

# Government Engineering

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## Cooperation Restores Salmon Habitat

**W**here can birds and fish both feel at home? At different times, each makes a home among trees. Standing Douglas firs make great roosting and nesting habitat for a host of migratory birds. When age or strong winds topple the fir trees into a river, they form shelters in the current that are ideal rest and relaxation spots for migrating Oregon Coast Coho salmon.

And the salmon need a break: They have only recently been removed from the endangered species list. So when the Oregon Department of Transportation (ODOT) and partners Slayden Construction, Parametrix ([www.parametrix.com](http://www.parametrix.com)), and the Oregon Department of Fish and Wildlife (ODFW) had a chance to expand and improve Coho habitat, they got together to share some trees.

As part of the \$1.3-billion Oregon Transportation Investment Act III State Bridge Delivery Program, ODOT is repairing or replacing hundreds of bridges around the state. On Oregon Highway 38 near Cottage Grove, the replacement of five bridges requires removing about 300 trees. But they will not go to waste. After Parametrix and Slayden cut down or uproot the trees, the Oregon Department of Fish and Wildlife (ODFW) will transport them to the Umpqua River basin to improve the river's ability to host salmon.

"This project demonstrates exactly the sort of proactive cooperation envisioned in the Oregon Plan for Salmon and Watersheds," said Geoff Crook, ODOT environmental program manager. "In the past, these trees would have been sent to a mill. ODOT is jumping on opportunities to fulfill its commitments to the Oregon Plan."

"We've moved four truckloads—about 60 logs—so far, and expect to end up with about 20 truckloads from

the entire project," said Bill Cannaday, habitat restoration biologist in ODFW's Roseburg office. "These trees will help us restore 13 miles of Paradise Creek, and we expect to use about 150

more to restore Brad's Creek."

Randy Reeve, environmental manager for Parametrix and former ODFW biologist, helped initiate the project and understands the benefits to fish.

"We lay the biggest trees down from the bank, so they interlock as a main structure that won't wash downstream in high water," Reeve said. "The pools that form underneath make good rearing habitat for young fish. The tree branches catch the leaf litter and needles that are food for everything from plankton to bugs, which in turn feed the salmon."

Behind the scenes, an equally intricate network of collaboration makes habitat restoration economical and successful. ODOT's bridge program hosts tours of its projects for environmental regulatory agencies. When ODFW biologists see opportunities such as this, they recommend a course of action that ODOT writes into its contracts with private firms such as Slayden and Parametrix. And funding for such projects takes place through the Oregon Watershed Enhancement Board and local watershed councils, which apply for grants from the Bureau of Land Management and the USDA Forest Service.