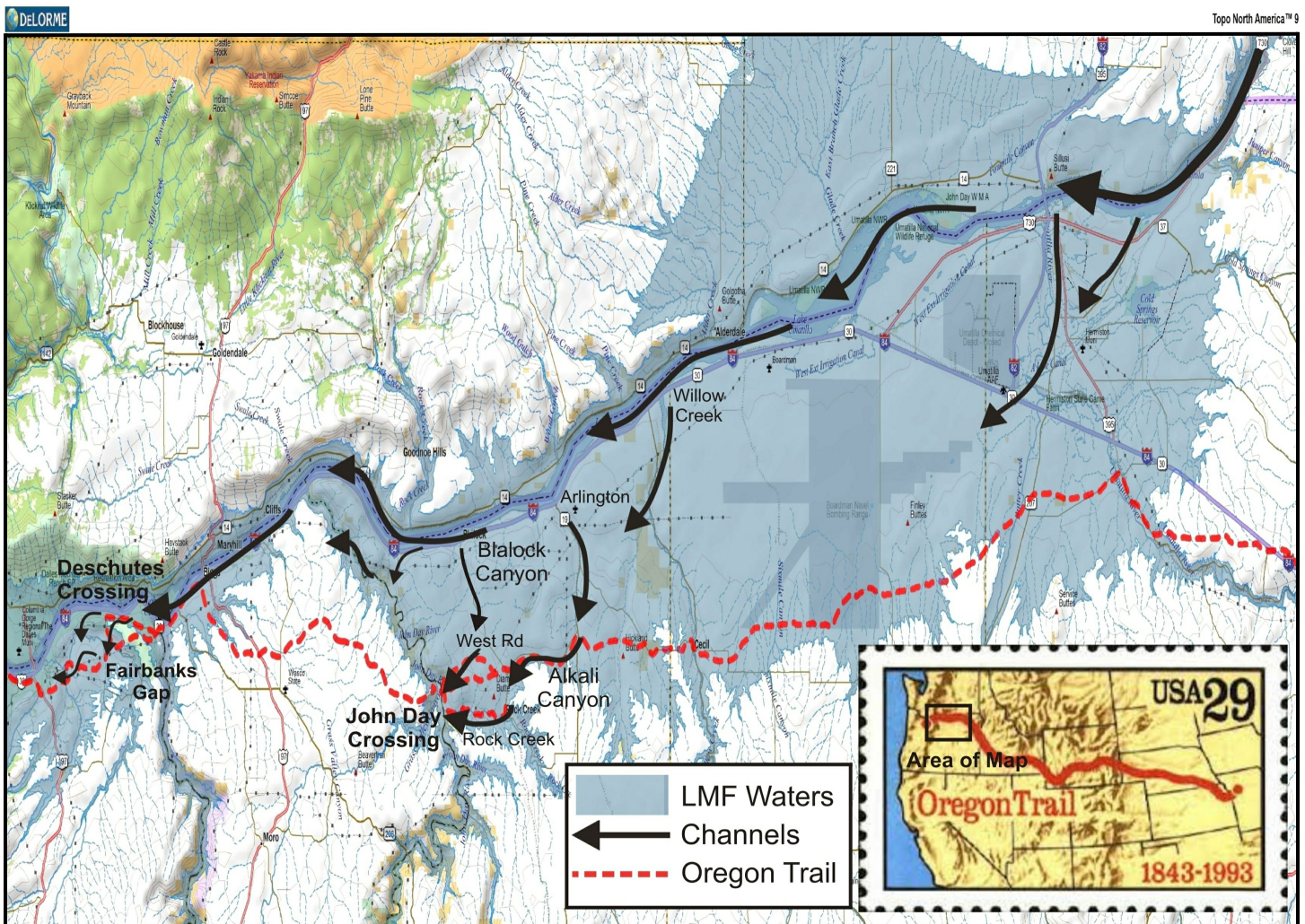


“The Ice Age Oregon Trail”

