



CHEHALIS BASIN PARTNERSHIP

Zoom
December 17th, 2021
9:30 am – 12:00

Meeting Summary

MEMBERS* and ALTERNATES' PRESENT

Alissa Shay*, *Port of Grays Harbor*

Angela Johnson*, *WA Dept of Ecology*

Brian Shay*, *City of Hoquiam*

Chris Lunde*, *Port Blakely*

Chris Stearns*, *Thurston PUD*

Colleen Suter*, *Chehalis Tribe*

David Windom*, *Mason County*

Jason Walter*, *Weyerhaeuser*

Jill Warne*, *Grays Harbor County*

Kim Ashmore*, *City of Centralia*

Lee Napier', *Lewis County*

Megan Tuttle*, *WDFW*

Paula Holroyde*, *League of Women Voters*

Rick Eaton*, *City of Centralia*

Suresh Bhagavan', *Grays Harbor County*

Terry Harris*, *City of Chehalis*

GUESTS

Andy Gendaszek, *USGS*; Mark Mobbs, *Quinault Indian Nation*; Lauren MacFarland, *Quinault Indian Nation*; Nat Kale, *Department of Ecology*; Elena Fernandez, *Thurston County Public Works*; Alex Gustafson, *Trout Unlimited*; Stacy LaClair, *Pacificorp*; Jill Van Hulle, *Aspect Consulting*, Tristan Weiss, *WDFW*; Steve Boessow, *WDFW*; Kevin Hansen, *Thurston County*; Bob Amrine, *Lewis County Conservation District*; Kenna Fosnacht, *Lewis County Conservation District*; Jamie Glasgow, *Wild Fish Conservancy*; Reed Ojala-Barbour, *WDFW*; Jacqui Brown Miller? *Holcol?*

STAFF

Kirsten Harma, *Watershed Coordinator*

Amy Booth, *Intern*

FOR MORE INFORMATION

- Meeting summaries are available on the Chehalis Basin Partnership website: www.chehalisbasinpartnership.org
- PowerPoint presentations from this meeting are available on the Chehalis Basin Partnership website: www.chehalisbasinpartnership.org/presentations

MEETING

1. Welcome and Introductions

Chair Terry Harris welcomed everyone to the meeting. Members and guests provided self-introductions and went into breakout rooms for individual updates.

2. Review of July Meeting Minutes

A quorum was present. All minutes were approved.

A. Presentations & Discussions

Beaver Dam Analogue (BDA) Implementation *Jamie Glasgow, Wild Fish Conservancy*

Mr. Glasgow presented an overview of the project “Chehalis BDA Implementation: A Streamflow Restoration Proposal.” He explained BDAs and how they enhance and restore watershed functions. WFC and WDFW are interested in creating fish habitats and restoring hydrological processes as well as understanding how fish species composition may change in the treatment reaches. Mr. Glasgow discussed project efficiencies, project goals and objectives, Beaver Intrinsic Potential refinement and application, and working with landowners. Working with WDFW, they have developed a BDA typical design. For this project, each site will have 6-12 BDAs and control treatment downstream reaches will be monitored. They are planning effectiveness monitoring with site-specific goals being evaluated. BDAs are well studied in other areas but less so in Western Washington. Mr. Glasgow explained that they have developed a study plan to evaluate water temperature, hydrological effects, physical effects, and biological effects. The timeline for the project is 2023-2025 with a request of \$310,000 to fund the project. This BDA project is number BW-00 in the Chehalis Streamflow Restoration Addendum. Mr. Glasgow stated the project aligns with the mission and values of the CBP and respectfully requests a letter of support for their Streamflow Restoration Project.

