

## CHEHALIS BASIN PARTNERSHIP

Satsop Business Park, Elma, Washington January 24, 2020 9:30am - 12:00pm

### **Meeting Summary**

#### **MEMBERS\* and ALTERNATES' PRESENT**

Mark Cox', Grays Harbor County
Lee Napier', Lewis County (phone)
Tye Menser\*, Thurston County
Alissa Shay', Port of Grays Harbor
Glen Connelly\*, Chehalis Tribe
Colleen Suter', Chehalis Tribe
Ed Moch', City of Aberdeen
Kim Ashmore\*, City of Centralia
Andy Oien', City of Centralia
Terry Harris\*, City of Chehalis
Dan Wood\*, City of Montesano
Brian Shay\*, City of Hoquiam
Jaron Heller\*, Town of McLeary
Nick Bird\*, City of Ocean Shores

Bobby Cox\*, Town of Pe Ell
Chris Stearns\*, Thurston PUD
Dusty Guenther\*, Boistfort Valley Water
Terry Willis\*, Grays Harbor Citizen
Mike Noone\*, Ecology Water Resources
Paula Holroyde\*, Citizen, League of Women
Voters Thurston County
Megan Tuttle\*, WDFW
Bob Johnson\*, WDNR
Chris Lunde\*, Port Blakely
Brian Thompson\*, Lewis County Farm Bureau
Jason Walter\*, Weyerhaeuser
Caprice Fasano', Quinault Indian Nation

#### **GUESTS**

Garrett Dalan, The Nature Conservancy; Joel Massman, Keta Waters/Quinault Indian Nation contractor; Anthony Waldrop, Grays Harbor CD; Ned Pittman, Coast Salmon Partnership; Brad Murphy, Thurston County Planning; Portia Leigh, WDFW; Brandon Carman, Washington State Recreation & Conservation Office (RCO); Cody Duncan, TransAlta; Jill Van Hulle, Aspect Consulting; Alyssa Moir, K&L Gates; Tom Culhane, Ecology

#### **STAFF**

Kirsten Harma, Partnership Watershed Coordinator; Cynthia Carlstad, Facilitator, NHC

#### **FOR MORE INFORMATION**

- Meeting summaries are available on the Chehalis Basin Partnership website: <u>www.chehalisbasinpartnership.org</u>
- PowerPoint presentations from this meeting are available on the Chehalis Basin Partnership website: <a href="https://www.chehalisbasinpartnership.org/presentations">www.chehalisbasinpartnership.org/presentations</a>

### **MEETING**

#### 1. Welcome, Introductions

The Chair convened the meeting and participants introduced themselves.

Ms. Harma recognized Chair Harris who as been with the Partnership since 2006, and chair since 2016 and the group gave a round of applause for Mr. Harris's contributions as chair since 2016.

Ms. Harma passed around an attendance sheet to everyone.

Mr. Dalan announced the passing of Chuck Caldwell of Port of Grays Harbor and acknowledged his contributions to the Partnership.

# **Approval of December Meeting Summary**

All were in favor of the meeting summary with no changes needed.

### Watershed Plan Addendum Offset Project Candidates

Ms. Carlstad introduced today's main topic – hearing about some ideas for potential offset projects. She reminded participants that the group is required to find projects which offset projected consumptive water use from future permit-exempt wells.

Project work groups have been developing ideas almost since the beginning of the planning process, and today we will hear about a few of these ideas that have promise. This is an opportunity for the Partnership to hear about some of these ideas and provide feedback. The timing for this is ideal because Ecology is beginning a competitive grant funding round beginning January 30 and going through March 31. She stated that because this is such an important topic, we will dedicate as much time as needed today, and can defer other listed agenda topics to our next meeting.

### **TransAlta Water Rights**

Cody Duncan, Business Developer at TransAlta provided an overview of this opportunity. TransAlta owns the Skookumchuck dam, reservoir, power plant, pump station and associated water right. The Skookumchuck River is roughly 23-24 miles long from headwater to mouth, and their river pump station is approximately 3.5 miles upstream from Bucoda. The dam construction was finished in 1970; TransAlta bought the dam, water right, and power plant in 2000. When the reservoir is full (at approximately 477' elevation, 35,000 acre-feet of storage) it is flow-through, so there is no storage capacity except early in the wet season before the reservoir fills up. TransAlta has water rights to make power - 1megawatt power generation. There are also agreement(s) for fish flow releases.

There are currently two coal-fired power plants for which TransAlta has a decommissioning agreement with the state. The first unit is coming offline in 2020, and second in 2025. When first unit comes offline, TransAlta will have an excess of water rights and they are evaluating what to do with that.

