

## Lefthand Creek Restoration

Boulder County, Colorado



*from top: Newly constructed road with stream before restoration; Immediately after stream relocation and floodplain creation; Coordinating construction of step pool*



*Stability, resilience, ecology, and public safety are restored to a flood-damaged canyon in Colorado's Front Range.*

In the fall of 2013, a severe storm dumped 10-20 inches of rain along Colorado's northern Front Range, causing severe flooding in the foothills, and wiping out Lefthand Canyon Road, the main road leading in and out of the mountains northwest of Boulder. The road follows the path of Lefthand Creek, a stream which begins on Niwot Mountain, runs through a canyon, and flows onto the plains, where it joins St. Vrain Creek and ultimately the South Platte River. During the storm, Lefthand Creek suffered extreme erosion, deposition, and habitat degradation.

Working with AECOM, Biohabitats helped the Central Federal Lands Highway Division of the U.S. Department of Transportation enhance the resilience of both the road and creek. While AECOM led the effort to relocate the roadway further

from the creek, Biohabitats developed a design to restore stability and habitat to nearly 2.5 miles of the creek and its floodplain. Biohabitats began by conducting an assessment of the entire project reach and prioritizing restoration reaches. Despite the challenges of working in a canyon with limited floodplain area and an adjacent roadway, Biohabitats recognized many opportunities to increase the floodplain and incorporate aquatic habitat features, such as riffles, pools, and woody debris, which had been removed by the flood. Biohabitats produced 30% construction plans and worked closely with the grading contractor to make adjustments to the channel design during construction.

### SERVICES

Inventory & Assessments  
Design  
Construction Management  
Public Outreach

*conservation planning  
ecological restoration  
regenerative design*



800.220.0919  
www.biohabitats.com

