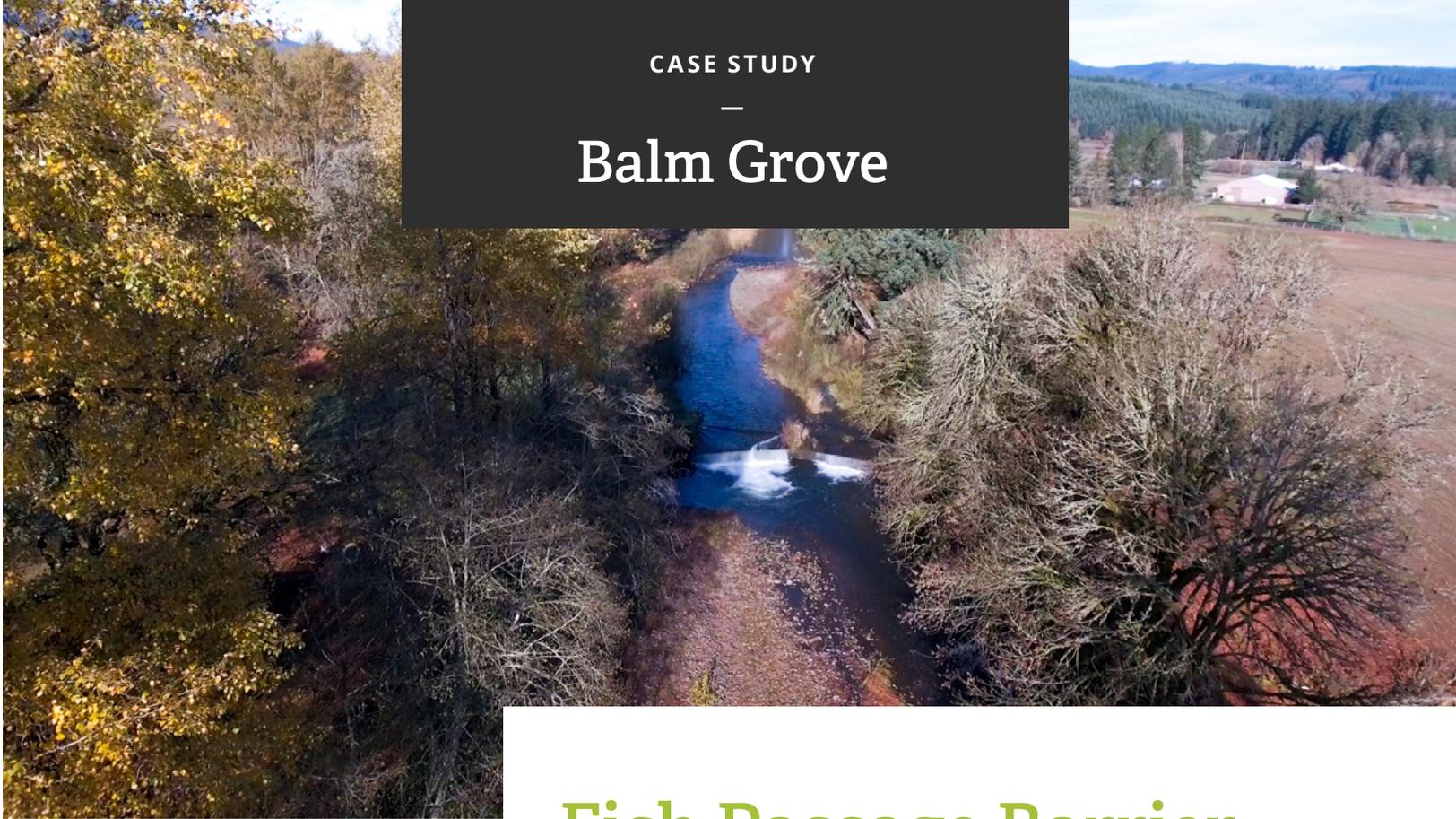


CASE STUDY

Balm Grove



Fish Passage Barrier Removal Will Open Up Prime Habitat

GALES CREEK winds for more than 50 miles through western Washington County, offering some of the best fish habitat in the region. But 12 miles upstream from where Gales Creek joins the Tualatin River, an obsolete, three-foot-tall concrete structure at Balm Grove has impeded fish passage for decades, blocking access to more than 25 miles of high-value spawning habitat. Gales Creek, alone in the Tualatin Valley Watershed, is recognized as critical habitat for winter steelhead, an anadromous (migratory) fish listed as threatened under the Endangered Species Act. The creek is also home to cutthroat trout and lamprey, as well as anadromous coho salmon, which travel hundreds of miles during their lifetime and eventually return to their birth streams to lay their eggs.



