

Chehalis Basin Lead Entity -- Habitat Work Group

Monday, November 4, 2019

~ 9:30 am – 12:30 pm ~

Fairfield Marriott, Grand Mound: Fairfield Marriott, Grand Mound

6223 197th Way SW, Rochester, WA 98579

Alissa Ferrell, RCO	Kirsten Harma, <i>Lead Entity Coordinator</i>
Alexa Jones, <i>Grays Harbor Stream Team</i>	Kelly Verd, <i>Lewis CD</i>
Ann Weckback, <i>Lewis Co.</i>	Kiley Smith, <i>Grays Harbor Stream Team</i>
Bob Amrine, <i>LCD</i>	Mark Gray, <i>CRBLT</i>
Caprice Fasano, <i>Quinault Indian Nation</i>	Mara Healy, <i>Thurston CD</i>
Cade Roler, <i>WDFW</i>	Miranda Plumb, <i>USFWS</i>
Claire Williamson, <i>WDFW</i>	Ned Pittman, <i>Coast Salmon Partnership/Fdn</i>
Emilie McKain, <i>WDFW ASRP Manager</i>	Omroa Bhagwandin, <i>Lewis County Citizen</i>
Greg Green, <i>Ducks Unlimited</i>	Renee Mitchell, <i>WA DNR</i>
Jamie Glasgow, <i>Wild Fish Conservancy</i>	Rick Rouse, <i>Port of Chehalis</i>
Jan Robinson, <i>CRBLT</i>	Rickie Marion, <i>Chehalis Tribe</i>
Jason Gillie, <i>Chehalis Tribe</i>	Rod Lakey, <i>Lewis Co.</i>
Jennifer Riedmayer, <i>ECY</i>	Ryan Williams, <i>Mason CD</i>
Jonathan Bradshaw, <i>HWG Minutes</i>	Thom Woodruff, <i>Capitol Land Trust</i>
Karin Strelhoff, <i>Thurston CD</i>	Tom Kollasch, <i>Grays Harbor CD</i>
Kathy Jacobsen, <i>LE Outreach Coordinator</i>	

1. Welcome, Introductions (9:30)

2. Organizational Business (9:40)

1. Review minutes from October, 2019:

Thom Woodruff made a motion to accept October's minutes without comment, and Mark Gary seconded. All in favor.

2. Elections for Chair & Vice Chair & Update to 2020 Member List:

Bob Amrine and Omroa Bhagwandin, who were nominated last month to continue as, respectively, Chair and Vice Chair, were elected unanimously.

Beyond these elections, new members are being sought out for the following:

Citizen Representatives: particularly from Grays Harbor or Mason Counties.

Alternate groups to serve alongside Wild Fish Conservancy and The Nature Conservancy.

Another business/port representative.

County representatives (Thurston and GH).

Thom Woodruff made a motion to add an ex-officio seat on the HWG for an ASRP representative. Tom Kollasch seconded the motion, all in favor. Emilie McKain will serve in this role.

Of further note, Alissa Ferrell's role at RCO will be filled by Brandon Carmen in the near future. Also, as Ned Pittman is officially the CSP/CSF representative for the HWG, going forward, he will continue to regularly attend in Mara's previous role.

3. Review Draft Conflict of Interest Policy

Kirsten led a discussion on the progress of the development of a more robust conflict of interest policy. The new language for the policy is borrowed from the Capitol Land Trust, but has been modified to fit the needs of the HWG. This newly tailored policy has been reviewed, and a few issues were discussed at the meeting. A small subcommittee will be put together to more carefully review the document, so that it will be ready in time for the next ranking group. Thom Woodruff is willing to take this on, and anyone interested in joining this subcommittee should contact him or Kirsten.

4. Subcommittees - Updates

Newaukum:

The Coast Salmon Partnership's vision for the pilot-watershed restoration in the Newaukum subbasin is to think top-down for LWD projects in the basin, and bottom-up for culverts. The Brian Abbott Fish Barrier Removal Board (FBRB) just put out their request for proposals, and Newaukum HUC10 is the priority watershed for the Chehalis. This will help meet the "bottoms up for culverts" goal. Ann has some additional barrier projects in this region to propose for funding. One noteworthy change in the FBRB program is that it has merged the two different funding pathways – Coordinated, and Watershed – into one. Cade noted that this is because having two pathways was confusing to law makers. In order to account for the added priority of previous "watershed pathway" culverts, they've decided to allocate projects from that program (in our case, the Newaukum) extra points.

