

# CASE STUDY



## WEST FORK KENNEY'S RUN

### Creek Channel Repair - Golden, CO



**Location:** Golden, CO

**Year Constructed:** 2016

**Application Type:** Channel Lining

**Project Size:** 2300 Units, 300' x 40'

**Client:** Urban Drainage & Flood Control

**Reinforcement:** Mattress Style

**Vegetation:** Hydroseed

**Engineer:** Icon Engineering

**Contractor:** Naranjo Civil Constructors

### +Project Snapshot

Envirolok was applied as a mattress application to create a naturalized stream corridor. By lining the meandering channel bottom with the Envirolok system, soils are permanently encapsulated, reducing erosion and eliminating sedimentation. The remaining corridor outside of the channel was further reinforced with a mattress application of bags and spikes to provide the strength and capacity to withstand large storm events.



**Envirolok®**

**Shoreline Protection | Slope Stabilization | Stormwater Management**  
**Erosion Control | River / Streambank Restoration | Retaining Walls**



### **+Installation Method:**

The base of the normal flow channel was sealed with a layer of Envirolok bags. The sides of the meandering stream were reinforced with a 2-3' high stack of bags locked in place with Envirolok spikes.

The remaining floodplain was sealed by laying Envirolok bags flat and tight which sealed the sediment and allowed the plants to grow into the bags.



### **+Vegetation Approach:**

The Envirolok portion of the project was hydroseeded using a mix of native sedges, forbs and grasses.

In addition to providing critical habitat for animals and amphibians, the native vegetation helps filter pollutants and sediment from rainwater runoff.



### **+Results**

The Envirolok's system provided a solution to handle large storm events, limit sedimentation, and create a new focal feature for the residential neighborhood. The project has vegetated well and maintained the desired form, despite seeing multiple seasons of snow, runoff, and multiple large storm events.

This project continues to be a successful example of how Envirolok can be utilized as a green infrastructure tool, to increase neighborhood aesthetics and improve water quality.

