

Hamlin Creek Hand Tool Restoration Project

Klawock Indigenous Forest Stewards
Partnership, Southeast Alaska
Watershed Coalition, and the US
Forest Service



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Project Overview

- Located on Kosciusko Island
- Identified as potential project based on red pipe site visit in 2019
- PFC survey in 2020
- Good Neighbor Authority Agreement with Shaan Seet in 2023
- NEPA coverage under Kosciusko Vegetation Management and Watershed Improvement Project EA (2015)



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Design

- Based off notes by Neil Schoenfelder and Helen Sladek
- Justin Anderson preliminary designs
 - LiDAR basemap and site visit notes
- Trees tagged collaboratively KISFP and USFS
- Designed refined after site visit with Justin Anderson and KISFP

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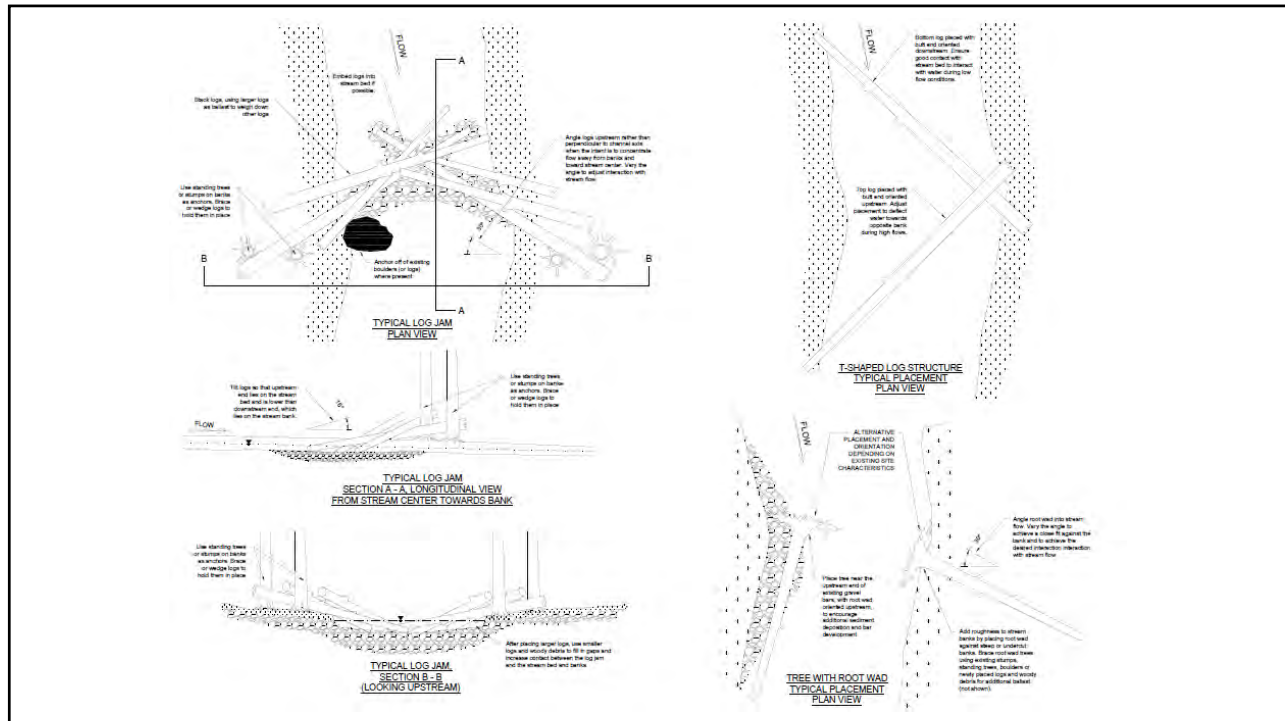
PROJECT OBJECTIVES

1. Provide structure that can interact with stream flows to dissipate energy and moderate flow velocities within the stream channel.
2. Enhance in-stream habitat complexity for resident and anadromous fish and other aquatic organisms.
3. Encourage stream flow to flood on to the central island during high flow conditions.
4. Protect existing in-stream habitat and enhance existing structure where possible.

