
Upper Van Zandt South Fork Restoration Project Community Workshop

January 29th, 4:30 p.m.

Van Zandt Community Hall



WORKSHOP AGENDA

1. Welcome and Introduction
2. Project Status Update
3. Design Concepts Overview
4. Break
5. Facilitated Discussion: Design Concepts
6. Wrap Up and Next Steps

PROJECT GOALS

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

PROJECT GOALS (CONT.)

- Key concerns for habitat improvement include high water temperature, low habitat diversity, and key habitat features such as deep pools with woody cover.



PROJECT GOALS (CONT.)

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



Source: *Whatcom Co River & Flood*



Source: *@Whatcom County Farmers (On Twitter/X)*

OBJECTIVES

Restore the SF Nooksack River near Van Zandt (RM 1.3-3) by installing a series of Engineered Log Jams (ELJs), while exploring other restoration alternatives.

1. Create or encourage a variety of types of pools
2. Identify opportunities to improve edge habitat with wood
3. Explore modifications to non-functioning levees/bank protection
4. Work with BNSF to improve habitat conditions along railroad
5. Improve habitat in thermal refuge areas
6. Expand and diversify riparian vegetation



1. CREATE OR ENCOURAGE A VARIETY OF TYPES OF POOLS



2. IDENTIFY OPPORTUNITIES TO IMPROVE EDGE HABITAT WITH WOOD



3. EXPLORE MODIFICATIONS TO NON-FUNCTIONING LEVEES/BANK PROTECTION



4. WORK WITH BNSF TO IMPROVE HABITAT CONDITIONS ALONG RAILROAD



Source: <https://www.bnsf.com/news-media/news-releases/newsrelease.page?relId=bnsf-railway-announces-2021-economic-development-results>



5. IMPROVE HABITAT IN THERMAL REFUGE AREAS



6. EXPAND AND DIVERSIFY RIPARIAN VEGETATION

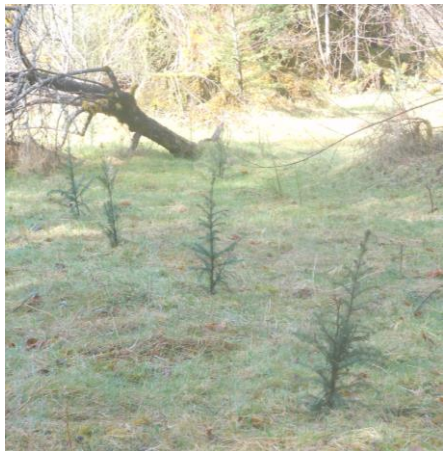


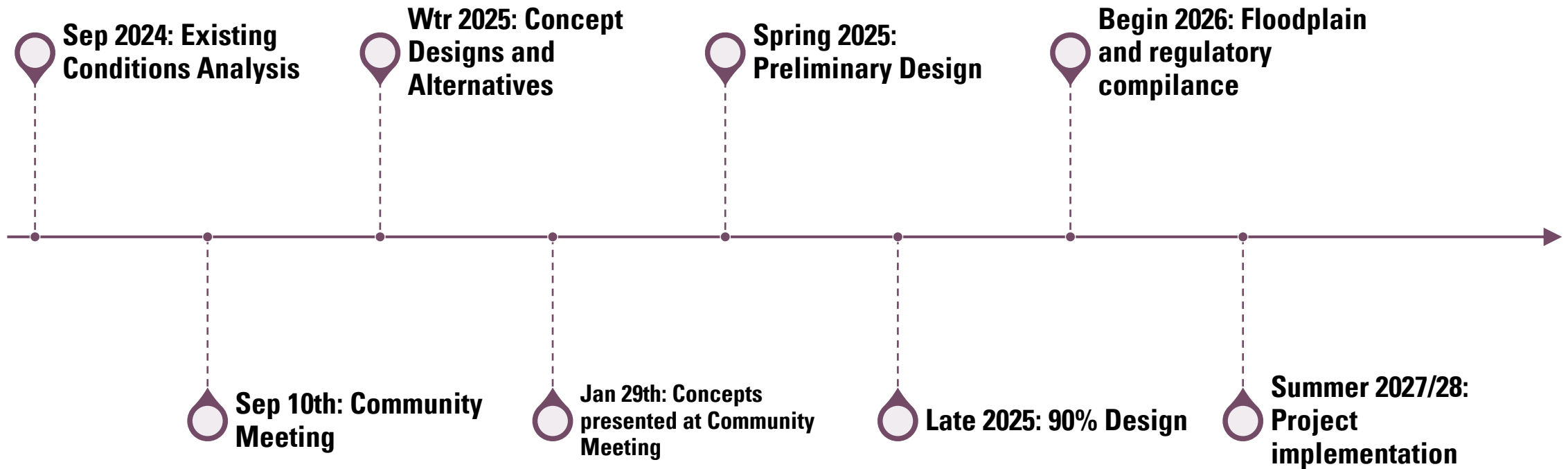
Image courtesy of Whatcom Conservation District

