

# SOUTH FORK NOOKSACK UPPER VAN ZANDT RESTORATION PROJECT – COMMUNITY WORKSHOP #1

Tuesday, September 10, 5:30 – 7:30 p.m.  
Van Zandt Community Hall  
4106 Valley Highway, Deming, WA 98244

**Hosted by Lummi Nation**

## Workshop Goal

Introduce the project to interested partners and community members and gather input to inform design concepts for the South Fork Nooksack Upper Van Zandt restoration project (previously the Black Slough Project) on the South Fork Nooksack River near Van Zandt. The goal of the Upper Van Zandt (UVZ) Project is to improve salmon habitat and reduce flood risk.

## Workshop Objectives

- 1) Build trust and relationships among project leads and stakeholders and partners.
- 2) Update participants on
  - a) the project goals -reducing flood risk and improving habitat for salmon,
  - b) discussion of FEMA regulated floodway and its effects on this project,
  - c) results of technical work to date including
    - i) initial geomorphic assessment/existing conditions work
    - ii) design process for development of conceptual designs
    - iii) conceptual alternatives
  - d) project timeline and next steps, and
  - e) opportunities for continued engagement.
- 3) Gather input from participants on
  - a) existing river conditions including observed changes to the river, flooding, and salmon habitat,
  - b) community interests, desired improvements in the project reach and how individuals and their property interact with the river, and
  - c) typical restoration approaches and considerations.

## Summary Notes

### **Welcome and Introduction**

Melanie del Rosario, Triangle Associates, welcomed attendees and introduced the project team.

### **Project Team**

## SOUTH FORK NOOKSACK UPPER VAN ZANDT RESTORATION PROJECT – COMMUNITY WORKSHOP #1

- Alex Levell, *Deputy Program Manager/Geomorphologist*, Lummi Nation
- Kelley Turner, *Watershed Restoration Program Manager*, Lummi Nation
- Melanie del Rosario, *Lead Facilitator*, Triangle Associates
- Kate Galambos, *Outreach Support*, Triangle Associates
- Laura Zanetto, *Senior Scientist*, Natural Systems Design
- Shawn Higgins, *Senior Scientist*, Natural Systems Design
- Nic Truscott, *Associate Principal Engineer*, Natural Systems Design
- Leif Embertson, *Principal Engineer*, Natural Systems Design

### **Attendees:**

- Jeff Swanson (BNSF)
- Ross Widener (BNSF)
- Karen Kuipers
- Vikki Jackson
- Rick Batdorf
- Jeff Rainey
- Val Lloyd
- Mike Hill
- Lindsie Fratus-Thomas (Nooksack Indian Tribe)

The workshop was the first focused on the [South Fork Nooksack Upper Van Zandt Restoration \(UVZ\) Project](#), although, some community members may be familiar with other nearby restoration projects with similar goals. Melanie shared a few similar projects in the South Fork Nooksack watershed including the [Lummi Nation Skookum-Edfro Phase 3/Phase 1 Adaptive Management Project](#) and the [South Fork Nooksack River Fish Camp \(Ts'eq\) Integrated Flood and Fish Project](#). The UVZ project is a separate project that builds on the existing work to achieve similar goals.

The purpose of this first workshop was to introduce the project to interested partners and community members and gather input to inform design concepts for the UVZ restoration project.

### **Goals and Objectives of the UVZ Project**

Alex Levell, Lummi Nation, walked through the goals of the restoration project, which include:

- Improve habitat conditions for threatened South Fork Nooksack early Chinook (chinook) salmon and reduce flood risk within the project reach.

## SOUTH FORK NOOKSACK UPPER VAN ZANDT RESTORATION PROJECT – COMMUNITY WORKSHOP #1

- Avoid any increase to flooding and erosion risk to properties and infrastructure in the project reach.

The objectives of the project include:

- The project will restore a portion of the SF Nooksack River between river mile 1.3 and 3 (Upper Van Zandt project reach) by installing a series of engineered log jams (ELJs), and exploring other restoration alternatives including:
  - Creating or encouraging a variety of types of in-stream pools
  - Identifying opportunities to improve edge habitat with wood
  - Exploring modifications to non-functioning levees/bank protection
  - Collaborating with BNSF to improve habitat conditions along railroad embankment
  - Improving in-stream habitat in thermal refuge areas

### **Outreach to Date**

Melanie del Rosario, gave an overview of the engagement work to date and noted that this project is one of many similar projects in the South Fork Nooksack valley, which community members may have heard about and/or participated in.