By Rick Thompson

The story of where the Oregon Trail pioneers used Lake Missoula Flood channels in their journey

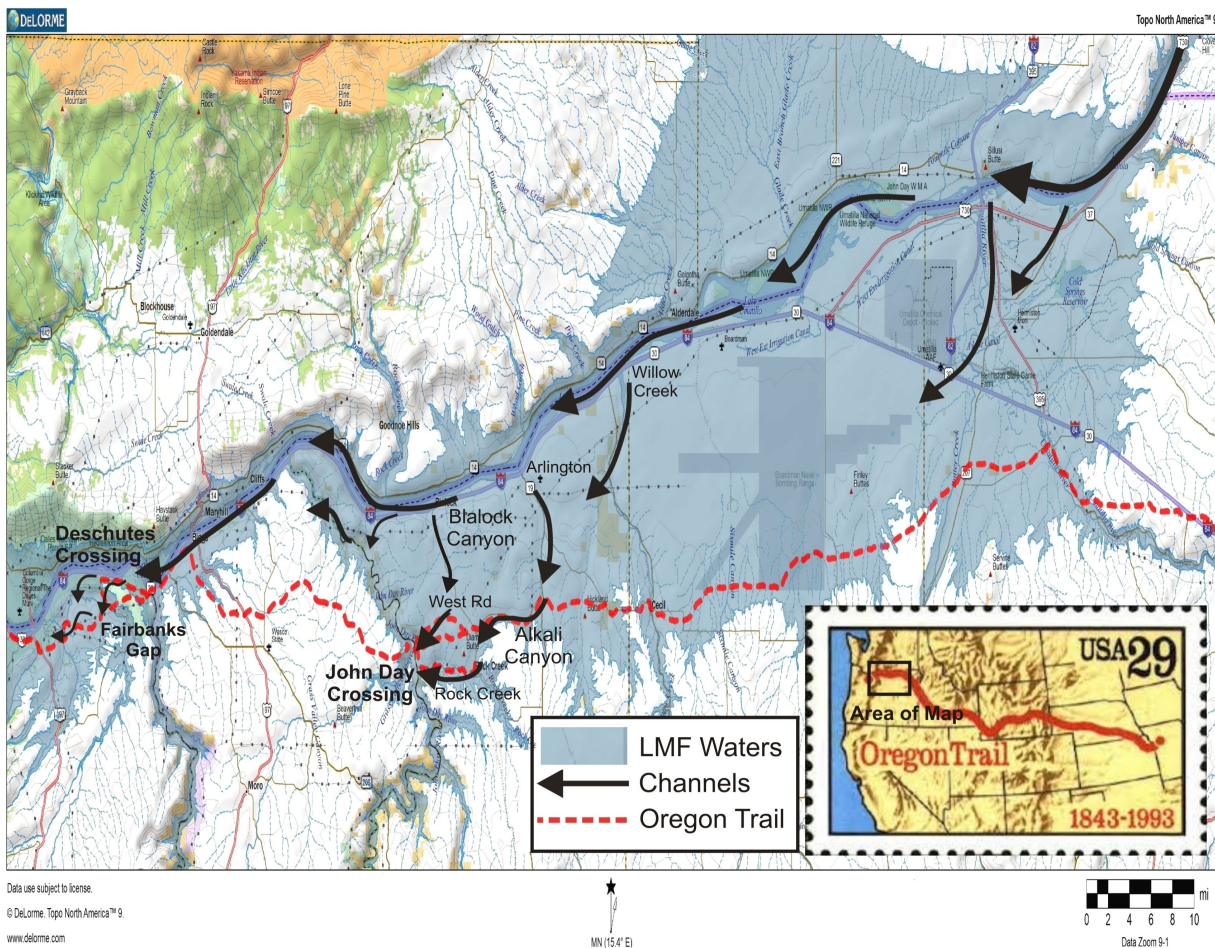


© Rick Thompson 2019

All rights reserved.

