

Project Summary

Rocky Mountains Cooperative Ecosystem Studies Unit

Project Title: Glacier National Park and the Flathead Basin Threatened by Coal Mine Development: Environmental Assessment and Baseline Conditions and Evaluation of Water Quality and Aquatic Life Use

Type of Project: Research
Discipline: Natural Resources
Funding Agency: National Park Service
Other Partners/Cooperators: University of Montana, Flathead Lake Biological Station
Effective Dates: 7/1/2008 - 6/30/2010
Funding Amount: \$150,000

Investigators and Agency Representative:

NPS Contact: Jack Potter, Glacier National Park, West Glacier MT 59936; 406-888-7821; Jack_potter@nps.gov

Investigator: Richard Hauer, Flathead Lake Biological Station, University of Montana 311 Bio Station Lane, Polson, MT 59960-9569; 406-982-3301 x232; ric.hauer@umontana.edu

Project Abstract:

TASK 1: *Water Quality Assessment*

Goal: Provide a baseline of physiochemical data that allows water quality assessment of ground waters and surface waters of the Transboundary North Fork of the Flathead River including waters in the USA and Glacier National Park. Analyses shall include risk analysis of the proposed Lodgepole/Foisey coal mine in the Canadian Headwaters of the North Fork of the Flathead River and potential affects on Glacier National Park, and the US reaches of the Flathead River. Make a comparative assessment of water quality between Transboundary Flathead Basin waters and the waters of the Elk River basin where coal mining has been a major activity for ~100yrs.

Objective: Measure and assess the concentrations and annual load of chemical constituents in water associated with the Lodgepole/ Foisey coal mine site, other coal deposits that might be exploited in the future, and ground and surface waters of the North Fork of the Flathead River and the Elk River basins.

TASK 2: *Stream and River Aquatic Life Assessment*

Goal: Provide a baseline of major components of the stream and river aquatic life. These data allow water quality and aquatic life use assessment of ground waters and surface waters of the North Fork of the Flathead River. Analyses shall include risk analysis of the proposed Lodgepole/Foisey coal mine in the Canadian Headwaters of the North Fork of the Flathead River and potential affects on Glacier National Park, the US reaches of the Flathead River. Sites on the Elk River will be used as direct comparison assessment sites.

Objective: Measure and assess the aquatic life in water associated with the Lodgepole/Foisey coal mine site, other coal deposits that might be exploited in the future, and ground and surface waters of the North Fork of the Flathead River.

Outcomes with Completion Dates: Annual reports will be completed each year that funding is awarded and the report for this project will be due March 31, 2009.

Keywords: Coal Mine Development, environmental assessment, water quality, aquatic life, Glacier National Park, University of Montana, Flathead Lake Biological Station