

**Project Summary**  
**Rocky Mountains Cooperative Ecosystem Studies Unit**

**Project Title:** Statistical Analyses to Direct Conservation and Restoration Priorities for the Yellowstone Cutthroat Trout in the Context of Climate Change

**Discipline:** Natural  
**Type of Project:** Technical Assistance/Research  
**Funding Agency:** USGS  
**Other Partners/Cooperators:** Montana State University  
**Student Participation:**  
**Effective Dates:** 09/01/2016 - 08/31/2021  
**Funding Amount:** \$9,100.00

**Investigators and Agency Representative:**

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**Project Abstract:** The goal of this project are to assemble and analyze empirical, georeferenced data and analyze data to assess how changes in climate and other factors have influenced the distributions of native and non-native fishes through time. The project is broken down into 2 separate objectives. The first objective is to assemble and analyze fish distribution data and climatic attributes to quantify how changing climatic conditions, among other factors will influence the abundance and distribution of Yellowstone cutthroat trout and non-native species. It will be important within this first objective to assess the relative importance of existing threats to native cutthroat trout populations including habitat fragmentation, habitat degradation and loss, non-native species, and changing climatic conditions. The second objective will be to assist in synthesizing results into a peer-reviewed manuscript to a scientific journal.

**Keywords:** Yellowstone cutthroat trout, statistical analysis, climate change, conservation, restoration, USGS, Montana State University