

Dosewallips River Collaborative

DRAFT Meeting Notes
Wednesday, October 20, 2021
10:30 am - noon
Remote Access Only

Welcome and Introductions

Attending: Lisa Belleveau (Skokomish Indian Tribe), Rebekah Brooks (Recorder, Rebekah Brooks Contracting), Greg Brotherton (Jefferson County Commissioner), Carrie Cook-Tabor (US Fish and Wildlife), Mike Dawson (Jefferson County Department of Health), Alex Gouley (Skokomish Tribe), Randy Johnson (Jamestown S'Klallam Tribe), Bridget Kaminsky-Richardson (Department of Natural Resources), Theresa Mitchell (Washington Department of Fish and Wildlife [WDFW]), Tami Pokorny (Coordinator/Facilitator, Jefferson County), Laura Street (WDFW), Hilton Turnbull (Jamestown S'Klallam Tribe), Chemine ____ (affiliation?), Kato ____ (affiliation?)

Additions to and Approval of the Agenda

Greg Brotherton suggested a high-level, two-minute update at the beginning of the meetings; this was added to the meeting agenda. The agenda was approved by consensus with the addition.

Approval of the June 16, 2021 Meeting Summary

Approval of the June Meeting Summary was postponed until the next meeting when more people might attend.

Announcements

None

Project Status Update

Tami Pokorny gave a brief update on the status of the Powerlines Conceptual Design and Resiliency Plan Project. The Draft Resiliency Plan, and conceptual designs for both reaches can be found on the Jefferson County website at: [Dosewallips River Project | Jefferson County, WA](#). More feedback is still needed from the Lazy C community, so that is high on Tami's priority list. The next Dosewallips River Collaborative Meeting will focus on the Powerlines reach. Tami has been working with Natural Systems Design (NSD) to see if an amendment can be added to their contract in order to conduct a feasibility study for the Powerlines reach, specifically with an eye toward cultural resources and wetlands. Limited funding is available for the preliminary design, so a cost increase within \$20,000 may need to be worked up. She also mentioned an approved project at Walcott Beach to conduct similar research with funding from the Recreation and Conservation Office. There is limited cooperation with landowners, but outreach to property owners and expansion of project geography is part of the scope of that project.

Old Business

None

New Business

Dungeness Restoration Experience with ELJs: Hilton Turnbull

Jamestown S'Klallam Tribe Habitat Biologist Hilton Turnbull presented on 2016-2020 Upper Dungeness and Gray Wolf River Large Wood Recovery. The projects take several years to plan and prepare, but are