PROJECT APPROACH

- Collaboratively develop project designs that prioritize habitat benefits and address landowner needs.
- Work with landowners to identify access locations.
- Conceptual Design reviewed by stakeholders and landowners.



PROJECT TIMELINE



ENGAGEMENT TO DATE



DESIGN CONCEPTS OVERVIEW









Three concepts that build from each other:

- Concept A: Instream focus
- Concept B: Instream + targeted off channel improvements
- Concept C: Instream + expanded valley scale opportunities

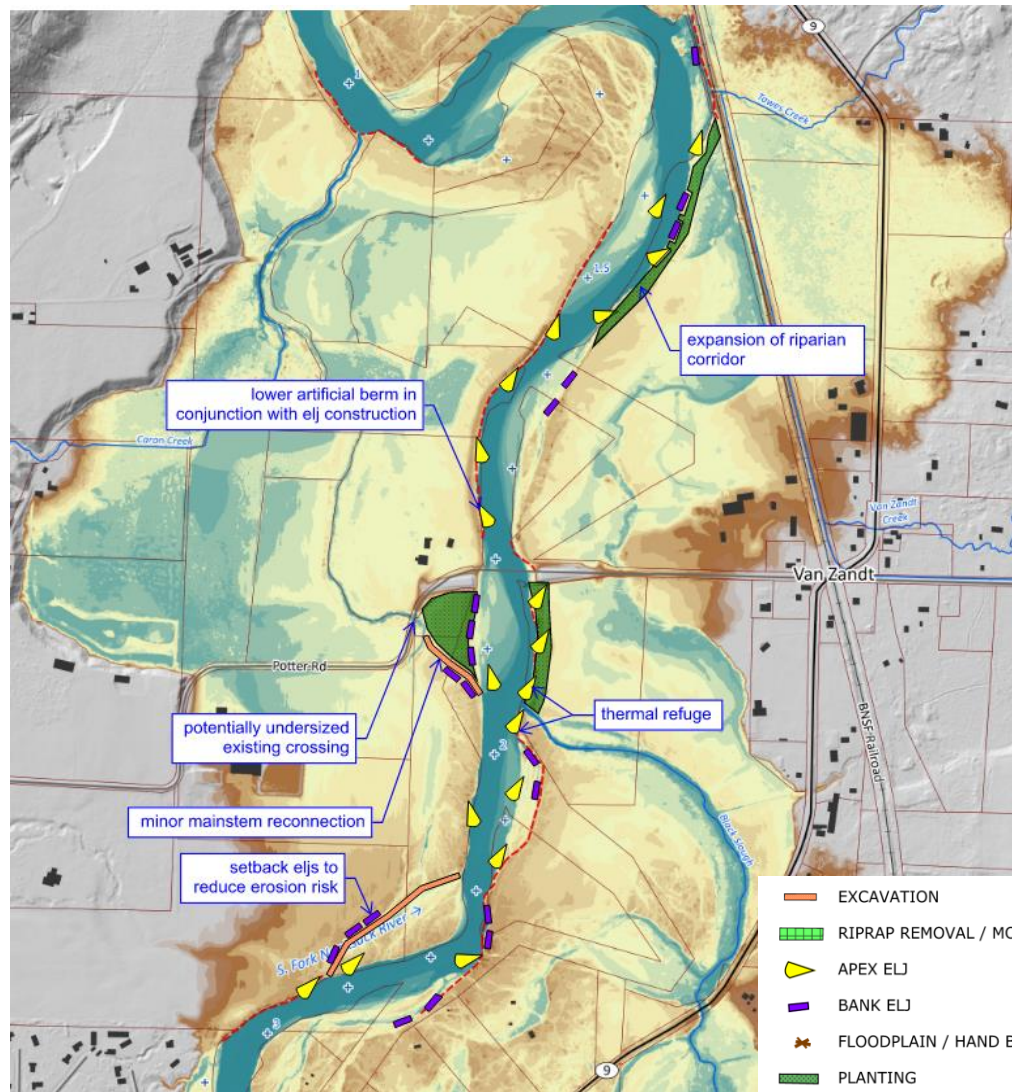
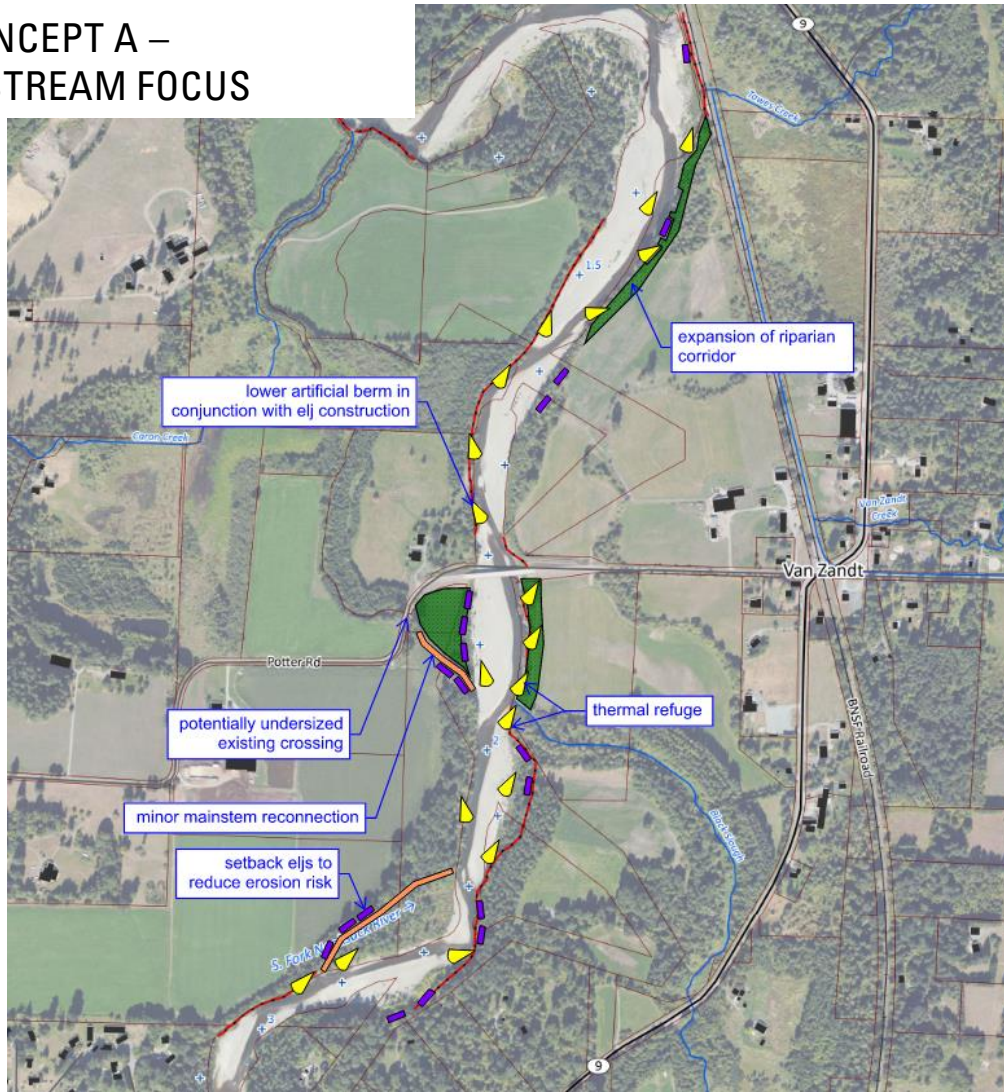
KEY ELEMENTS IN DESIGN CONCEPTS

