

The Klickitat: A River Reborn

We are all connected by our rivers. Those downstream receive our waters, those upstream, our salmon. The Klickitat is a conveyor of culture and resources, moving through this landscape and through time.

Rivers are dynamic, shaping habitat features like islands, side channels, beaches, and gravel bars, which fish use for cover, for food, and to reproduce. The road you are standing on acts like a straight-jacket, limiting the river's ability to form important habitat features.

Columbia Land Trust and Yakama Nation Fisheries Program partnered for over a decade to remove eight miles of the road upstream to improve fish habitat – an extraordinary effort unparalleled in salmon country.

We welcome you to the Klickitat River Haul Road Corridor. We hope you enjoy your time here.



1M+ years BCE

The Beginning

Over one million years ago, water flowing from Mt. Adams (*Pahto*) and the Goat Rocks Wilderness carved dramatic canyons through vast sheets of volcanic basalt flows.

Photo credit: Doug Gorsline



From time immemorial to present day

First Peoples

The Klickitat Indians (*Xwatxway-pam*), making their seasonal rounds, fished for salmon (*nusux*), steelhead (*shushinsh*), and Pacific lamprey (*asum*), lived and camped along the river's banks, hunted and collected roots, berries and acorns from the woodlands and meadows on the surrounding hillsides. Tributary confluences served as gathering places for feasts and ceremonies. The descendants of the *Xwatxway-pam* Band continue to gather foods in this area, passing on important traditions to future generations.

