

## Stream Restoration, Mine Reclamation

### Poorman Creek

#### Placer Mine Reclamation & Stream Restoration

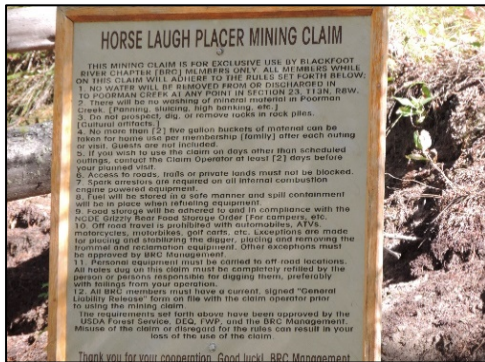


**Location:** Lincoln, Montana

**Client:** Lewis & Clark County with Big Blackfoot Chapter of Trout Unlimited & USFS

#### Key Project Elements:

- ❖ Natural Channel Design
- ❖ Channel Relocation
- ❖ Fish Habitat Enhancement Design
- ❖ Large Wood Structure Design
- ❖ Aquatic Habitat Inventories
- ❖ Hydraulic Analysis & Hydrologic Assessment
- ❖ LiDAR Processing and Terrain Modeling
- ❖ Specifications & Bid Document Preparation
- ❖ Grading Plans for Tailing Removals / Repositories



#### Project Description:

Restoration Engineering, LLC provided design and alternative development services for a 1,250-foot stream reach to ensure connectivity with a functioning floodplain and improvement of in-stream habitat and function. Project partners include US Forest Service, US Fish and Wildlife Service, MT Fish Wildlife and Parks, and the Big Blackfoot Chapter of Trout Unlimited. The project was initiated to restore critical habitat for westslope cutthroat trout (Montana species of concern) and bull trout (Threatened).



The creek is a 3rd order tributary to the upper Blackfoot River, which flows 14 miles through a mixture of USFS and private land and supports populations of pure westslope cutthroat trout and bull trout. The project reach has a history of placer mining that has confined most of the channel between placer deposits. Consequently, the stream lacks floodplain connectivity, a functioning riparian area and instream habitat complexity is very limited.



Preliminary plans with a set of alternatives were completed in the winter of 2016. A preferred alternative has been selected by stakeholders and RE, LLC is currently finalized final designs for completed tailings removal and complete channel restoration / relocation. Construction is scheduled for 2018.