WOOD PLACEMENT NOTES

1. Wood placed in the stream channel will interact with stream flow in different ways depending on log size and orientation, location within the stream relative to flow patterns, and the degree to which individual logs are interconnected, braced and keyed into the bed and banks.
2. Placed wood will deflect and concentrate flow energy which will cause localized bank erosion and bed scour in certain areas, while causing sediment deposition in others areas.
3. Wood placements that aim to enhance existing stream features or processes will likely be more effective than those aimed at stopping or reversing ongoing processes such as active erosion.
4. Individual logs or log jams will shift and move with high flows but will eventually become embedded in the stream. Wood placement will increase stream roughness, habitat structure, diversity and complexity at the reach scale even as individual features adjust.

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Project Objectives

- Provide structures that can interact with stream flows to dissipate energy and moderate flow velocities
- Enhance in-stream habitat complexity for aquatic organisms
- Encourage stream flows to flood on the central island during high flow conditions
- Protect existing in-stream habitat and enhance existing structure where possible

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Implementation

- 8 structures
- Combination of root wads and cut logs, sourced locally
- Combined with riparian thinning
- 2 crews working simultaneously (big Rob and saucy Rob)



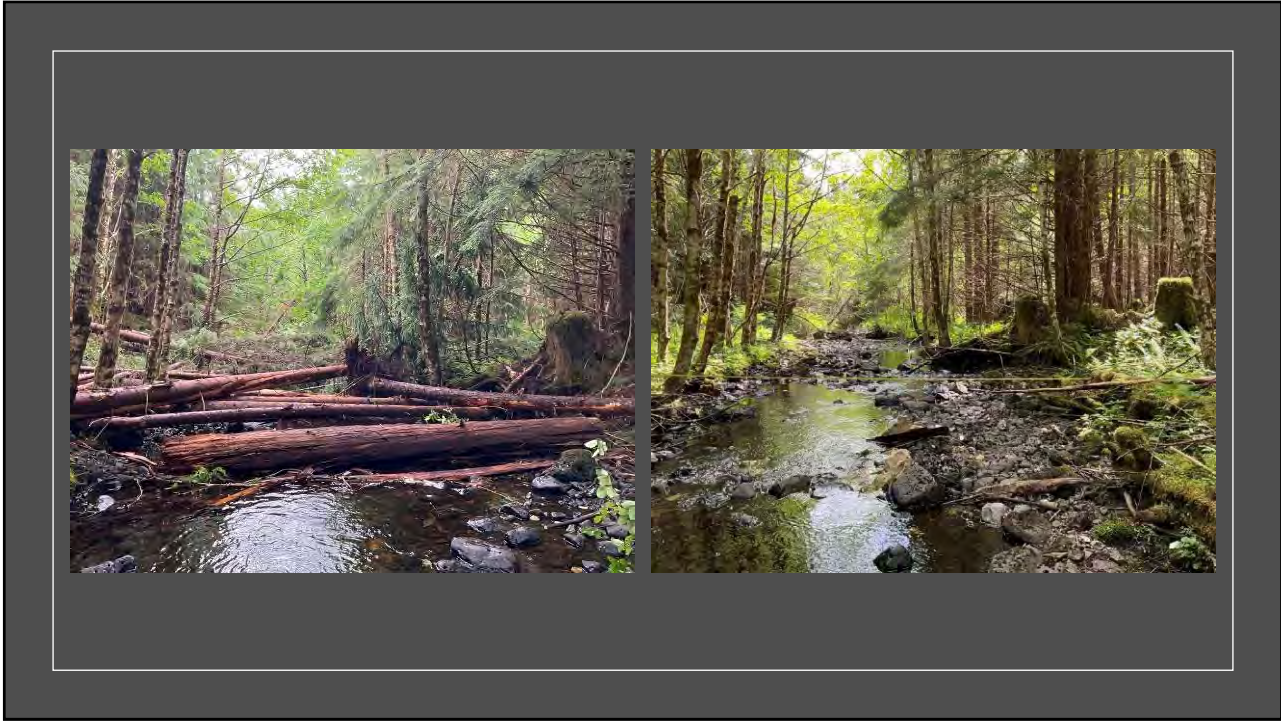
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Monitoring

- Photo points established as mapping points
- Interval camera to monitor main channel