Q: A question for Ned: Conservation Districts are looking at sponsoring large wood projects down the road. We want to know where we're going to get the best bang for our buck for doing these wood projects. Do you have clear guidance somewhere stating we should start at the top of the basin?

A: Ned: Yes-from studies and experience. Doing these projects in 10-meter bank full width or less is ideal. LWD installed at these locations are almost a guaranteed success. They consistently hold, and we've seen a lot of really good results in surrounding habitat. It's good to look for moderately confined reaches that are about 1% grade: not much more or less steep. With high LIDAR resolution, this isn't too hard to find, even in some of the steeper-on-average upstream areas.

Culvert Subcommittee:

Cade Roler reported that the subcommittee has contracted with Aspect Consulting to do follow-up work to iron out issues with the new culvert prioritization model. Among other issues, they're working to fix inconsistencies with linear gain measurements and with Chinook data. Additionally, they'll be looking at incorporating future temperature modeling done by John Winkowski. After running into significant issues with Chinook scoring in particular, this model will, for now, return to using old SWIFD data for all species. Chinook were being overrepresented in habitat gain in the new SWIFD. This was causing some culverts to rank as a higher priority than they are; given the current emphasis on killer whale work, these numbers are particularly important to get right. The model should be up and ready to

go pretty soon. After working out these known issues, the subcommittee will run through and vet for any further issues. Following that, little more will be needed beyond periodic check-ins and model/database maintenance.

5. Outreach

Kathy is working with Centralia College and CRBLT to bring Scott Freeman, author of Saving Tarboo Creek, to do an outreach event. A date has not been chosen, but the event will likely be February, or possibly March. HWG members expressed a preference in Fridays over Saturdays. Kathy suggested that the event be scheduled to coincide with the day of a CBP meeting to capitalize on having him in the area. It was also suggested that the event also involve a variety of relevant groups tabling to facilitate discussion and conversation before and/or after the event.

Kathy is also working on a story about salmon and the community for the Lead Entity's watershed heroes story series. Next, a story will be highlighting students who have gone through watershed education programs, and cover how that experience has impacted them post-college, and in what they've done in their communities.

The group was asked to provide information on any salmon projects that would be particularly well suited to showcasing to the public through a tour. The idea is to get the community out to different completed project sites to see what has been done and support future restoration work. One issue that was brought up was the "But what was there before?" confusion. A clear before/after project is always ideal, so the public has a solid idea of what is being done. A pre-presentation can go a long way to help this. It was also noted that the inclusion of plans for solid before/after documentation could be an avenue to get points in the "education" category of SRFB applications. Action Item: Anyone with ideas for well-suited projects is asked to contact Kirsten or Kathy.

Lee First, the new Twin Harbors Waterkeeper for the Chehalis Basin/Grays Harbor/Willapa Bay, called in to the meeting. She gave the group information on a 2-year grant she and Friends of Grays Harbor worked together to acquire from the Dept. of Ecology. The grant provides funding to clean up the Hamilton/LaBree Rd. superfund site. She wanted to let the group know that significant work will be carried out at this site, as this may be relevant to slated projects in the area. December 11th, a public informational event will occur at 5PM. The event will cover both the history of the site as well as the plans for cleanup.

DISCUSSION:

Q: Why has this contaminated site been allowed to sit for so long?

A: The site is being managed by the EPA rather than the State. As such, the site, compared to other sites on the federal list, has likely just not rated highly enough. Any homes which were drawing water from contaminated wells were put on city water--beyond this, there aren't acute human health risks associated with the site.

Q: Will the public have a comment period on this?

A: Yes, there has been one and there will be one at the meeting.

3. Salmon Recovery Funding Board (SRFB)

1. 2019 – SRFB Project List

The POC on the Satsop/Wynoochee Pilot Project was sustained by the SRFB Review Panel. As such, the Satsop/Wynoochee project has dropped out, which puts the MF Hoquiam project up for partial funding. However, as partial funding wouldn't provide significant help to the MF Hoquiam project, the project has opted to pass the funding opportunity to the Hogue project, who accepted.

