



# **Montana Fish, Wildlife & Parks**

## **ENVIRONMENTAL ASSESSMENT AND DECISION NOTICE FOR THE SWAN LAKE DEPLETION POPULATION ESTIMATE PROJECT**

June 27, 2008

### **Project Proposal and Justification:**

Montana Fish, Wildlife & Parks (FWP), and Partners (i.e., US Fish and Wildlife Service, US Forest Service, Montana State University Cooperative Fisheries Research Unit, Trout Unlimited, Confederated Salish and Kootenai Tribes, and the Montana Department of Natural Resources and Conservation) propose to conduct a depletion population estimate for lake trout *Salvelinus namaycush* in Swan Lake, Montana. A depletion population estimate requires multiple days of netting effort while removing (culling, in this case) all lake trout sampled during a three-week period. As fish are removed from the lake, the average catch rate will decline. Biologists can use the rate of decline in catch to determine what number of fish existed prior to the action. Due to the numbers of fish likely to be handled, we propose to utilize the skills, equipment, and expertise of professional fishery consultants. A research project conducted in the fall of 2007 resulted in about 1,400 lake trout being tagged and released alive. Recapture of these tagged fish will provide additional data to further improve the quality of our analysis.

The Swan Valley has historically been home to a stable, healthy bull trout population. However, in 1998 anglers began to occasionally catch adult-sized (20-30-inch) lake trout from Swan Lake and the Swan River. This caused alarm because lake trout are not native and are notorious for rapidly expanding and dominating fish communities in lakes at the expense of bull trout and kokanee salmon. In the years following the original discovery, catch rates of lake trout have increased. Efforts have been made to examine the population size and structure of the expanding lake trout population, and this project represents a progression of these efforts.

### **Location of Project:**

This project will be conducted on Swan Lake, located approximately 10 miles southeast of the city of Bigfork, Montana. Swan Lake drains to the Swan River, a major tributary to Flathead Lake.

### **Environmental and Social Impacts:**

Conducting gill netting to estimate lake trout numbers will have unintended impacts to the bull trout population through bycatch-related mortality. Mortality associated with the bycatch of bull trout will be minimized by rapid removal and resuscitation of all live bull trout captured in the nets, as it was during 2007 research efforts. Additionally, sampling will be conducted during the time in which most adult bull trout have left the lake and are residing in Swan River tributaries in preparation for fall spawning. A portion of the bull trout captured will be dead, and these fish will be retained and used for additional research objectives. Overall, bull trout bycatch mortality during lake trout gill netting will

likely be insignificant relative to the direct impacts of lake trout on the bull trout population through competition and predation. Additionally, bycatch of other fish species is expected to be minimal, as was observed during 2007 netting efforts.

Some anglers may be temporarily disrupted, precluded from fishing in chosen locations, or disturbed by sampling activities. However, due to the timing of this project and short duration, such effects will be minimal.

### **Public Involvement:**

In compliance with the Montana Environmental Policy Act, a draft environmental assessment (EA) was prepared and released for a 30-day public comment period from May 7 through June 10, 2008. Notices were placed in local and surrounding area newspapers, a news release was done, and notices were mailed to selected persons, legislators, and local conservation groups. Copies of the EA were available for viewing at the Montana State Library in Helena, the Flathead County Libraries in Kalispell and Bigfork, the Polson City Library, the Seeley Lake Library, the Swan Ecosystem Center in Condon, and the Swan Lake Library and Swan Lake Trading Post in the town of Swan Lake. Copies of the EA were also available at the FWP Region One headquarters in Kalispell and the FWP web site.

### **Public Comments/Responses:**

FWP received 11 written comments and 7 oral comments at the public meeting, all in favor of the proposed depletion estimate project. FWP received no comments in opposition to this project.

### **Decision Notice:**

Lake trout pose an imminent threat to the native bull trout population of Swan Lake. Because of the immediacy of this threat, this project serves to accomplish two objectives. First, this project represents an important step in furthering our understanding of the lake trout population in Swan Lake. Identifying the population size and structure of this expanding species will aid fisheries managers in future management decisions related to lake trout. Second, because of the methods used for this population estimate, a significant portion of the lake trout population will be removed from the system. While this netting represents an initial effort at removal of these fish, any future management actions will involve a separate environmental assessment and additional public involvement.

Based on the public comments received during the public comment period for the draft EA, I recommend that the proposed project be implemented.



June 27, 2008

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