The Ice Age Oregon Trail

By Rick Thompson



(Figure 1) Map of North Central Oregon with the Oregon Trail (Red Dotted Line) and the areas covered by the ice age floods (Blue), and Flood Channels (Black Arrows). Where the red and black overlap is where the trail was in a flood channel.

Much has been written about how the rich soil of the Willamette Valley is actually from eastern Washington, brought here by the ice age floods. It was this soil that attracted the Oregon Trail pioneers. It has been said that this was one of the largest non-forced migrations in all of history.

What has not been written is that some of the very trails the pioneers used to get to the Willamette Valley are actually channels of those floods.

The early Oregon Trail immigrants used the Columbia River, which, of course, was the main flood path. But floating the river with their families and all their earthly possessions lashed to a log raft was dangerous, time consuming, and also expensive, if you had to hire a raft from the natives.

The Oregon Trail took several routes over the years and was the major east-west highway from the Mississippi River to the west coast for over 50 years. The first route was simple animal trails. Bison and deer have a knack for finding the easiest and most level ways around obstacles such as mountains, swamps and rivers.

The next version was created by the Native Americans who followed game and traded with other tribes. This was essentially the route that Lewis and Clark travelled.

John C. Fremont and others made refinements to the Lewis and Clark trail and then the first wagon travelers adjusted it to make it more wagon-friendly.

When the pioneers found out that wagons could reach the Oregon Country they went to the Whitman Mission, near Walla Walla in SE Washington, and then followed the Walla Walla River to the Columbia River. There they built or rented rafts to float down to Fort Vancouver, or they followed a crude sandy and rocky trail along the south side of the Columbia River as far as The Dalles where they still had to raft the final leg of the journey.

Some wagon trains were turning west and going overland to the Umatilla River and following it north where they put into the Columbia. They only went to the Whitman Mission if they were in need of supplies or medical help.

The trail along the south bank of the Columbia was both dangerous and difficult. In places it had deep wind-blown sand and silt from the Lake Missoula Ice Age Floods and in other places it was rocky and barren because the floods had scoured off any topsoil that might have been there. It wasn't long before they were seeking a better route to the Willamette Valley.

After the Whitman massacre (now referred to as the Whitman Incident) and the closure of all the Protestant missions in Eastern Washington there was no reason to take an extra week or so, to go north to the mission before turning west.

The trail then took a west turn in the area of Pendleton and for the most part went overland until it had to cross the John Day and Deschutes Rivers.



(Figure 2) Sylvia Thompson stands in Oregon Trail ruts near where they turned west to travel through eastern Oregon. (White post is a trail marker)

During this whole trek from Pendleton to the Deschutes they traveled in areas that had been covered by the waters of the Lake Missoula Floods. (See map)

The best areas for trails were the broad, flat flood channels that were cut in an east-west direction. Next were areas that had been leveled off by the deposits of the flood sediments. For a few weeks the trail was smooth sailing, except for the dust, if it were dry, or

the mud if it were raining. This area was dotted with granite boulders (erratics) that they remembered and used when they needed something solid for a tombstone or other marker. They have nearly all been taken away for those purposes.

The largest flood channel that they traversed is known as Alkali Canyon. The alkali part is easy to understand but it seems strange to call such a wide flat area a "canyon". It is roughly seven miles long, one-third a mile wide and up to 200 feet deep, almost perfectly flat from side to side and end to end. Maybe they called it a canyon for lack of a better word. They didn't know it was a flood channel. (In Washington they are called: "Coulees")



(Figure 3) Alkali Canyon from the air, looking northwest. The Oregon Trail followed it from the lower right to the upper left.