2. 2020 - Launch of the 2020 SRFB Grant Round

Site visits have been set for April 14th and 15th. This puts ranking day somewhere during the week of May 11-15. As the schedule is finalized, it will be sent out.

3. Planned Project List Development for SRFB

Kirsten showed an example spreadsheet of the kind of information sponsors are being asked to develop. These lists will then be compiled to form our Planned Project List. To this end, RCO plans to send out template lists for sponsors to fill out, so that they can be sent back and compiled by the LE.

4. Conceptual Project Presentations

i. Berwick Creek Culverts (Ann Weckback – Lewis County)

Ann Weckback outlined Lewis County Public Works' projects they'll be submitting for SRFB funding. The first request, on LaBree Rd., would fund the installation of a 19' span to replace a 12' by 5' box culvert. This passage replacement would restore just over a mile of access when an adjacent city barrier is removed. The grant request would be for \$119,000. Of note as regards to the nearby superfund site: the project site is near the Superfund site, but about 1,000' away from anything that was found to be hot. To be safe, though, this project includes about \$5,000 for soil sampling and testing as a precaution.

The second request is for the construction of an already-designed project on upper Berwick Creek. It is a project co-sponsored by the Port of Chehalis. It would replace a 6' x 4.5' squash pipe that is 67% passable with a 24' x 7' x 42' box culvert, and would involve stream realignment. The passage is ranked 125th, and there are around 10 miles of stream to be addressed above this barrier. Immediately, however, 0.31 miles would be opened up by this project. The cost will be \$204,000, with more funding from WCRRRI.

The third request replaces twin 5' diameter culverts on Bishop Road, which would likely fall around 126th if ranked. They would be replaced with a 24' x 7' x 80' span, and involves realignment. This would open 1.6 miles of habitat for coho, and 1.9 for steelhead, and the funding requested is a match of \$185K. Of note, the structure is longer than necessary per the request of adjacent development interests--the developer is footing the expenses for this expansion. This project will also involve a large planting.

ii. Rice Road Culvert (Celest Wilder– City of Chehalis)

Celest was unable to attend, so Ann stood in. She outlined a request to replace a double box culvert with two 8x8 cells on Rice Road. These would be replaced by a minimum 28' span. They're looking at the possibility of doing a GRS bridge. The passage is a Tier 1 barrier the Prioritization mapper. The project will immediately open 5 miles of stream, and has the potential to provide access to up to 27 miles. Funding request is \$154,000, and is for design.

iii. Van Ornum Creek Barrier Removal.

This grant request would replace an existing 4' corrugated metal pipe on Bunker Creek Road, just outside of Adna. The barrier ranks 17th, has a PI of 18.47, and is a Tier 2 barrier on the interactive mapper. They're looking to install a GRS bridge with a 40' deck. Immediately, the project opens 0.14 linear miles. After other barriers are removed, this would open 3.31 miles of stream according to SWIFD, but 4.73 according to on-ground survey. The funding request is for \$345,000 as match for the ~\$1 million project.

4. ASRP

1. ASRP Document Update

Emelie provided the update. Phase 1 will be released Nov 15th. It will be housed on Chehalis Basin Strategy website, and has a 60-day public comment period. Along with the posted document on the website, there will be prompts/questions to guide review and feedback. These comments and reviews will help shape the document into the next program development phase.

2. Small Projects Grant Round update

Also, the middle of November, the RFP will be put out for the 2019 ASRP small projects grant round. Full applications will be due the first week in February.

Q: How much funding is available?

A: We have 5 million to initiate new projects: we want to be as opportunistic as possible. We have up to 5 million, but this is for the next two years. As such, there are some decisions to be made down the road about how much we want to hold on for the next year.

5. "NOAA Life Cycle Model" – Overview of model results & planning implications (Tim Beechie)

Tim Beechie, of the NW Fisheries Science Center, gave a presentation on the state of NOAA's Life Cycle Model, and walked the HWG through planning implications. The presentation can either be found on the Lead Entity website, or provided upon request.

