

FISH

Concern

There is a need to find out why the Braeburn Lake whitefish population is declining.

Whitefish spawning runs in the creeks in and out of the lake used to be good and were an important source of food for people. There has been a noticeable decline in whitefish over the past few years and according to local residents, the last good year was in 1998. Suggested causes of the decline could be contaminants changing water chemistry, sewage from lakefront residences, or changes in water levels due to beaver dam removal. The health of Braeburn Lake is a concern for many people, not just residents of Carmacks.

Solution **Monitor water quality, contaminants, water flow, and whitefish populations in Braeburn Lake.**

Managers and area residents need more information to understand changes that are occurring in Braeburn Lake and to the whitefish population.

Commitment

By who? By when?

YTG, LSCFN, CRRC
EARLY IN PLAN

Monitor water quality and contaminant levels in Braeburn Lake. [34]

The management plan for the Nordenskiöld Habitat Protection Area (Figure 1) will include monitoring of water quality downstream from Braeburn Lake, and the lake should be included in monitoring. Both water and fish should be sampled for contaminant levels. Outcomes of this monitoring will be shared with the CRRC.

YTG
EARLY IN PLAN

Do a traffic flow study where vehicles are crossing Klusha Creek. [35]

It is possible that vehicles crossing Klusha Creek to reach homes around the lake are affecting the whitefish spawning areas by causing siltation or by destroying spawning areas in the shallows. YTG should monitor traffic flow using a vehicle counter.

YTG, LSCFN, CRRC
EARLY IN PLAN

Conduct a whitefish study that collects local knowledge about spawning areas and water quality, and counts juvenile whitefish. [36]

There have been two small net surveys on Braeburn Lake but there is no information about juvenile whitefish production. Small-mesh “beach seine” nets will be used to sample the lake to study the recruitment of juveniles into the whitefish population. Traditional spawning areas will be investigated to see if changes in water flow have affected their use. Results of the study will be shared with the CRRC.

YTG, LSCFN, CRRC
EARLY IN PLAN

Monitor spawning in the fall using local people. [37]

Local people could watch spawning areas and report changes in the numbers of whitefish. Samples taken from harvested fish will be used to see if there are missing age classes.

Concern

A creek crossing the Campbell Highway (near Bearfeed Creek) near Little Salmon Lake is drying up. Beaver dams block another creek from Ghost Lake.

These creeks were grayling and pike fishing spots for LSCFN people. Blockages in both creeks (Figures 12 and 13) may be related to beaver dams. Some people thought that changes in water flow in the Ghost Lake creek was related to the installation of a culvert under the Robert Campbell Highway.

Solution Assess what is changing creek flows and develop plans to correct the problems if required.

Commitment

By who? By when?

YTG, LSCFN, CRRC
2004

Investigate why these creeks are drying up and report to the CRRC. [38]
Once it has been determined why the creeks are drying up, YTG, LSCFN and the CRRC will consider how to proceed. Local trappers or residents with an interest should participate in any planned work.

