

Québec's 2014–2020
Lake Trout
Management Plan

Quality,
Sustainable
Fishing



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Management Plan**

A species management plan makes it possible to check in on population health, identify the factors limiting population growth, and if necessary, introduce measures to improve the situation. The following steps were involved in adopting this lake trout management plan:

- 1– Conducting of population and habitat sampling (1988–2012)
- 2– Determination of status of the species and its habitat (2011)
- 3– Identification of the conditions for sustainable exploitation (2012)
- 4– Provincial consultations (2012–2013)
- 5– Regional consultations (2012–2013)

This process was coordinated by the Wildlife division of the Ministère du Développement durable, de l'Environnement, de la Faune et des Parcs (MDDEFP) in close collaboration with the MDDEFP regional offices and the main stakeholders involved with the management of lake trout in Québec.

Main partners:



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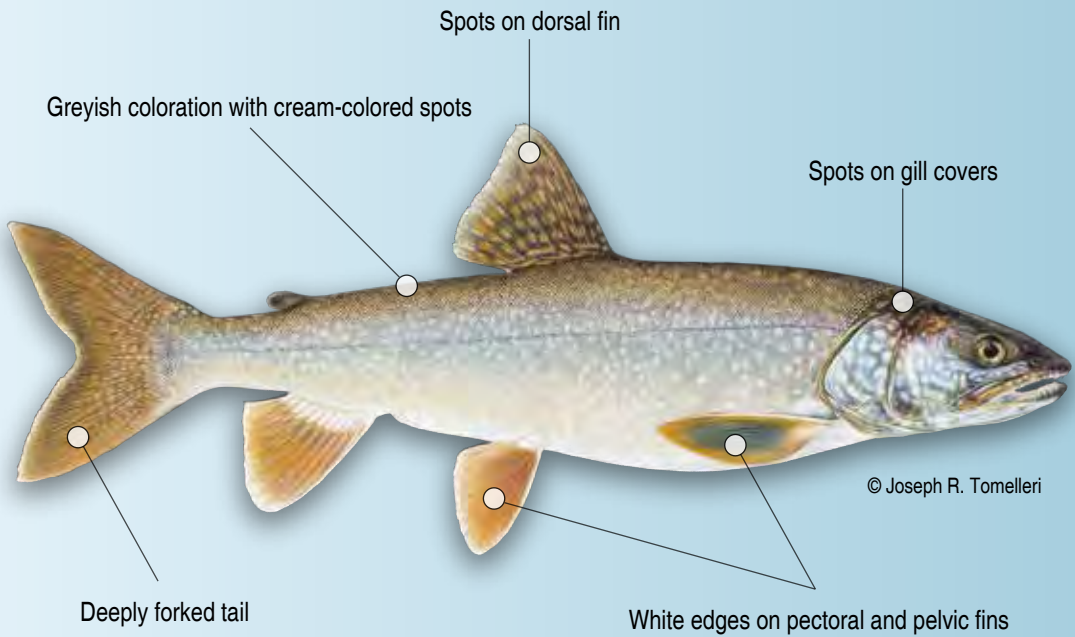
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Ecology of the Lake Trout

Food supply: Wide variety of organisms: freshwater sponges, crustaceans, plankton, insects in the larval or adult stage, benthic invertebrates, fish, and small mammals

Growth: Fast for piscivorous (fish-eating) populations, slow for planktivorous (plankton-eating) populations

Reproduction: Fall, when water temperature is between 8 °C and 13 °C, which is in September in northern Québec and October and November in southern Québec.

Habitat: Large, deep, oligotrophic lakes with clear, cold, oxygen-rich water and good stratification in summer