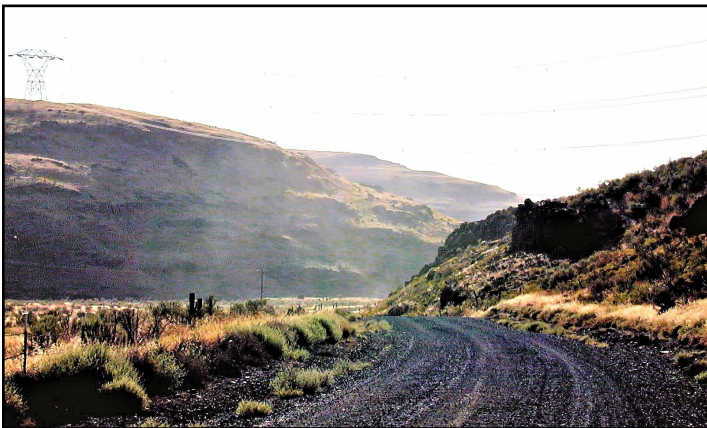
(Figure 4) Looking toward the SE across Alkali Canyon. Trail ruts are visible in middle of the flood channel (dark line slanting from upper left toward the lower right)

The west end of Alkali Canyon funnels into Rock Creek which carried the pioneers down to the John Day River. There are 70 streams in Oregon named Rock Creek for obvious reasons. This one may have been named in 1845 by early pioneer Joel Palmer.

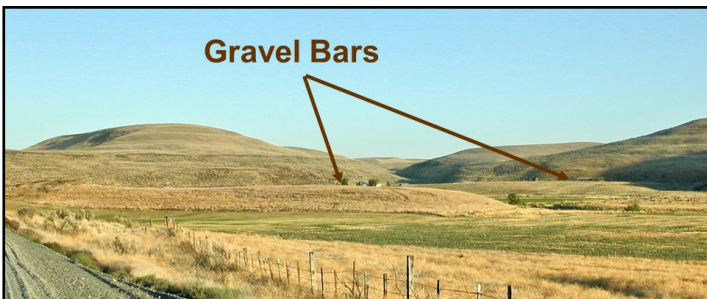


(Figure 5) Looking SW down Alkali Canyon in the area of Cedar Springs where the canyon meets the Rock Creek channel.

There were actually three overflows of Lake Missoula Flood waters overtopping the divide between the Columbia and the John Day River. Two were used by the Oregon Trail pioneers. The main road now is Rock Creek Lane but pioneers preferred a more direct route which is now on private property. (The middle route on the map - figure 19)



(Figure 6) Lower Rock Creek Lane follows one of the routes of the Oregon Trail down to the John Day River. Note how the sides are scoured. The dust in the air in the photo is only a hint of what it was like for the pioneers



(Figure 7) Gravel bars in Rock Creek channel.

A second ravine, two miles north of Rock Creek was sometimes used as a branch of the Trail. It was the

Blalock Canyon overflow from the Columbia. Today's West Road actually covers over most of the trail here except for the last half-mile down to the river. I wonder if any of the pioneers recognized the giant current ripples they passed on this route.



(Figure 8) Google Earth photo of Rock Creek channel showing wall scouring and two parallel gravel bars (center of photo). The road on the north side of the channel is one of the Oregon Trail routes.



(Figure 9) Three Oregon Trail routes (Marked in red) converge on the John Day River and leave as one.

A third route went over the high ground between the two canyons. It was smoother and straighter, but had a steep descent down to the river.

Once down at the John Day River, all three trails joined at an area now called McDonald Ford where they could safely cross and resume their trek. In late summer the water was less than a foot deep here.