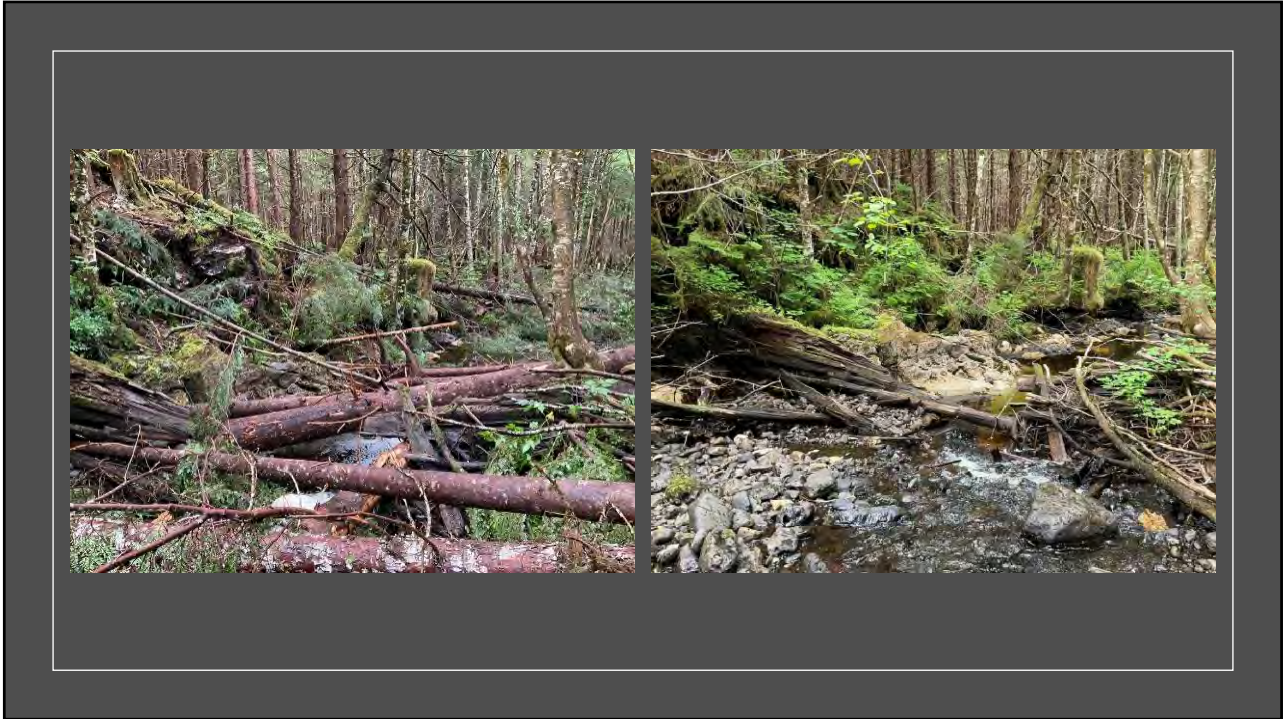
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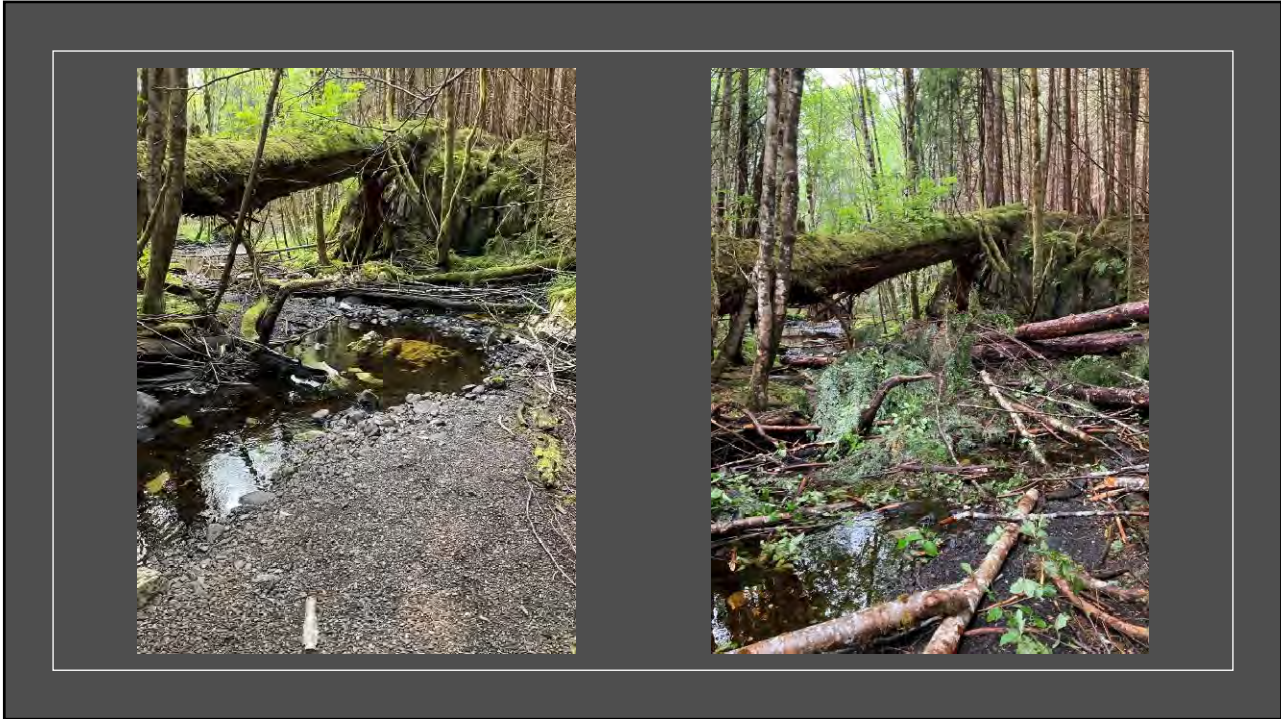
