PRCC Habitat Subcommittee

Conference Call

Thursday, 12 February 2026
11:00 a.m. – 4:20 p.m.

Final Meeting Minutes

PRCC Habitat Subcommittee Members

Tracy Bowerman, Shelby Fowler (alt), USFWS
Dave Duvall, Deanne Pavlik-Kunkel (alt), GPUD
Scott Carlon, Sean Gross (alt), NMFS/NOAA[1]
Jeremy Cram, Cody Gillin (alt), WDFW
Nathan and Clayton Buck, Wanapum
Chris Fisher, CTCR
Brandon Rogers, Hans Smith (alt), YN
Carl Merkle, CTUIR
Erin Harris, GPUD
Tracy Hillman, BioAnalysts, Chair

Meeting Attendees

Chris Fisher, CTCR
Jeremy Cram, WDFW
Brandon Rogers, YN
Nathan Buck, Wanapum
Tom Kahler, DPUD*
Aaron Rosenblum, CF*
Jason Lundgren, CF*
Grace Watson, MSRF**
Chris Johnson, MSRF**
Tara Gregg, MSRF**
Mark Ingman, CCD***
Chris Gabrielli, Blackwater Consulting***
Stine Griep, Hinchinbrook***
Tracy Hillman, BioAnalysts, Chair
Dave Duvall, GPUD
Tracy Bowerman, USFWS
Chris Mott, GPUD
Catherine Willard, CPUD*
Phillip Klenke, CF*
Alex Harwell, CCD*
Ryan Lefler, TU*
Brian Fisher, MSRF**
Jessica Goldberg, MSRF**
Camden Shaw, MSRF**
Nick Legg, Lichen Land and Water***
Carlos Polivka, USFS***
Keith van den Broek, Hinchinbrook***

*Participants who joined for the CRM Riparian Stewardship Package discussion.
**Participants who joined for the Bartsch Acquisition project discussion.
***Participants who joined for the Roaring Creek Restoration Monitoring discussion.

[1] NOAA Fisheries did they notify the Chair requesting a delay in voting on decision items. Therefore, decisions were made by members present.

Action Items:

- If required, Dave Duvall will contact appraisers and schedule an appraisal of the 5.58-acre Rains property on the Entiat River.
- Dave Duvall will contact appraisers and schedule an appraisal of the Roaring Creek-Nysether Acquisition Project.

Decision Items[2]:

- ***Decision:*** *PRCC Habitat Subcommittee members approved a scope change for the Bockoven Entiat and Stormy Acquisition Projects to include the 5.58-acre Rains parcel along the Entiat River (located 0.25 miles upstream from the Bockoven property).*
- ***Decision:*** *PRCC Habitat Subcommittee will accept a specification sheet on the hydrology component of the integrated monitoring plan for the Roaring Creek Floodplain Reconnection Project.*
- ***Decision:*** *PRCC Habitat Subcommittee members elected not to fund the Stage-0 Monitoring in Roaring Creek, 2026-2030 project.*

I. Welcome and Introductions

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

II. Coordinated Resource Management (CRM) Riparian Stewardship Package Discussion (with the HCP Tributary Committees)

Phillip Klenke (CF), Aaron Rosenblum (CF), Alex Harwell (CCD), Jason Lundgren (CF), and Ryan Lefler (TU) joined the meeting for the CRM Riparian Stewardship Package discussion. Phillip reminded members that last year they applied for funding from the Tributary Committees to support efforts to adaptively manage riparian and instream restoration actions across 28 project sites in the Wenatchee and Entiat watersheds as well as in two smaller tributaries to the Columbia River. Although the Tributary Committees did not support the project as proposed, the Tributary Committees indicated that they would consider funding stewardship efforts in high-priority areas that support Plan Species. Phillip said the reason they are meeting with the Committees (both the Tributary Committees and PRCC Habitat Subcommittee) today is to identify and discuss high-priority areas that support Plan Species.

Phillip gave a presentation titled "CRM Riparian Stewardship Package" (see Attachment 1). He provided an outline of his presentation, which included a description of the CRM partnership, project overview, goals and objectives, project tasks, and prioritization. He said the CRM was formed in 2019 and is a partnership between Cascadia Fisheries, Cascadia Conservation District, and Trout Unlimited. The group works together to develop, plan, design, and implement salmon recovery projects throughout the region. Their mission is to create a network of healthy, connected tributaries that provide crucial habitat and climate refugia to native fish populations. He added that their partnership extends beyond the three entities and includes federal and state agencies and private landowners.