Ms. Van Hulle spoke about the water right situation. TransAlta has a large certificated block of water and one in permit stage. Both have a mid-1960's priority date. The quantity is listed at 51.6 cfs, 28000 ac-ft per year, for industrial use. They made a minor modification a few years ago – changing the place of use to accommodate the industrial park. They are currently implementing the development schedule for that.

Ms. Van Hulle said that they are currently working with Ecology on mechanisms for preserving the economic and environmental value associated with the water right. It is an exciting water right because it is year-round use and very consumptive because water is evaporated. Beneficial use is well documented; they are in the process now for resetting final quantities. Potential downstream uses are municipal, irrigation, and instream flow. She gave a recent example where Benton County bought 300 acre-feet of Yakima River water for offsetting permit-exempt wells and suggested a similar thing could be done in the Chehalis. Regarding potential irrigation uses, she indicated that their initial mapping of irrigated farmland suggests that water rights and irrigated lands don't always match up in the Chehalis. They are in early phase of evaluating what do to with the excess water right and assume they will go through a formal process to set up a trust agreement with Ecology. Ms. Carlstad asked if this would be a temporary or permanent trust agreement; Ms. Van Hulle answered it would likely be permanent.

Ms. Willis asked how much of the water right will be re-purposed. Mr. Duncan answered that it will be phased, and it will likely be about a quarter of the water right initially. Ms. Van Hulle added that the quantity would be based on Ecology's quantification determination on the right.

Mr. Thompson asked what TransAlta's ultimate plan is, and Mr. Duncan responded that this is a big focus for TransAlta right now. They are interested in renewal energy, and want to make use of the existing infrastructure.

Mr. Stearns asked about plans for the second coal power unit. Mr. Duncan said no decisions have been made, but it would be a full conversion, whatever happens.

A question was asked about expected costs and timing for TransAlta's water right transactions. They are targeting this year and haven't talked much about price; the going range seems to be \$2,000 - \$5,000 per acre foot in this watershed.

Ms. Carlstad asked about storage at the dam, recognizing that mitigation agreement(s) drive a big part of releases. Is there opportunity for modifications to operations to provide more instream flow? Mr. Duncan is not responsible for dam operations but indicated that this has been looked at in the past for flood storage. Because they try to keep the reservoir full, they can't rely on having extra storage capacity. Mr. Harris remembered that in 2007 the flood storage helped Centralia a lot because that was an early-season flood when the reservoir was not yet full.

Mr. Stearns asked about power generation at the dam – it has always been kept below 1 megawatt; it could provide more. He wondered whether TransAlta would consider increasing that. Mr. Duncan said they had looked at increasing to 2 megawatts, but that has not penciled out due to insufficient head for parts of the year.

Ms. Willis asked about creating more storage by cleaning out accumulated sediment in the reservoir. Mr. Duncan said they do debris removal annually and annual silt surveys to evaluate accumulated sediment. He is not aware that sediment accumulation in the reservoir is large.

Ms. Carlstad reminded the group that the Partnership's offset needs are relatively small compared to storage in the dam and the water right. She also reminded the group that the Skookumchuck is a priority watershed for Net Ecological Benefit because of the depressed spring Chinook stocks in the basin.

### Satsop/Wynoochee Tributary In-Stream Restoration Strategy and Pilot Project

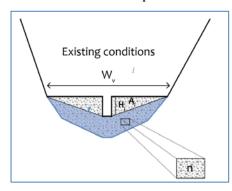
Mr. Waldrop, Grays Harbor Conservation District, provided an overview of their in-progress project which seeks to use in-stream wood structures to address water quality, water quantity and habitat issues at a watershed scale. They are currently funded for this pilot study by Ecology and US Fish and Wildlife Service. They are working collaboratively with large timber landowners in the Satsop and Wynoochee watersheds.

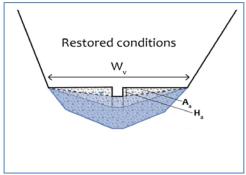
Their approach utilizes a GIS analysis with field verification to identify areas where channel incision has impaired floodplain sediments from storing shallow groundwater. They are focused on  $2^{\rm nd}$  to  $4^{\rm th}$  order headwater tributaries that intersect with managed timber land ownership. The majority of these streams fall in Green Diamond and Weyerhaeuser ownership.

Mr. Waldrop described the impacts from legacy land management practices of removing large wood from streams, and how this contributes to stream downcutting and incision, which also decreases the shallow groundwater storage in floodplain sediments. He showed the before-and-after cross sections below to illustrate how the groundwater storage gain can be quantified. Their study will include a pilot implementation at one of the sites, including monitoring for water storage gain.

