Transforming Watersheds

Couse Creek — Asotin County

The Place

Couse Creek cuts deep through a beautiful canyon in southeastern Washington before spilling into the Snake River downstream of Hells Canyon. Every autumn, endangered Steelhead trout make the long journey up the Columbia and Snake rivers, eventually reaching Couse Creek. The Nez Perce Tribe historically utilized this area for hunting and collecting herbs. The Couse Creek canyon also served as an important travel corridor to fishing and hunting grounds located along the Grande Ronde River. Today, as has been typical for the last century, the plateaus above Couse Creek are farmed for wheat and barley and the canyon is used for range and feeding livestock.

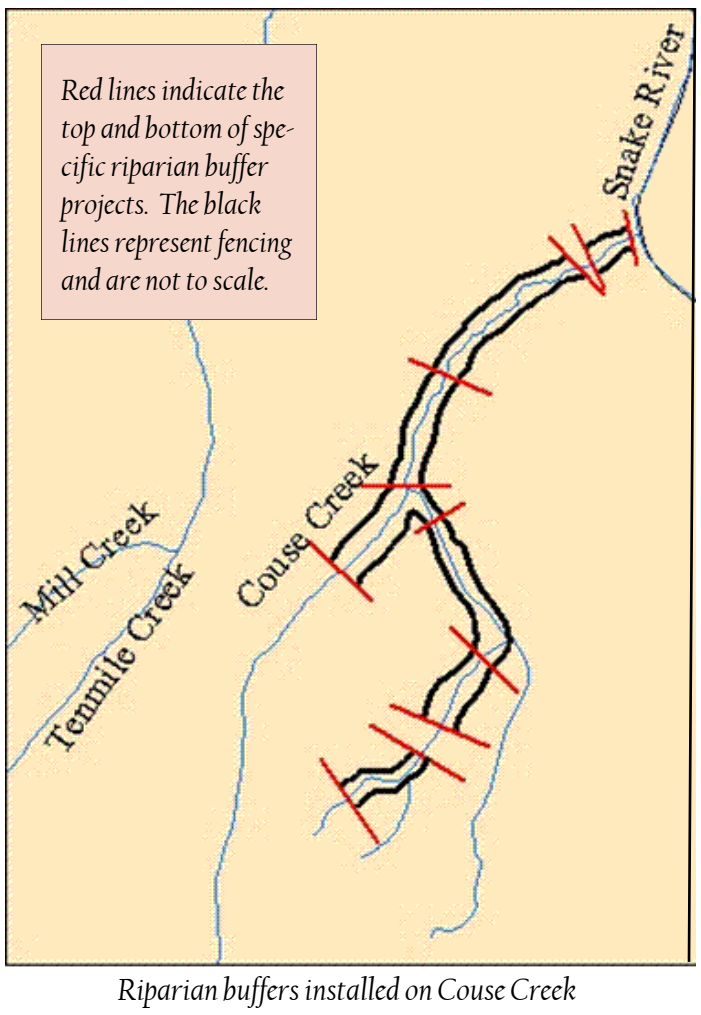
The Effort

Prior to 2001, livestock in the watershed had uncontrolled access to the creek and were fed at several easy-to-reach locations along the stream. The riparian corridor had been degraded. Landowners along the creek have since committed themselves to improving water quality and fish habitat. An extraordinary effort by the landowners, the Asotin County Conservation District (ACCD), and Natural Resource Conservation Service resulted in the implementation of over eight miles of riparian buffers. The creek was fenced to protect it from livestock, and off-stream water was provided at several key points. Thousands of native trees and shrubs were planted near the stream to aid in the recovery process.

Riparian Buffers & Water Quality

Much of the work to improve water quality involves the creation of riparian buffers using a variety of different funding sources. Riparian buffers are zones of protective native vegetation along streams that provide many very important functions. Riparian buffers work to:

—Slow bank erosion by holding soil in place during periods of high water.
—Reduce flood damage and sedimentation by slowing run-off and capturing the sediment that would otherwise be carried downstream.
—Help keep water cool in the summer by shading the stream and protecting fish habitat.
—Improve water quality by reducing sediment, nutrients, pesticides, pathogens and other pollutants from reaching the stream.
—Create fish and wildlife habitat. A healthy riparian area improves habitat for fish and provides the space, food, water, and cover needed by wildlife.
—Enhance summer stream flow by improving water infiltration and storage.



Riparian buffers installed on Couse Creek

The Results

The positive changes to the stream corridor can already be seen. Trees and shrubs have returned to the banks, and the channel is more defined and stable. Ron Scheibe, a progressive landowner in the watershed, has been extremely happy with the results. "Since we implemented these projects we have stands of grass I have never seen before. The stream corridor looks healthier than it did three years ago." Also, as a result of the projects, a stretch of the creek damaged by floods in the mid-1990's has begun the recovery process. Brad Johnson of the conservation district is hopeful the new vegetation growth and the stabilizing channel will create more habitat for endangered Steelhead.

Partnering For Clean Water

The Department of Ecology is using a unique collaborative approach to address livestock related water quality problems in eastern Washington. We are working to achieve clean rivers and streams in ways that also can improve the relationship and build trust between Ecology and the rural public.

We team with conservation districts, local government, and landowners throughout eastern Washington to provide assistance where needed. We do not use a traditional regulatory process unless our collaborative efforts fail.

The result of this partnership has been the implementation of Best Management Practices (BMPs) at hundreds of sites where water quality and fish habitat issues exist. The partners are using a strategy that recognizes the economic importance of livestock operations as well as the need to comply with state water quality law.

Winter feeding - Couse Creek 2001

Riparian buffer - Couse Creek 2004

The Future

The ACCD will begin monitoring water quality in Couse Creek in spring 2005. The purpose is to demonstrate these projects are improving water quality in addition to stream health. It should also be noted that farmers in the upper watershed are assisting in the water quality efforts. They are currently adopting new tillage practices and installing sediment basins. Together, these changes will reduce the amount of sediment reaching the creek. Sediment covers Steelhead redds (nests) and reduces the oxygen available to developing eggs.

Vegetation recovering within fenced reach 2004

The People

Landowners installing riparian BMPs — R. Scheibe, K. Ausman, V. Floch, T. Appleford

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