Phillip reiterated that their proposal focuses on restoring and enhancing riparian plant communities through the stewardship of riparian and in-stream habitat restoration efforts. Of the 26 project sites included in the proposal, 15 sites include riparian plantings (>21 acres of planted riparian habitat) and 22

[2] All decision items listed here were approved by PRCC HabSC members.

sites include low-tech process-based restoration (LTPBR) actions (>10 mile of treatment). These sites are scattered throughout the Wenatchee and Entiat basins and in tributaries to the Columbia River. Phillip showed a map of a project site in Eagle Creek.

Phillip said the goal of their work is to (1) improve the success and rate of riparian habitat establishment, (2) enhance the development of normative stream processes/functions, and (3) promote the formation of self-sustaining ecosystems that provide crucial habitat to at-risk fish species. The objectives are to (1) steward >21 acres of riparian plantings and manage invasive species and noxious weeds and (2) maintain and enhance >500 beaver dam analogs (BDAs) and post-assisted log structures (PALs) across 10.8 stream miles.

Phillip next described riparian stewardship actions and noted that riparian restoration projects need care and attention long after they are implemented. He said they propose to supplement sites with water using irrigation systems, maintain irrigation systems, apply mulch, physically and/or chemically manage invasive plants and noxious weeds, and enhance riparian buffers with additional plants. Regarding LTPBR maintenance, they plan to add material to BDAs to build up dams and repair the structures, replace BDA and PAL posts, and alter the size and shape of structures depending on site conditions and responses. He reminded the Committees that last year they requested $200,000 from the Tributary Committees (the total cost of the project was $800,000). Although they did not receive funding from the Tributary Committees, the Salmon Recovery Funding Board contributed $182,824 to the project.

Phillip described the freshwater benefits from riparian planting and LTPBR projects and indicated that these projects ultimately improve the survival, capacity, and distribution of native fish species. He noted that they are planning five years of stewardship, which should improve establishment of riparian communities and kick-start the return of natural stream processes. He added that there is no risk because the projects are already permitted and implemented, and they already have landowner support. However, there is a risk of failure if there is no stewardship. Phillip provided some examples of what happens when there is no stewardship. He noted that $7.4 M has been spent on these projects and it would be unfortunate if much of this investment is lost because of a lack of stewardship.

Based on feedback from the Tributary Committees last year, CRM developed site prioritization criteria to identify and rank sites that are in high-priority areas supporting Plan Species. He showed a table of ranked sites based on the prioritization criteria and a map identifying the locations of project sites. He then thanked the Committees and asked whether the Committees had questions.

Brandon Rogers asked whether the table of prioritized sites could include a column identifying treatment type (e.g., riparian, LTPBR, or both treatments). Phillip indicated that he would add that information to the table. He said he will provide a larger spreadsheet with much more information. Jeremy Cram asked which of the sites were on private lands and whether the landowners have concerns with repeatedly visiting or managing the sites. Phillip responded that they have 10-year agreements with the landowners that allow CRM to monitor and adaptively manage the sites. He added that the landowners are on board with the stewardship project. Jeremy asked whether CRM could provide a cost estimate for each site. Phillip said, yes, they can do that.

Chris Fisher indicated that based on his experience, natural beaver dams are rarely long-term structures. Indeed, many last only a few years. He asked if the goal is to mimic natural beaver dams, why is CRM trying to maintain structures over such a long period of time. Phillip, Alex, and Ryan responded that because the sites that are treated are so entrenched and degraded, it will take several years for the structures to elevate the stream beds and reconnect the floodplain. They noted that each site is different and may require different levels of stewardship. They are hoping their structures are more

robust than natural beaver dams and will last long enough with stewardship to return the sites to more natural conditions. Chris asked whether they are most interested in managing the structures on private property. Phillip said they want the structures to last on both private and public lands, but they do need to be aware of infrastructure on private lands. Chris asked whether they have contracts with private landowners indicating that the restoration actions will not affect infrastructure. Phillip responded that their agreements with landowners do not include such a contract, but during the planning of the projects, they work with engineers to make sure the treatments meet the "no rise" requirement and will not affect infrastructure.

Tracy Hillman recalled that one of the goals of the work was to allow recolonization of treated sites with beavers. He asked whether that is still the goal. Phillip said that is the goal on public lands but less so on private lands. Alex said some landowners want beavers to return to their property; other landowners do not want beavers on their property. Chris asked whether they intend to expand restoration work at sites where the treatments are effective. Phillip said they do not plan to expand treatments under this phase of work. Expanding treatments would require additional permitting, which would add another phase to the work.