Discussion

Mr. Hansen asked Mr. Glasgow about the recruitment of new wood and organics to allow these to endure over the long term with or without beaver recruitment. Mr. Glasgow explained that the advantage of their restoration technique is that it’s relatively inexpensive and simple. One of the reasons they are constructing so many BDAs in each site is the rate of attrition and failure over time. Mr. Glasgow stated his project is also planning on having beavers help maintain the structures. The Beaver Intrinsic Potential model helped to identify the presence of beavers in the area. Some BDAs will work better than others, but the complex as a whole will achieve the results. Mr. Harris asked Mr. Glasgow, if we’re creating a better habitat for beavers, how much research is being done to make sure there are enough trees around the area? Further, how do we know their log jams won’t wash downstream? Mr. Glasgow responded that when encouraging beavers to help maintain the structures, one of the areas of focus is making sure the beavers have everything they need. Making sure beavers are already in the area is a good indicator that there is sufficient forage nearby. The debris flow issue is addressed by BDAs being placed in lower gradient and smaller stream channels. They are also aware of where BDAs are being placed in reference to culverts. Ms. Suter asked Mr. Glasgow about landowner outreach in areas adjacent to the project. Beavers have been seen as bad and sometimes landowners call the county for their removal. Mr. Glasgow responded that they are addressing the beaver stigma and partnered with Beavers Northwest to develop a brochure that identifies the benefits, common conflicts, and resources landowners can use to resolve conflicts. Mr. Ojala-Barbour added that they have been working with larger parcels to avoid the risk of conflict with landowners. Mr. Harris asked where the beavers are being collected from, and if they will be transplanted into the project. Mr. Glasgow replied that relocating beavers is outside of the scope of their project.

Decision

Voting for a letter of support took place at 10:25 AM. Mr. Lunde, Ms. Napier, Ms. Suter, Ms. Shay, Mr. Ashmore, Mr., Bhagavan, Mr. Harris , Mr. Windom, Ms. Warne, Mr. Shay, and Mr. Walter

expressed support. No oppositions were noted. WDFW, Thurston County, and Quinault Indian Nation abstained from voting.

Stillman Creek Tributaries Streamflow Improvement *Kenna Fosnacht, Lewis Conservation District*

Ms. Fosnacht presented on Stillman Creek Tributaries project to request a letter of support from the CBP. The project goals are to construct instream wood structures, improve water quality and habitat complexity, and increase alluvial water storage by slowing drainage. They are building this project off the work completed by Grays Harbor Conservation District in the Satsop/Wynoochee watershed and the Beaver Intrinsic Potential model to determine eligibility in the upper sites for BDAs. They selected three streams for wood placement along with Weyerhaeuser based on ease of access and probability of success: two tributaries to Halfway Creek for placement of BDAs, and Raccoon Creek for placement of wood structures. In these locations, the streams were degraded from mining, splash dams, logging, and channel straightening. Wood has also been removed, which can cause floodplain disconnection, erosion, increased sediment transport, and decreased groundwater storage. Stillman Creek has been identified as near-term priority under the Aquatic Species Restoration Plan and is a Tier 1 concern for salmon according to the Chehalis Lead Entity Strategy. It's on the 303(d) list for temperature.

Ms. Fosnacht stated the Chehalis Basin Strategy has identified Upper Stillman Creek and Upper Chehalis River tributaries as being good candidate for wood placement to increase groundwater recharge and low-flow support. Stillman Creek has coho, Chinook, steelhead, sea run cutthroat, and resident trout. According to Coast Salmon Partnership, Stillman Creek streamflows are expected to decrease by 21-24% by 2080. Ms. Fosnacht explained the Conservation District's plan to address this is to introduce strategically placed wood and keep more water in the stream. Lethal temperatures were recorded in the South Fork of the Chehalis River and were mentioned in a presentation by Ned Pittman. Kelly is working with Ned Pittman from Coast Salmon Partnership to estimate sediment storage potential and water storage.

Discussion

Ms. Tuttle asked Ms. Fosnacht if they have a plan for monitoring habitat and fish passage through the wood structures. Ms. Fosnacht stated that their plan is to mimic natural processes as closely as possible with the assumption that salmon will be able to navigate them. They are looking into monitoring procedures. Mr. Walter asked where lethal temperatures in the South Fork of Chehalis River were recorded. Ms. Fosnacht stated the temperatures were provided by Thermalscape spatial stream network model for the Olympic peninsula and the Chehalis Basin provided by the Coast Salmon Partnership. Ms. Fosnacht will get back to Mr. Walter about the exact location. Mr. Weiss asked about environmental monitoring and project effectiveness monitoring. Ms. Fosnacht responded that are still looking into effectiveness monitoring at this scale and want to leverage with any monitoring already taking place in the area.