Tree for All engages communities large and small in conservation projects throughout the Tualatin River Watershed in Oregon.

JOINTREEFORALL.ORG



The Site

SIZE 12 acres

FIRST PLANTING PLANNED TBA

STREAM LENGTH 1,167 feet

Partners update the community at a project open house

The Challenge

Five decades ago, Balm Grove Dam was built to create a swimming and boating area north of Forest Grove. Over time, however, after zoning and ownership changes, the site ceased to function as a recreational facility. Yet the structure remained in place, creating a bottleneck between the stream's upper and lower reaches.

By raising water temperatures and altering flows, the structure has a negative effect on all fish species in Gales Creek. Additionally, it functions as a physical barrier to all but the strongest of the anadromous fish. The more that Tree for All partners learned about the structure's effect on fish passage, the more concerned they became. Clean Water Services, Tualatin Riverkeepers, Tualatin River Watershed Council, Oregon Department of Fish and Wildlife, and Metro all declared the Balm Grove site as a top restoration priority.



This project will open up more than 25 miles of prime habitat to cutthroat trout, coho salmon and winter steelhead.



Balm Grove dam in fall 2016.

The Transformation

In 2016, the owners of the property that includes the fish passage barrier put it on the market, and Tree for All partners purchased the site. Staff soon embarked upon project planning, to develop a design for riparian restoration; a determination of full versus partial removal of the concrete structure; decisions about adjustments of the channel bed and banks; and a long-term stewardship strategy.

In 2017, the team launched a geomorphic assesment of the stream, to help predict and guide the stream's response to barrier removal. Site preparation, including mowing and the removal of undesirable plants, began at that time as well. The two years since then have been a time of preparation, including project design, permitting and contracting, along with continued removal of invasive plants.