The Committees thanked Phillip and his team for attending the meeting and discussing their project with both the Tributary Committees and the PRCC Habitat Subcommittee. The Committees recommended that CRM share additional information on the prioritized sites (i.e., provide a more detailed spreadsheet). The Committees will study the spreadsheet and identify whether they are interested in seeing a proposal/specification sheet for stewardship on specific restoration sites. The Committees will let the sponsor know their thoughts after the 12 March meeting.

III. Lunch

IV. Agenda Review

The PRCC Habitat Subcommittee reviewed and approved the February meeting agenda.

V. January Meeting Notes

PRCC HabSC members reviewed and approved the 8 January 2026 meeting notes.

VI. Review Action Items

There were no action items to review.

VII. Project Updates

Members of the PRCC HabSC provided the following updates on funded projects:

- **Primary Appraiser (Pacific Appraisal Associates)** – Dave Duvall reported that there is no update on Pacific Appraisal Associates.
- **Primary Appraiser (Noble Ag Land Valuation) –** Dave Duvall reported that there is no update on Noble Ag Land Valuation.
- **Lower Wenatchee Instream Flow Enhancement Project, Phase II Project (TU)** – Tracy Bowerman reported that because of significant rainfall in December, work areas became too muddy to continue irrigation pipeline activities. As a result, Smith Excavation temporarily paused pipeline-related work through January. However, work on the pump building continued, with the subcontractor completing remaining exterior steel and interior wall paneling and door

trim. In addition, Irrigation Technology Controls worked on electrical installations within the pump building, including the main disconnect, main breaker control box, variable frequency drives, programmable logic controller, fish screen controller, and associated steel conduit. Remaining electrical work includes installation of the HVAC (Heating, Ventilation, and Air Conditioning) system, lighting, and minor finishing items. When the ground freezes, Smith Excavation will continue to install service valves along the irrigation mainline. Tracy Bowerman provided photographs of implementation (see Attachment 2).

- **Peshastin Creek RM 2.5 Project (CF)** – Tracy Bowerman indicated that the sponsor prepared a bid solicitation including the final plans and specification package. The package can be found here: Peshastin RM 2.5 - 3.0 Habitat Restoration Project RFP .pdf. In February, the sponsor will advertise the project and run the bid solicitation, including a mandatory pre-bid walk, which is scheduled for 16 February, and respond to bid inquiries. Bids are due in early March. The sponsor will continue to coordinate with Washington State Department of Transportation and the private landowners.

- **Bockoven Entiat and Stormy Acquisition Projects (CDLT)** – Jeremy Cram reported that the Bockoven's moved to the westside of the Cascades because of health issues. He added that Bockoven's have a pending closing on the Stormy Lodge and Stormy Creek properties. Once the deal is closed, the sponsor will reach out to the new owner to see whether they may consider redeeming some of their investment.

  Dave Duvall noted that Mickey Fleming reached out to him regarding an opportunity to pick up a small 5.58-acre parcel along the Entiat River that is owned by Jesse Rains. As shown on the map below, this is immediately downstream of the Bremer piece that the PRCC HabSC funded exclusively and is a quarter mile upstream from the RM 18.5 Bockoven property to which the PRCC HabSC committed $123,000 in HFA 602-78H. This property is on river right without legal access across land from Entiat River Road; however, CDLT has access from its adjacent property (Bremer). It is also an important link in the sponsor's long-term goal to acquire all or a significant portion of the Jean property that lies immediately downstream.

  Because of the small size of the property and lack of legal access, CDLT expects that the appraised value will be inexpensive, perhaps in the $30,000 -$40,000 range. CDLT is looking for the least expensive way to accomplish the acquisition in both cost and time. CDLT asked whether the PRCC HabSC would be willing to add this project to HFA 602-78H. CDLT would not seek a cost increase (budget amendment) at this time. CDLT would like to work through the PRCC HabSC on this project because going through the SRFB will involve more extensive requirements. For example, SRFB now requires a full cultural resource study even for acquisition-only projects that involve no ground disturbance. The last cultural resource study cost $12,000 and took most of six months to be completed and approved.

  Members approved the scope change in HFA 602-78H (Bockoven Entiat and Stormy Acquisition Projects) that includes the acquisition of the 5.58-acre Rains property and, if required, recommended that Dave initiate the appraisal process.