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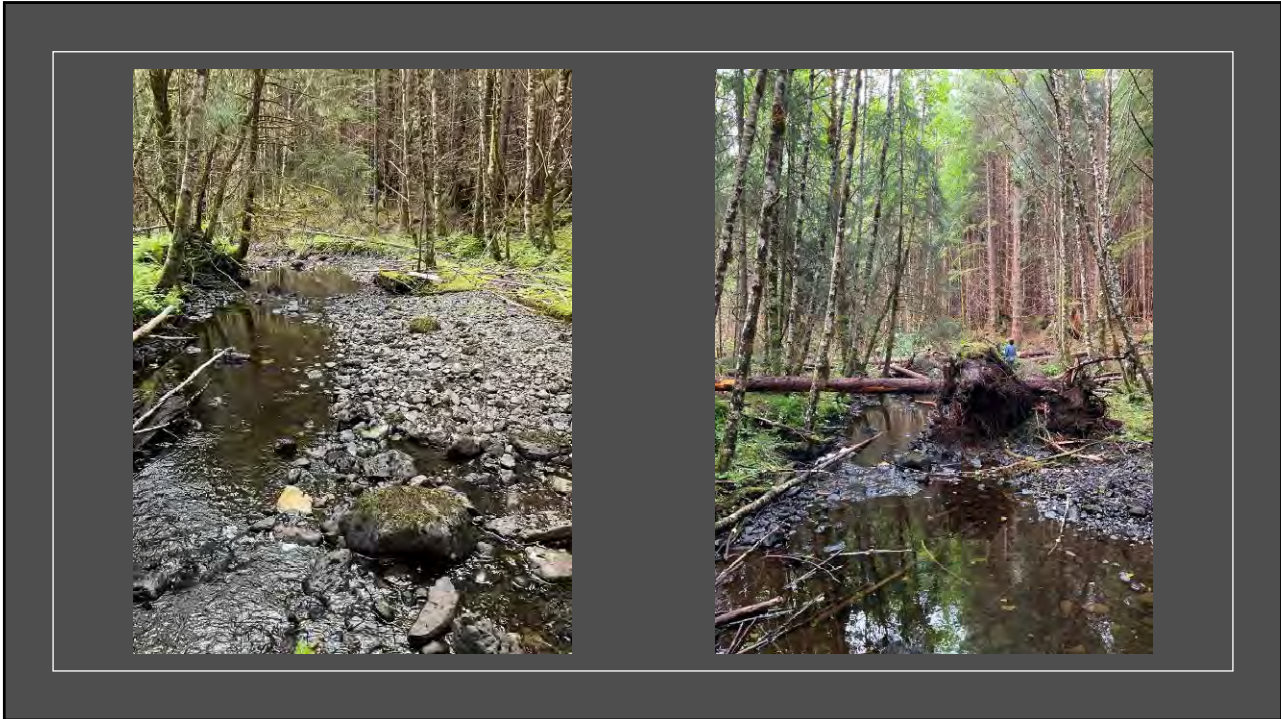
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