### **Outreach Questions:**

- How did the project team develop the contact list?
  - *Response:* The contact list is still developing. The initial list was developed using the Whatcom County assessor database to pull contact information for neighbors in the general project area. We will continue to build the contact list through events like these.
- Many of the projects seem to be working toward the same goals (habitat improvement and flood control). Is Whatcom County involved in this project?
  - *Response:* Some projects are more connected with the County than others depending on land ownership and funding. In general, we are committed to working collaboratively to achieve joint benefits between projects. Lummi Nation is working closely with Whatcom County.

### **Current Conditions Analysis**

The Natural Systems Design (NSD) team gave an overview of existing conditions analysis performed to inform the identification of project opportunities. Results from field visits, hydraulic modeling, and geomorphic, instream, and floodplain habitat assessments were

shared. NSD noted that a key part of early assessment and design development will be incorporating the experiences and knowledge of the community and landowners.

The historical channel conditions indicate that the channel was more complex. The historical channel mapping can help guide restoration opportunities for this project. Another tool NSD is using to understand the current conditions is hydraulic modeling. Modeling results give the design team insight into the extent and duration of overbank flow during a range of flow conditions (e.g., volume and speed of water moving through the project reach during a variety of seasonal scenarios like peak winter flows and low summer flows).

In general, most of the channel is characterized as a run, or a simplified channel shape with limited complexity for fish habitat. Simplified channels increase the speed at which water moves through them, causing them to erode rapidly and become downcut, or disconnected from floodplain habitats which provide relief for instream species and storage of floodwaters.

## Discussion

- Mike Hill shared his experience living adjacent to Potter Rd. for 30 years on the west side, both before and after the new bridge was installed. This year, the unnamed channel running parallel to his property was dry for the first time in his memory. He noted he can almost walk across the river 100 yards north of Potter Rd. He is concerned with the sediment backup in the river and shared that during the November 2021 flood event, he had two feet of water in his barn and his whole property was flooded.
- Jeff Swanson, BNSF, noted that BNSF is at the 100% design phase for rebuilding the bridge at Tawes Creek and expects to move to the construction phase in 2025. The bridge, like all BNSF projects, is being constructed to meet current flow conditions to meet current FEMA mapped floodplains. Should the floodplain expand, the bridge can be extended to meet the new floodplain.
- Richard Batdorf noted that the rip rap shown on NSD's current conditions maps was not entirely accurate. The rip rap extends further south than noted on the map. He shared his concerns about further erosion of the riverbank on his property. Over the years, he has seen trees erode on the bank due to the fast water.
  - NSD noted that water moves faster over rip rap than large woody structures. This project would aim to slow instream flows and lessen bank erosion.
- Attendees noted that the name of this project (Black Slough Reach Restoration Project) is confusing given there is another project being simultaneously implemented on the Black Slough and surrounding wetland.

## SOUTH FORK NOOKSACK UPPER VAN ZANDT RESTORATION PROJECT – COMMUNITY WORKSHOP #1

- *\*Since the Community Workshop, the project name has been amended to Upper Van Zandt (UVZ) to reduce confusion\**
- Attendees noted the impact of this project on sediment transport and expressed concern for downstream neighbors who could be impacted by increased sediment.
  - The project team explained that in the current simplified channel, sediment transport is limited. One of the goals of the project is to increase access to the overbank / floodplain areas, which would expand the storage for sediment and flood waters and reduce the flow of sediment downstream.
- WSDOT owns three parcels within the project reach containing a large wetland complex constructed to satisfy wetland mitigation requirements. The wetland, along with other existing floodplain within the project reach provides habitat for populations of the Oregon spotted frog – a species listed as endangered in Washington State, and threatened, federally.
- Attendees noted significant beaver activity in the reach.

### **Next Steps**

Melanie del Rosario, closed the meeting and noted ways to stay updated on the project progress:

- Attendees signed up for the listserv will receive updates by email at key project milestones.
- Community members are encouraged to share this information with their neighbors. The project team is available to answer questions and conduct site visits to individual properties, if landowners are interested.
- The project team plans to attend an upcoming Acme Van Zandt Subzone meeting on October 23<sup>rd</sup>, to share this information.

Based on the information gathered at the workshop, the NSD team will develop concept design alternatives for consideration. The project is expected to be implemented at the earliest in summer 2027.