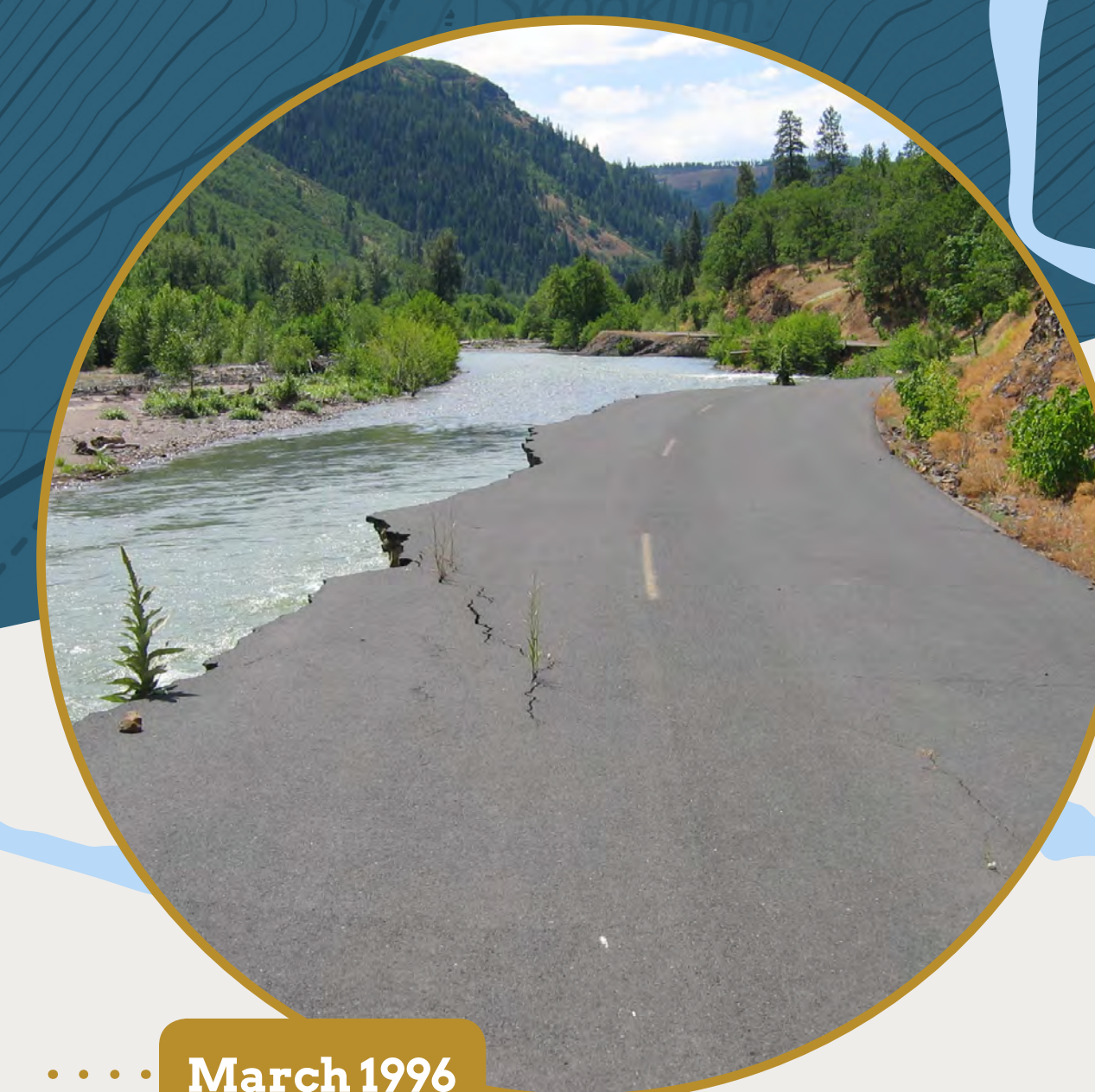
Photo credit: Doug Gorsline



Early 1900's

Industrial Change

In the early 1900's, timber harvest and grazing activities practiced by European immigrants and their descendants spurred the construction of a railway from the Little Klickitat River to Glenwood. This railway, which was later converted to a two-lane paved road, conveyed timber to the mill at Klickitat. It was built in the floodplain of the Klickitat River.



