



Hood River Watershed Group

“...to sustain & improve the
Hood River Watershed through
education, cooperation, & stewardship”

OCTOBER 27, 2020 MEETING MINUTES

Watershed Group Members Present

Chuck Gehling	Cindy Thieman	Alix Danielsen	Heather Hendrixson	Megan Saunders
Dick Iverson	Holly Coccoli	Karl Weist	Gary Asbridge	Diana Burman
Lauretta Burman	Brian Nakamura	Stuart Blois	Jonathan Terhaar	Steve Pribyl
Jim Wells	Lindsay Powell	Jason Seals	Rob Greenman	Alex Johnson
Mark Zanmiller	Megan Shearer	Rick Larson	Greg Short	Phil Simpson
Kate Conley	Zach Bergen			

** This meeting was conducted virtually via Zoom.

Welcome and Introductions

At 6:04pm, Chuck Gehling welcomed everyone to the October meeting and started a round of introductions. There were 27 people in attendance.

Cindy introduced the speaker, Phil Simpson.

Monthly Informational Presentation

Phil Simpson with the Oregon Department of Fish & Wildlife presented a *Steelhead Production Monitoring Update for the Hood River Watershed*.

The Oregon Department of Fish and Wildlife Hood River Research Program monitors and evaluates actions taken by fisheries co-managers from ODFW and the Confederated Tribes of Warm Springs to improve wild production of summer and winter steelhead in the Hood River Subbasin. Phil’s presentation included context for the program and recovery efforts, background of Hood River steelhead life history, and a summary of recovery metrics as they pertain to the National Marine Fisheries Service biological viability criteria.

Phil referenced the BPA Revised Master Plan for the Hood River Production Program (2019) to reflect progress and provide context for salmon and steelhead recovery. He also highlighted the Columbia Basin Partnership Task Force’s final report, *A Vision for Salmon and Steelhead* (2019), for anyone interested in learning about the issues and recommendations in the Columbia Basin as a whole. The plan recommends “a coordinated, basin-wide multi-partner long-term vision and a common set of goals”. His takeaways from this report are: 1) the recovery issue is extremely complex, 2) the need to find overlapping values and missions and create shared goals, and 3) the need to aspire to a “healthy and harvestable” level of salmon and steelhead, with goals that reflect current landscape.

Phil explained the concept of “viable salmonid populations (VSP)”, which is what the NOAA Fisheries Recovery Plan dictates for recovery evaluation. A “viable” population has a negligible extinction risk over the next 100 years, and uses abundance, productivity, spatial distribution, and diversity as parameters. VSP and the Master Plan are what will frame Phil’s report on steelhead status.

Steelhead Background:

The Hood River is one of only five Oregon watersheds to have indigenous populations of both summer and winter steelhead. Winters are found mostly in East and Middle Fork Basins and summers are generally in the West Fork Basin (as shown by telemetry data). Both run types are ESA-listed as “threatened”.

Winters typically enter the Hood sexually mature. They have a relatively short migration, dominating streams within 100 or less miles from the ocean. They enter freshwater in November-May and spawn in March through May. Summers typically migrate longer distances (>100 miles) and are typically sexually immature when they re-enter the basin and typically spawn in the spring after overwintering in the basin. Phil noted rotary screw trap locations and explained PIT tagging, which tracks the movement of fish in and out of the basin. He showed examples of typical migration patterns for a winter and summer tagged fish.

Results for VSP parameters through 2019:

Abundance: Juvenile abundance is tracked using the DAR system, which aggregates data for small populations, accounts for temporal variability, and groups strata based on likelihood of trapping efficiency. There is an average abundance of about 17,262, with a big difference between pre- (14,087) and post- (23,259) Powerdale Dam removal in 2010. Adult abundance is based on a survivor open population model that incorporates data collected at Bonneville Dam and compares to adult collection facilities in the Hood (East Fork Weir, Neal Creek Weir, Moving Falls, EFID Ladder). The winter adult average is 566 (Master Plan goal is 1,000), and the summer adult average is 254 (Master Plan goal is 600).

Productivity: Productivity is assessed using a recruits-per-spawner metric (1992 – 2014). A value of 1 indicates 1 fish replacement. For both winters (0.93) and summers (0.8), as abundance increases (the more spawners you have), the R/S value diminishes. This is typical for “density-dependent” populations – adding more fish does not translate to more recruits. By fitting R/S data to a model, you can determine peak Hood River recruitment, which is 505 adults. For smolts, most years are limited to 25,000 recruits or less, which is indicative of density dependence. The basin may be somewhere near carrying capacity (winters – 16,970, summers – 13,860).

