



SOUTH FORK NOOKSACK RIVER FISH CAMP (*Ts'éq*) REACH INTEGRATED DESIGN PROJECT: FREQUENTLY ASKED QUESTIONS

What is the purpose/goal of the project?

The primary goals of this project are to reduce flood risk, create habitat that supports Chinook salmon recovery, and to build relationships within the community surrounding the South Fork Nooksack. The ultimate purpose of this project is to develop a preliminary design for the South Fork Nooksack River Fish Camp (*Ts'éq*) Reach* Integrated Design Project.

*The Fish Camp reach is located upstream of Acme, River Miles 8.6-9.6.

What problem is this project trying to address?

This project will address negative flood impacts in the Lower S. Fork Valley/Acme area and degraded river habitat conditions that strongly limit production of wild Nooksack early Chinook salmon.

- There has been a recent increase in frequency and intensity of floods in the South Fork. There are four repetitive loss properties within the Acme area. Prior to 2000, nine claims were filed on three properties, however since 2000, eleven claims were filed on five properties, suggesting that the frequency of claims is increasing over time. Results of a recent Climate Impacts Risk Assessment show that there is going to be more frequent and intense floods in the future.
- The Nooksack early Chinook salmon populations are essential to the overall Chinook salmon recovery efforts in Puget Sound. Until recently, the number of native South Fork Chinook spawning in the South Fork was much less than 100, and often less than 40. Habitat degradation is considered the leading cause for the decline of local salmonid populations. Nooksack early Chinook salmon hold great cultural and subsistence importance to the Nooksack Tribe and the Lummi Nation and low numbers of natural-origin spring Chinook in the Nooksack strongly constrain fisheries throughout the west Coast and Washington State.

How will this project address these problems?

Following many in-depth conversations with stakeholders, the project team will develop multiple design possibilities (alternatives) to both reduce flood risk to the community and improve habitat conditions for salmon. Designs will be based on input received from the community, an understanding of current flood risk to the area, Chinook habitat needs, existing channel and

flooding conditions, and each design alternative's potential hydraulic and geomorphic response. Some of the strategies that have been used by other watersheds to address flood risk and improve Chinook habitat that may be explored for this project, include:

- Floodplain reconnection
- Property acquisition (where desired)
- Bank stabilization
- Floodgates
- Engineered logjams
- Potential removal or setback of bank armoring and /or incorporating woody debris into existing bank armoring
- Riparian restoration and planting

Other ideas on how to address these problems will be solicited from the community and stakeholders throughout our outreach efforts. Please check the project webpage for updates.

How long will it take for these outcomes to present themselves?

We expect the in-stream habitat benefits to occur within 1-5 years of construction.

How is this project tied in to other restoration/flood reduction plans and efforts in the S. Fork Nooksack River?

This project will follow recommendations from the SF Nooksack River Acme-Saxon Reach Restoration Plan, WRIA 1 Salmon Recovery Plan, and the SF Nooksack Watershed Conservation Plan. A few of the shared priorities are to a) promote long-term agricultural economic viability, b) maintain communication, transparency, and trust between stakeholders within the watershed, c) provide incentives for landowners' efforts to improve watershed conditions, and d) promote open dialogue and understanding around data, science, resource management, and the changing climate conditions that affect our watershed.

Why is this project significant?

The project reach presents a unique opportunity for the Nooksack Tribe and Whatcom County to work together to develop an integrated design for salmon habitat restoration and flood risk reduction in the Lower S. Fork Valley. This project also provides an opportunity to continue to build relationships and involve community stakeholders in watershed management and restoration projects the lower S. Fork Nooksack valley.

Are there other projects similar to this one?

While there are no other projects where Whatcom County and the Nooksack Tribe partnered to design an integrated flood and fish project, the County has completed other flood/fish projects on their own within the Nooksack basin, and there are several restoration projects in the SF Nooksack that had similar habitat project elements. A few of those projects include the County's SF

Nooksack Acme (2010) and North Fork Nooksack Canyon Creek (2013) projects, the Nooksack and Lummi Tribe's SF Nooksack Hutchinson Project (2006), and the Nooksack Tribe's SF Nooksack Kalsbeek Project (2007) and the SF Downstream of Hutchinson Project (2012; 2014; 2015).

Who is funding this project?

The Nooksack Tribe received a grant from the Washington State Recreation and Conservation Office-Salmon Recovery Funding Board (SRFB) to develop a Preliminary Design for the SF Nooksack Fish Camp (*Ts'éq*) Reach Integrated Design Project. However, this project is a collaboration of the Nooksack Tribe and Whatcom County River and Flood Division with support from a consultant team led by Herrera Environmental Consultants.

Who is on the project team and how was the project team formed?

The Project Team members are the individuals who actively work on the project and provide technical expertise, contribute to overall project objectives, complete project deliverables, determine and address project needs, and help facilitate project development. As such, the Project Team consists of staff from the project sponsor (Nooksack Tribe), the project partner (Whatcom County), the project engineer (Herrera Environmental Consultants), and the project facilitator and outreach manager (Veda Environmental). Additional Project Team members may include current members of the Acme/Van Zandt Subzone Advisory Committee, since the project includes a flood-reduction element, and members of that committee have been appointed to represent the community's flood-related interests. We welcome the Acme/Van Zandt Subzone Committee members, landowners, and stakeholders to participate throughout the process by providing input/review of planning and design concepts. We are committed to addressing the concerns of stakeholders and community members, and we shall welcome input and feedback from the community through every stage of this process.

What is the timeline for this project?

The project timeline will be fluid, since we anticipate much of the design process will be guided by landowner and stakeholder outreach efforts and input. However, our *goal* is to have a preferred preliminary design by the end of 2019 however, this timeline may be extended to June of 2020.

How are stakeholders being engaged, and how can I be involved?

The project team is committed to working with stakeholders throughout the duration of this project. Stakeholders will have opportunities to weigh in on various aspects of the project, including but not limited to: 1) the scope and scale of the problems to be addressed, 2) thoughts and concerns regarding the results of the geomorphic and hydraulic assessments, 3) prioritization approach and criteria for design alternatives and 4) the selection of the preferred design alternative. The project team will meet with individual and groups of landowners/stakeholders to discuss the project, host two community workshops in late spring (June 27th) and early fall (Date TBD) and provide project updates via a Listserv and the project webpage.