Klickitat River Floodplain Restoration Project

Frequently Asked Questions
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1. Who is Columbia Land Trust?

Columbia Land Trust is a private non-profit organization based out of Vancouver, WA with a field office in Hood River, Oregon. We conserve and care for the vital lands, waters, and wildlife of the Columbia River region, including over 3,500 acres along the Klickitat River.

2. Where is the project located?

The two-lane, paved haul road follows the Klickitat River on its west bank from Dead Canyon Creek to the Little Klickitat River. Of ten miles of road in this reach, eight miles are being removed.

3. Why is the road being removed?

In 1996 catastrophic flooding events washed away significant portions of the road, carrying fill and asphalt downstream. The road was no longer passable but was still having an impact on habitat.

4. What impacts did the road have on the river? On fish?

The road was constructed in the active floodplain of the Klickitat River. Historically, the Klickitat River moved from one side of the valley to the other, shaping islands and side channels, moving gravels and dirt, growing and knocking down trees and shrubs, and scouring deep pools at the base of bedrock walls. The road's presence was like a straight-jacket that impaired the river's ability to move freely on one side of its floodplain. Removing the road allows the river full access to its historic floodplain, side channels, backwater channels and bedrock, and has already led to formation of gravel bars, long and deep pools, and off-channel habitat important to growing fish. Fish benefit by being able to access these areas that were previously buried or cut off by the road.

5. How did the project develop?

The Washington State Legislature created a salmon recovery program in 1999. Each geographic area across the state has its own locally-authored recovery plan. Local technical experts (fish biologists, hydrologists, etc) and a citizen advisory committee representing multiple interests in the watershed (ranching, timber, environmental, etc), with support from Klickitat County Natural Resources Department, created a plan for the Klickitat River. In that plan, the

project corridor was identified as one of the highest priority reaches for conservation and restoration. In 2004, Columbia Land Trust joined the effort to help implement the strategy on the haul road.

6. Who is paying for the project?

This project has been funded primarily by Salmon Recovery Funding Board (SRFB) with significant financial and technical support by the Yakama Nation Fisheries Program. SRFB is a grant program established by the Washington Legislature in 1999 to help advance salmon recovery in the state.

7. What is turbidity?

Turbidity is a reference to water clarity. When water is turbid, it means its carrying suspended sediments that color the water. Glacial melt has sediments that turn the river green. Rain events generate sediments that turn the river brown.

8. Why does the project generate turbidity?

Most of the project does not generate turbidity. Of the 170,000 tons of fill that have been removed from the floodplain during this project, a small fraction of that material stays suspended in the river. Several thousand tons of fill was placed in the water when the road was built. Removing this material is dirty work because after each scoop, the water rushes by, carrying some of the exposed sediment downstream. We are very carefully staging this work to minimize the amount of digging we have to do in water, but it is impossible to completely eliminate the resulting turbidity.

9. Why is the project allowed to generate turbidity?

The project is unique among construction projects in that we're making adjustments to the primary channel of a large river – and we're doing so to ultimately benefit the river's health and function. Unlike most construction projects that are building equipment access, we are removing equipment access, making it difficult if not impossible to use traditional methods of water quality controls because we cannot physically remove the controls when we are done. The project approach has been reviewed and supported by many agencies, including WA Department of Natural Resources, WA Department of Fish and Wildlife, NOAA fisheries, US Army Corps of Engineers, WA Department of Ecology, and many resource professionals from across the region.

10. What are the impacts to fish?

There is no perfect time to do this work. There is at least one life stage of fish sensitive to turbidity in the Klickitat River year round. The reason agencies set the in-water work window for July-October is because the fish spawning in the river at that time of year downstream of the project area are primarily fall Chinook. Fall Chinook are a culturally important fish, but they are not native to the Klickitat, are not a threatened species, and are strongly supported by hatchery efforts. July is the best possible time from a fish resource standpoint to minimize impacts to fish and to fishermen.

11. What are you doing to prevent erosion in the future?

As with any construction project, the road's removal causes temporary disturbance that can lead to surface erosion. To prevent that, we've graded the dirt into stable slopes, textured and seeded it with native grass, covered it with weed free mulch, and planted tens of thousands of native trees and shrubs.

In the short term: As the river reoccupies historic floodplain and starts to reshape a natural shoreline where riprap and road fill have been removed, there will be minor amounts of erosion. This is expected for the first couple of years as the river beings to flow freely in its floodplain.

In the long term: Some minor and moderate amounts of erosion will continue for all of time as the river continues to do what rivers do: transport nutrients and gravels, sand and sediments downstream. In the process, you'll see gravel bars and beaches form and be washed away, islands appear or disappear, side channels and backwater channels watered and dewatered, as the river shapes and then reshapes habitat. The Klickitat River in its natural form is a dynamic and changing place. We don't expect to have built something that will remain the same for all of time – quite the opposite. The river is the engineer.

12. Why are you working at night?

When we first started working in water, we realized the turbidity associated with our project might cause problems for fishermen. To minimize the impact, we shifted our in-water work to night hours so the majority of the river would have time to clear before morning.

13. How much work has been done?

Eight miles of asphalt have been removed, and five miles of road bed, fill and riprap have been removed or modified. We do not plan on removing any additional asphalt.

14. When will you be finished?

Our final phase of construction will occur in 2017 (if all goes as planned) on the 3-mile reach downstream of Dead Canyon Creek, past Stinson Flat campground, and around the ninety-degree bend south toward the area that was washed out in 1996.

15. How can I use the corridor after you are done?

You can continue to enjoy the corridor by boat, on foot or by bike. We have no plans to remove the asphalt in the lower 2 miles of the road. The corridor will be a changing place, so please use caution when navigating – on foot or by boat – and enjoy watching this incredible river take its natural course.

16. Will the road be closed in the future?

We own just a narrow sliver of land through a remote corridor with abundant privately and publically owned natural resources. Out of respect for our neighbors, and in the long tradition of private ownership of the haul road, we are maintaining public access, but ask that you do not enter during periods of high fire risk. We use the WA Department of Natural Resources Industrial Fire Precaution Level System (IFPL) to determine when those periods occur. When the IFPL reaches level 2, we close the road. We will reopen the road when the IFPL drops back to level 1. We appreciate your respect for the safety of those around you and the resources on which we all depend. We post updates on our website.

BEFORE: ***AFTER:***

The asphalt and road fill were removed from this portion of the floodplain, revealing a backwater channel that provides important refuge for young fish to get off the main river during flood events. Fast moving water can injure or kill young fish and often carries them downstream before they are prepared. The slow moving water and overhanging trees and shrubs in these backwater areas combine to produce food (insects) for growing fish. The road's presence severely limited development of such areas on the western shoreline of the river.

For more information please see our website at http://www.columbialandtrust.org.