Life Stage Restoration Prioritization

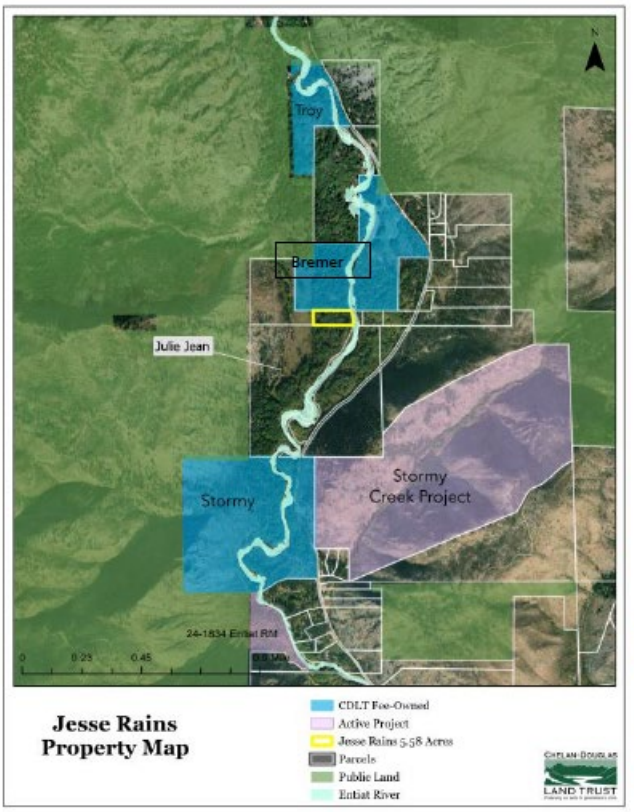
Life Stage Priorities
Subbasin: Entiat
AU: **Entiat River-Potato Creek**

Assessment Unit-Level Life Stage Priority by Species and Life Stage:

Spring Chinook:
Adult Migration: **Low Priority**
Holding: **Medium Priority**
Spawning: **Medium Priority**
Fry Colonization: **High Priority**
Summer Rearing: **High Priority**
Winter Rearing: **High Priority**
Smolt Emigration: **Low Priority**

Entiat River Potato 06

Assessment Unit: Entiat River-Potato Creek
Reach Rank: 2
Priority Actions: Maintain Reach Function,Prevent Limiting Factors
Priority Life Stages: Winter Rearing,Fry,Summer Rearing
Priority Action Categories: Land Management for Protection, Land Protection (e.g. conservation easement and/or property acquisition)"



Summer Chinook (not listed) spawn in this area and are seen at Stormy

Steelhead:
Adult Migration: **Low Priority**
Holding: **Life Stage Not Supported**
Spawning: **Low Priority**
Fry Colonization: **Low Priority**
Summer Rearing: **High Priority**
Winter Rearing: **High Priority**
Smolt Emigration: **Low Priority**

- **Canyon Creek Culvert Design and Construction Project (CF)** – Tracy Bowerman indicated that the sponsor has been on hold waiting for the next phase of review for this project. They plan to submit engineer responses to Forest Service comments on the 30% design in the next month. They will then move toward a 60% design.
- **Eagle Rocks Habitat Enhancement Project (MSRF)** – Tracy Bowerman said the onset of winter has dictated a pause in fencing and gate installation. Work on this project will be on hold until spring.
- **Kedrowski Acquisition Project (MSRF)** – Tracy Bowerman indicated that the acquisition closed on 1 December 2025. There will be no activity on this project until spring. At that time the sponsor will survey and flag the property boundary.

- **Skyline Screen and Fish Return Upgrades Project (MSRF)** – MSRF staff joined the meeting to provide an update on this project. The sponsor provided a brief presentation on the project (see Attachment 3). The sponsor indicated that the Skyline fish screen was upgraded in 2024 and the trestle replacement over Cub Creek occurred in 2025. The upgraded fish screen eliminates the risk of fish stranding. Diverted water is now delivered under the MacPhearson side channel. The trestle replacement included replacing the wooden trestle with a 90-foot steel bridge and new 24-inch high-density polyethylene conveyance pipe. The trestle replacement was completed in November 2025.

- **Sugar Channels Reconnection Project (MSRF)** – MSRF staff also provided an update on this project (see Attachment 3). The sponsor noted that the purpose of this project was to increase habitat complexity, increase refuge habitat during high flows, and improve riparian conditions. The sponsor showed photos of the site during 7,000 cfs before and after restoration. They were pleased to report that their habitat goals were achieved. The restoration work used minimal excavation and engineering to achieve maximum benefit. They connected 7,700 feet of season side channel, installed 43 wood structures, and reconnected more than 15 acres of floodplain. They will conduct final project cleanup this spring. They will then work on restoration of the upper pasture.