The treatment to reconnect the stream and shallow alluvial aquifer is adding stable wood to slow streamflow and capture sediment incrementally along the stream length. These range from small structures like beaver dam analogs to large engineered log jams. These structures will raise the bottom of the stream and reconnect it to its shallow alluvial aquifer. Mr. Waldrop showed several images depicting the type of analysis they are doing to identify suitable areas for this type of restoration. The GIS screening will provide a description of stream, floodplain, and fish use

characteristics along with restoration "prescriptions" best suited to those characteristics. Feasibility considerations such as landowner needs, access, and constructability will also be considered. Outputs include modeled benefits as acre-feet of water storage and estimated flow benefits in cubic feet per second.





Grays Harbor CD is seeking to complete the GIS screening and select a pilot project site by summer 2020 and hopes to implement the pilot project in Fall 2020. This ambitious schedule could get pushed into 2021, and their funding allows for that schedule. Grays Harbor CD plans on the following as next steps:

- Continue development of reach-scale analysis
- Work with Green Diamond and Weyerhaeuser to select a pilot reach for implementation
- Conduct outreach to small forest landowners
- Seek additional funding to further implement the strategy

### Questions/Answers:

- 1. Are you working with the Forest Service and National Park Service? Not yet, streams in those areas are steeper, and their administrative processes are more cumbersome, so starting with private landowners.
- 2. Are you looking at invasive plants as part of this? Not at the screening level, but during project implementation, invasives control is included.
- 3. Wood flushes out of the rivers during floods; will you be able to build something that will hold the wood in place? Log structures are engineered to withstand potential stream power during large floods.
- 4. Mr. Dalan offered that the small increase in water storage in the headwater areas gives you a big bang-for-the-buck because it reduces the volume of water that makes it to the mainstem rapidly during a flood. Mr. Waldrop added that landowner accounts that the rivers have gotten flashier (respond faster to large rains) support this approach.
- 5. Several participants remarked on the great force seen in previous big floods moving large volumes of wood, sediment, and water and expressed concerns around the ability to engineer structures to withstand these forces.
- 6. Mr. Culhane asked about logging practices if logging would continue in restored areas. Yes, these projects would not affect logging activities. Project designs would need to allow for the altered hydrology from upstream logged areas.
- 7. What is upper stream gradient threshold? Approximately 10%.
- 8. Other partners involved? Coast Salmon Partnership. Grays Harbor CD is also starting to talk with WDFW, who are looking at a more beaver-intrinsic model.
- 9. Ms. Willis asked about incision why it happens. It happens when the water flow has excess power and cuts its channel down. This can happen when there is too much water and when obstacles (like wood) that create friction in the channel are removed.

### **China Creek Phase 2 Restoration Project**

Mr. Ashmore showed slides of the City of Centralia's China Creek Phase 1 project, first acknowledging project partners present today – Chehalis Tribe, Ecology Office of Chehalis Basin, Chehalis Basin Flood Authority, and Recreation and Conservation Office. The Phase 1 project extensively re-meandered the creek, adding large wood and extensive plantings. He noted that they also had to accommodate an 18" City water line under the site.

Phase 2 is a continuation downstream. The project is currently at 90% design; funding has been provided by Ecology's Office of Chehalis Basin and Chehalis Basin Flood Authority. They may need additional funding if construction bids come in high.

Phase 2 site is the location of the old Agnew mill ponds from 1930s. The objectives are similar to Phase 1 and also remove material and add gravels to encourage fish spawning. They have observed fish present at the site. He showed an illustration of the design for the site, with connected floodplain pool and berm to contain flow. Chair Harris noted that in the recent flood there was less flooding in Centralia than expected perhaps due to the Phase 1 project storage.

#### Questions/Answers

- 1. Is there a high elevation portion to the China Creek Watershed? Yes, and Mr. Ashmore is interested in understanding the incoming flows better.
- 2. Was removed sediment from Phase 1 able to be re-sold? Mr. Ashmore said it was the contractor's discretion; it may have been re-used.
- 3. Ms. Fasano asked for clarification on what the floodplain pool (depicted on the site plan) is. It is a connected floodplain wetland. Mr. Ashmore described photos of the Phase 1 project from the recent flood that showed the floodplain pools full and metering water back into the stream after the flood.
- 4. Ms. Fasano asked if it has been permitted. Permitting is in process.
- 5. Ms. Shay asked about low flows, and Mr. Ashmore said China Creek often dries up in the summer.
- 6. Mr. Thompson asked about the Agnew ponds do they remain ponds during the summer? Yes
- 7. Will there be recreation / public access? Yes, walking trails.
- 8. What might the hydrologic benefits be? A general approach to quantify hydrologic benefits will be to examine time and depth of storage and available groundwater storage to quantify volume. This would not add water to the system but would re-time water to provide flow when needed later in the season.
- 9. Ms. Suter asked about gaining or losing reaches of China Creek. Mr. Ashmore was not familiar with any studies on that.
- 10. Mr. Harris commented that he feels intuitively that these types of projects are very good because of the multiple benefits.

