

---

## Background

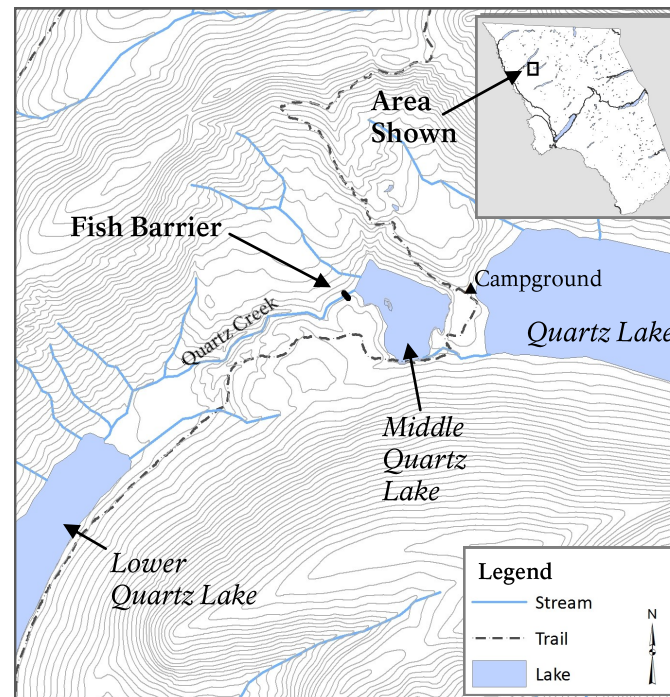
Native fish populations in Glacier National Park have been severely compromised by the invasion and expansion of non-native fish species into the park's lakes and streams. Non-native fish affect native fish through predation, hybridization, and competition and are imperiling populations of bull trout (*Salvelinus confluentus*), which are federally listed as threatened, and the native westslope cutthroat trout (*Oncorhynchus clarkii lewisi*), a state listed Species of Concern.

Of the seventeen lakes on the west side of the park that support bull trout, nine have been compromised by the non-native lake trout (*Salvelinus namaycush*) and a tenth has been compromised by brook trout (*Salvelinus fontinalis*). Data show that lake trout are increasing in abundance and bull trout are in decline, and lake trout have largely replaced bull trout as the top level aquatic predator in lakes that have been monitored over time. Bull trout populations in some lakes appear to be at imminent risk of disappearing altogether. The colonization of several of the park's lakes by lake trout and the subsequent decline of bull trout in the park make protecting remaining bull trout populations a high priority.

Until recently, Quartz Lake was believed to be free of non-native fish species. In 2004, with assistance from the U.S. Fish and Wildlife Service, Glacier National Park constructed a fish passage barrier on Quartz Creek between Middle and Lower Quartz lakes to protect the area from invasion by lake trout. But in 2005, before final construction of the barrier was complete, lake trout were detected in Quartz Lake and further work on the barrier was suspended until options to control lake trout

could be reviewed. Since that time, the NPS has collaborated with the U.S. Geological Survey and others in an ongoing experimental program to remove lake trout from Quartz Lake and suppress the population. Experimental suppression has so far been promising, with identification of lake trout spawning areas and annual removal of spawning lake trout.

The park is proposing to modify and improve the existing Quartz Creek fish barrier to support suppression efforts in Quartz Lake, reduce the potential for additional lake trout to enter the lake, and reduce the likelihood of invasion from other non-native species, such as rainbow trout (*Oncorhynchus mykiss*) and brook trout.



Location of Quartz Creek fish passage barrier.

---

## Objectives

- Protect the integrity of native fish populations in the upper Quartz drainage.
- Support lake trout suppression efforts at Quartz Lake by reducing the potential for additional lake trout to enter the lake.
- Reduce the potential for other non-native fish, including brook and rainbow trout, to access the upper Quartz drainage.

---

## Alternatives Identified to Date

**No action**— the NPS would not modify and improve the fish passage barrier on Quartz Creek, and lake trout and other non-native fish species would continue to move into the upper Quartz Lake system.

**Modify and improve the fish passage barrier**— the NPS would modify the fish passage barrier on Quartz Creek. The improved structure would eliminate upstream passage of fish during non-flood periods and reduce the likelihood of upstream passage during flood flows. Downstream passage of native fish would not be impeded. The work would involve a small number of helicopter flights, motorized equipment (such as a portable generator), and the cutting of onsite trees for use in the construction of the barrier.

---

## Issues to Consider

- Protection of native fish populations.
  - Impacts to water quality, wetlands, and floodplains.
  - The temporary use of motorized equipment within recommended wilderness.
-

## Environmental Assessment Process Overview:

- Public Scoping
- Preparation of Plan/Environmental Assessment (EA)
- Public Review of Plan/EA
- Analysis of Public Comments
- Preparation of Decision Document

### Public Comments During Scoping

Your comments will help identify issues and other alternatives to evaluate in the EA. There will be another opportunity for you to comment when the plan/EA is completed. Please post your comments online at:

***[www.parkplanning.nps.gov/  
QuartzFishBarrier](http://www.parkplanning.nps.gov/QuartzFishBarrier)***

or

Send comments to:  
***Superintendent Glacier National Park  
Quartz Fish Barrier EA  
PO Box 128  
West Glacier, MT 59936  
Phone: 406-888-7901***

No public meetings are scheduled at this time..

Please provide comments by  
**September 6, 2011**



National Park Service  
U.S. Department of the Interior  
Glacier National Park  
P.O. Box 128  
West Glacier, MT 59936

National Park Service  
U.S. Department of the Interior



Glacier National Park  
Montana

## PUBLIC SCOPING

### Proposed Quartz Creek Fish Barrier Modification and Improvement

### Environmental Assessment



Quartz Creek Fish Barrier, NPS photo.

August 2011