Spatial Distribution: Spatial distribution may apply to within a population segment (i.e. Lower Columbia) or to local population like the Hood. Spatial distribution influences the viability of a population if distribution is confined and not diversified. It refers to the amount of available habitat, the organization/connectivity, and occupancy. Occupancy is often gauged with metrics like redd surveys, but we do not have that data in the Hood due to feasibility. We do know that spatial distribution in the Hood does follow the genetic ecotype, where winter and summer locations are determined by telemetry data (2013-14 data) and mapping of spawning probability. Not much seems to have changed since the 90s. We are lacking juvenile data – we know a lot about when they are moving, but we don’t know about distribution throughout the year, about parr abundance (this would be a good research project!), or about movement patterns.

Diversity: Diversity refers to the distribution of life history and behavioral and physiological traits within and among populations. Diversity is genetically and environmentally influenced, and like spatial structure, diversity allows populations to better respond to change. Diversity is assessed by run timing (total river miles to display upstream migration). Winters generally follow the same April-May spawning migration time and summers generally migrate April-October, overwinter in the basin, and spawn in the spring (March-May). Phil noted that hatchery and wild fish timing is similar, which he believes is due to careful brood stock selection. Genetic diversity is assessed as proportion of natural brood stock, and the Hood has done a good job of maintaining natural diversity and meeting set standards.

VSP Parameter Conclusions: Abundance (does the Hood have a sustainable number of spawners?) – For winters: yes, for summers: no; Productivity (is the population capable of responding to perturbations?) – Productivity is probably very reasonable considering R/S numbers but probably more so for winters than summers

Spatial structure (is available habitat increasing or stable? Are key habitats preserved?) – Watershed partners are making a difference here. Diversity (are variations in life history, morphology, and genetics maintained?) – they appear to be (though likely diminishing genetic variation over time with hatchery broodstock)

Questions:

Cindy – when you were talking about density dependence, you were getting at habitat capacity, correct?

Phil – yes, if you are not seeing increased recruits, you are likely up against carrying capacity.

Holly – would significant increases in wood and improved flow have an impact on carrying capacity and density dependence?

Phil – yes, the Master Plan specifically states this (with summers in particular); this is a big part of the Action Plan being developed now.

Alex Johnson – any guess on abundance numbers as percent of historic levels?

Phil – Based on the NOAA recovery plan, it was reported that historically there were 3,800 winter and 3,800 summers in the Hood. In the Columbia Basin historically produced 5-16 million salmonids annually, and now there are less than 3 million per year.

Rob Greenman – how are strategic action planning groups helping native populations of non-migrators?

Cindy – the actions that the Partnership have been working on would benefit resident rainbow trout as much as anadromous species.

Gary – what do you see as primary threat to steelhead in the Hood River Basin?

Phil – I would work on things I could control, including water availability and fish passage projects (creating as much access and connectivity as possible).

Heather – it seems like hatchery steelhead program is not necessarily increasing populations; what is the status of that program?

Phil – it depends on the basin; for the Columbia as a whole, hatchery programs were meant as mitigation so that there would still be fish to catch. How hatchery fish impact wild fish varies basin by basin, based on practices and what is happening with wild fish at a given time. This will be an on-going topic over time.

Jon – is Warm Springs going to stop their winter steelhead hatchery program to increase spring Chinook numbers?

Jason Seals – winter steelhead broodstock were taken in the spring and are currently being raised, but there will be no more brood taken from this point on. This is a decision made by BPA and ODFW.

Megan Shearer – the last year for winter steelhead smolt release is 2021.

Chuck – does your data show that we are generally at a plateau right now, regardless of wild or hatchery fish increases?

Phil – there is definitely environmental variation, but it could be that yes, we are at carrying capacity.

Cindy – there have been some good studies in last 7-8 years, including IFIM studies that were geared to the relationship between stream flow and habitat suitability for different species in the basin. One of the conclusions was that there is a lack of adult holding habitat in the watershed (in mid sections of East, West, and Neal Creek). As we move into more work in the mainstem and on private lands downstream and add more structure, how will this impact adult holding and carrying capacity?