## **Satsop Business Park Water Recycling**

Ms. Shay presented an idea from the Port on the concept of water recycling. She first provided a little history about the site. It was originally developed for a nuclear power plant from land purchases in the 70s, construction in the 80s, and then mothballing soon after. In the mid-90s the community came together to buy the site as a business park. In 1999 a public development authority formed, and all assets transferred to it. Then in 2013 the Port purchased the site and its assets. It has approximately 600 acres of developable property.

The Port also has approximately 20 cfs of Chehalis River water rights. Half of that is dedicated to Grays Harbor Energy, and the other half is available for use. The Port is interested in other business tenants, but the limiting factor is sewer capacity. Their offset project idea is to have a process water facility to recirculate process water instead of discharge to a sewer plant. The Port

would then reduce its water right to recognize the re-use. A decision to build the system would be based upon a user; the Port would not build a plant speculatively. They are interested in having it included in the plan to recognize the possibility.

### Questions/Answers

- 1. How are new tenants evaluated? No formal process, Port will discuss, and commissioners make the decision. Examples of types of businesses that could potentially locate here include food processors and server farms.
- 2. Mr. Dalan asked the source for these water rights. Chehalis River.
- 3. Rail line access? No
- 4. Ms. Willis commented that there were outfall tubes installed in the bottom of the Chehalis River when the plant was built. Her property was used for access to install them. Ms. Shay needs to research this as she had not heard about these. The Port does have one permitted outfall.

### Stillman Creek Water Right

Ms. Carlstad advised the Partnership about a potential water right acquisition of an irrigation water right in the Stillman Creek basin. This idea came to the Partnership through the OCB Aquatic Species Restoration Plan (ASRP) Early Action Reach Projects team as the property is being considered for acquisition for habitat restoration. The landowner wants to sell the water right off the land as they have been unable to find an agricultural buyer.

Ms. Carlstad acknowledged that the Partnership has stated concerns about acquiring agricultural water rights and asked for direction on approaching this particular water right in Stillman Creek. Mr. Thompson stated that the future of agriculture in the basin will be in high value crops that require irrigation. Removing agriculture water rights is counter to that objective and is a concern. Ms. Willis commented on dynamic nature of agriculture and said the agriculture cannot afford to lose the water rights they have. She suggested 'no net loss' as a concept to focus on and advocated for flexibility in where the water is used and when it is used. Mr. Noone commented that in the Dungeness they have established water storage areas to provide additional irrigation water. Ms. Willis said that concept had been advocated by the Partnership years ago.

Ms. Guenther asked about the volume of the Stillman Creek water right, and Ms. Carlstad said it has not been quantified but appeared to be used to irrigate approximately 40 acres.

### **Watershed Plan Approval Process**

Ms. Carlstad provided a handout on plan approval as a homework assignment for members. Members are asked to investigate internal to their organizations and provide their internal review and approval process for discussion at next month's Partnership meeting.

### For the Good of the Order / Public Comment

Chair Harris opened public comment and partner updates.

Ms. Shay said a few words about Chuck Caldwell, former Port Commissioner who passed away in December. When he retired, he asked her to take his place working with the Partnership, a role he valued. His celebration of life is at 1pm today in Montesano. She also welcomed participants to the business park and advised about a taco truck onsite, a good place to grab lunch.

Mr. Noone announced that the Streamflow Restoration grant round opens on Thursday, January 30 and runs through March 31. Ecology is accepting appointments for pre-application meetings.

## **AJOURNMENT**

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

# **RECORD OF DECISIONS**:

- 1. June 28, 2019 Members voted by full consensus to review the Charter Addendum as edited at this meeting within their organizations and be prepared for a second reading and approval at the July 26, 2019 meeting.
- 2. July 26, 2019 Members voted by full consensus to approve the Charter Addendum to the 2004 Operating Procedures. The Quinault Indian Nation voted "Formal Disagreement, but Willing to Go with Majority" and will provide a written statement to include with the final charter.

**NEXT MEETING:** February 28, 2020