Enloe Dam Removal Concept Plan

The Wells Tributary Committee received a time extension request from Inter-Fluve on the Enloe Dam Removal Concept Plan. Because of the COVID-19 pandemic, there have been delays securing sediment data and results from USGS. As a result, the contractor requested a time extension from 28 February 2021 to 31 March 2021. The Wells Tributary Committee approved the time extension.

V. Sugar Project Discussion

Chris Johnson (MSRF), Tara Gregg (MSRF), Jessica Goldberg (MSRF), Jen Bountry (BOR), Steve Kolk (BOR), Emily Alcott (Inter-Fluve), Mike McAllister (Inter-Fluve), Mackenzie Butler (Inter-Fluve), and Mike Brunfelt (Inter-Fluve) described the status of the Sugar Project with the Committees. The purpose of the discussion is to update the Committees on current design concepts, seek feedback from the Committees, and to gauge the Committees' interest in moving forward with design develop.

Tara gave a presentation on the status of the Sugar Project (see Attachment 1). She began by describing the goals of the project, which are to allow for naturally dynamic and deformable floodplain processes to operate and to increase habitat for juvenile spring Chinook and steelhead. She then outlined the project schedule and design progression. The development of conceptual designs considered stakeholder feedback (including Committees' comments) and design team expertise. She reminded the Committees that the Sugar Project consists of five restoration areas and that there are multiple constraints within the project area including roads, homes, existing habitat projects, irrigation infrastructure, and private property. She said todays discussion will focus on the WDFW and Eagle Rocks sites (upper two sites of the Sugar Project).

1. **WDFW**

   Tara said the WDFW site includes multiple habitat restoration projects that were implemented previously. Those include the removal of an irrigation dam, updates to the MVID irrigation diversion and fish return, and multiple restoration actions (wood structures). The design team has identified additional enhancement opportunities including removing culverts to increase floodplain connectivity, improve off-channel alcove habitat, and develop a flow split that increases edge habitat in both channels at all flows. Based on feedback provided by the Committees and others on pre-appraisal concepts, MSRF is looking at three action types in this area. Two action types consider promotion of a perennial flow split (by regrading and/or channel roughening using large wood placement) and the third addresses floodplain and alcove connectivity. With regard to regrading, she said it would be used to enhance flow split, which is needed to prevent all the flow from going down the side channel (river right) and to sustain earlier habitat improvement investments. Habitat enhancement work would focus on removing culverts on the floodplain, adding wood, and enhancing low-flow connectivity at Plummers outlet/alcove. Tara noted that the outlet of the pond is primarily groundwater driven but is disconnected from the river from September to March. She said high densities of juvenile

salmonids use the outlet channel during high flows. She added that during summer, water temperatures in the pond increase and dissolved oxygen levels decrease. As a result, they are evaluating the possibility of decreasing the surface area of the pond to improve water quality.

Hans Smith asked about the possibility of the side channels intercepting groundwater. MSRF said the goal is to only capture surface water. They are unable to intercept groundwater because of landowner restrictions. Tom Kahler questioned the stability of the bar that is forming in the main channel just upstream from the flow split, and whether actions under consideration to maintain the flow split included both regrading and structure placement, or only one or the other. Jen Bountry responded that although the bed material comprising the bar is mobile at high flows, the bar is in the widest part of the river favoring bar formation. Thus, actions under consideration could include both structure placement and some excavation to modify the bar.

2. **Eagle Rocks**

   Tara identified the location of the Eagle Rocks site and reviewed comments/feedback received on pre-appraisal concepts. Possible enhancement actions at this site include riparian plantings, addition of large wood, riparian conservation, improvement of off-channel alcove habitat, and enhancement of edge habitat along the mainstem. Tara said the lack of landowner support has reduced their ability to reconnect the floodplain on river left. The design team identified two action types that would improve habitat conditions for Chinook and steelhead at this site. Those include developing a groundwater channel/alcove and installing wood structures. Regarding the groundwater channel/alcove project, Tara shared groundwater depths and temperatures collected within two monitoring wells on the floodplain. Based on these data, they are proposing a channel that follows topographical lows and will intercept groundwater. The channel will have a slope of 0.44%. To improve channel complexity within the mainstem, they propose a series of large wood structures mostly along the left bank. These are intended to increase edge habitat for juvenile salmon and steelhead and encourage some lateral migration. These actions are being designed to work with other restoration actions implemented within the reach (e.g., 1890s channel).