Ms. Harma mentioned that in the Nisqually they are using recycled Christmas trees as a materials source for wood projects. Ms. Tuttle asked the group for recycled Christmas trees for projects going on in the Satsop. Mr. Harris mentioned bringing non-native wood is frowned upon because it can spread disease/invasions to new areas. He asked if the wood is checked prior to placing in the projects. Ms. Tuttle stated she will speak with Mr. Harris offline about how the wood is checked. Ms. Fosnacht stated for their project, all wood will be locally sourced. Mr. Glasgow stated the wood posts for their project are going to be purchased and brought on site but the wood material is going to be sourced from the project site.

Decision

Voting for a letter of support took place at 10:45 AM. Mr. Lunde, Ms. Napier, Ms. Suter, Mr. Ashmore, Mr. Bhagavan, Ms. Tuttle and Mr. Windom, expressed support. Mr. Harris and Ms. Warne expressed support with minor concerns regarding bringing in foreign wood. Mr. Walter wants more discussion. No oppositions were noted. WDFW, Thurston County, Ms. Johnson, and Quinault Indian Nation abstained from voting.

Thurston County Managed Aquifer Recharge Assessment *Kevin Hansen, Thurston County*

Mr. Hansen stated that the project is located east of Tenino in the upper part of Scatter Creek on land belonging to Creekside Conservancy. The Conservancy has signaled support for towards the project but has not yet approved it. Thurston County's plan is to divert water out of Scatter Creek during high flow greater than 10 cfs. They would divert 0.3 cfs into a diversion system to a site located about 1000 feet away. Scatter Creek can sustain this much water being diverted from November to April and the soils are very coarse. Mr. Hansen stated they used a HEC-HMS model and determined that a little over 1,400 acres are draining into the reach that water would be diverted from. The feeder area is about 50% forested and the remaining is pasture and agriculture. There could be some water quality concerns and adding the diverted water after the first flush would reduce any buildup from the summer time. Mr. Hansen stated this is a non-acquisition water offset project and the project envisions diversion of 80-140 acre-feet per year. Models show that the travel time for water to go from the MAR site to creek is 280 days and thus would provide an offset through re- timing. Mr. Hansen explained the depth to groundwater is 6 feet on average, which is not great, but deep enough. The estimated water benefit as stated in the Streamflow Restoration Plan is 53-acre feet per year based on HEC-HMS modeling. They are anticipating lots of growth in Scatter Creek aquifer area and this is one of projects needed to offset growth. The diversion would be operated by a crew in Thurston County Public Works. Mr. Hansen also stated that coho salmon and cutthroat trout in Scatter Creek would benefit immediately downstream of the project site. A feasibility study has not been done yet for the project, just the modeling previously discussed. They also need to do sampling and drilling to learn more about the aquifer, which will involve heavy equipment and access. Monitoring is an essential part of the project and will include streamflow, habitat, groundwater and water quality. Creekside Conservancy has other projects in the area and Thurston County Conservation District has a project immediately upstream.

Discussion

Ms. Harma mentioned that this project is part of the Scatter Creek bundle. Ms. Tuttle asked Mr. Hansen if they have a design set for fish exclusion to keep fish away from the intake portion. Mr. Hansen stated that he does not and will need to work it into the design. Ms. Tuttle expressed her interest in being a part of the design conversation. Mr. Weiss asked if reach is prone to flow intermittency (no year round flow). Mr. Hansen replied that flows are intermittent and by the time it reaches the gravel zone in the summer time, but that it doesn't truly dry up until between Tenino and I-5. They're not expecting the project to have a significant impact on reducing flow intermittency.

Decision

Voting for a letter of support took place at 11:18 AM. Mr. Lunde, Ms. Napier, Ms. Suter, Mr. Bhagavan, Mr. Harris, Mr. Windom, Ms. Warne, Mr. Shay, and Mr. Walter expressed support. Ms.

