



United States Department of the Interior

NATIONAL PARK SERVICE

North Cascades National Park
Lake Chelan National Recreation Area
Ross Lake National Recreation Area
810 State Route 20
Sedro-Woolley, Washington 98284-9394

May 13, 2013

Dear Friend of the North Cascades,

Over the past four years North Cascades National Park Complex has been working hard to restore several mountain lakes within the park in accordance with our *Mountain Lakes Fisheries Management Plan* (MLFMP). This letter highlights the success of these restoration efforts and invites your comments on revised plans to continue these restoration efforts in accordance with the adaptive management principles of the MLFMP.

Background

Historically, all of the mountain lakes of North Cascades National Park Complex were free of fish due to natural fish barriers (such as waterfalls) in streams connecting these water bodies with those located downstream. In the absence of fish, these lakes developed unique ecosystems where amphibian species such as frogs and salamanders were the top predators. Despite this natural history, stocking practices over the past century introduced fish to over a third of the mountain lakes within the park complex, having a detrimental effect on these native ecosystems. Particularly where fish stocking established reproducing fish populations, fish have overpopulated these mountain lake communities, not only undermining fish stocking efforts by stunting the growth of all fish in the lake, but also reducing or eliminating native species such as the long-toed salamander from these unique ecosystems.

To address these issues, the National Park Service has been restoring select mountain lakes since 2009, in accordance with the MLFMP, using various methods to remove non-native fish. Over the past four years, spawning habitat exclusion has been implemented in one lake, intensive gill netting in four lakes, and piscicide removal (specifically antimycin) in two lakes. Monitoring results following these efforts indicate native species such as tailed frogs and long-toed salamanders are rapidly returning to these naturally fishless lakes as the non-native populations of fish are removed.

Proposed Actions

Now, in accordance with the MLFMP, North Cascades National Park Complex is preparing to continue our lake restoration efforts this fall by removing a reproducing population of non-native Eastern Brook Trout from Sourdough Lake. The goals of this high-priority effort are to restore the native ecology of Sourdough Lake and to protect the genetic integrity of Bull Trout, a federally threatened fish species which is native to lower elevation creeks and rivers. Brook trout dispersing downstream from Sourdough Lake have the potential to harm Bull Trout in Ross Lake and the broader Skagit River watershed.

As outlined in the MLFMP, successful restoration of Sourdough Lake requires treatment with a piscicide due to the size and depth of the lake. Although antimycin, specifically Fintrol™ a liquid form of the piscicide, was initially identified as the preferred piscicide in the MLFMP and was successfully used to treat Blum Lakes in 2010, this chemical is no longer commercially available and current stocks have been depleted. As a result, North Cascades National Park Complex is proposing to use a recently developed liquid formulation of rotenone known as CFT Legumine™ as the preferred piscicide for fish removal in lakes identified for chemical treatments in the MLFMP, including Sourdough Lake.

The MLFMP envisioned using rotenone to restore mountain lakes; however, the plan noted that if rotenone was to be used for fish removal actions in the future, additional analysis would be completed and opportunities for public comment would be made available. The EPA has concluded that the use of rotenone for fish control does not present a risk to humans or the environment when used according to the label instructions, and based on an assessment of the environmental and human health risks of using rotenone to implement the MLFMP, the NPS has determined that using CFT Legumine™ to remove non-native fish will not have higher adverse environmental impacts than using Fintrol™ because this newer formulation of rotenone is not as toxic to non-target organisms and humans as older formulations of the piscicide. The NPS also believes that rotenone could be more effective than antimycin in treating particularly deep mountain lakes, such as Sourdough, as rotenone, unlike antimycin, is able to penetrate more dense layers in a lake's thermal stratification.

How to Comment

In order to engage your review of this proposal, we are soliciting public comments during a 30-day public review period that extends through June 14, 2013. During this time, we encourage you to visit the project website (www.parkplanning.nps.gov/restore_sourdough) to learn more about our lake restoration program and access an NPS whitepaper on the *Assessment of the Environmental and Human Health Risks of Using Rotenone to Implement the Mountain Lakes Fisheries Management Plan in North Cascades National Park Complex*. We have also enclosed a FAQs in this mailing to address any questions you may have, but please feel free to contact Ashley Rawhouser, Aquatic Ecologist (360-854-7317; Ashley_Rawhouser@nps.gov) with any additional questions or for more information.

Comments may be submitted online via the project website (www.parkplanning.nps.gov/restore_sourdough) or via regular mail to North Cascades National Park Complex Headquarters, 810 State Route 20, Sedro-Woolley, Washington, 98284.

We look forward to hearing your input and appreciate the opportunity to share with you some information about the restoration of mountain lakes within the North Cascades.

Sincerely,

A handwritten signature in dark ink, appearing to read "Karen F. Taylor-Goodrich", followed by a horizontal line.

Karen F. Taylor-Goodrich
Superintendent