MSRF asked the Committees to provide feedback on the concepts by 8 January 2021. MSRF will provide the Committees with a comment form and the presentation. Tracy Hillman asked members to provide comments to him by 7 January 2021. He will then compile the comments and forward them to MSRF on 8 January 2021.

The Committees thanked MSRF for joining the meeting and updating them on the Sugar Project. The Committees also appreciate the opportunity to provide feedback on the Sugar Project.

VI. Wetland Regulations Discussion with Ecology

In November, while discussing the Yakama Nation proposal titled, Chewuch River Mile 4.2 Fish Enhancement Project, the Committees observed that there appears to be a disconnect between floodplain restoration projects and Ecology's wetland regulations. The Chewuch River Mile 4.2 Fish Enhancement Project, like many other proposed projects received by the Committees, intends to reconnect the floodplain, but because of a Category 1 wetland on the project site, reconnection is designed to avoid any disturbance to the wetland or other jurisdictional areas. Consequently, the project does not take full advantage of site potential and falls short of providing the greatest biological benefit to Plan Species. Some members of the Tributary Committees criticized this and other similar efforts because these efforts do not take advantage of reconnecting natural features (e.g., wetlands) on the floodplain that would benefit Plan Species. In addition, these proposed projects are often designed to "lock" side channels in place so as to avoid any disturbance to wetlands. Some members of the Committees see this as falling short of restoring natural processes. Because of this apparent conflict between floodplain restoration and wetland regulations, last month the Committees agreed to invite representatives from Ecology to the

December meeting to discuss wetland regulations and policy. The Committees identified the following questions for Ecology's consideration:

1. What are the State's requirements for impacts to wetlands resulting from stream restoration projects? Are there differences in mitigation if the project is restoration versus non-restoration?
2. What are the mitigation ratios?
3. Is it only excavation or fill that triggers mitigation, or does a change in hydrology that results from restoration work (without direct excavation or fill within the wetland) also trigger mitigation?
4. If a restoration action changes hydrology (e.g., an engineered log jam on the mainstem directs some flow onto a floodplain containing wetlands), and the change in hydrology subsequently changes the classification of a wetland, does that require mitigation?
5. Are there any exceptions to wetland mitigation?
6. What is the process for discussing wetland modifications with Ecology? Are there opportunities to discuss wetland impacts from river restoration and evaluate options for specific projects?
7. Has Ecology entered into any discussions with Fish Enhancement Groups in Washington regarding wetland and river restoration?
8. Does Ecology have time or an interest to engage in early discussions on specific projects where there may be wetland impacts?
9. Has Ecology drafted any notes on discussions Steve Manlow and other FEGs have had with Ecology on this issue?
10. How does coordination with the Corps and Ecology work?

In November, Tracy Hillman invited Ecology representatives to the Committees' December meeting and shared the questions with Ecology.

Lori White (Ecology) and Rick Mraz (Ecology) joined the meeting to discuss wetland regulations and policy. Before the meeting, Rick provided two reports that address most of the questions offered by the Committees (see Attachments 2 and 3).

Rick and Lori began by stating that Ecology treats fish restoration projects differently than they do other floodplain projects (e.g., construction of a parking lot). Rick said Ecology is actively engaged in supporting restoration of floodplain connectivity through the Floodplains by Design program. He said proposed projects are evaluated on a case-by-case basis and project sponsors must provide context for the proposed project. That is, sponsors need to provide enough information for Ecology to determine if or how a functioning wetland is decoupled or isolated from the stream. If the wetland is isolated and has been for a long period of time, it may be inappropriate to convert the functioning wetland to a stream (i.e., converting a lentic system to a lotic system). A mature forested wetland, for example, provides ecological services for a variety of plant and animal species that would be negatively affected if the wetland is converted to a stream. This conversion would likely trigger a different permit.

Rick noted that no mitigation is required if the proposed action meets requirements in Nationwide Permit 27. Lori noted that the project sponsor needs to demonstrate that the proposed action will increase ecosystem function. In this case, the sponsor must describe (through modeling or other means) that the gain in fish benefit exceeds the loss in wetland function. Ecology may require 5-10 years of monitoring to demonstrate ecosystem benefits.