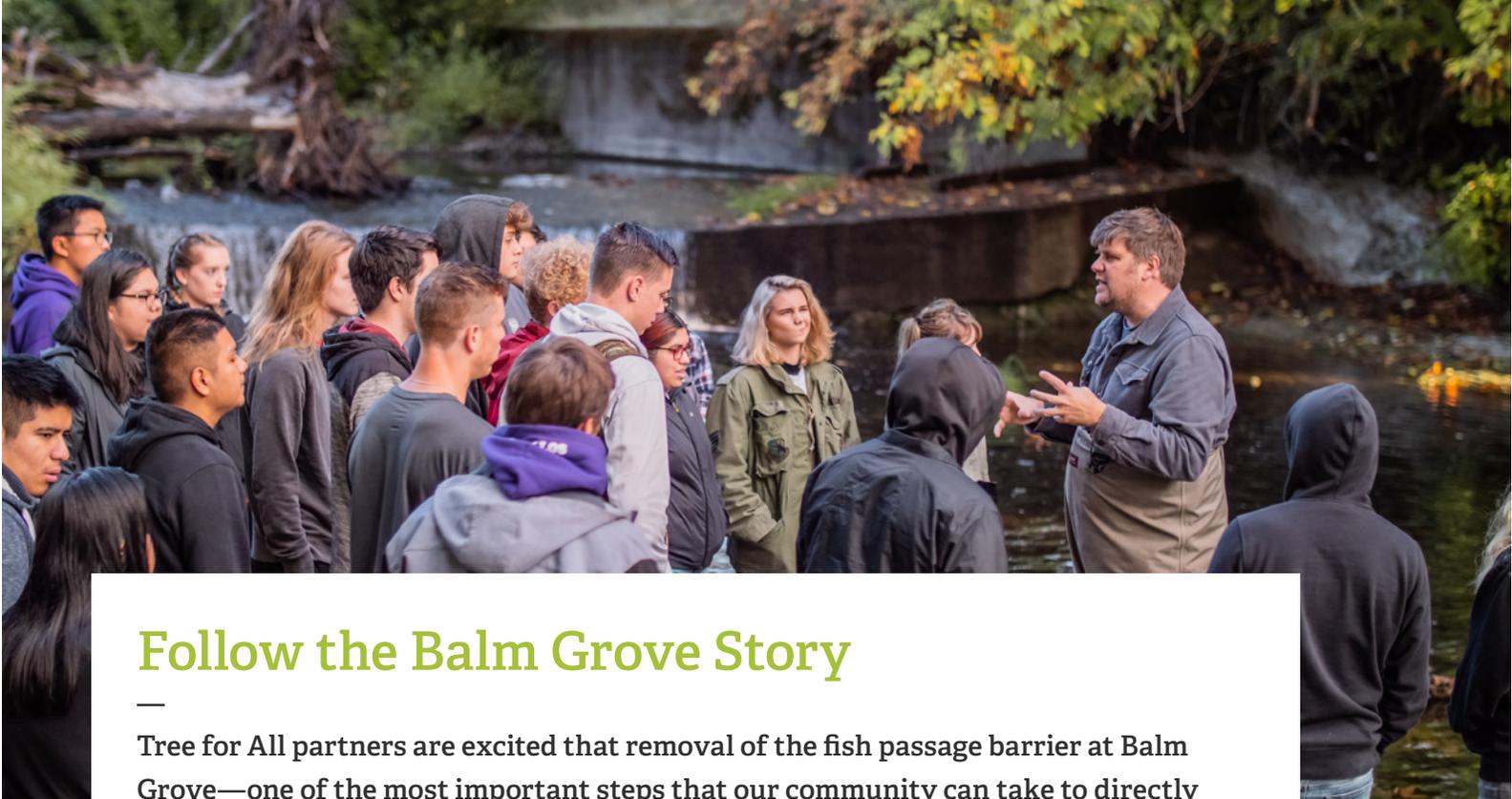
Barrier removal will take place over two summers, followed by intensive planting and long-term monitoring. Most of the heavy equipment activity will take place in the first summer. A second phase will follow, as the team makes any adjustments necessary after a year of observing how the

creek behaves once free of the barrier. After that, the multi-year revegetation process will take place, including several opportunities to participate in volunteer planting events. Removal of the barrier could begin as early as the summer of 2020 and could last two summers. In the long term, partners will monitor conditions in and around the stream, making adjustments as needed to promote ecological health.

As the permitting process continues, current activities at the site include occasional project open houses and community meetings, as well as a community science/student education program through Portland State University's Student Watershed Research Project. Through SWRP, high

school students are learning about the watershed while building a long-term water quality data set that will help provide insights about stream condition, ecology and biodiversity.

This project will open up 25+ miles of prime habitat to cutthroat trout, coho salmon and winter steelhead. Since a stream that's healthy for fish is healthy for recreational activities, the project is expected to increase birding, fishing, hiking and camping in the public lands along upper Gales Creek. Tree for All partners are excited that removal of the fish passage barrier at Balm Grove—one of the most important steps that our community can take to directly benefit aquatic life in the Tualatin River Watershed—is finally within reach.



Follow the Balm Grove Story

Tree for All partners are excited that removal of the fish passage barrier at Balm Grove—one of the most important steps that our community can take to directly benefit aquatic life in the Tualatin River Watershed—is finally within reach.

Learn more at jointreeforall.org/balm-grove.



Clean Water Services, Tualatin Riverkeepers, Tualatin River Watershed Council, Oregon Department of Fish and Wildlife, and Metro all declared the Balm Grove site as a top restoration priority.

Learn more about TFA partners at:
jointreeforall.org/partners

Above: The Student Watershed Research Program uses Balm Grove as a community science site. Left: Staff and consultants have conducted a geomorphic assessment of the stream, to help predict and guide the stream's response to dam removal.

Key Partners