In brief:

Coho, Spring, and Fall Chinook QA/QC is complete, Steelhead are still in process. Diagnostic is built, and the QA/QC is complete. The ASRP scenario is built out, and the QA/QC is nearing completion.

DISCUSSION ON MODEL CONSTRUCTION:

The goal of this model is to provide a dashboard by which different habitat/lifecycle drivers can be adjusted to determine which drivers produce which outcomes, as well as suggest which drivers seem to have historically caused current conditions. Going forward, then, this information can be used to help in determining which restoration actions will most likely accomplish desired results.

Q: You mentioned productivity: do you have any data on the effect of hatchery/wild interactions on productivity?

A: Not in this model. That has been done in the Wenatchee system, where they have enough data to do it. We don't have enough data to do it, and we know of areas where they've tried to do it without

sufficient data, but the results just weren't useful.

Q: Could you identify data gaps preventing analysis for wild/hatch interactions? This could be helpful information for a lot of groups.

A: Sure: there's information that could aid in understanding this. This is a gap that would be interesting to look into. Good point. We'll keep that in mind. ... Also, speaking broadly, our model doesn't really account for interactions between salmon species within the basin. This is something all of these lifecycle models (this NOAA model, the EDT...) are missing. Our data sets use observed populations and set capacities there.

DISCUSSION ON DIAGNOSIS:

Tim went through some sample diagnoses his team ran through the model, and shared the results. As an example, they found:

Coho should respond very well to beaver pond analogues as well as floodplain reconnection in combination with LWD.

Spring Chinook have been significantly affected by increased temperature and by increased fine sediment. Wood loss was also shown to have a significant effect. These, then, are issues that would be particularly helpful to restore.

Tim also noted that there's not a very robust way to measure the presence of fine sediment issues: for the model, all his team was able to use as an indication was road density.

Q: How is LWD effective for those species? Spring Chinook don't spend much time in freshwater rearing.

A: It affects the rearing capacity and productivity, and is helpful in spawning. They also create holding pools and build up spawning gravel in small streams. In the river, the issue is mostly just providing more gravel.

DISCUSSION ON ASRP SCENARIOS:

ASRP restoration was looked at for its three scenarios (200, 300, and 400 miles of restoration), and the effects of climate change were also considered. (With an assumed 1 degree increase by 2045, 2 degree by 2085) Using the model, Tim was able to run through the levels of impact that ASRP restoration plans would have on the different species in the basin.

Q: How did you determine fish densities for rearing capacities for specific habitat types?

A: All literature values. Each species has its own set of data. Some of these are reanalyzed from Puget Sound: we took some original data and reanalyzed it.

Q: What are your historic fish #s from?

A: Those numbers are generated from turning back all of those factors and letting the model generate it.

Q: Did you back-check with historical estimates?

A: There's a lot of uncertainty in those numbers, and so we don't like to do that explicitly as an evaluation. But, we did look at that a bit and compared them against what we got when we turned back all the factors to historical (everything but beaver values). We got pretty close!

Q: What is the most useful part of this that's going to come out in the ASRP for sponsors to look at to inform choices?

A: I'd look at those species plots to decide what the main focuses should be (in the case of the Coho: beaver, riparian, floodplain/LWD) and then focus in on individual habitat issues. Our plan is to put a website up with all the files and metadata available.

Q: Any thoughts on why channel length is shown to have a low effect?

A: Yeah, a lot of these areas are main-stem channels, which only had about 10-15% more sinuosity historically. So there wasn't a lot of improvement to be had there.

NEXT STEPS: 2019 report was sent in the couple days following the meeting. Issues to be completed are the steelhead model QA/QC. Then there will be 2020 updates: habitat data, more clarity on restoration scenario plans. We'll also be looking at stochastic effects of peak flows. We also plan to complete a chum salmon model.

6. Chehalis Lead Entity Strategy Chapter Review (postponed to Dec.)

[Chapter review presentations were be put off until December's meetings--too full of an agenda today!]

1. Black (Thom)
2. Lincoln (Rick)
3. Upcoming: December: Cloquallum (Ryan); Humptulips (Luke); January: Wynoochee (Tom); South Bay (volunteer needed); Skookumchuck (volunteer needed)