When asked about how Ecology views naturally occurring wetlands versus wetlands created as a result of human activities (e.g., a wetland that formed following the construction of a levee), Rick and Lori said Ecology looks at the current state of the wetland and whether it is functioning. However, Ecology does consider whether the wetland formed naturally or was the result of human activities. Nevertheless, if it is a wetland, Ecology has regulatory authority over it. He added that it is important to know the potential loss of function resulting from a proposed action.

Chris Fisher commented that reconnecting floodplains should increase wetlands and wetland function. Rick responded that a reconnection project that converts an existing wetland to a stream may not increase wetland function. Indeed, it may reduce wetland function. For example, as a river migrates across a floodplain, it can form disconnected oxbows that function as wetlands. If a sponsor intends to convert the oxbow wetland to a flowing side channel, the function of the wetland may be reduced or lost, even though the floodplain has been reconnected.

Rick and Lori responded to the question about whether a change in hydrology resulting from restoration work (without direct excavation or fill within the wetland) triggers mitigation. Rick said if work on the floodplain converts a wetland to a flowing channel, it may require mitigation. On the other hand, if the work changes a wetland from one type to another, it may not require mitigation depending on the type of wetland. Ecology would need to evaluate the historical, current, and future conditions of the wetland. Use of the Washington State Wetland Rating system can help evaluate the change in function from before to after restoration and then determine whether mitigation is necessary. Another useful tool is the Credit-Debit Method. When asked about seasonal activation of a wetland (i.e., enhancing surface water flows through a wetland only during high flows resulting in a short-term lotic system), Rick said Ecology has authorized these actions without mitigation. Again, it would depend on lost function. Ecology is charged with achieving no net loss of wetland function through their permitting. It requires unique circumstances to accept resource trade-offs. More information on resource trade-offs is available in their newest draft Mitigation Guidance documents.

Regarding the question, "if a restoration action changes hydrology (e.g., an engineered log jam on the mainstem directs some flow onto a floodplain containing wetlands), and the change in hydrology subsequently changes the classification of a wetland, does that require mitigation," Rick and Lori indicated that where and how the wood is placed would matter. Determining whether a Clean Water Act permit is necessary is an Army Corps of Engineers (ACOE) issue. Such a proposal would also possibly require shoreline permits and other permits (e.g., HPA). Those permitting decisions could result in the need for permits from Ecology.

A member asked whether the construction of a short pilot channel that activates floodplain features, including wetlands, would require mitigation. In this case, no excavation or fill of a wetland occurs. Rick said Ecology is less concerned with actions that restore natural processes, such as floodplain activation. However, the effects of the activation on wetland function and classification would need to be described (e.g., through modeling). He and Lori understand the uncertainty associated with the proposed action and therefore Ecology would likely recommend 5-10 years of monitoring.

Justin Yeager asked about coordination with and between Ecology and ACOE. Lori said it is best to have pre-project meetings with Ecology and ACOE. Ecology and ACOE may not have all the answers to questions, because projects evolve over time and additional information may be needed to evaluate potential changes to wetland function. If the sponsor does not reach out to Ecology, the ACOE will contact Ecology. Rick noted that ACOE recently added a layer of process associated with Clean Water Act permitting (Section 401) that will take more time.

Hans Smith commented that the advice they receive from Ecology when planning a floodplain restoration project is to avoid impacts to wetlands. Rick said this is generally true as Ecology wants to avoid or minimize impacts to wetlands. However, Ecology views restoration differently because the focus of the work is to restore floodplain function. That said, the sponsor needs to demonstrate the proposed project

will provide lift for fish and, if possible, maintain wetland function. Lori added that the sponsor also needs to reduce or minimize impacts to Category 1 wetlands. Hans remarked that the wetland at the Chewuch RM 4.2 Enhancement site is a Category 1 wetland, which is why they designed the project to avoid disturbing the wetland.

Rick noted that Ecology is supportive of floodplain restoration projects that benefit fish and maintain wetland function. He and Lori indicated that communicating and coordinating with Ecology early in the process is best. This allows Ecology to provide positive input on project designs.

The Committees thanked Rick and Lori for discussing wetland regulations with them. They found the discussion very helpful.

VII. Upper Nason Fish Passage Assessment Presentation

Hans Smith provided a brief introduction to the work that the Yakama Nation funded to evaluate fish passage at potential natural barriers in Upper Nason Creek between the confluences of White Pine Creek and Mill Creek. He said the potential barriers are in the Gaynor Falls Reach (RM 16.5) and the Bygone Falls Reach (RM 20.5). These reaches are upstream from the Reach Assessment conducted by the Yakama Nation. Hans said they hired Parr Excellence to conduct the surveys and evaluate passage for salmonids in both reaches. Bill Norris with Parr Excellence gave a presentation on the results of the evaluation (see Attachment 4).