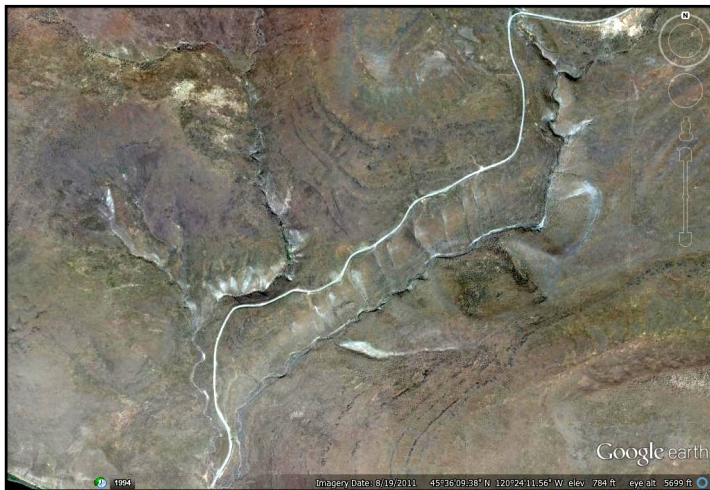
The ice age floods had cut good paths for the Oregon Trail immigrants down to the John Day River but getting back out of the canyon was a whole new story. It took as long as a week for a wagon train to climb out of the John Day Valley, even using double

and triple teams because of the steepness of the hillside. The first wagons up the hill west of McDonald Ford camped while their teams were used to bring up the remaining wagons.



(Figure 13) Trail west from the John Day River (marked in red)

A fork in the trail (after the Barlow Road was created) allowed travelers to go SW toward Mt. Hood or proceed northwest toward the Columbia. Near Biggs the trail came down a ravine to a basalt ledge above the Columbia River.



(Figure 10) The Oregon Trail, (now West Rd) skirts the north side of a set of current ripples. (Center of photo)



(Figure 14) Oregon Trail ruts above highway 206 the Biggs- Rufus Highway, west of Biggs



(Figure 11) The West Road trail down to the ford of the John Day River.

The ruts here are still very visible, even from I-84 if one knows where to look. They stayed on this ledge until they met the Deschutes River. There, an island at the mouth of the river, and the aid of local Native Americans, for a price, helped them ford the stream and head back up to higher ground.

There are several sets of ruts visible on the west side of the Deschutes, but one of the main trails is now followed by Moody Road to Fairbanks Gap where it is met by a portion of the trail that stayed on the top of the ridge above the area scoured by the floods.

Fairbanks Gap is one of two overflow channels from the Columbia River into 15 Mile Creek. Here the Oregon Trail followed the expansion ripples down to the Creek. A rock harvesting area shows that a huge amount of gravel flowed through Fairbanks Gap.

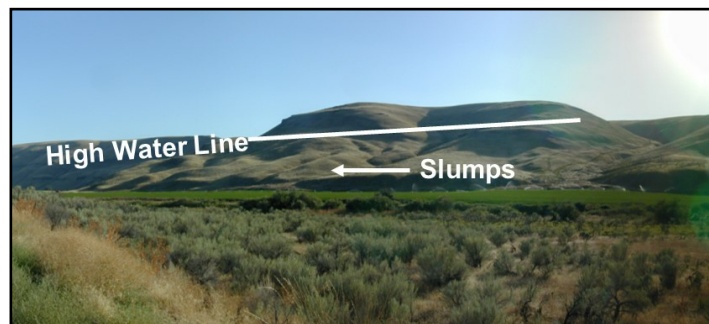
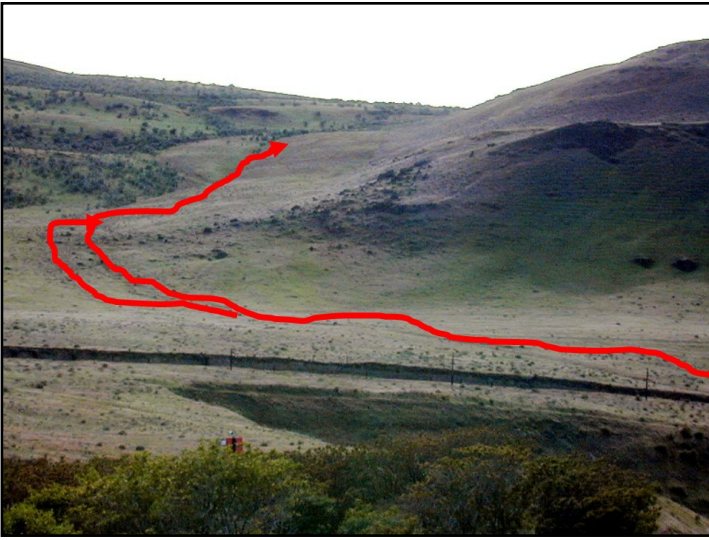
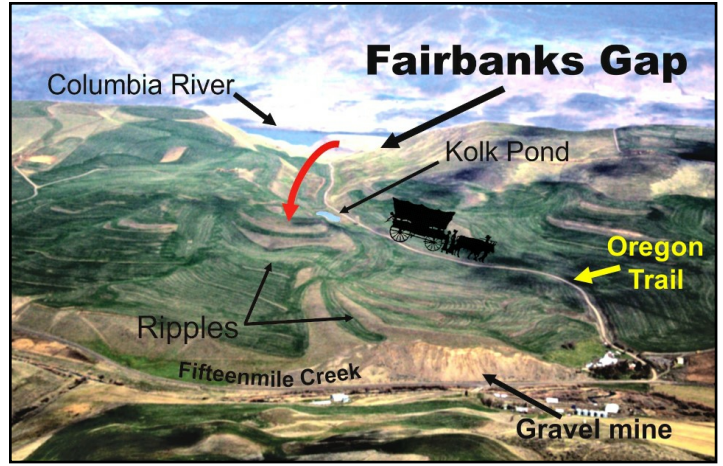