- **Bartsch Acquisition – Lower Twisp River – Reach 2A Project (MSRF)** – MSRF staff provided an update on this project (see Attachment 3). They noted that the acquisition included 7.86 acres of floodplain and a 2,500 sq ft house. The acquisition allows the sponsor to link the upper channel and pond with the lower pond complex. With the acquisition of the property, there are new opportunities for increasing floodplain connectivity. As for the house, the sponsor is in conversations with house movers, and the plan is to move the house. The sponsor is currently using the house as a temporary office while the Community Center undergoes energy retrofit and radon mitigation.

  The sponsor talked about existing conditions on the site and identified restoration actions including side channel and pond connectivity and riparian restoration. Floodplain connectivity will be improved by removing two undersized culverts in the upper channel; one culvert will be replaced with a temporary bridge. Riparian restoration work includes channel banks replanting and planting 0.7 acres surrounding the house. They also have a revegetation/riparian restoration effort along the ponds adjacent to the road.

  The sponsor also discussed modeling results from partial and full levee removal. This work is part of a larger floodplain reconnection project. Based on Q10 hydraulic modeling, full levee removal will provide little biological benefit and instream improvements would be needed to achieve biological value. There is also a need to evaluate flood risks downstream from the project site. The sponsor will be seeking funding to evaluate partial and full levee removal.

  Chris Fisher asked about the septic system. Chris Johnson responded that the house includes a two-tank septic system. They plan to pump the system and then they will completely remove the system. They plan to keep the existing well to help irrigate revegetation work. They will eventually cap the well permanently. Chris Fisher asked about the installation of a bridge. Chris Johnson said it is a temporary bridge and will be removed when it is no longer needed.

- **Penticton Dam Fish Passage Construction (ONA)** – Chris Fisher reported that this project is complete. Grant PUD and ONA are finalizing a time-extension and budget reduction Change Order.

- **White River Ohme Acquisition (CDLT)** – Dave Duvall said that he received the Deed of Right and this project will be closed once final invoices have been submitted.
- **Enloe Dam Sediment Analysis and 30% Design (TU)** – Chris Fisher reported that the elutriate tests were completed. This work is required for the 401 Certification. Ecology is currently reviewing the results and should provide requirements by late next week.
- **Methow River Riparian Stewardship (MSRF)** – Dave Duvall reported that the sponsor is on hold for the winter. They are planning work on the Bartsch and Robinson properties this spring.
- **M2@3R Habitat Construction (MSRF)** – Dave Duvall reported that the sponsor held meetings to discuss potential wetland impacts from side channel grading. They continue to work on the CLOMR (Conditional Letter of Map Revision) and environmental permitting processes. They are also coordinating with the Methow Conservancy on a walk through on final design.
- **Libby Creek Fish-Passage Barrier Dam Removal (CF)** – Tracy Bowerman reported that the sponsor is pursuing the idea of moving away from the surface-water diversion and installing a well for the landowner. They are working with a hydrogeologist to develop a feasibility assessment for various options.
- **Methow River – Integrated CMZ Project (MSRF)** – Dave Duvall reported that the sponsor is waiting on clarification from Ecology about matching funds.
- **Wenatchee-Okanogan Comprehensive Thermal IR Surveys (CCD)** – Dave Duvall reported that the sponsor submitted a letter to the PRCC HabSC indicating that it is both feasible and appropriate to meet the PRCC HabSC's requirement for a winter flight along the main channels of the Okanogan and Similkameen rivers (see Attachment 4). Dave reminded the group that the PRCC HabSC approved this project on the condition that PRCC HabSC funds must be used to conduct winter surveys. We also told them that if they believe summer surveys would be more appropriate, they need to justify why that is so. Chris Fisher added that he met with the sponsor and their consultants, and the sponsor believes they will be able to do the surveys this March when water temperatures are still cold and there are no leaves on vegetation. If that does not work, they will conduct surveys this fall. Importantly, they have additional funding to conduct surveys on the Okanogan and Similkameen rivers (up to the US/Canada border) during summer. Thus, they will be able to compare results from both warm-water and cold-water surveys.
- **Roaring Creek-Nysether Acquisition Project (CDLT)** – Dave Duvall reported that Mickey Flemming (CDLT) requested that an appraisal be scheduled as soon as possible on this project. She is preparing an information packet for the appraiser. Members supported the initiation of the appraisal process. Dave will reach out to the approved appraisers and see who is available to conduct the appraisal.

Chris Fisher reported that he recently met with ONA, and ONA is developing plans for creating meanders upstream from vertical drop structures (VDSs) 14 and 15 on the Okanagan River. The PRCC HabSC may receive a specification sheet from ONA early this summer on adding riffles and meanders upstream from the VDSs. Chris also indicated that the landowner on river right near the VDSs is interested in activating the floodplain and side channel on his property. Although the levee cannot be removed, it can be breached to reconnect the floodplain. A bridge would need to be placed over the breach. We will hear more about this potential project in the future.