Design elements seek to address:

- Elevated water temperatures
- Lack of habitat diversity
- Lack of key habitat quantity
- Elevated presence of fine sediment
- Decreased stream flow

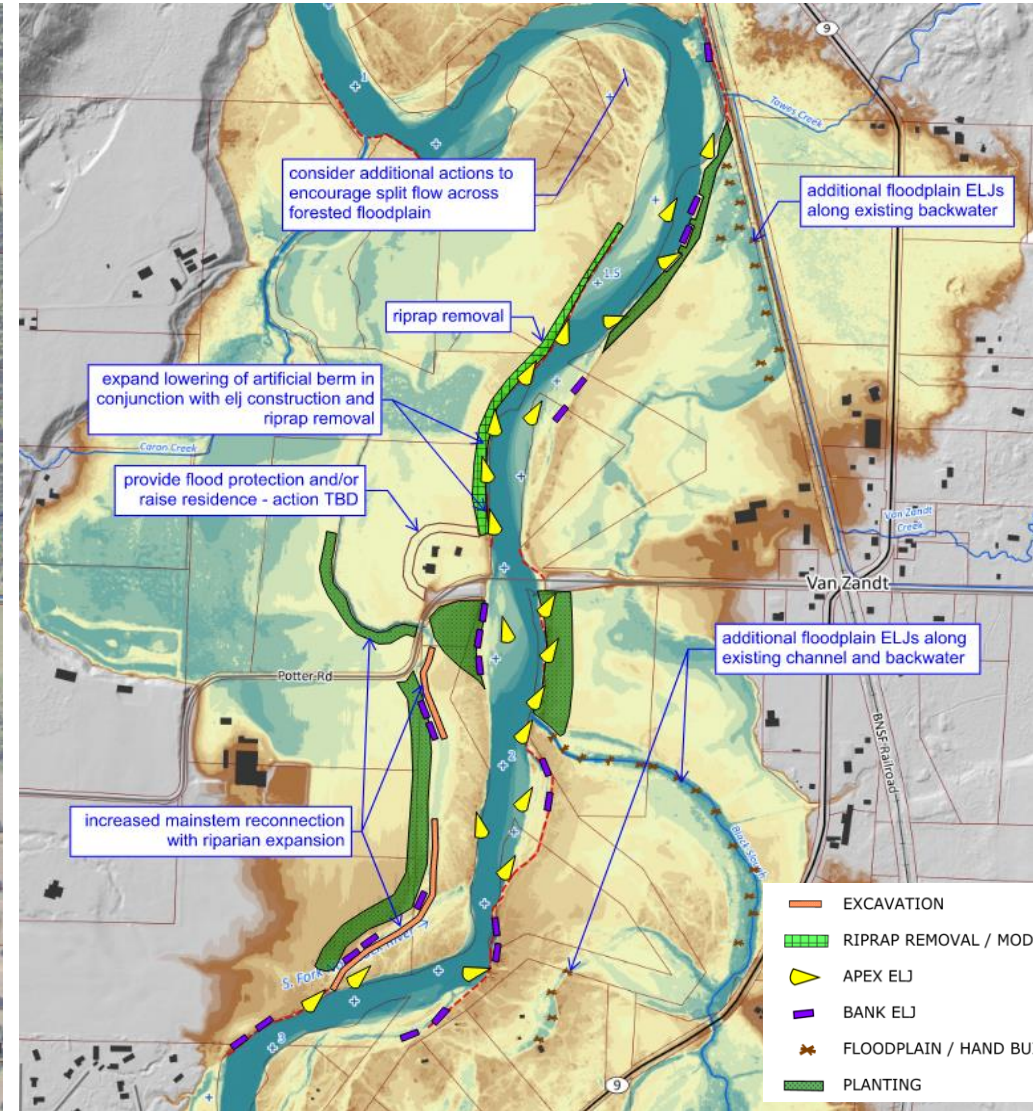
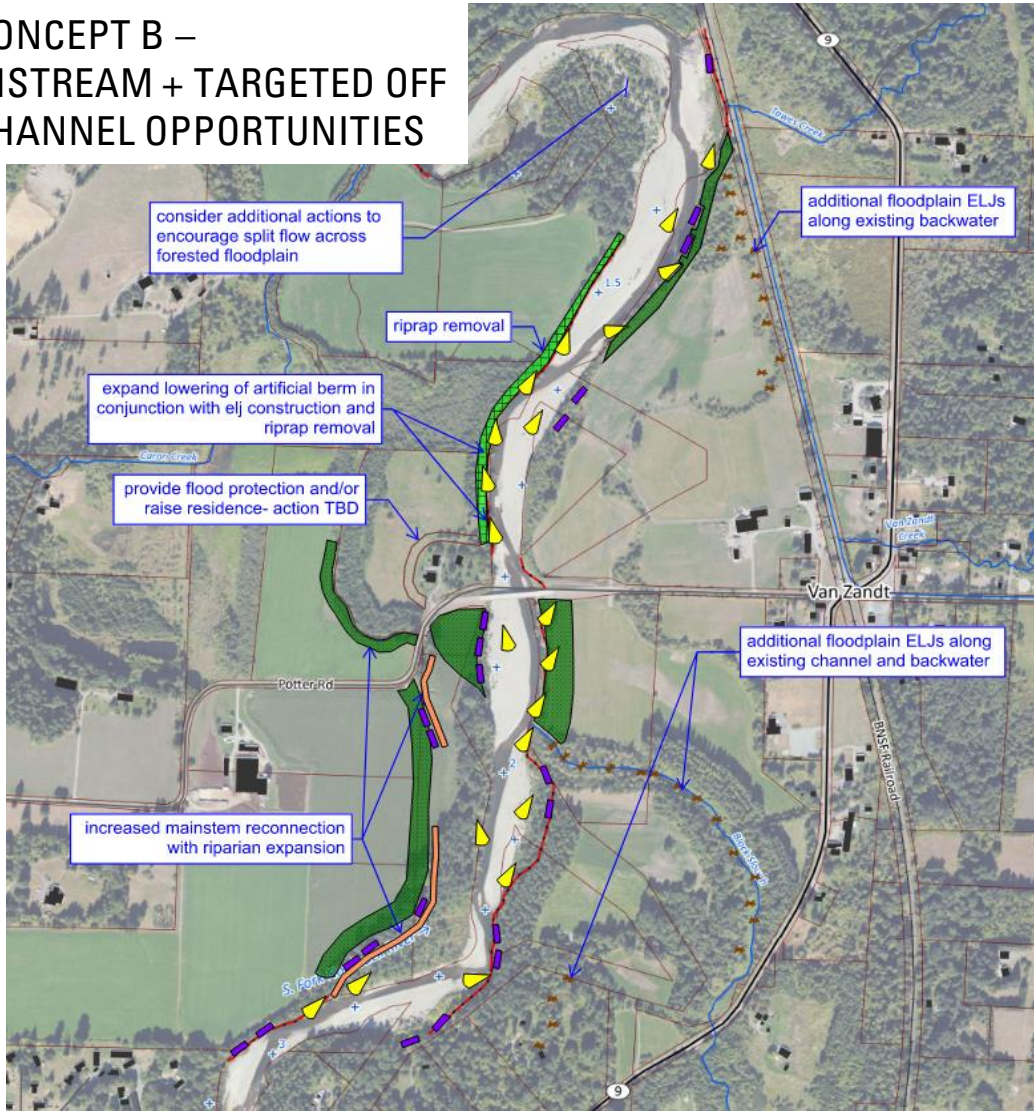
	EXCAVATION
	RIPRAP REMOVAL / MODIFICATION
	APEX ENGINEERED LOG JAM (ELJ)
	BANK ELJ
	FLOODPLAIN / HAND BUILT ELJ
	PLANTING