Figure 12 The John Day Valley shows the effects of the Missoula Floods with high water lines, slumping and faceted toes of the slumps.



(Figure 15) Oregon Trail west from the Deschutes crossing



(Figure 17) Fairbanks Gap from the air looking north. Oregon Trail cuts from the center to the lower right side of the photo. It then crosses the lower part of the photo and exits the canyon at the lower left.



(Figure 16) Oregon Trail (Moody Road) west from the Deschutes crossing.



(Figure 18) Fairbanks bar gravel deposit.



(Figure 16) Trail west turning south through Fairbanks Gap down to 15 Mile Creek.



(Figure 19) Petersburg overflow into 15 mile creek. (Purple Arrow. The Dalles Dam upper left. "A" marks the gravel area)

Petersburg Gap is over a mile wide but was not used by the Oregon Trail pioneers because at Fairbanks they climbed out of 15 Mile Creek and went overland into The Dalles where they had a major decision to make.

Just northwest of Fairbanks Gap is another, even larger gap scoured by the floods and an even larger gravel harvest area in what used to be the town of Petersburg.



(Figure 20) Petersburg gravel deposit.

The only trail, if you could call it such, west from The Dalles was the Columbia River itself. This was because the steep cliffs of Rowena Gap came right down to the river leaving no place to put a trail. But the river route was expensive. They had to rent or build a raft to float their belongings. It was also dangerous. Each year both lives and belongings were lost due to overturned rafts.



(Figure 21) Before the freeways were built the cliffs of Rowena Gap went straight down into the river making no room to get wagons passed except on rafts.

The other choice was to turn south from The Dalles and follow the newly built Barlow Toll Road. One would think that the Oregon Trail would get easier as you got further along. Not so!

The Barlow Road was considered by many to be the roughest and hardest section of the whole trail. Having to pay to use it was like adding insult to injury, so they tried to bypass the tollgate wherever possible. This led to the tollgate being moved every few years. As it was, Barlow and his partners never really turned a profit from the road.

This road left the ice age flood paths behind until it reached Eagle Creek in the Clackamas Valley, where they were again in a Lake Missoula Flood area. Near Carver Gap they climbed out of it to cross a ridge into Oregon City which was their final destination.

Oregon City was built on Lake Missoula Flood terraces at Willamette Falls which was created by the Ice Age Floods. From there, they could file land claims and start farming the rich deposits of Lake Missoula Flood soil in the Willamette Valley which had been their goal all along.



For more information go to www.GigaFlood.com