VIII. Restoration/Protection Projects

Roaring Creek Floodplain Restoration Monitoring Proposal and Discussion

Mark Ingman (CCD), Nick Legg (Lichen Land and Water), and Chris Gabrielli (Blackwater Consulting) joined the meeting to discuss water budget and evapotranspiration (ET) monitoring of the Roaring Creek floodplain reconnection project. Mark explained that the purpose of the project is to estimate a water budget for the valley reset (Stage-0) restoration work in Roaring Creek, a tributary to the Entiat River. Mark indicated that the restoration work will reconnect about 50 acres of floodplain along 1.4 miles of Roaring Creek (all on public lands). Currently, channels in the treatment area are entrenched/incised up to 6 feet. Mark noted that there are several components to monitoring this restoration project: (1) hydrology, (2) biophysical conditions, and (3) fish monitoring. Each of these components make up the integrated monitoring plan. He said his group will focus on the first part (hydrology), while Carlos Polivka and his group (Hinchinbrook) will focus on fish monitoring.

Nick Legg and Chris Gabrielli gave a presentation titled "Roaring Creek Floodplain Reconnection Project Water Budget and ET Monitoring" (see Attachment 5). He said their goal is to answer the following key question: how much does floodplain restoration benefit late summer streamflow? Although floodplain reconnection projects are touted as benefiting late summer flows, few studies have documented or measured benefits of these projects. Nick said this will be a learning opportunity because it is one of the first Stage-0 projects in the Upper Columbia. Nick said the schedule is to design and conduct pre-project monitoring in 2026. Restoration work will occur in 2027, and post-project monitoring will occur in 2028 and beyond.

Nick showed maps indicating the location of the project and identified geomorphic features and locations of streamflow monitoring gauges. He noted that the lower reach of Roaring Creek is a losing reach and does dewater on occasion. Nick then showed cartoon drawings of existing condition, as-built condition, and 10-year post construction condition. The figures show that high-elevation points in the floodplain will be protected, and floodplain roughness will be added during implementation. Nick introduced the water budget concept and outlined the physical framework for evaluating the restoration project. He pointed out the importance of data collection before and after restoration upstream and downstream of the project area. He noted that their goal is to monitor hydrology, which includes streamflow, groundwater level, ET, and temperature (ambient and diversity). Of these, they are seeking funding for groundwater and ET monitoring.

Chris Gabrielli described the approach for monitoring ET in the field. He noted that floodplain reconnection raises the water table, which supports riparian and wetland vegetation, and increased vegetation and shallower groundwater should potentially increase ET. Very simply, a change in storage is a function of flow in, flow out, and groundwater exchange. He said that measuring ET requires the use of a meteorological station, groundwater wells, sap flow sensors, vegetation surveys, and soil moisture surveys. Information from these measurements is integrated using an ET monitoring framework resulting in estimates of constrained actual ET before and after restoration. He said they will collect data using a transect-based design, which provides funding flexibility.

As a final point, Nick stated that they must consider fire impacts. They currently have pre-fire imagery and stream flow monitoring. However, to tease out post-fire responses from post-restoration responses, they will need to use multiple transects and work with variability. Fires within the watershed were mosaic and burned with low to moderate intensity. Their design should allow for evaluating the variability in the system. He ended by thanking the PRCC HabSC and noted that they will be looking for funding to do the groundwater and ET monitoring.

Chris Fisher asked how much of the watershed burned, what was the severity of the fire, and has the Forest Service initiated post-fire rehabilitation (e.g., revegetation). Nick responded that most of the upper watershed burned. Fire intensity was low to moderate. Nick was not sure whether the Forest Service had initiated post-fire rehabilitation. Chris Fisher asked about the frequency and duration of dewatering in the lower reach of Roaring Creek. Nick indicated that the dewatering reach is below the treatment reach, and he believes it dewaters every other year, usually from mid-August through mid-September. Tracy Bowerman asked how the sap-flow sensors work. Chris Gabrielli indicated that the sensors measure heat flux.

Carlos Polivka (Forest Service) along with Stine Griep (Hinchinbrook) and Keith van den Broek (Hinchinbrook) joined the meeting to discuss the fish monitoring component of the integrated monitoring plan. Carlos gave a presentation (see Attachment 6) that outlined the contents of the specification sheet they submitted to the PRCC HabSC (the specification sheet was sent to the PRCC HabSC last week).