Tuttle expressed support with fish exclusion/screening consideration. No oppositions were noted. WDFW, Thurston County, and Quinault Indian Nation abstained from voting.

Scatter Creek Groundwater Discharge Zone Delineation *Lauren MacFarland, Andy Gendaszek, Tristan Weiss*

Ms. MacFarland presented on the project in order to request a letter of support from the CBP. It's the same project identified in the addendum as W-07 "USGS thermal profiling" in our streamflow restoration plan. Scatter Creek is projected to experience high impacts by future permit exempt wells. The calculation is that an additional 64.2-acre feet per year will be consumed over the next twenty years. Scatter Creek has shallow and connected groundwater areas. There are reaches that are gaining or losing water to the aquifer. There was a seepage study in 2008 by USGS that measured discharge at established streamflow sites. The data needs include finer scale data on point locations of cold-water input, location of dry reaches, and quality of cold-water inputs. The objectives of this project are to identify cold water inputs in Scatter Creek basin and support local habitat projects in locating stream reaches where the greatest benefit would be. Mr. Gendaszek explained that a way to track input and output is to use temperature as an environmental tracer. Groundwater usually maintains mean annual air temperature depending on the local climate. Surface water gets warmer, especially in the summer when you have a lot of solar radiation. In the summer there is cooler water in gaining reaches, while in the winter it is warmer. Mr. Gendaszek also stated you can move a data logging thermometer downstream and track water temperature. You can calculate the expected increase due to solar heating, and deviations from that can detect groundwater inputs. The best time to do this is mid-summer where the greatest temperature contrast is highest.

Discussion

Mr. Hansen spoke in favor of the project and asked Mr. Gendaszek if this method will allow us to see the difference between shading and groundwater input. Mr. Gendaszek said you can use a vertical temperature profile to see if groundwater is coming into the stream. Mr. Hansen asked if any warm inputs can be detected. Mr. Gendaszek said he would look into it but knows there is a method for detection. Mr. Kale asked if the study is confined to a small part of the stream where it's still flowing in the summer. Mr. Gendaszek said the profile requires water and the study will be confined to where there is flow. The methods could also include vertical temperature profiling. Mr. Stearns added that when he was working as the Chehalis Tribe fisheries manager he learned that there's a large influx of cold water that comes into the lower part of the Black River all summer near the confluence with the Chehalis. Tribal members know this from observing spring chinook salmon where they hold in that area before spawning in late summer. These observations are a good indicator of cold-water input. Ms. Suter stated the Tribe has conducted similar studies to the one being proposed and those temperatures are noted in documented gaining and losing reaches, not just from fish presence.

Decision

Voting for a letter of support took place at 11:44 AM. Mr. Stearns, Mr. Harris, Ms. Napier, Mr. Bhagavan, Mr. Shay, Ms., Warne and Ms. Holroyde, expressed support. Ms. Suter supports with reservations due to involvement of QIN in the Chehalis area. WDFW, Thurston County, Ms. Johnson, and Quinault Indian Nation abstained from voting.

Presentation- Hoquiam Dam Removal and Water Right Source Switch *Jill van Hulle, Brian Shay*

Ms. van Hulle presented this project to request a letter of support from the CBP. In the project area, more wells are anticipated with no identified offsets. The West Fork Dam is located at river mile 10.3 on the Hoquiam River near the city water treatment plant. The dam was built in 1956 to divert water for municipal supply. Ms. van Hulle said the sluice gate has fallen into disrepair and fish passage is most likely below 60%. Their plan is to change the city's water source to wells and remove the dam. The West Fork Dam is limiting transport of sediment, wood, nutrients, and anadromous fish. Removing the dam should increase access to miles of fish habitat. Removing the dam would diversify the city's water source and supply, and allow more water instream during low-flows. The city drilled test wells in 2010, but Ecology didn't feel they had enough information to assess water availability and how it would interact with the river. For the proposed project, Hoquiam would build on the 2010 study, establish feasibility of dam removal, conduct water right permitting and design for dam removal. Later steps are installing production wells and conveyance/treatment system. Ms. van Hulle explained the dam has been identified as a fish passage barrier by many groups, including ASRP, Chehalis fish passage barrier prioritization, and Habitat Work Group. Although it was not identified in the Watershed Plan, it aligns with the goals to reduce direct impacts on surface water and provide habitat offsets. The total project cost estimate is \$8.5 million. The bulk of the cost is in water treatment plant upgrades and the actual dam removal. They're requesting funding for the first four phases- dam removal predesign, water rights permitting, and enhanced site assessment. Mr. Shay added that the city of Hoquiam removed a dam about 10 years ago on the Little Hoquiam River and it greatly increased streamflow and salmon habitat. They're also expecting this dam project to get major federal funding once the initial work is complete.