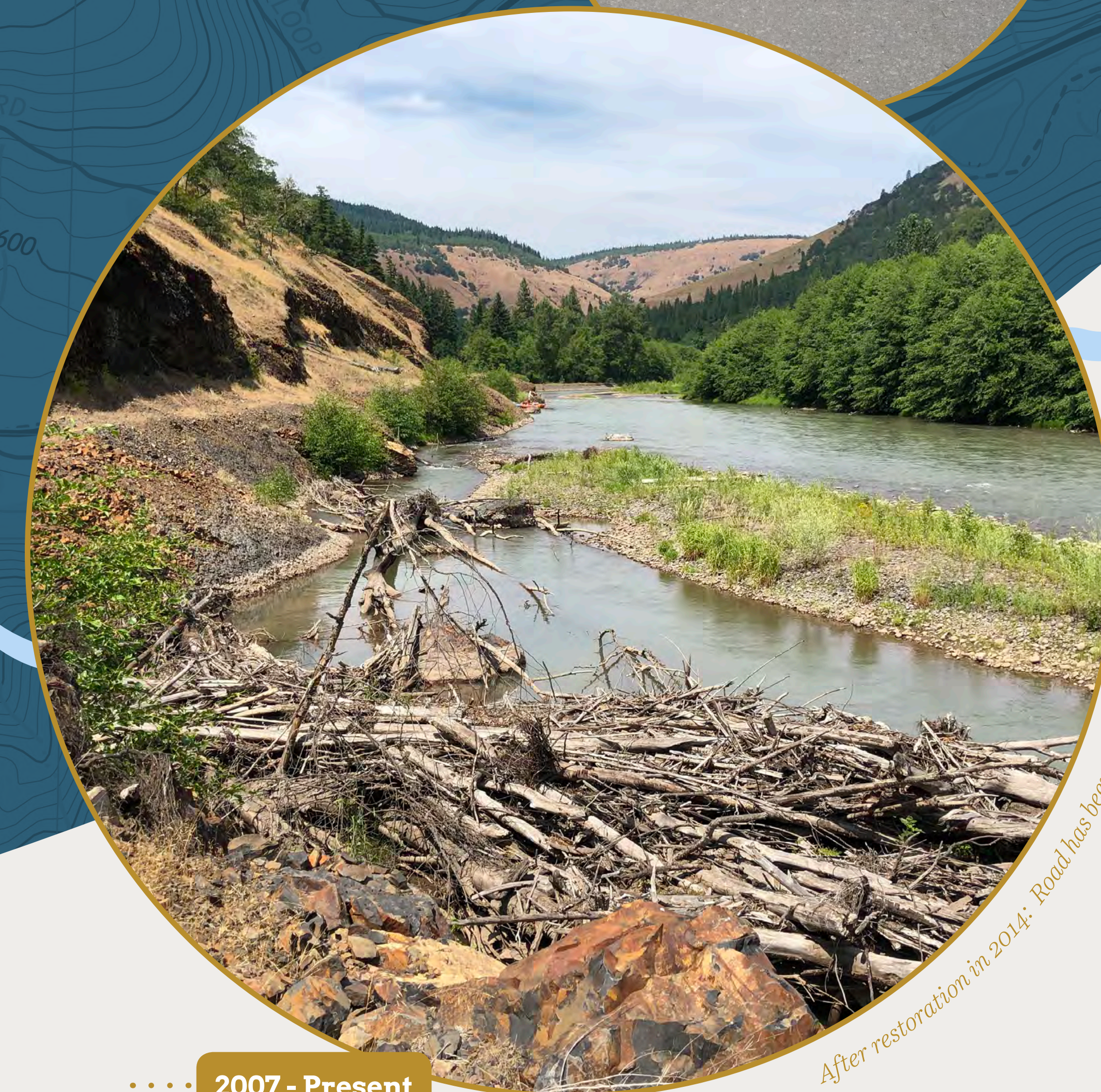
March 1996

The End of an Era

Each of our lives represents a sliver of time in this river's history, but we love it as though it belongs to us. The river has been many things to many people over the years: provider of fish and wildlife, conveyor of timber, garden of first foods, place of renewal and adventure, home. In 1996, floods washed away over a half mile of road fill and asphalt, ending the corridor's brief era as a through-way for transporting forest products, and opening the door on a remarkable opportunity to restore river function.



Before restoration, in 2013: Road is in the floodplain.



After restoration in 2014: Road has been removed and a side channel restored.

2007 - Present

Unprecedented Restoration

In 2007, Columbia Land Trust and Yakama Nation Fisheries Program commenced restoration efforts to remove eight miles of remnant road infrastructure, restoring the river's ability to shape fish habitat through this reach. The corridor remains an important place for fishing, hunting, boating, hiking, harvesting first foods, and enjoying quiet nature.



A NEW BEGINNING

We don't expect the corridor to stay the same, in fact, we expect change. Watch from year to year how the river shapes and reshapes habitats and enjoy getting to know this river, reborn.



How Can a Road Hurt Fish?

A floodplain is the flat area between hills where the river flows. The road creates a barrier between the river and important features of its floodplain, like walls of bedrock.

Walls of bedrock, or cliffs, drive the formation of habitat for fish. Pools develop at the base of bedrock, providing safe places for adult fish to rest and rejuvenate on the intense journey upstream, and gravel bars and islands develop downstream. Since the early 1900's, a road was located between the river and its bedrock. Many of these important habitat features disappeared. With the road's removal, they are back.

Plants and large wood along the shoreline provide homes for aquatic insects, which fish feed on.

Logs floating down the river may catch on gravel bars and jagged shorelines, providing important cover for young fish.

Water collides with hard bedrock and is forced down into the riverbed, where it scours pools.

After the water collides with bedrock, it slows down. Gravels suspended in the water drop out, forming gravel bars. Fish use sorted gravels for spawning and side channels for refuge from faster-moving water.

Before and After



Before (2013): The road is between the bedrock and the water.



Immediately following road removal (2014): River contacts bedrock.