CONCEPT A – INSTREAM FOCUS



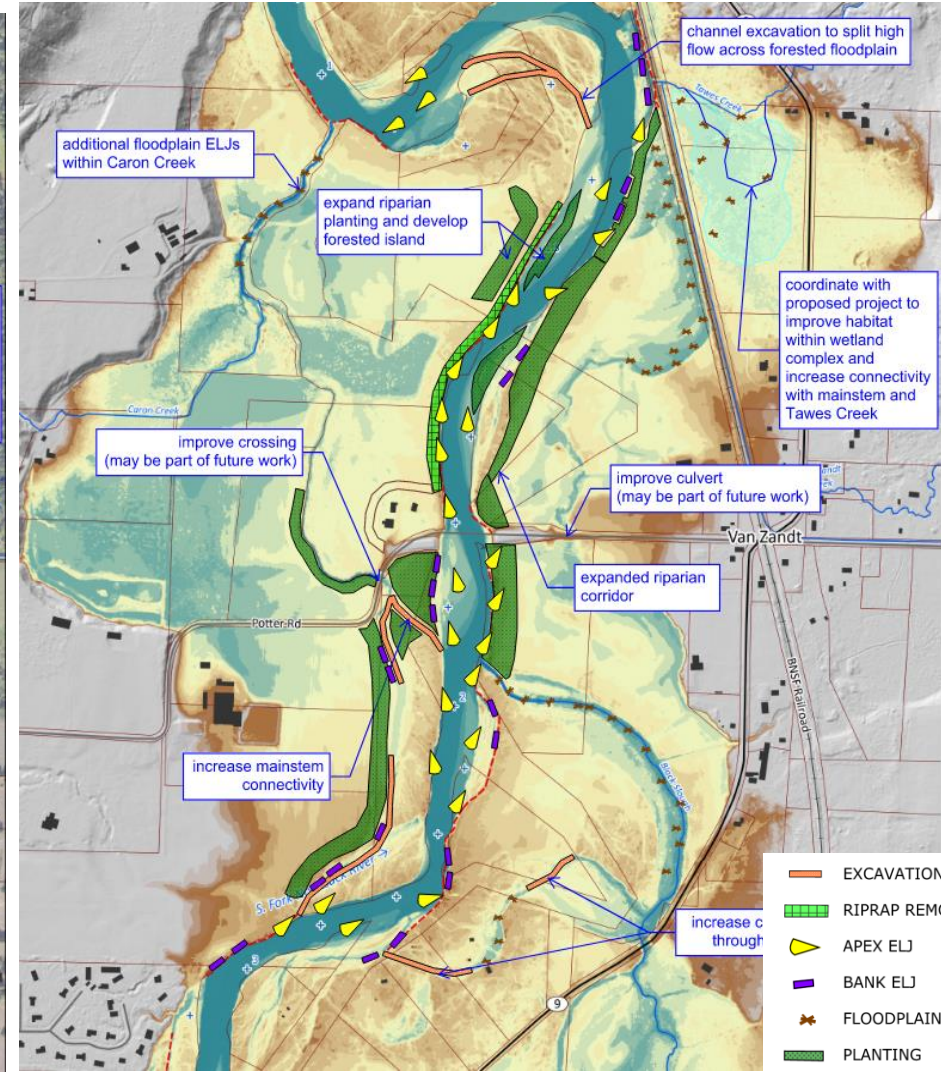
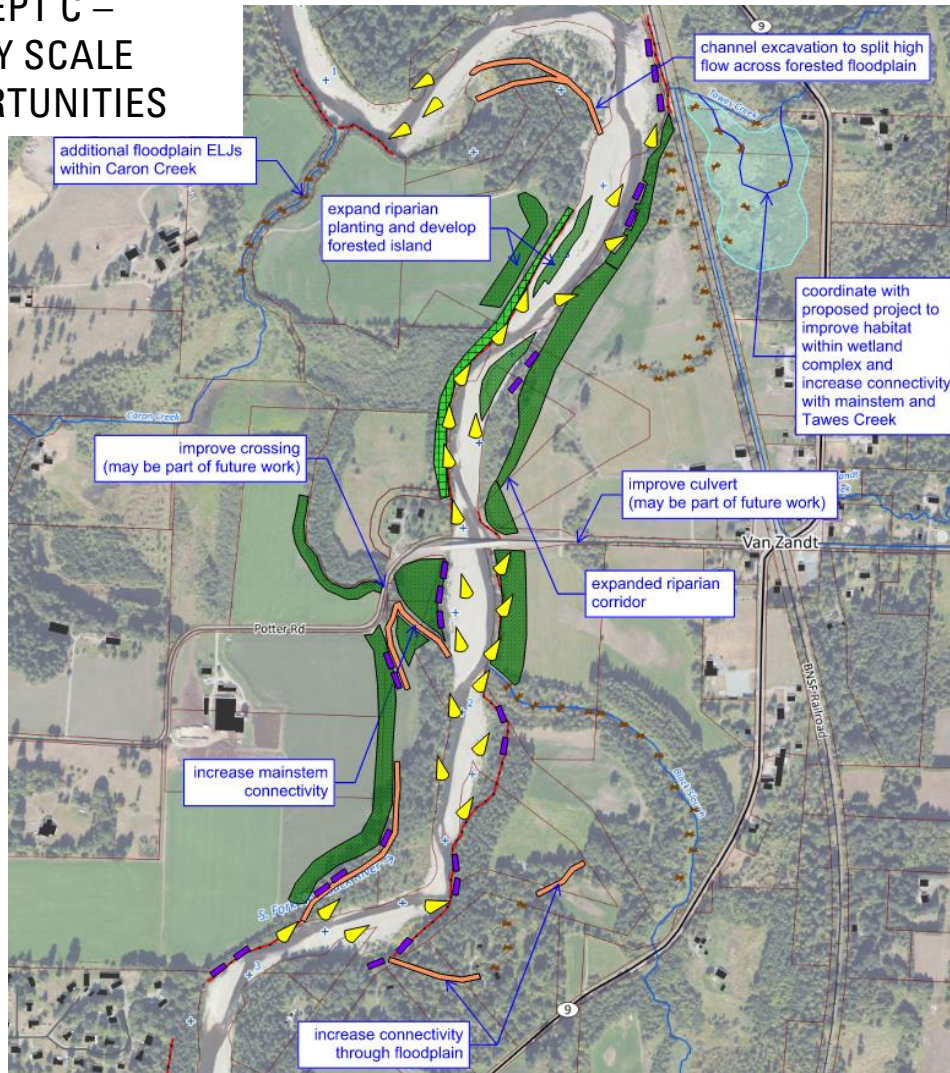
- EXCAVATION
- RIPRAP REMOVAL / MODIFICATION
- ▲ APEX ELJ
- BANK ELJ
- ✦ FLOODPLAIN / HAND BUILT ELJ
- PLANTING

