

PROJECT FACT SHEET:

TOMLINSON CREEK

STARTED: 8/20

COMPLETED: 9/20

PROJECT DESCRIPTION

Tomlinson Creek is a tributary of the Tillamook River and Tillamook Bay. Two culverts that occurred on private driveways crossing Tomlinson Creek were impeding fish passage and natural stream processes including transport of nutrients and sediment. SSH worked with the private landowners to reduce the two stream crossings to one by combining transport over the creek via one new bridge, removing the remaining culvert altogether and restoring the stream channel.

SPECIES + INFRASTRUCTURE

Tomlinson Creek is used by ESA listed threatened coho salmon, Chinook, steelhead, cutthroat trout, and lamprey. The stream is an important rearing habitat for coho, and showed significant production levels in the 2005 – 2007 Rapid Bio Assessment juvenile fish surveys.

The two culverts were identified high priority in the Tillamook River Coho Restoration Strategy (2009), Culvert Assessment and Prioritization Plan for Fish Passage in the Tillamook Bay Watershed (2012), and the Salmon SuperHwy fish passage prioritization. During high flow events, the undersized culverts back up water into the field upstream, which overtops Bayocean Road. The habitat upstream of the culverts passes alongside agricultural land then enters industrial timberland. Both target culverts were undersized and very deteriorated, with the downstream culvert at critical failure potential.

COMPLETED SOLUTION

The two barrier culverts were removed and replaced with a 16' clear span concrete modular bridge, restoring full volitional access to 0.5 miles of 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. Rootwads that were removed when clearing for the bridge construction were installed in the downstream project area for habitat enhancement.



BEFORE: Both target culverts were undersized and very deteriorated, with the downstream culvert at critical failure potential.



AFTER: The two barrier culverts were removed and replaced with one 16' clear span concrete modular bridge, restoring full volitional access to 0.5 miles of spawning and rearing habitat.

BENEFITS ACHIEVED

- Restores access to 0.5 miles of anadromous fish habitat
- Improves sediment and large wood transport
- Provides safe, climate resilient access for private landowners.



TOMLINSON CREEK

CULVERT REPLACEMENT

HIGHLY SUCCESSFUL PARTNERSHIP

The Tomlinson Creek project is a great example of the collaborative nature of the Salmon SuperHwy. Federal, state and local partners worked with private landowners to implement the project successfully, improving the safety of the landowners' property access while removing two fish passage barriers in one project.

The US Forest Service provided engineering designs, federal permitting and technical assistance in project implementation, as well as cash contribution. The US Fish and Wildlife Service provided cash contribution. Trout Unlimited provided project management, state & local permitting and contracting. Tillamook Bay Watershed Council provided landowner outreach. Tillamook Estuaries Partnership provided administrative support. The Oregon Department of Fish & Wildlife provided technical assistance in project implementation. Finally, the Oregon Watershed Enhancement Board cash contribution.

PARTNERS

US Forest Service, US Fish and Wildlife Service, Tualatin Valley Chapter of Trout Unlimited, Tillamook Bay Watershed Council, Tillamook Estuaries Partnership, Oregon Watershed Enhancement Board, Oregon Dept. of Fish and Wildlife

COST + FUNDING

TOTAL COST: \$322,790

USFWS: \$66,073

USFS: \$198,517 plus \$40,000 in kind

OWEB: \$15,000

ODFW: \$1,000 in kind TU (TV Chapter): \$2,200 "The success of the Tomlinson Creek Project can be attributed to SSH partners and land owners working together, which encouraged technical knowledge transfer and acquisition of funds."

- Adriana Maria Morales, District Fisheries Biologist



DURING: Construction was completed by CatWorks, which did an excellent job materializing SSH partnership's vision in real time.



DURING: The streambed was reconstructed using streambed simulation methodology which emulates the stream's natural bedform to create optimal fish habitat and passage.



TOMLINSON CREEK

CULVERT REPLACEMENT













Photos by Justin Bailie.