

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

**Project Title:** Evaluate Lake Trout Suppression Strategies for Blue Mesa Reservoir

**Discipline:** Natural  
**Type of Project:** Research  
**Funding Agency:** National Park Service  
**Other Partners/Cooperators:** Colorado State University  
**Effective Dates:** 9/1/2009 - 6/30/2012  
**Funding Amount:** \$10,000

**Investigators and Agency Representative:**

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**Project Abstract:** Lake trout are usually thought of as a slow-growing, late-maturing and long-lived species, owing to their typical demographic characteristics in the cold, oligotrophic lakes of their native range. As such, the species can be sensitive to overexploitation. In contrast, Blue Mesa Reservoir, within Curecanti National Recreation Area (CURE), supports one of the fastest growing, naturally reproducing lake trout populations in North America. Despite liberal harvest regulations (no size limit, 8 fish daily bag) for over a decade, this population has produced several state record fish and the population appears to have increased in abundance during the same period. Concurrently, the lake's kokanee population has declined despite a doubling of kokanee stocked from about 1.5 million per year in 1992 to 3 million per year starting in 1999. Thus, the lake trout population has at the same time become a popular trophy fishery while jeopardizing an even more popular kokanee fishery and egg supply for the state's kokanee management program.

Because this lake trout population appears to be more resilient than most, and because some anglers may strongly oppose endangering the trophy lake trout component of the Blue Mesa fishery, efforts to suppress the Blue Mesa lake trout population may require an unconventional approach. This project is a cooperative effort between the Colorado Division of Wildlife (CDOW) and the National Park Service with the goal of determining the optimum long-term suppression strategy for Blue Mesa Reservoir's lake trout population. Results from the project will provide information necessary to better manage the significant fishery at CURE.

This project will support a graduate student to work closely with the CDOW, Gunnison Area Fishery Biologist to devise and evaluate lake trout suppression strategies that will optimize multiple objectives for the Blue Mesa sport fishery: 1) recovering and maintaining a robust kokanee population and egg supply, 2) rebuilding and sustaining a world class sport fishery for kokanee, and 3) providing trophy lake trout angling opportunity (to the extent compatible with 1&2).

**Outcomes with Completion Dates:** Field work, analysis, and thesis will be completed by June 30, 2012.

**Keywords:** Lake trout, Kokanee, management strategies, Blue Mesa Reservoir, Curecanti National Recreation Area, Colorado Division of Wildlife, Colorado State University, National Park Service