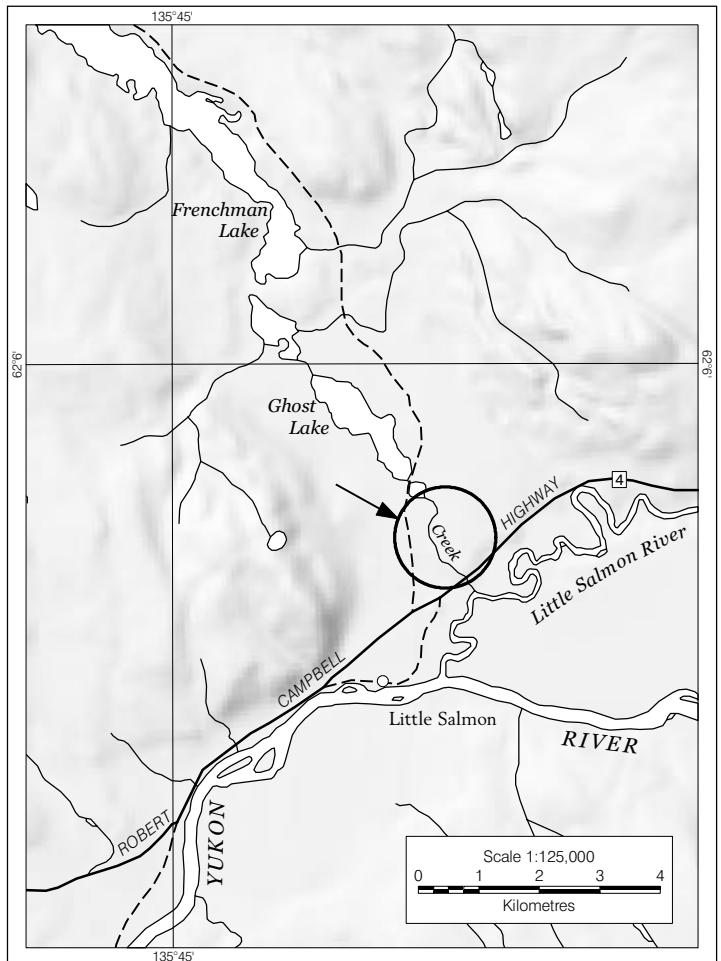
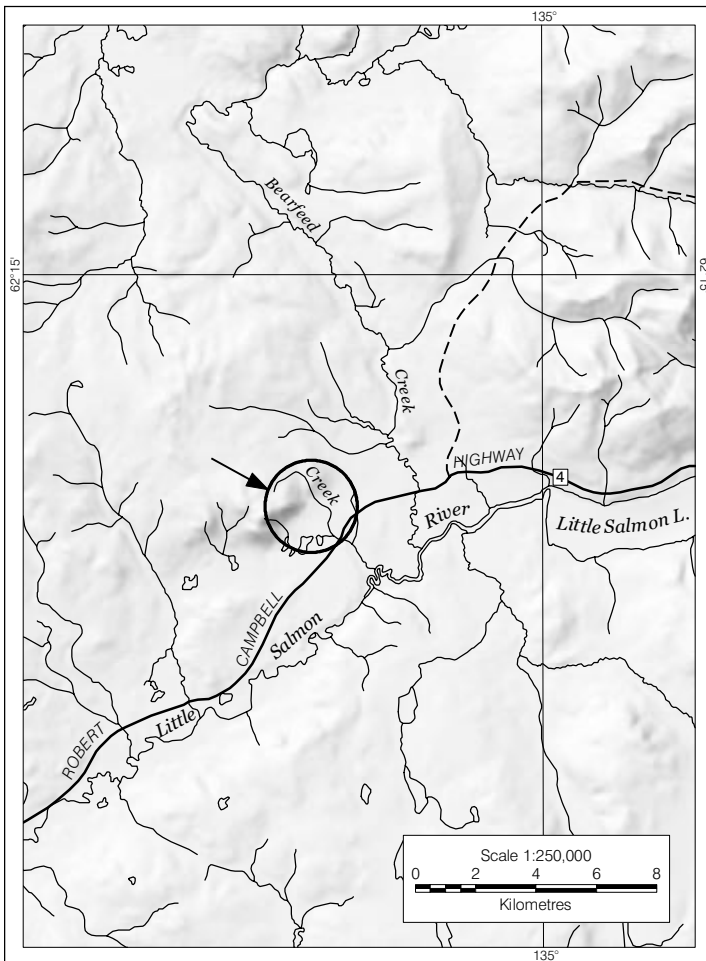


Figure 12. Creek identified by Carmacks residents as drying up.

Figure 13. Creek from Ghost Lake blocked by beaver dams.

Concern

Ten-Mile Lake may be over-fished during the winter due to easy access.

This is a small lake located between the North Klondike Highway near Braeburn and Coghlan Lakes (Figure 14). It is the first lake on the trail from Braeburn and is easily accessible in winter. People who fished the lake 20 years ago have noticed that far fewer fish are being caught than before. This lake is managed under the Conservation Water regulations with a daily catch limit of two lake trout, four grayling and four pike, per person.

Solution Provide information to anglers about fishing regulations on the lake, assess lake trout stock, and increase education and enforcement presence during winter.