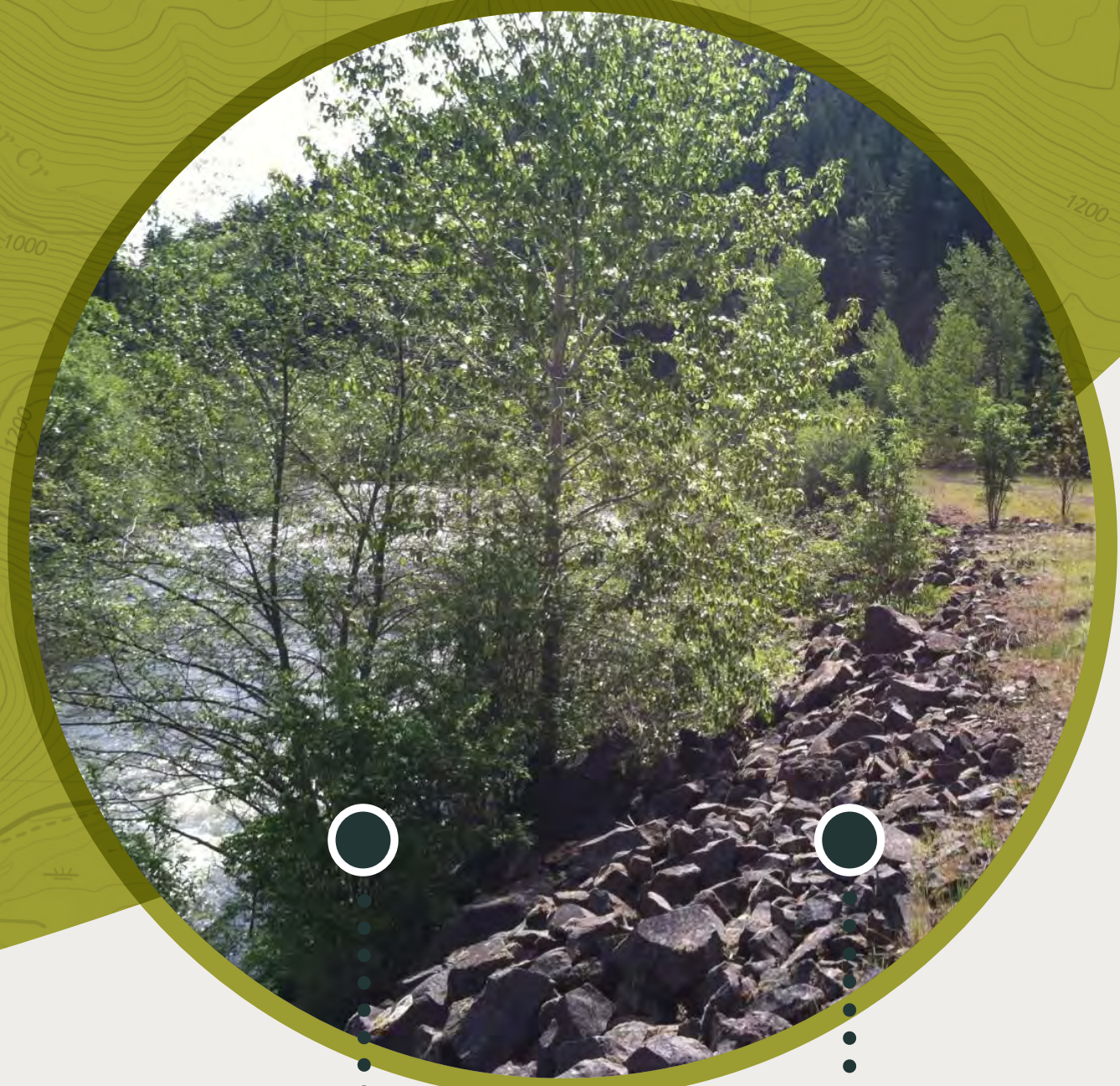
5 years later (2019, large photo): More complex habitat is developing – gravel bar, side channel, pools, large wood.

Wasn't It Fine Before?

There were plants growing along the road, so wasn't it fine before?

No. Trees don't grow well in the large, angular rock (rip rap) placed between the road and the river to protect the road from erosion. Roots can't get a firm hold in the large rock. Trees that grow there can be scoured away during floods. Behind the thin screen of shrubs and trees that grow along the shoreline is the asphalt or the compacted rock surface of the road, where nothing grows at all.

Removing the road fill and the rip rap rock along the shoreline allows native plants to once again grow and mature, contributing to a healthy river system.



This vegetation is easily ripped from the shoreline during major flood events.

Rip rap rock anchors the road from erosion and prevents plant roots from securely anchoring along the shoreline.