Bill began by identifying the location of the barrier reaches on Nason Creek. He described the general characteristics of the reaches and noted that there are five potential barriers in the Gaynor Falls Reach and one potential barrier in the Bygone Falls Reach. He then described the methods they used to evaluate fish passage at the potential barriers. They used Real Time Kinetic (RTK) surveys, Total Station surveys, and multi-elevation unmanned aerial vehicle aerial photogrammetry. They used data from these surveys to create digital elevation models. They then conducted hydraulic modeling and calibration. They generated fish passage flow estimates, identified fish passage criteria, and identified alternate fish passage routes through each of the potential barriers. Finally, they evaluated fish passage at low flow, average flow, and high flow conditions.

For each potential barrier, Bill provided passage results for steelhead, spring Chinook, Coho salmon, and bull trout at the three flow levels. In general, each barrier is passable to most species only at certain flows. The following summarizes passage for each species.

- Spring Chinook Salmon—Adult Chinook cannot pass through the Gaynor Reach unless they hold and wait for flows to fluctuate to levels that allow passage. Unfortunately, some barriers are only passable at high flows, while others are passable only at low flows. Thus, it is unlikely adult Chinook can pass through the Gaynor Falls or Bygone Falls reaches.
- Steelhead—Adult steelhead may be able to pass through the reaches at moderate to high flows; however, passage is challenging even at these flows. They cannot pass all barriers at low flows.
- Coho Salmon—Coho cannot pass the second barrier in the Gaynor Falls Reach at any flow. Thus, the Gaynor Falls Reach is a barrier to Coho salmon.
- Bull Trout—Bull trout may be able to pass through the two reaches, but like spring Chinook, they would have to rely on different flow levels to pass different barriers. Bull trout have been observed upstream from the barriers, but they could be resident forms. Tagged fluvial bull trout have been detected in the reaches and this area was and apparently still is a popular fishing area.

Chris Fisher asked about the condition of habitat upstream from the barriers. Jeremy Cram responded that there is spawning and rearing habitat upstream from the barriers. He added there are a few miles of habitat upstream from the Bygone Falls Reach, but the basin area upstream from the barriers is small. It is mostly a plane-bed channel with possible fish passage barriers. He said the area between the Gaynor Falls

and Bygone Falls reaches has high quality habitat. Chris asked about the fish assemblage upstream from the barriers. Jeremy noted that there are high densities of *O. mykiss* upstream from the barriers. Bull trout also occur upstream from the barriers.

When asked what the Yakama Nation intends to do with these results, Hans indicated that the results are intended to supplement the Reach Assessment. He added that they have no intention of trying to improve passage at the barriers. That would be extremely difficult to do based at their locations in Nason Creek. Brandon Rogers responded that these results will also help the Committees determine if it is cost-effective to fund projects upstream from the barriers.

The Committees thanked Bill and the Yakama Nation for sharing the fish passage results with them.

VIII. Information Updates

The following information updates were provided during the meeting.

1. Approved Payment Requests from November and December:

   Rock Island Plan Species Account:

   - $86.63 to Clifton Larson Allen for Rock Island financial administration in November 2020.
   - $12,414.10 to Chelan County Treasurer for the Peshastin RM 4.3 Side Channel Project.
   - $4,187.48 to Cascade Fisheries for the Restore Lower Chiwaukum Creek – Phase I Project.
   - $136.59 to Cascade Fisheries for the Chiwawa Nutrient Enhancement Project.
   - $258.61 to Cascade Fisheries for the Goodwin Side Channel Project.
   - $11,255.66 to Trout Unlimited for the Beaver Fever – Restoring Ecosystem Function Project.

   Rocky Reach Plan Species Account:

   - $86.62 to Clifton Larson Allen for Rocky Reach financial administration in November 2020.

   Wells Plan Species Account:

   - $3,704.81 to Inter-Fluve for the Enloe Dam Removal Concept Plan Project.

2. Becky Gallaher reported that Cordell, Neher & Company is completing the financial review of the Rock Island and Rocky Reach Plan Species Accounts. She will see if the accountants can submit the report before the end of the year.

IX. Next Steps

The next scheduled meeting of the Tributary Committees will be on Thursday, 14 January 2021.

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