Transforming Watersheds

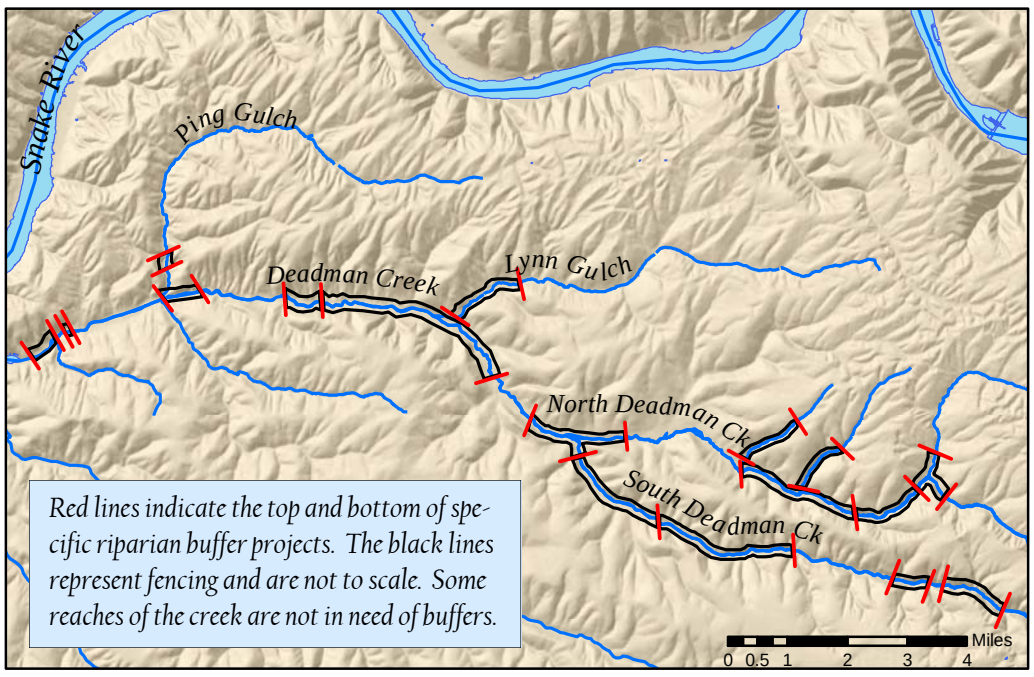
Deadman Creek — Garfield County

The Place

Deadman Creek flows gently through rolling hills toward the Snake River in north Garfield County. This is arid country, with rainfall in some areas averaging as little as 11 inches annually. Historically, the surrounding hills were covered in bunchgrass and sage and the meandering creek provided habitat for Steelhead trout. Approximately half the watershed today is utilized for non-irrigated crops such as wheat and barley and the other half provides range for livestock. From November through March, cattle are typically fed along the valley floor which serves as a perfect refuge from the region's harsh winter weather.

The Effort

In January 2001, Deadman Creek was in poor condition. Winter feeding and uncontrolled livestock access had eliminated much of the vegetation within the stream corridor. The creek was shallow, wide, and muddy in many areas due to trampling by cattle and provided little habitat for Steelhead trout. In addition, it was failing state water quality standards. Fecal coliform bacteria are an indicator of human and/or animal waste in the creek and values as high as 40 times the state standard were recorded. That all began to change in Spring 2001. Landowners in the watershed took up the challenge of improving water quality and fish habitat. They worked proactively with the Pomeroy Conservation District (PCD) and the local Natural Resource Conservation Service office (NRCS) to fence much of the creek, creating over 25 miles of riparian buffer. Several off-stream water facilities were developed and feeding locations were moved away from the stream to prevent polluted run-off. In addition, trees and shrubs were planted to stabilize banks, shade the stream, and improve wildlife habitat.



Riparian buffers installed on Deadman Creek

The Results

The efforts by landowners have dramatically changed the watershed. Fish habitat and stream health are improving and water quality data show that during most months the stream is now meeting state standards. Butch Klaveano, a landowner in the watershed, implemented four separate projects. He originally had concerns but is happy with the results and surprised at how easy it's been. Agencies were "interested in what we wanted and there were not nearly as many hoops to jump through as we thought." He added, "Nothing is ever as bad as it sounds, you just need to get started."

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 rural property owners.

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.

Deadman Creek - 2001 (before)

Deadman Creek -2005 (after)

Deadman Creek -2001 (before)

Deadman Creek -2005 (after)

The Future

A few sites where cattle are adversely affecting water quality remain in the watershed. The landowners have plans to continue their efforts to address these areas. In addition, farmers throughout the watershed are adopting conservation tillage practices that reduce soil erosion and keep sediment out of the stream. These practices also improve rain and snowmelt infiltration and reduce the chance for damaging spring floods. A new challenge in the watershed is a noxious weed called False Indigo. As cattle are excluded from the stream corridor, this aggressive invader moves in. The PCD has a grant from the Department of Ecology to remove the weed and plant native trees and shrubs in its place.

Installing a Stock Tank - 2004

The People

Landowners installing riparian buffers —
Klaveano Ranches, McGreevy Brothers, Blachly & Sons, Gary Bye, Sam & Pat Dixon, 7JK Ranch, Deadman Farms, Mike Anderson, Larry Koller , Ken Beale, Phil & Dale Heitstuman.

Technical and financial assistance provided by —
PCD staff (Duane Bartels, Marie Gormsen); NRCS, Pomeroy (Rick Stauty, Carol Wildman, Jim Shawley); SE District Engineer Lance Horning; Farm Service Agency, Garfield County.

Special Thanks to the PCD Board of Supervisors for their commitment to clean water and fish habitat!

Funding for projects provided by the Conservation Reserve Enhancement Program (CREP), the Continuous Conservation Reserve Program (Continuous CRP), and the Department of Ecology.

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Ecology Publication Number 05-10-049, April 2005