2010



Restoring Natural Processes

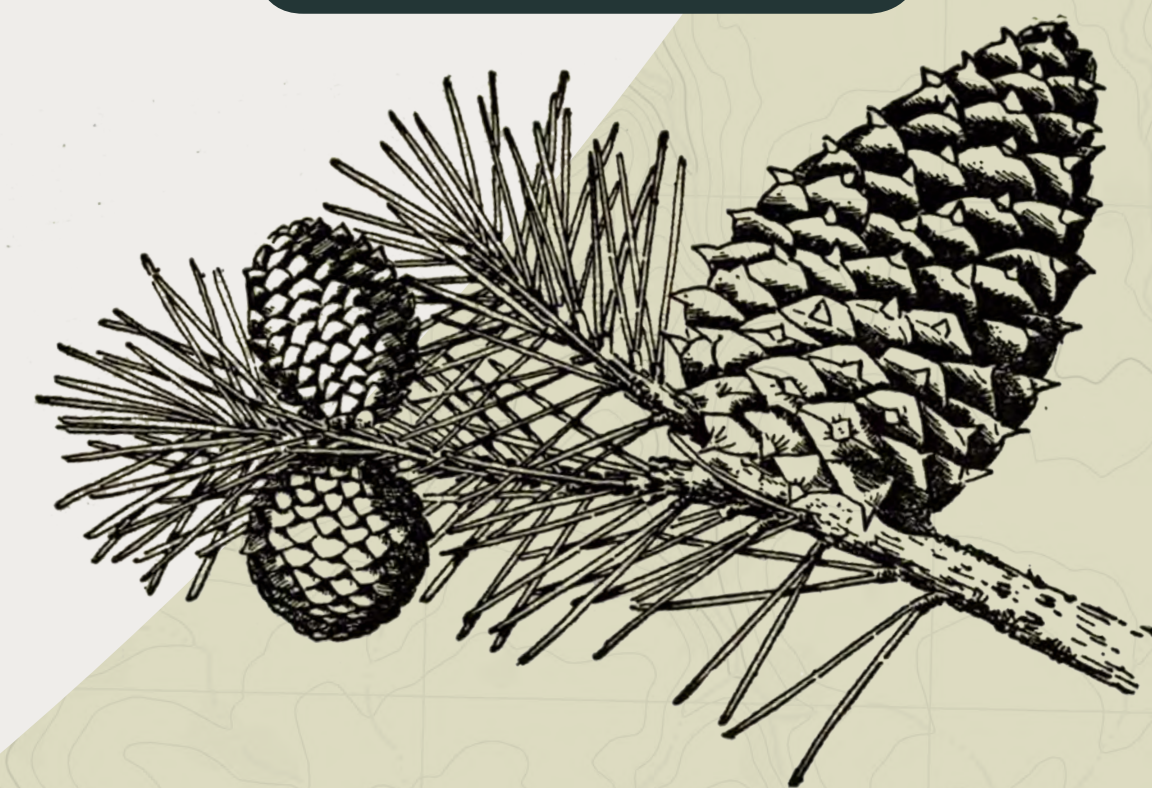
In 2010, this young volunteer helped plant a tree in the restored corridor. This is that boy and the tree he planted in 2019.

2019



Restoring natural processes takes a long time. Over the next few centuries, this tree will cast shade over the river, drop seeds and insects from its crown, shelter birds and small mammals, and may someday end up as a log in the river, sheltering fish.

We removed eight miles of asphalt and moved 300,000 tons of road fill. In its place we planted more than 50,000 native trees and shrubs.



**8 MILES
OF ROAD REMOVED**

**50,000 NATIVE TREES
& SHRUBS PLANTED**

A River Loved By Many

The Klickitat River has long supported the needs of people and, with thoughtful stewardship, can continue doing so. This is a place we come for sustenance, for rejuvenation, and for good old-fashioned fun. This river provides for us.

What can you do for the river?



Spend time with the river and advocate for its resources



Get to know the plants and animals who live here

Student studies insects on the Klickitat River



Learn the qualities of a healthy river and watch for warning signs

Goldendale Middle School samples water quality on the Klickitat



Understand and honor treaty obligations

Man fishes from platforms at Lyle Falls



Honor seasonal fire closures to prevent unintentional fires



Remove trash when you find it



Share your love of this place with the next generation

Volunteers enjoy biking and pulling weeds along the roadside



Assist with recovery and stewardship efforts

Volunteers plant trees in the restored area

What Do You See Now?

In 2016, the road and the imported dirt and rock it was built on were removed, allowing the river to once again shape its own shoreline. As the river rises and falls, beaches appear and then wash away only to reappear again, plants grow and mature, driftwood piles up or is washed downstream. Look up. What does this spot look like today?