CONCEPT B – INSTREAM + TARGETED OFF CHANNEL OPPORTUNITIES



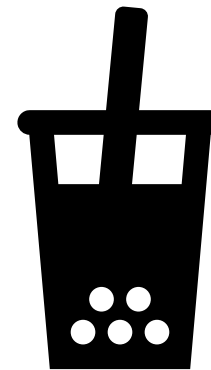
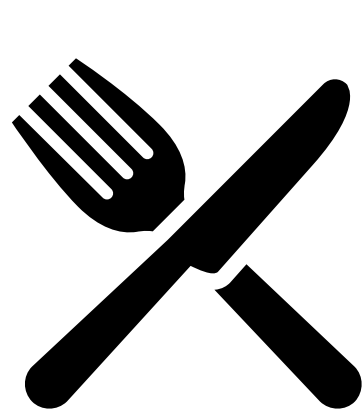
- EXCAVATION
- RIPRAP REMOVAL / MODIFICATION
- APEX ELJ
- BANK ELJ
- FLOODPLAIN / HAND BUILT ELJ
- PLANTING

CONCEPT C – VALLEY SCALE OPPORTUNITIES



- EXCAVATION
- ▬ RIPRAP REMOVAL / MODIFICATION
- ▲ APEX ELJ
- ▬ BANK ELJ
- ✦ FLOODPLAIN / HAND BUILT ELJ
- PLANTING

BREAK



DISCUSSION: DESIGN CONCEPTS

WRAP UP AND NEXT STEPS

1. Lummi will update the project website with summary notes by the end of February
2. Check for updates on the website: <https://www.lummi-nsn.gov/s/>





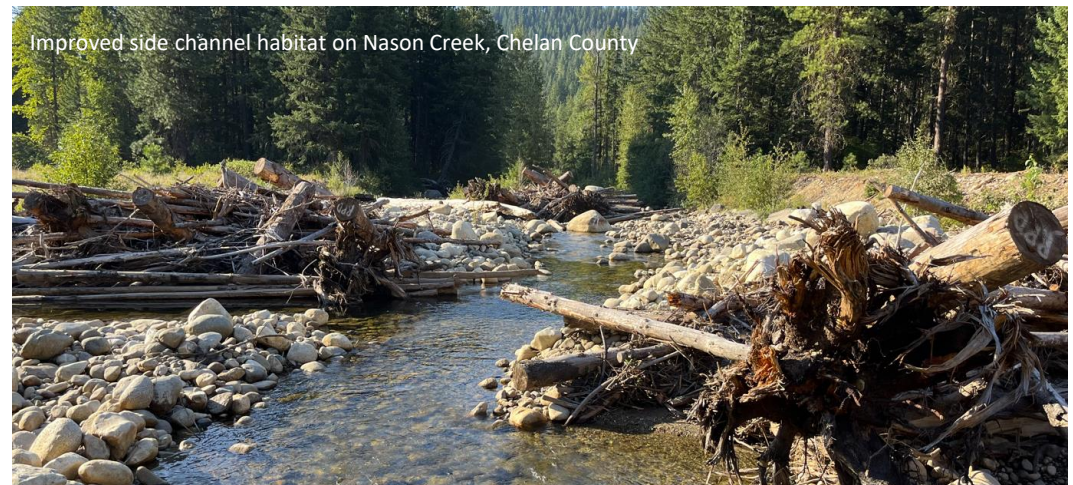
Recently installed ELJ on the Middle Fork Nooksack River



Improved side channel habitat on the Wenatchee River, Chelan County



Recently installed ELJ on the Elwha River, Clallam County



Improved side channel habitat on Nason Creek, Chelan County