Discussion

Mr. Stearns mentioned the amount of sediment that has come through with other dam removals and asked what the plan is for sediment in this project. Ms. Van Hulle stated there will have to be some thought put into how the dam is removed and removing the sediment safely. They will also do site restoration with planting and restoring natural conditions. Gathering more information about sediment will be part of the feasibility phase. Ms. Tuttle said this removal is a much smaller dam than the Elwha, for example. They will be required to get an HPA permit, which will require slow releases to keep sediment load down. Ms. Tuttle asked if the feasibility package includes increased flows for the waste water treatment plant. Ms. Van Hulle said it's not a part of the feasibility plan currently but they will look into it with future models. Mr. Shay added the wastewater treatment plant is about 7 miles away from the project site as opposed to the water treatment plant that is very near the site.

Decision

Voting for a letter of support took place at 10:45 AM. Mr. Lunde, Ms. Napier, Ms. Suter, Mr. Ashmore, Mr. Bhagavan, Ms. Tuttle and Mr. Windom, expressed support. Mr. Harris and Ms. Warne expressed support with minor concerns regarding bringing in foreign wood. Mr. Walter wants more discussion. No oppositions were noted. WDFW, Thurston County, Ms. Johnson, and Quinault Indian Nation abstained from voting.

Ms. Harma said that we could issue a single support letter to Ecology listing all of the projects we are providing support for, or provide individual letters. She then polled the group as to their preference. Members agreed that individual letters might be more appropriate. Ms. Harma added that there might be one more request coming later regarding the Cooke Aquaculture water right.

B. Updates

Ecology Update on Chehalis Basin Funding Request- *Angela Johnson*

Ms. Johnson updated the group on the Partnership's request for funding from Ecology. At this time, Ecology will not support the request. The main reason for denial was that Water Resources feels that they have an avenue for managing funds consistent with the streamflow law, and it doesn't include allocating funds externally in the way the Partnership is requesting. Ecology is creating a project tracking report that will be published in January that will include streamflow restoration projects. There is a \$40 million grant program available this year and Ms. Johnson encouraged the group to consider submitting a request that fits into a grant program criteria. Mr. Harris stated that it's disturbing that the Partnership was created by the legislature to do this work, the Partnership spent 3 years writing water law, and now Ecology can't come up with a small amount of funding to keep the program going. Mr. Harris added we were about to collapse when the Hirst decision came around. Ms. Tuttle asked if Ecology develops positions for each WRIA to help, if they won't fund the Partnership. Ms. Johnson stated that Ecology feels current staff engagement is sufficient and that isn't something they have considered. Ms. Suter said she feels money needs to come to the Partnership, rather than through another state agency. Mr. Stearns added that Ecology might need the Partnership again in the near future, for example, they have prioritized adjudication behind the Grand Coulee and Nooksack, but after that, they're going to look at the Chehalis Basin.

Mr. Weiss stated that RCW 90.94 is clear about how funds can be used and must be spent on certain actions. Ms. Johnson stated to her knowledge the funding conversation didn't go up to the Director of Ecology. Only the Director or the Director's designees can allocate funds. Ms. Harma and Mr. Harris will try to set up a meeting with Mary Verner.

ADJOURNMENT

With there being no further business, Chair Terry Harris adjourned the meeting.

NEXT MEETING: January 28, 2022