Carlos began by describing the study area on Roaring Creek and noted that their work targets steelhead and Chinook Salmon if present. They are proposing five years of monitoring but hoping to conduct long-term monitoring. He reminded everyone that this monitoring effort is a collaborative approach, with CCD leading efforts associated with hydrology and the Forest Service/Hinchinbrook focusing on fish monitoring. He said the objectives of the study are to (1) develop a comprehensive ecological monitoring program to evaluate the long-term benefits and risks associated with a large-scale Stage-0 restoration project in an important steelhead stream and (2) focus on biological monitoring tools that inform restoration effectiveness monitoring. He added that they are not just asking whether restoration worked but how it worked.

Carlos said they divided fish monitoring into base monitoring tasks and advanced monitoring tasks. Base monitoring includes redd surveys and capture-mark-recapture techniques. These base components will address whether fish abundance, distribution, habitat use, and life histories change with Stage-0 restoration. Advanced sampling components include geomorphic sampling at habitat transects (assess habitat status and trend over time), stream metabolism monitoring (assess restoration on stream productivity), and consumption and productivity monitoring (assess whether restoration shifts productivity and foraging opportunities for steelhead). Carlos noted that they changed the design from a before-after control-impact design to a before-after design because they were unable to find a suitable reference watershed.

Carlos then talked about the timeline and cost. Carlos said they are proposing five years of monitoring, with sampling in 2026 serving as the final pretreatment period. Except for redd surveys, most work will occur in August. Redd surveys will be conducted weekly from March through May. This work will be repeated annually through 2030. Carlos stated that the total cost of the fish monitoring effort over the five-year period is $1.344 million. However, they provided annual costs for each monitoring item. That is, they have annual budgets for project management and coordination, data and reporting, redd surveys, capture-mark-recapture, habitat transect surveys, stream metabolism, and consumption and productivity. He said the PRCC HabSC can elect to fund the entire project or specific components of the project. As a final point, Carlos indicated that the Forest Service may have a budget that will allow them to do some of the fish monitoring work. The total amount from the Forest Service is unknown at this time.

Jeremy Cram noted that juvenile capture-mark-recapture will occur in August and asked whether subyearling steelhead will be large enough to tag in August. Stine responded that previous sampling in Roaring Creek indicated that about 50% of the steelhead captured in August were large enough to tag. Keith added that because the stream is cold and thus there are no permit issues, they may try to tag fish

later in August or early September. Jeramy asked whether they intend to PIT tag 1,000 to 2,000 juvenile steelhead per year. Keith said they intend to PIT tag all the taggable-sized steelhead they capture. The 1,000-2,000 tags is only an estimate.

Brandon Rogers asked whether there are other opportunities to conduct Stage-0 restoration work in the Upper Columbia and whether the results from the proposed study can be transferred to other Stage-0 projects. Tracy Bowerman noted that a Stage-0 restoration project was recently completed in Duffy Creek, a tributary to Foster Creek in the Upper Columbia. This was implemented on BLM land. Nick Legg added that ET comes up a lot with floodplain reconnection projects, and he pointed out that results from monitoring Stage-0 projects should also transfer to any floodplain reconnection project (e.g., LTPBR projects). Brandon said he would like more information on how the results from this work will inform management decisions.

Dave Duvall asked what happens if Brook Trout are found in the project area (either from eDNA sampling or electrofishing). Carlos responded that their goal is to monitor the effectiveness of the project, which includes assessing the response of all fish species present in the restoration area. If Brook Trout are in Roaring Creek, Carlos and his team will be able to evaluate how Brook Trout respond to the restoration action and whether they displace target species from the restored habitat. Jeremy added that WDFW can prepare a Memorandum of Understanding (MOU) that would allow the removal of Brook Trout if they are present in the project area.

After the guests left the meeting, the PRCC HabSC discussed the "Stage-0 Fish and Habitat Monitoring in Roaring Creek, 2026-2030" specification sheet prepared by the Forest Service and Hinchinbrook. Tracy Bowerman is the liaison for this project. Although there was general support for the integrated monitoring project, members were more interested in the hydrology component than in the fish monitoring component. Because it appears the Forest Service may have funding available for fish monitoring, the PRCC HabSC was more interested in supporting hydrology monitoring. Indeed, the PRCC HabSC and HCP Tributary Committees have long been interested in understanding the water budget and scale of ET associated with floodplain restoration projects. Therefore, they would like to see a specification sheet on hydrology monitoring and elected not to fund the fish monitoring component of the integrated study. They did indicate that they would be willing to revisit the fish monitoring component if the sponsor is unable to find funding for monitoring. Of the fish monitoring elements proposed, capture-mark-recapture was of most interest to the PRCC HabSC. A few members also supported the redd surveys; however, spawning escapement can be estimated from WDFW's steelhead modeling work provided the PIT-tag array in Roaring Creek is operating properly.

