U.S. Fish & Wildlife Service

Fish, Trains, & Automobiles

Meeting Human & Fish Transportation Needs

It's not cheap—or easy—to replace a pair of 80-foot long, fish passage-blocking culverts with a bridge that carries both vehicular traffic and rail cars. It's even harder to do so while simultaneously meeting stringent structural requirements for a local railroad line, county highway standards, and fish passage criteria.

Coho salmon will benefit from the Roy Creek Restoration and Fish Passage Project. Photo Credit: NOAA-Fisheries

Thanks to a strong, collaborative effort involving multiple partners, a new 36-foot wide bridge across the mouth of Roy Creek, a Lower Nehalem River tributary along the Oregon Coast, does just that and more. Native fish from coho salmon to Pacific lamprey now have unimpeded access to nearly three miles of high quality habitat, and Tillamook County now has new, safer highway and railroad infrastructure that can withstand peak flows and flooding better than the old culverts ever could.

Timing Is Everything

Bridge construction in 2012. Photo Credit: USFWS

Even though the culverts running under Foss Road and the Port of Tillamook Railroad line had been rated as a top priority for infrastructure and fish passage improvements for nearly a decade, the high cost of the project, the economic downturn, and the impact construction would have had on rail traffic made completing the project a challenge. When a 2007 storm damaged nearby railroad lines along Foss Road, a window of opportunity opened to lessen costs by designing and implementing the project while the railway was in limited operation. And partners jumped at the chance.

Partnering for Success

Planning, design, and construction of the nearly $1 million project required many hands, including Tillamook County, the Lower Nehalem Watershed Council, private landowners, the Oregon Watershed Enhancement Board, the Oregon Department of Fish and Wildlife, the Port of Tillamook Railroad, the Tillamook Estuaries Partnership, the NOAA Community-Based Restoration Program and American Rivers, the National Fish and Wildlife Foundation, and of course, the Service. Our agency used National Fish Passage Program and Partners for Fish and Wildlife funding to pay for a construction-ready engineering design, a key piece of the project, as well as some construction costs. Service biologists also took the lead on securing federal environmental compliance

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documents and helped write grants that secured additional dollars for construction.

Before: *The old culverts at Roy Creek's Foss Road blocked fish passage upstream for nearly three miles.* Photo Credit: USFWS

Now: *Roy Creek's new Foss Road bridge better accommodates winter flows making automobile and rail travel safer.* Photo Credit: USFWS

Designs On Improving Roy Creek's Resiliency

Humans and fish are already benefitting from the new crossing, but so is Roy Creek. And that's by design—literally. Climate change step-down models for the Oregon Coast indicate that, over time, peak flows for area rivers and streams will increase, both in frequency and intensity during winter and spring seasons.

Designed to be more than one and a half times Roy Creek's bankfull channel width, the new bridge allows the creek to better accommodate higher flows during storms than the original culverts. That's critical for restoring and sustaining natural stream dynamics, which are ultimately safer for people and fish. A more resilient stream system and infrastructure that facilitates flows minimizes erosion, reduces the likelihood that gravel beds important to spawning fish will be scoured away, and keeps stream banks more stable.

> *"This just shows what can be done when people at the local community level, stakeholders and leaders, are encouraged and aided by government agencies at all levels. Bottom up and grassroots thinking, aided by county, state and federal experts and funds. What an idea…very Oregonian."*
>
> --George Hemingway, Chairman, Lower Nehalem Watershed Council

Read More About The Project

http://www.tillamookheadlightherald.com/ncc_news/article_9e616b2b-dafb-5a96-b100-805ae1596245.html

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