

PROJECT FACT SHEET:

SAMSON CREEK

STARTED: 5/23

COMPLETED: 10/23

PROJECT LEAD: TU + TCPW

PROJECT DESCRIPTION

This project replaced an 84" rusted corrugated metal pipe with a 46' clear span bridge, meeting fish passage requirements. The 1942 Bridge Inventory listed this crossing as a 15-ft timber bridge.

Trask River Road is the sole access to this area and a failure at this culvert would have cut off access to numerous residences, state and industrial timber land, and recreational opportunities such as parks, camping, fishing and hunting. Replacing this culvert eliminated a public safety hazard and reduced maintenance costs for the County.

SPECIES + INFRASTRUCTURE

The old culvert was a full barrier to juveniles and a partial barrier to adults, depending on flows. Anadromous salmonid fish species occurring in the Trask Watershed include spring and fall Chinook Salmon, Coho Salmon, summer and winter Steelhead, and sea-run Cutthroat Trout. Resident Cutthroat Trout also occupy most of the streams. Resident Brook and/or Pacific Lamprey likely occur in the watershed but are not well-documented. The Oregon Department of Environmental Quality rates the lower Trask River as temperature impaired for rearing, migration, and spawning criteria. Because Samson Creek is a tributary that enters the lower Trask River it offers essential cold water refugia for all fish in the Trask River during high summer water temperatures. Historic construction of the Samson Creek crossing included a concrete headwall at the intel. The concrete wall having been cast around the old steel culvert obscured structural failure at the inlet. This was in addition to structural failures of the pipe through the remainder of the crossing. Prior to the now completed restoration project, considering this combination of failure mechanisms, the crossing was set up for unpredictable catastrophic failure.

COMPLETED SOLUTION

The undersized culvert was removed and replaced with a 46' clear span bridge, restoring 1.3 miles of upstream spawning and rearing habitat. The streambed was reconstructed using streambed simulation methodology. This technique emulates the stream's natural bedform, including gravels and boulders, to create optimal fish habitat and passage. We also removed an old concrete structure at the inlet of the culvert.



This undersized culvert also had a one-foot jump that not all fish could make.



The New bridge provides ample room for fish passage and a safe structure for residents.

BENEFITS

Trask River Road (single road access to area)

- Improved public health and safety
- Maintains emergency responder access
- Maintains wildland fire access
- Maintains business access
- Removes a flood risk

Samson Creek (high quality habitat)

- Unimpeded passage for fish and access to spawning and rearing habitat
- Natural stream processes restored
- 1.3 miles of habitat reconnected



SAMSON CREEK

CULVERT REPLACEMENT

HIGHLY SUCCESSFUL PARTNERSHIP

The Samson Creek project was successfully implemented with the collaboration of Salmon SuperHwy partners. Federal and state agencies along with willing private landowners combined technical skills and funding to reopen this important local road and reconnect high quality spawning and rearing habitat for Oregon's anadromous fish.

Trout Unlimited worked closely with Tillamook County Public Works Department, Oregon Department of Fish and Wildlife, and US Fish and Wildlife Service, US Forest Service, Oregon Watershed Enhancement Board, National Oceanic and Atmospheric Administration

PARTNERS

Trout Unlimited, Tillamook County Public Works Department, Oregon Department of Fish and Wildlife, and US Fish and Wildlife Service, US Forest Service, Oregon Watershed Enhancement Board, National Oceanic and Atmospheric Administration

COST + FUNDING

TOTAL PROJECT COST: \$ 1,500,000 + \$28,000 in kind USFWS: \$127,K+ \$10K in kind technical assistance + federal compliance

USFS: \$127,000

TCPW: \$30,000 + \$18k in kind, technical assistance & oversite

OWEB: \$491,000 ODFW: \$131,000 NOAA: \$594,000

CONTRACTOR

Farline Bridge Construction, Inc.

"We were excited to observe coho fry distributed throughout the project site within days of project completion."

- Jacob Jesionek, Salmon SuperHwy Restoration Project Manager, Trout Unlimited



DURING: A temporary bypass bridge keeps traffic moving while the old culvert is replaced.



DURING: Aquatic species are moved to safety before construction begins



AFTER: Most of the culverts replaced during Salmon SuperHwy projects are just as worn out and rusted as this one was. The new bridge is a much longer term solution and will keep this "Priority 1 Lifeline" road operational year-round for decades to come.



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CULVERT REPLACEMENT













Photos by Trav Williams/Broken Banjo Photography, Jesse Andrew Clark and Nathan Holdstedt.