Dosewallips River Collaborative

DRAFT Meeting Notes
Wednesday, June 16, 2021
10:30 am - noon
Remote Access Only

Welcome and Introductions
Attending: Tim Abbe (Natural Systems Design [NSD]), Lisa Belleveau (Skokomish Indian Tribe), Rebekah Brooks (Recorder, Rebekah Brooks Contracting), Carrie Cook-Tabor (Washington Fish and Wildlife), Mike Dawson (Jefferson County Department of Health), Alex Gouley (Skokomish Tribe), Bridget Kaminsky-Richardson (Department of Natural Resources), Torrey Luiting (NSD), Torrey Luiting (NSD), Alicia Olivas (Hood Canal Coordinating Council), Alex Papiez (Hood Canal Salmon Enhancement Group), Tami Pokorny (Coordinator/Facilitator, Jefferson County), Joey Smith (NSD), Laura Street (Washington Department of Fish and Wildlife)

Additions to and Approval of the Agenda
The agenda was approved by consensus as written.

Approval of the May 19, 2021 Meeting Summary
The May Meeting Summary was accepted by consensus.

Announcements
None

Old Business
None

New Business
Introduction to Draft Resiliency Plan for the Lazy C Powerlines Reach: Torrey Luiting, NSD

Torrey presented on the Dosewallips River: Powerlines/Lazy C Reach Resiliency Plan Preferred Alternative Discussion. She gave an overview of the Resiliency Plan process and analysis. The Resiliency Plan process was to understand the geologic, geomorphic, and hydraulic context; to understand the human conditions such as land ownership and access; to tie the impaired processes to physical outcomes for aquatic habitat conditions; to identify and protect intact habitat and areas that are critical to habitat-forming processes; to link those impairments and protections to limiting factors for Hood Canal summer Chum, Chinook, and Coho; and finally, to design actions to address specific impaired processes. In developing restoration actions, the team built upon knowledge of existing aquatic species and use, and geomorphic processes. Impaired processes drive the restoration actions. Placement of in-stream wood structures and engineered log jams (ELJs) can be a successful methodology for increasing wood loading and improving impaired processes. The designs need to consider both the project goals and constraints, so the periodicity of selected salmon in the Dosewallips River, land ownership, parcel boundaries, geologic characteristics, and Jefferson County and Federal Emergency Management Agency (FEMA) regulations come into play. Most of the Lazy C is privately owned and developed, but most of the Powerlines reach is publicly owned. The Lazy C reach features a straight plane bed channel, a

forested island and side channel, and relict flow paths through the floodplain. The Powerlines reach is characterized by low elevation, a well-connected floodplain, several side channels, and the river extending across the full valley bottom. The team also considered historical channel mapping, model predictions for deposition and migration, hydraulic modelling of one-, 10-, and 100-year flows, and channel migration zone delineation to inform potential structures and the Resiliency Plan.

After the analysis, the next step was to make field observations of both reaches. Upstream Lazy C was observed to have a plane bed channel with low habitat complexity and few pools; few pieces of large wood and low wood recruitment; mature riparian vegetation; alcove and bedrock pools that were good examples of complex habitat; some development near the river; and an unstable slope prone to landslides. Downstream Lazy C contained more habitat complexity than upstream with small side channels and a forested island; some large wood that was likely not very stable; active erosion on the left bank at the downstream end; some bank protection that was not continuous; and landslide and debris flow activity on the hillslopes. Taking all of the information into account revealed the impaired processes for Lazy C, including a confined channel, limited floodplain connectivity, high sediment transport capacity, low levels of stable wood, and immature riparian vegetation. The downstream reach specifically has channel migration rates greater than likely historical levels. The impaired processes have consequences for aquatic habitat, such as loss of channel complexity and floodplain access, which is key for Hood Canal summer Chum; few pools and large wood jams, creating risk to redds and incubating fry from high fall and spring flows; and little rearing habitat for juvenile Coho, Chinook, and steelhead. Recommended design actions for the Lazy C in the short term were to increase large wood loading with a variety of log jam structures, to slow the channel migration rates closer to historical levels in the lower Lazy C, to restore riparian forest through invasive control and conifer interplanting, and to conduct a smaller scale possible pilot project within the tributary channel in the lower Lazy C. Long-term design actions included acquiring floodplain properties from willing sellers, and investigating the feasibility of floodplain benching along the upper Lazy C as acquisitions or conservation easements can be made. Safety constraints, construction access, and Jefferson County and FEMA regulations would also need to be considered.

