

The Armstrong Creek Restoration Project

Partners: United States Forest Service, Trout Unlimited, Colorado Parks and Wildlife, Routt County Conservation District, Yampa-White-Green Basin Roundtable, Colorado Water Conservation Board, Shell, Tri-State Power and Generation, City of Craig, Colorado River Water Conservation District

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Summary

We had a successful 2013 restoration season! The lower reach of Armstrong Creek—1.5 miles in length—was completed in September, 2013. We constructed 400 feet of new channel and created within the existing channel 350 feet of reconstruction and improvement to the floodplain. We've included some before and after photos to show the restoration process.

We also completed all our fencing for both upper and lower reaches, better preparing us for the construction process on the upper reach. Three separate sections of fence were constructed.

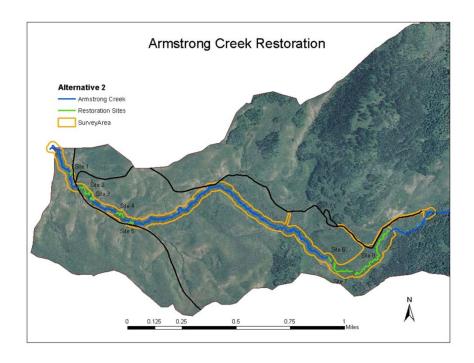


Figure 1. Map of the project site. Restoration of sites in the lower reach (left side of figure) was completed in 2013 as were the exclosure fences around all sites. The restoration design for the upper reach was initiated in 2013 and will be finalized shortly.

Project photos



Figure 2, Site 3, Before (looking downstream)

Notice the wide channel, erosion and lack of woody vegetation on the streambanks, as well as lack of cover and complexity.



Figure 3, Site 3, After (looking upstream)

An improved and reconstructed floodplain using rootwads, willow plantings and sodmats was created to narrow the channel and create deep, complex habitat for native fish. The eroding slope was stabilized by lowering the angle, seeding, and covering with wood straw.



Figure 4, Site 2, Before

Notice that the channel is wide and shallow and runs at the toe of the eroding hillslope.



Figure 5, Site 2, After

The two men on the right side of the stream are standing on the end of a rootwad/sodmat that plugs the old channel. The newly constructed channel turns left of the Shell volunteers in the yellow t-shirts. Notice in the foreground, thatthe width-to-depth ratio of the channel has been reduced and that streambanks have been stabilized and revegetated with sedgemats. This process will reconnect the stream and floodplain and also result in lower summer stream temperatures.



Figure 6, Site 2, After

This is the newly created channel. The volunteers are planting willows to stabilize and vegetate the streambanks.

General Construction photos





Fence around Sites 2 and 3



Fence around Site 4



We'd like to thank you all for your support of this project. For all of us working on the implementation team, our favorite aspect has been the great partnerships that have been created. We'll continue to give you updates as we move upstream to tackle the upper reach. As always, please let us know if you have any questions or would like to schedule a visit or a volunteer day. We still plan to host a tour in the summer months and will contact you as we get closer to that time.

The Armstrong Creek Restoration Project was featured in several publications. Please take a moment to review the articles as they really paint a broad picture of the project and underlying goals.

Trout Unlimited, October 9, 2013

http://www.tu.org/blog-posts/a-small-creek-a-grand-vision-of-restoration

Steamboat Pilot and Today, September 25, 2013

 $\underline{http://www2.steamboatpilot.com/news/2013/sep/25/crews-california-park-try-make-creek-more-inviting/}$

Many Thanks and Best Wishes for 2014!

Jackie Brown, Routt County Conservation District Brian Hodge, Trout Unlimited Rick Henderson & Liz Schnackenberg, US Forest Service