quickly built with helicopters. The structures they are building in the Upper Dungeness are made from root wads and racking bundles that are anchored with rock collars. Ground construction methods are not always feasible in areas without road access, and using a helicopter can be more efficient. The Tribe has been working with the Olympic National Forest on a six-mile reach on the Gray Wolf and Dungeness Rivers, reconnecting historic floodplains that were heavily impacted by wood removal. The projects were constructed on federal lands. Phase 1 was in the Lower Gray Wolf River; Phase 2 was around river mile 14 on the Dungeness. They are gearing up for Phase 3 next year. Hilton discussed how floodplain disconnection issues lead to low salmon productivity, so the goal is to reach proposed historic conditions for high salmon productivity. They have realized over time that redd scour and survival is highly correlated with flows in the Dungeness River. Migrant survival plumets at flows above 2,000 cfs. The mean 2-year flood event in the Dungeness is around 2,600 cfs. By installing engineered log jams (ELJs), they hope to reach proposed conditions to increase inundation for floodplain connection, slow the river down, and rack up wood that will stick around for at least 50 years so that the channels are accessible for spawners at lower flows. To do these projects requires a very detailed design. The Tribe worked with NSD to develop site specific designs that were engineered to achieve the sponsor's goals and objectives. Once you commit to using a helicopter, everything about the project has to be designed to make the helicopter as efficient as possible, because it costs \$8000/hour. In order to do that, you have to be strategic about where all the materials are kept. Each piece of the ELJ has to be laid out in advance. One of the lessons the Tribe learned during their first project was to not move materials twice. During the second project, they built the racking bundles in the harvest unit where the trees were felled so they could be flown directly to the River. They also had the rocks delivered to a location within a mile of the project site so the rock collars could be built there. Making those changes saved enough money to build two or three additional structures. Even though the helicopter is \$8000/hour, it is so efficient that it can save a considerable amount in trucking costs. Once the ELJs are built, they blend in with the natural landscape, and after a few years, it can be hard to tell which are engineered and which are natural. Greg Brotherton asked how the structures are installed by the helicopter. Hilton explained that they are built sequentially in a series of lifts; the design shows in exactly what order the materials must be placed and the pieces are numbered. A ground crew remains with the materials and at the river site to help direct the helicopter pilot by radio. Greg also asked about materials costs; Hilton said that wood donations as match from the Forest Service and timber companies make a huge difference. His costs have been between \$30,000 and \$38,000 with about two hours of helicopter time per structure when the trees are donated. Three primary project partners work with the Tribe: a logging contractor, a building contractor to build the rock collars, and the helicopter. Hilton showed pictures of the ELJs over time; they are recruiting natural wood, pushing water into side channels, and building habitat like they are designed to do. Lisa Belleveau asked about rocks and cables. Hilton explained that the rocks are cabled to the logs with galvanized steel wire rope. While the rock collars are extremely expensive, they are very successful: all 24 ELJs have remained in place in spite of super high flows in the Upper Dungeness since 2016. The structures are monitored annually for safety and effectiveness. Alex Gouley asked about historic channel reconnection; Hilton confirmed that that is the main objective of the project and that historic channels are being reformed. Carrie Cook-Tabor observed that one of the structures appeared to shift in the photos and asked about how much the structures move after installation, and whether that is concerning. The structures are evaluated by extensive GPS and GIS measurements and have not been

found to move locations; however, unanchored logs may swing in the channel, and the ELJs are recruiting a lot of trees so their appearance changes over time. After construction, Washington Conservation Corps crews are brought in to install retention straps for additional safety, any loosened cables are removed, and the structures are tightened up. Lisa asked whether the cables were eventually removed, and if they are hazardous in any way. Hilton said that the cables will remain, which is why they are inspected annually; they are also a common and proven design that has been used widely for decades. Eventually, the rock collars dig themselves in and disappear over time. With respect to boater safety, there is signage posted and boater activity is taken into account when locations are determined. The ELJs are not built on blind corners or transport reaches, and are installed in areas with very low boater activity. Hilton was not aware of any water quality concerns with the stainless-steel cables; they are specifically not oiled and are chemical free. Discussion followed. The ELJs that were installed in knee-deep water are in deep 1.7-meter pools now. Laura Street said that WDFW recommends using chain whenever possible because cables turn into sharp shrapnel when they do break down. Hilton mentioned that he had no direct experience using chain, and that his sources have a lot more confidence in the tensile strength of cable over chain link, but he is willing to try them somewhere where that design might work. Other areas would require a different design approach. The Lower Dungeness would probably be ground-based construction with pile-driven ELJs. All designs are site specific. Tami Pokorny asked whether there was a flow that the rock collars would not be viable. Hilton explained that NSD designed these structures to withstand 100-year flow events. He emphasized that the site you choose to restore will dictate the type of ELJs that are built.

Project, River and Community Updates

Tami Pokorny mentioned that the downstream Lazy C reach is seeing a lot of erosion right now.

Next Agenda: The next meeting is scheduled for November 17, 2021 from 10:30 AM – 12:00 PM, if there are enough agenda items. Otherwise, there will definitely be a meeting in December. *Please send any agenda ideas to Tami Pokorny.

Adjourn at 11:36 PM

Summary by Rebekah Brooks, Rebekah Brooks Contracting

Action Items:

****Please send any agenda ideas to Tami Pokorny.***