



National Park Service
 Glacier National Park
 P.O. Box 128
 West Glacier, MT 59936

Bull Trout (*Salvelinus confluentus*)



J. Dunham, USGS

PUBLIC SCOPING FOR:
Proposed Large-Scale Removal of
Lake Trout on Quartz Lake
Environmental Assessment
Glacier National Park, Montana

WHAT COMES NEXT

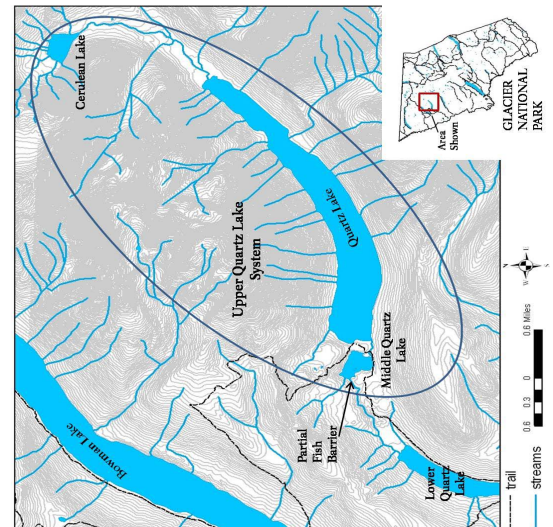
After we review the comments received during scoping, we will prepare an environmental assessment (EA) and announce its availability for 30 day public review with news releases and letters.

Scoping comments are due by April 06, 2009 and may be posted online by selecting Quartz Lake EA at:

<http://parkplanning.nps.gov/parkHome.cfm?parkId=61>

Or by writing to Superintendent, Attention: Quartz Lake EA, P.O. Box 128, Glacier National Park, West Glacier, MT 59936.

Once completed, the EA will be available as the above site for review/comment.



"...to conserve the scenery and the natural and historic objects and the wildlife therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations"

National Park Service - The Organic Act of 1916

Glacier National Park (GNP) is committed to preserving and protecting natural resources in the park while providing exceptional recreation opportunities. The following proposed project is intended to protect native bull trout populations in Quartz Lake.

THE PROJECT AREA

The proposed project would take place on Quartz Lake; however, it would affect the fishery of the entire upper Quartz Lake system which includes Middle Quartz, Quartz, and Cerulean Lakes (see map). The upper Quartz Lake system is located within recommended wilderness in the North Fork of the Flathead River watershed. It is generally best accessed by trail from Bowman Lake to the outlet of Quartz Lake. Native fish species in this complex include bull trout, classified under the Endangered Species Act as "Threatened", westslope cutthroat trout, a Montana state species of special concern, and mountain whitefish. Until the recent discovery of lake trout in Quartz Lake, it was the largest remaining natural lake system in the Columbia River Basin with an intact native fish species assemblage.

PROJECT BACKGROUND / PURPOSE AND NEED

The native fish assemblage west of the Continental Divide in GNP has become severely compromised, due to introduction, invasion, and establishment of nonnative fish populations, including lake trout. After 14,000 years of dominance, GNP's greatest native aquatic predator (bull trout) could be lost from many of the park's west-side waters, including Quartz Lake. The decline of bull trout in GNP is directly attributed to the invasion and establishment of nonnative lake trout, which consistently displace bull trout in systems where they have been introduced.

Several lakes in the Rocky Mountains are experiencing similar problems with invasive lake trout. These include Priest Lake and Lake Pend Oreille (Idaho), Swan Lake (Montana), and Yellowstone Lake (Yellowstone NP, Wyoming). Lake trout populations in these lakes have been targeted for removal by netting in an attempt to conserve native fish species.

In 2004, a partial fish passage barrier was constructed by GNP and U.S. Fish and Wildlife Service (USFWS) staff at the outlet

of Middle Quartz Lake to prevent nonnative fish migration up stream. The barrier project was not completed when lake trout were subsequently discovered in Quartz Lake in 2005.

Unless lake trout can be successfully suppressed or eradicated in Quartz Lake, the fish community will likely shift from one dominated by bull and westslope cutthroat trout to one dominated by lake trout. This change has consequences not only for fish, but also for anglers as well as the terrestrial ecosystem that utilizes the native fishery resources (i.e. loons, otters, eagles). Without action, recent history indicates that yet another of Glacier's ecologically unique bull trout populations will face the eventual threat of extinction due to competition with, and predation by, introduced lake trout. In order to be successful, an aggressive adaptive management approach to evaluate lake trout status and remove lake trout from Quartz Lake is proposed.

Glacier National Park is proposing to protect the native fish species assemblage in Quartz Lake by implementing a project to evaluate the status of lake trout and investigate ways to remove lake trout from Quartz Lake. Determining the feasibility of successful long-term lake trout suppression or eradication in the Quartz Lake system under the proposed project is a critical information need Glacier National Park will use to guide long-term fish management in the Quartz Lake system.

ALTERNATIVES/IMPACTS

To date, park staff has identified the following alternatives and impact topics:

- No Action: Maintain current management of the Quartz Lake drainage. Non-native lake trout would most likely continue to multiply and migrate up from Quartz Lake and eventually occupy the entire drainage. The park would rely on current fishing regulations (no limit for lake trout) to control the population.
- Conduct a four-year operation that would require the use of an 18-foot or larger, motorized boat to deploy large nets to evaluate population status and lethally remove lake trout. Some lake trout would be radio-tagged to locate spawning and rearing areas. Biological samples would also be collected.
- Use a non-motorized watercraft to conduct hook-and-line, and weather permitting, small netting operations for lake trout evaluation and removal.

The proposed project would be implemented by staff from multiple agencies including NPS, U.S. Geological Survey, USFWS, and others.

Preliminary internal review identified the following impact topics: Fisheries/Aquatic Species, Wilderness, Visitor Use and Experience, Wildlife, Threatened, Endangered and Species of Concern, Water Quality, Natural Sound, and Visitor Use and Experience.