|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Project Name** | **Applicant Name** | **Amount Requested** | **Matching Funds** | **Total Project Cost** | **Project Location**  **(Zone)** |
| McCoy Creek Wet Meadow Restoration Project | US Forest Service | $75,000 | $354,500 | $429,500 | 2 |

Executive Summary

This project seeks to bring this portion of McCoy Creek back to its full ecological potential. While most of the McCoy drainage consists of narrow valleys, higher gradients, and large cobble to small boulder substrates, the restoration site consists of large valley width, low gradient, and gravel substrate indicative of a productive depositional area. The restoration site has the potential to be an anastomosing, multiple-channel system with ecosystem values of 88-97 compared to the present degraded, single thread system with ecosystem values of 12-27 (Figure 2., Cluer and Thorne (2013)).

Recent high flow events in 1997 and 2011 have demonstrated the ability of this unstable system to change abruptly. Beaver-induced progress has occurred under relative low flow years since 2011. However, beaver activity has not resulted in stable floodplain reconnection, so future high flow events are largely confined within the channel and are likely to destroy these isolated dams, erode the channel, and set this section of stream back to a single thread.

The activities that degraded this site to a single thread channel span more than a century. Degradation began with beaver trapping in the early 1800s, followed by the arrival of settlers and livestock grazing. These settlers continued the removal of beaver and ranched and hayed this land until the 1990s, when it was acquired by CTNF. Further degradation and destruction resulted from the discovery of gold in the canyon and associated placer mining. These actions contributed to the decline of the system to what it is today, and what many accept as normal.

This section of McCoy Creek can be restored a similar function as prior to the 1800s by promoting wet meadow development and floodplain processes to address incision. The project is necessary to bring the creek back to a stable landform by elevating and reconnecting the creek to its floodplain, creating more areas of inundation. The project design uses techniques that will encourage multiple flow paths, increase habitat complexity, and enhance beaver activity. The creation of more complex habitat will result in greater resiliency and productivity of fish populations.

The project will improve habitat conditions for adfluvial and resident Yellowstone cutthroat and all species that benefit from riparian wetlands. The project will secure and enhance the existing 34 acres of wet meadow habitat and add up to 43 additional acres. Juvenile rearing and high flow refuge habitat, both limited in the drainage, will increase dramatically.