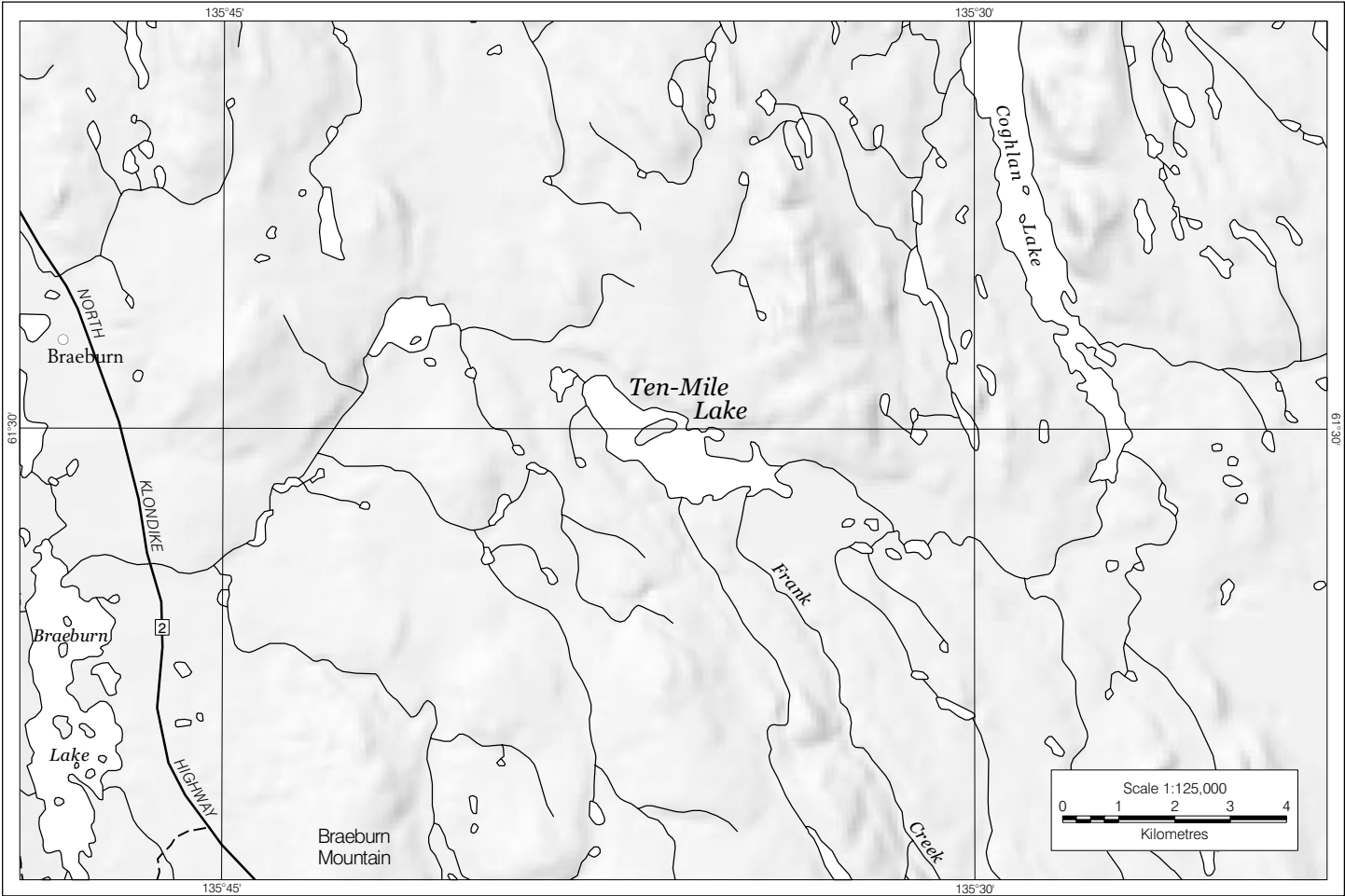


Figure 14. Ten-Mile Lake and area.

Commitment

By who? By when?

YTG
2004

Put up an information sign at Ten-Mile Lake describing fishing regulations on lake. [39]
A sign at the lake will help to inform anglers about the daily catch limits, slot sizes and how these apply to fish in the lake.

YTG, LSCFN
2004 OR 2005

Survey lake trout stock. [40]
A lake trout survey gives an idea of relative abundance that can be compared to over 100 lakes in the Yukon. YTG will try to study Ten-Mile Lake early in the plan. The lake should be sampled every five years to monitor changes in fish populations. YTG will cover the cost of the survey, and LSCFN will participate in the survey.

