## Project Summary Rocky Mountains Cooperative Ecosystem Studies Unit

Project Title: Lake McDonald Fishery Investigations, Continuation of UMT-72
Type of Project: Research
Funding Agency: National Park Service
Other Partners/Cooperators: University of Montana, Montana State University
Effective Dates: 6/1/2004 - 12/30/2005
Funding Amount: \$2,350
Investigators and Agency Representative:
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## Project Abstract:

The indigenous fishery of Lake McDonald in Glacier National Park has been altered by a succession of habitat disturbances and ecological manipulations dating from the early 1900's. Park managers are particularly concerned about the welfare of the bull trout, a native char recently placed under the protection of the Endangered Species Act (ESA) as a Threatened species. The native westslope cutthroat trout, a "Species of Special Concern" in Montana, is also imperiled in the lake. Limnological studies conducted in Lake McDonald in September and November of 2003 were typically within the range of values measured in the late summer from 1984 to 1990.

In 2004, limnolgical studies will continue on Fish Creek only. Fish Creek is a known important spawning stream located on Lake McDonald's southwest shore with head waters on Howe Ridge. Water quality parameters to be tested include total phosphorous, total nitrogen, ammonium-N, total organic carbon, and dissolved inorganic carbon. This project is a component of a larger, three-year study funded by NPS-NRPP to investigate the status of the fishery in Lake McDonald, Glacier NP.

## Outcomes with Completion Dates:

List of Products: Investigators Annual Reports 2003: 1. Habitat Use and Movement By Lake Trout In Lake McDonald, Glacier National Park, Andrew M. Dux. (submitted in partial fulfillment of the requirements of the study)

2. Investigating Water Quality In Lake McDonald, Progress Report James A. Craft and Jack A. Stanford, Flathead Lake Biological Station, University of Montana Investigators Annual Reports 2004. Investigators Final Report due FALL 2005

**Keywords:** water chemistry, limnology, fisheries, bull trout, lake trout, Fish Creek, Lake McDonald, Glacier National Park, University of Montana

## For Administrative Use Only:

Date Annual Report Received: Date Final Report Received: Publications, etc. on file: