## Project Title: Stream Ecological Integrity Monitoring at Grant-Kohrs Ranch Relative to Clark Fork Restoration and Remediation, 2015-2020

Discipline: Natural Type of Project: Technical Assistance Funding Agency: National Park Service Other Partners/Cooperators: Montana Tech Student Involvement: Yes, student technician and graduate student Effective Dates: 07/01/2015 - 05/31/2020 Funding Amount: \$31,400 [FY16; \$15,700; FY15: \$15,700]

## Investigators and Agency Representative:

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**Project Abstract:** Heavy metals originating from historic mining activities, milling and smelting processes associated with the Anaconda Company operations in Butte and Anaconda have accumulated on the Clark Fork River stream banks and floodplain over a period of more than 100 years. The planned remediation and restoration of the Clark Fork River within the Grant-Kohrs Ranch NHS park boundary is scheduled to begin in late 2015 and is expected to last approximately 10 years. This unprecedented action in a national park will involve the removal of more than 100 acres of contaminated soil (approximately 387,000 cubic yards) along 2.4 miles of the Clark Fork River that flows through the heart of the park. The remediation and restoration action will also involve replacing the removed soil with clean material, re-contouring the Clark Fork River floodplain, stabilizing the river banks, and revegetating the impacted area to natural conditions. This necessary project will expand current stream ecological monitoring to better understand ecological response for this unprecedented remediation and restoration action.

**Keywords:** Grant-Kohrs Ranch, Montana Tech, Clark Fork River, Superfund, river restoration, stream ecological monitoring