# RM-CESU -Project Completion Report, FY 07

## Project Title: Panel to evaluate Yellowstone Lake Cutthroat Trout

## Park: YELL

<u>Funding Source</u>: Rocky Mountains CESU Research Funding (\$5,000); YELL funds (\$15,000)

Contact: Todd Koel, Yellowstone National Park, 307 344-2281

University Partner: John Varley, Montana State University, Big Sky Institute

<u>USGS Partner</u>: Robert Gresswell, USGS Rocky Mountains Science Center, Bozeman, Montana

### Project Description:

Soon after the 1994 discovery of lake trout in Yellowstone Lake, Yellowstone National Park initiated a gillnetting program aimed at suppression of the population. In 2001 our efforts were greatly enhanced by acquisition of a Great Lakes – style gillnetting boat and funding to support additional staff. From 2001-2006 we set 105,000 net nights of gillnet (100m/night) and removed 170,000 lake trout from Yellowstone Lake. Despite this effort, lake trout remain abundant; a new spawning site was discovered in 2006, and increasing numbers of smaller, immature lake trout have been removed for the fifth year in a row. Suppression efforts are surely slowing the rate of population growth, but will the program be able to suppress the lake trout population to an equilibrium that allows cutthroat trout to co-exist? In addition, whirling disease has resulted in a severe cutthroat trout decline in Pelican Creek and potentially other spawning tributaries to Yellowstone Lake. Since 2001 anglers have been required to release all cutthroat trout unharmed, but are we doing enough to save the Yellowstone Lake cutthroat trout population? What do the regional and national experts see as the greatest strengths of our program? What are our greatest needs? How can we become more efficient with our efforts given that lake trout suppression will forever be required here?

### Methods:

We will identify a panel of experts on the ecology and management of cutthroat trout and introduced predatory lake trout in large lake systems. A document will be created for review by this panel that contains the best available information regarding the current state of the cutthroat and lake trout populations, and the approach being taken to address the problem on Yellowstone Lake. In late summer 2008 we will hold a facilitated 1-2 day workshop in Yellowstone National Park where the panel would be convened and existing information on population status will be presented to the panel. Critical review of the cutthroat trout preservation program and constructive comments/advice on how to continue the program into the foreseeable future will be received from external (outside YNP) scientists. A scientific document based on the workshop will be produced that potentially redefines our approach to cutthroat trout preservation on Yellowstone Lake.

<u>Project Results</u>: CESU agreement and a modification was established with John Varley/MSU. Initial workshop planning meetings have been held with our collaborators.

Follow-up of this Project: Planning for the workshop continues.

Expected Final Report: Fall 2008 we will have results of the workshop. Final document expected in winter/spring 2009.