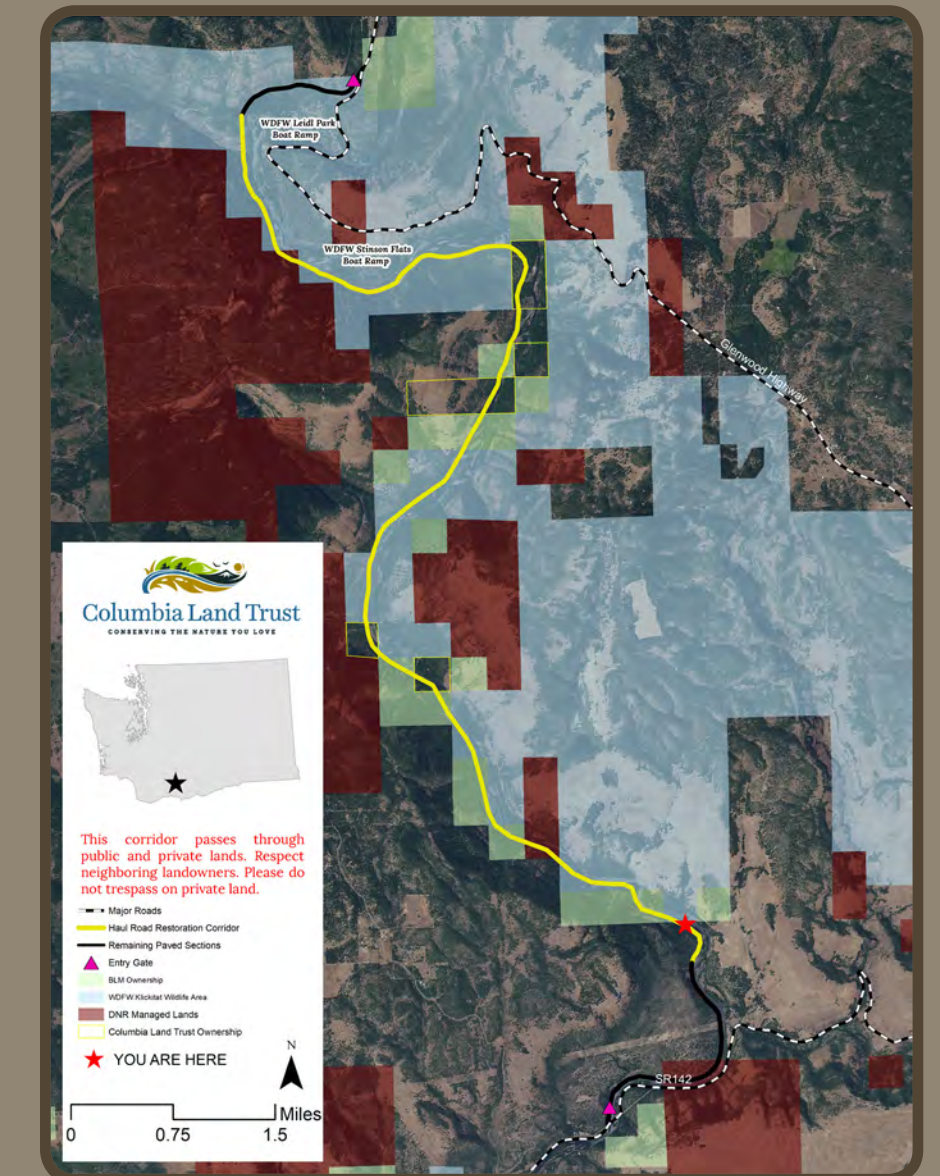


GREEK PHILOSOPHER, HERACLITUS SAID,

"You cannot step into the same river twice, for it is not the same river and you are not the same person."

ENJOY YOUR DISCOVERIES!

Floodplain Restoration



The restoration area extends another eight miles upstream. The floodplain and shoreline have been returned to their natural state. The water will rise and fall, the river will change course, wood will be moved around, sediments will be deposited and eroded, shorelines may become unstable. There is no road or formal trail beyond this point.

**UNEXPECTED HAZARDS
MAY EMERGE. PROCEED AT
YOUR OWN RISK.**