CRRC
2004 OR 2005

Assess lake trout stocks and consider classifying Ten-Mile Lake as Special Management Waters with “small lake” trout regulations. Submit to Yukon Fish and Wildlife Management Board as a regulation change proposal. [41]
Depending on the outcome of the stock assessment, if there is a significant conservation concern for the lake trout population, a regulation change to limit daily catches to one lake trout less than 65 cm in length per day could be introduced.

CRRC, LSCFN, YTG
2004 OR 2005

Increase education about freshwater fish at schools. [42]
Providing information to school kids is a good way to get information to the public about fisheries management. At the time of the plan, the LSCFN was working on some new school curricula. This provides an opportunity to share information about fisheries management in the Carmacks area. The LSCFN, CRRC and YTG would all need to participate in a discussion about the best way to do this. Field trips with older school kids related to “on-the-land” resource management are also a way to work with kids.

YTG
2004-2009

Enforcement patrols to Ten-Mile Lake should be a high priority during winter. [43]
Both Faro and Whitehorse Conservation Officers patrol Ten-Mile Lake trail in winter, at least three weekends each winter. To get a good sense of angler activity during the winter, there needs to be as much activity reported as possible.

Concern

There are concerns about levels and methods of harvest and locations of guest cabins of the fly-in commercial fishing operation on local lakes. There is a need to have the owner involved with the community.

There are fishing lodges on eight lakes in the area: Coghlan, Claire, Drury, Frank, Ken and Lynn (Chain Lakes), Mandanna, and Ten-Mile lakes. People in the Carmacks area don't have a lot of information about the commercial activities at these lodges and are concerned about the impact this operation has had on fish populations in lakes in the area in the past. The ownership of the lodge has recently changed, and the community would like to develop a relationship with the new owner. People in the community would like to understand what fish are in these lakes, how many fish are caught and released, how many fish are harvested by the commercial operation, and also find out what are safe levels of harvest. People are also concerned about the ethics of catch and release fishing and would like to discuss the need to limit use of areas in lakes to avoid disturbing spawning fish on a seasonal basis. The operating policy of the commercial lodge is for catch and release fishing only, and catch effort has been reduced from what it was in the past on lakes.

Solution **Work to exchange information between the community and the fishing lodge owner to understand the fishing activities on these lakes.**

Commitment

By who? By when?

CRRC
2004

The CRRC will ask for voluntary reporting by the fishing lodge owner of fishing activity on lakes. [44]

The lodge could also report numbers and conditions of fish caught, and record other activities on lake. Since this is confidential information, providing these numbers would be up to the owner of the lodge, but would directly address people's questions about how many fish are being taken. Information about the condition of fish caught would be helpful also to monitor any concerns with the health of fish.

LSCFN
EARLY IN PLAN

The LSCFN will consider giving traditional use information to the fishing lodge owner. [45]

Information about traditional uses of lakes, and fishing practices and First Nations ethics could be interesting for the lodge's clients, and help foster conservation of fish. A meeting with LSCFN and the lodge owners would be the best way to begin this discussion.

Concern

Catch and release practices of fishing can hurt and kill fish.

This is a common community concern throughout the Yukon and has come up in past regional fish and wildlife management plans. The YFWMB worked extensively to come up with solutions to address community concerns, and could be asked to present the findings of their work to the community.

Solution **Make a recommendation to the Yukon Fish and Wildlife Management Board about catch and release fishing, and work with fishing lodge owner on local lakes.**

Commitment

By who? By when?

CRRC
BEFORE 2007

Make a recommendation to the Yukon Fish and Wildlife Management Board: "People are concerned about catch and release fishing practices in the LSCFN traditional territory. The Board needs to continue an education and awareness program because it is a high priority in the community. The Board is invited to host a discussion in the community." [46]

Because live release is a Yukon-wide issue, the Carmacks plan partners acknowledge that changes to fishing methods cannot be made in isolation from the Yukon Fish and Wildlife Management Board.

CRRC, LSCFN
2004-2009

The CRRC and LSCFN will work with the fishing lodge owner about live release practices. [47]

Information and communication between the community and lodge will help each other understand management concerns.