Decision: *PRCC Habitat Subcommittee will accept a specification sheet on the hydrology component of the integrated monitoring plan for the Roaring Creek Floodplain Reconnection Project.*

Decision: *PRCC Habitat Subcommittee elected not to fund the Stage-0 Monitoring in Roaring Creek, 2026-2030 project.*

IX. Administration and Information Updates

Habitat Project List

Tracy Hillman and Dave Duvall reviewed the Habitat Project List spreadsheet with the PRCC HabSC. Tracy noted that 166 projects have been supported with funds from 601, 602, and 603. Dave said he tracks Monitoring/Assessment Projects. The following table shows all the monitoring/assessment projects funded under 602 and 603.

HFA	Project Name	Project Type	Amount Awarded	HabSC Contribution to Date	Year Closed
602-13	Icicle Creek Boulder Field	Assessment/Monitoring/Evaluation	$99,554	$99,460	2013
602-27	Silverside PIT Array	Assessment/Monitoring/Evaluation	$123,639	$108,315	2018
602-30	White River Gage Station	Assessment/Monitoring/Evaluation	$60,000	$18,390	2019
602-35	1890s Side Channel	Assessment/Monitoring/Evaluation	$140,283	$0	Contract Void
602-40	Skaha Dam Fish Passage	Assessment/Monitoring/Evaluation	$29,279	$29,279	2018
602-41	Wenatchee Barrier Diversion	Assessment/Monitoring/Evaluation	$15,000	$15,000	2017
602-47	McIntyre Fish Evaluation	Assessment/Monitoring/Evaluation	$15,000	$5,366	Open
602-55	Enloe Sediment Assessment	Assessment/Monitoring/Evaluation	$229,224	$229,224	2022
602-61	Enloe Sediment Volume	Assessment/Monitoring/Evaluation	$117,739	$85,739	2021
602-68	Wenatchee PIT Barge	Assessment/Monitoring/Evaluation	$82,000	$82,000	2022
602-XX	Comprehensive Thermal IR Surveys	Assessment/Monitoring/Evaluation	$258,000	$0	Open
603-5	Kitsap LIDAR	Assessment/Monitoring/Evaluation	$124,000	$123,590	2007
603-7	USGS LIDAR	Assessment/Monitoring/Evaluation	$160,000	$60,000	2008
603-22	White River Gage Station	Assessment/Monitoring/Evaluation	$22,000	$14,288	2018
603-26	Okanogan Discharge Monitoring	Assessment/Monitoring/Evaluation	$90,952	$90,952	2015
603-27	Icicle Peshastin Irrigation Analysis	Assessment/Monitoring/Evaluation	$174,847	$166,139	2014
603-28	Icicle Creek PIT Array	Assessment/Monitoring/Evaluation	$167,097	$167,097	2015
603-31	Bonaparte Discharge Monitoring	Assessment/Monitoring/Evaluation	$21,860	$21,850	2018

Dave said that to date, $1,584,324 of the $2,500,000 available has been spent or allocated to projects. Thus, there is $915,676 available for monitoring/assessment projects.

Habitat Account Deposits

Dave Duvall reported that in February, Grant PUD made their annual contributions to the habitat accounts (see Attachment 7). The deposits were as follows:

Habitat Fund	Funds deposited in February 2024
NNI Fund (601)	$744,467.08
Habitat Supplemental Fund (602)	$1,464,372.30
Habitat BiOp Fund (603)	$523,106.63
Total	***$2,731,946.01***

Dave said he should have unallocated balances available before the March meeting.

SRFB 2026 Schedule

Tracy Hillman reviewed the Salmon Recovery Funding Board/Tributary Committees proposed schedule for 2026 (see Attachment 8). Important dates are noted below:

- Pre-Applications Due: 11 March 2026
- Presentations by Project Sponsors: 25-26 March 2026
- Completed Draft Applications Due: 17 April 2026

- Site Visits: 5-7 May 2026
- Tributary Committees Review Draft Applications: 14 May 2026
- Final Application Due: 27 May 2026
- Tributary Committees Review Final Applications: 11 June 2026

Tracy Hillman reported that he often receives questions from project sponsors asking whether the PRCC HabSC would accept SRFB applications. Members discussed this and determined that sponsors should submit Specification Sheets even if they are seeking a match on SRFB applications. Thus, the PRCC HabSC will not accept SRFB applications.

X. Adjourn

Tracy Hillman adjourned the meeting at 4:20 pm.

XI. Next Meeting

The next meeting of the PRCC HabSC will be on 12 March 2026.