Joey Smith walked the group through Conceptual Restoration Actions for the upper and lower Lazy C. Proposed actions were light in scale in the upstream end, and included deflector jams, hydraulic shadows, low profile jams and bar aggradation to add stable wood, split flows, protect the left bank and produce areas of slow water. Proposed actions for the downstream section of the reach included apex jams, deflector jams, hydraulic shadows, stabilizing the existing island, invasive species control, and conifer planting to provide complex woody cover and habitat complexity, and prevent river migration. To move forward with these structures, care would need to be taken to evaluate the risks to the community and follow the set regulations, while still getting the habitat and geomorphic uplift desired from a construction project.

Torrey continued the presentation on the Powerlines Reach, which features three perennial and several ephemeral side channels that provide some complexity and aquatic habitat and stable wood accumulations. Powerlines field observations included complex, multi-threaded channel morphology

with several side channels, braid bars within the active channel that indicate frequent sediment mobilization, some stable wood accumulations, patches of mature mixed deciduous and conifer forest on higher floodplain surfaces, and a landslide-prone left bank hillslope. While a lot of the habitat in the Powerlines reach is very functional, there are still impaired processes and potential issues. Upstream channel confinement has increased sediment supply; channel migration rates are above likely historic levels; frequent bed mobilization and sediment deposition in braided sections negatively impacts salmon redds; and there is the risk of avulsion through the side channels. There is some loss of process over time, and lower levels of large wood than in best conditions. Proposed design actions for the Powerlines reach in the short term included increasing large wood loading, encouraging stable forested island development, reducing channel migration rates and avulsion risk, encouraging the formation of stable and complex aquatic habitats, and restoring the riparian forest through invasive species control and conifer interplanting. Long term actions would be acquiring floodplain properties or developing conservation easements with willing landowners. Safety constraints, construction access, and Jefferson County and FEMA regulations would also need to be considered.

Joey led an overview of the suggested actions and the placement of various ELJs to stabilize the existing island and wood accumulations, maintain flow alignment to create scour pools and hydraulic shadow, stabilize the existing bar, and promote forested islands. There is not as much private property in the Powerlines reach, so there is more opportunity for restoration actions; however, Jefferson County and FEMA regulations must still be upheld and structures must be stable in the highest flow events. This would be worked out in detail in the preliminary design stage.

Torrey concluded the presentation by leading input and discussion on preferred actions. Options for moving forward were to develop a Lazy C landowner outreach plan, and pursue either the Lazy C or Powerlines short-term actions. Tami Pokorny said that there was funding for a preliminary design; she would need a recommendation from the Collaborative to take the request to the County. Bridget Kaminsky-Richardson added that DNR is not a permitting agency, but a land authorization agency; ELJs would probably require a right of entry in order to be installed within the River. The group discussed the reaches and how to proceed with preliminary design projects given the constraints. Lisa Belleveau suggested prioritizing the Powerlines reach. Discussion followed on working through the reaches with the intention of going through the entirety of both reaches, looking at the project as a whole but starting downstream and working upstream. Tim Abbe pointed out that there is one private landowner in the Powerlines reach, and landowner consent is necessary for Salmon Recovery Funding Board funding. Tami added that it would be better to go to the landowner with a specific plan in mind rather than something nebulous. The group discussed which structures allow for the greatest stability, approaching the projects in phases, and how to best prioritize the projects between the highest need and benefits and landowner willingness and feasibility. The projects could be prioritized by benefit, but sequenced by landowner willingness.

Selection of Project Reach for Preliminary Design and Next Steps

The conceptual design and Resiliency Plan have been completed, and are being distributed by Jefferson County through their website. *Tami Pokorny will send out the link. Comments can be sent to Tami over the summer. The County will continue to reach out to landowners in both reaches, with respect to project site access.

Next Agenda: WE September 15, 2021 10:30 AM – 12:00 PM

Adjourn at 12:39 PM

Summary by Rebekah Brooks, Rebekah Brooks Contracting

Action Items:
Tami Pokorny will send out the link to the Resiliency Plan.