Jason Seals – if the gradient were more structured, this could certainly benefit juvenile steelhead; adults (especially winters) are not necessarily holding for very long prior to spawning.

Megan Shearer – I feel like the Hood River Basin is naturally constrained and has a high gradient, so if you can be creative and create more over-wintering habitat, this would be greatly beneficial to juveniles, etc.

** This presentation was recorded and can be found at: <https://hoodriverwatershed.org/recording-available-for-steelhead-production-monitoring-update-for-the-hood-river-watershed/>

Review and Approval of Last Meeting Minutes

Chuck asked if there were any corrections to the September minutes. No changes were noted and the group approved the minutes.

Old Business

None.

New Business

None.

Reports and Announcements

Coordinator Report:

Cindy reported that she and Alix spent the day up on the West Fork. There was a mandatory pre-bid site visit for the West Fork at Red Hill instream restoration construction project. The project is a partnership between the USFS, the CTWS, and HRWG. This is an exciting project with aggressive restoration to reconnect historic floodplain using large boulders and wood. Nine contractors attended the meeting and bids are due November 17th.

Cindy is also wrapping up the West Fork at Jones Creek OWEB grant with the installation of a gate near the project site that will allow Ecotrust Forest Management and the Forest Service to better manage the area (specifically during fire season).

The 2020 annual report was just completed, and the EFID Eastside Lateral project is moving along.

Cindy went out with Rod French recently to look at possible mitigation sites for the ODOT work that took place under Tucker Road on Indian Creek. It seems like they are finally narrowing in on two fish passage sites on Evans Creek.

There is a requirement for OWEB capacity funding to do a biannual self-evaluation. HRWG would normally do this in December, but due to COVID constraints, OWEB said it would be fine to wait until June.

Project Manager Report:

Alix provided an update on the Neal Creek restoration projects. The draft design for Phase 1 will be complete next week, at which point the design will be reviewed with landowners and any final adjustments will be made. An RFP for the cultural resources assessment of Phase 1 was distributed and bids are due on Friday the 30th. An RFP for the Phase 2 design was distributed, and bids are also due on the 30th.

Alix noted that annual reporting for the CIG pollinator pipeline project was submitted last week. The OWEB small grant-funded Powerdale Corridor project is moving along. There will be a work party at the River Mile 1 site that Kate Conley will provide more information about.

Member Announcements:

Kate Conley provided additional updates on the OWEB small grant Powerdale project; there are two project sites: Whiskey Creek and the River Mile 1 Ponds. Both are vegetation restoration projects. CLT has been working on blackberry management for years at RM1 and now planting will take place at the site. There is a work party on November 10th and there is capacity for a few local volunteers. More info to come. This is the

first year working on management of yellow flag iris at RM1. There was a crew that waded into the ponds to do spraying – effectiveness will be determined next spring.

Megan Saunders reported that the Kingsley Reservoir project will be extending into next year. Crestline will still be up there for the next few weeks working on getting the partially constructed reservoir sealed off safely until next summer. FID will be able to build storage capacity next year, but they still need to finish fish screens etc. so they will not be able to use the expanded capacity.

Heather – will that push that campground work out to 2022?

Yes, FID is working with the County on that, but it will probably be 2022.

Greg – when will boat ramp be open?

FID is applying for a grant (from the Oregon State Marine Board) in December to help cover replacement but regardless, it will be done next year. Cindy recommended an ODFW grant that funds improved fishing access.

Stuart Blois noted that he is interested in hydrology/wilderness restoration volunteering projects.

Brian reported that EFID is still waiting for NRCS approval before the Eastside Lateral project can begin. The board also distributed the job description for the EFID manager position.

Heather reported that the ODA/Ag Water Quality Plan team is working on updating the plan in December so if anyone is interested in joining the team, they should reach out to Heather. The Annual Plant Sale order form is coming out soon for April plant pick up.

Dick asked if anyone knew about a flood on Newton Creek some time within the last few weeks. There seems to have been a change in hydrology and a fair amount of sediment dumped out along the reach.

Megan Saunders noted that with the recent rain events, FID has had a lot of sediment coming through the FID system.

Summary of Consensus Items and Establishment of Next Meeting

None.

The next meeting will be held virtually on November 24th from 6-8pm.

Adjournment

Chuck thanked the group for attending and adjourned the meeting at 7:46 pm.

Reported by Alix Danielsen.