

Transforming Watersheds Upper Cow Creek — Adams County

The Place

From its origin at Sprague Lake in eastern Washington, Cow Creek flows 50 miles south through a region called the Channeled Scablands. Great ice-age floods created this region's unique landscape of channels, coulees, and potholes. The upper portion of Cow Creek snakes between ancient basalt-rimmed plateaus and occasionally forms small lakes. Cow Creek is an oasis of flora and fauna in this arid country. For centuries the creek provided a home to small groups of Native Americans. It was later a favorite travel route for fur traders moving between the Snake River and outposts in Spokane and Okanogan. A military road was constructed along Cow Creek in the 1850s connecting Fort Walla Walla and Fort Benton (Montana) with Fort Colville to the north.



Upper Cow Creek 2002 (before)



Upper Cow Creek 2004 (after)

The Results

The Effort

As the name would suggest, the Cow Creek watershed is cattle country. Livestock from some of the largest ranches in Washington graze vast areas. Unfortunately, the creek is the primary water source and cattle tend to spend a lot of time in the stream corridor. Trampling and overgrazing has damaged or removed many of the trees and shrubs along the stream banks. The creek has consistently failed state water quality standards. Landowners on the creek recognized these problems and started taking action. Working with the Adams Conservation District (Adams CD) and Natural Resource Conservation Service staff (NRCS), they have planned more than 20 miles of riparian buffers. Implementation of projects is either completed or underway. In addition, landowners have been working with the Adams CD to plant thousands of native trees and shrubs. The landowners are also installing off-stream (alternative) stock watering facilities. These facilities allow livestock to drink from stock tanks rather than from the creek itself.

The Cow Creek landowners are making huge strides in their effort to improve water quality. Gary Devore, manager of the Adams Conservation District, points out that the water quality



Aerial view of a riparian buffer — Upper Cow Creek

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 can also improve the relationship and build trust between Ecology and the rural public.

We partner with conservation districts, local governments, and landowners throughout the region to provide assistance where needed. The partners are using a strategy that recognizes the economic importance of livestock operations as well as the need to comply with water quality law.

data the CD collects twice a month shows an improving trend. He is hopeful the work will result in the creek achieving state water quality standards in the future. The stream is not the only beneficiary of this effort. Jake & Joan Harder, landowners and cattle ranchers on Cow Creek, are happy with the changes they see on their property and feel the benefits are both environmental and economic. Jake encourages others to complete similar projects and believes stream restoration is "the number one thing you can do to increase the value of ranch property."



The Future

While the changes to Cow Creek have been dramatic, landowners continue to work to improve water quality and fish habitat. Additional riparian restoration projects are being planned. Cattle producers are also working to improve overall range health. By cross-fencing rangeland and placing water tanks in strategic locations, ranchers can ensure livestock utilize more of their range.

This promotes healthier grasses and improved forage. One other issue within the Cow Creek watershed is the invasion of non-native carp. During spawning season, these fish stir up sediment and cause water quality problems. It has been a difficult issue to solve, but landowners are currently working with state agencies in an effort to control the invader.



Riparian buffers installed on Upper Cow Creek

Conservation crew installing riparian fencing

The People

Landowners installing riparian BMPs-

Hercules Ranches, Harder Ranches, Jake & Joan Harder, J & R Hennings, Golden West Cattle Company

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Adams CD staff (Gary Devore, Linda Quast, Joyce McNeil); Natural Resource Conservation Service, Adams County; Farm Service Agency, Adams County.

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For additional information, please contact Chad Atkins at the Dept. of Ecology 509-329-3499 or Gary Devore at the Adams CD 509-659-1553. If you need this information in an alternate format, contact us at 509-349-3455. Persons with hearing loss can call 711 for Washington Relay Service. Persons with speech disability can call 877-833-6341 Ecology Publication No. 06-10-051, June 2006