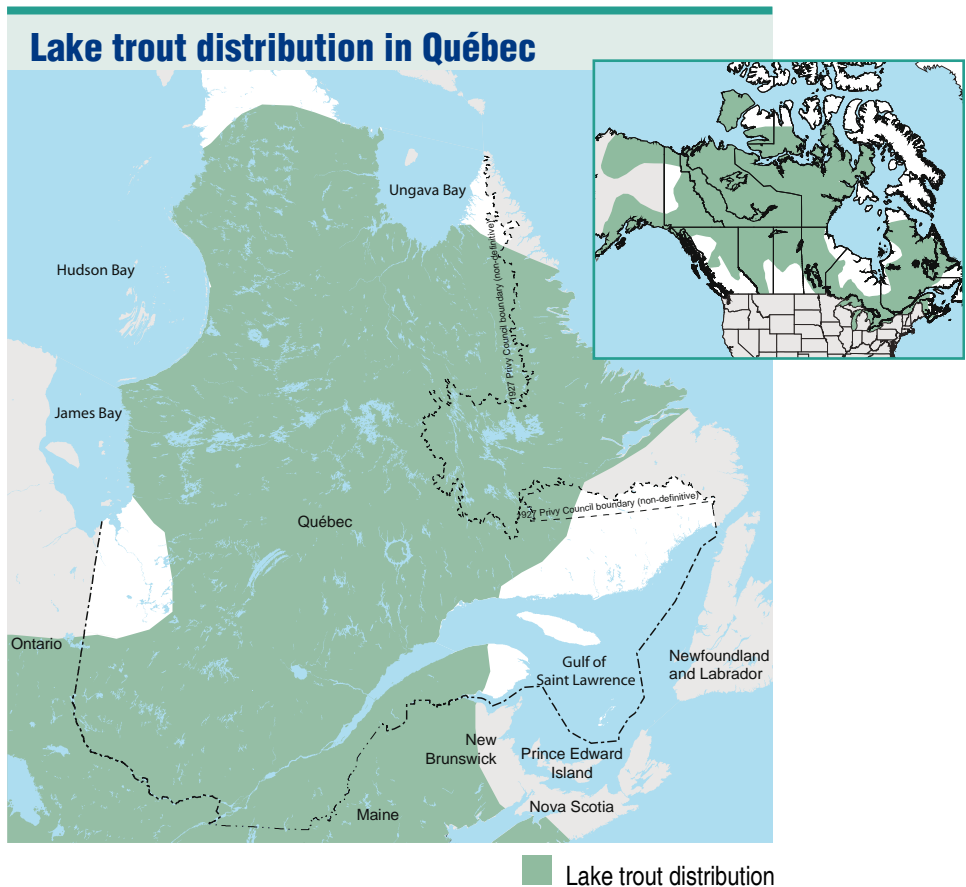
Limiting factors: Eutrophication, reservoir drawdown, climate change and overharvesting (especially from winter fishing)

Distribution

The lake trout (*Salvelinus namaycush*), also known as lake char, is an indigenous fish of the Salmonidae family whose natural range, exclusive to the northern part of the continent, is the broadest in North America. It is common in the northern Prairies and can be found all the way to the Yukon and Nunavut. In the east, its range extends further south, covering the Great Lakes region and part of New England and the Maritimes.

In Québec, knowledge of the distribution of this species north of the 55th parallel is incomplete, but it appears that the region's many cold lakes and rivers favor its presence across much of the territory.

Though less common in the south of the province, lake trout is still found in at least 1,030 bodies of water covering a total area of 26,000 km². It has also been introduced in numerous lakes to improve sport fishing opportunities. These bodies of water are now considered lake trout lakes in their own right because the populations have become self-sustaining.



Managing the lake trout

Fishing management in Québec aims to maintain a sufficient number of spawners to ensure populations are self-sustaining while at the same time providing high quality fishing. The distribution of fish available for harvest must be allocated according to the following priorities: (1) Aboriginal communities, (2) sport anglers (3) commercial fishers. Lake trout is not commercially exploited in Québec.

Fishing for food and for ritual and social reasons

Lake trout is highly prized by Aboriginal communities. Its large size makes it an attractive food source, and fishing mostly takes place in the fall, winter, and spring using gill nets or set lines.

On land covered by the *James Bay and Northern Cree Agreement and the Northeastern Québec Agreement*, Aboriginal fishing practices are governed by a specific framework. In communities on non-treaty land, the government seeks to facilitate fishing for food and for ritual and social reasons. These activities may be managed using community fishing permits issued by the minister responsible for wildlife according to conditions agreed upon with each band council.



Photo: Pekuakamiulnuatsh Takuhikan, service Patrimoine, culture et territoire.

Sport Fishing

The number of lake trout anglers in Québec is estimated at 70,000. Together, they spend a total of 625,000 days fishing, catching 670,000 lake trout and keeping 380,000 of them. The release rate is 43%, and the catch rate is 0.6 per day of fishing, per angler.

Lake trout fishing plays an important role in the regional economy of Québec, where anglers spend an estimated \$90 million a year targeting the species. That represents 7.1% of all expenses on sport fishing in Québec.

The species is predominantly found in the western part of the province. Fifty four percent (54%) of lake trout lakes are located on public access lands (81% of the total area). The rest are found throughout the various controlled wildlife areas (controlled harvesting zones [ZECs], wildlife reserves, national parks, and outfitting establishments).



Photo: Raymond Dynes

Some figures

Recreational lake trout fishing at a glance

Fishermen: 70,000

Days of fishing: 625,000

Catches:

670,000 caught

380,000 kept (380 tons)

Release rate: 43%

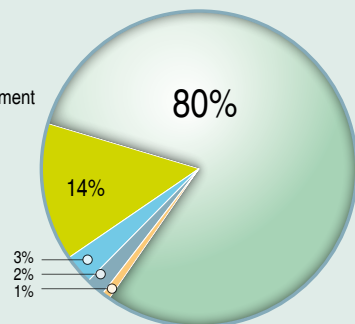
Daily success average: 0.6 fish/day/angler

Total amount spent: \$90 million

Jobs: 1,250

Distribution of lake trout waters in Québec

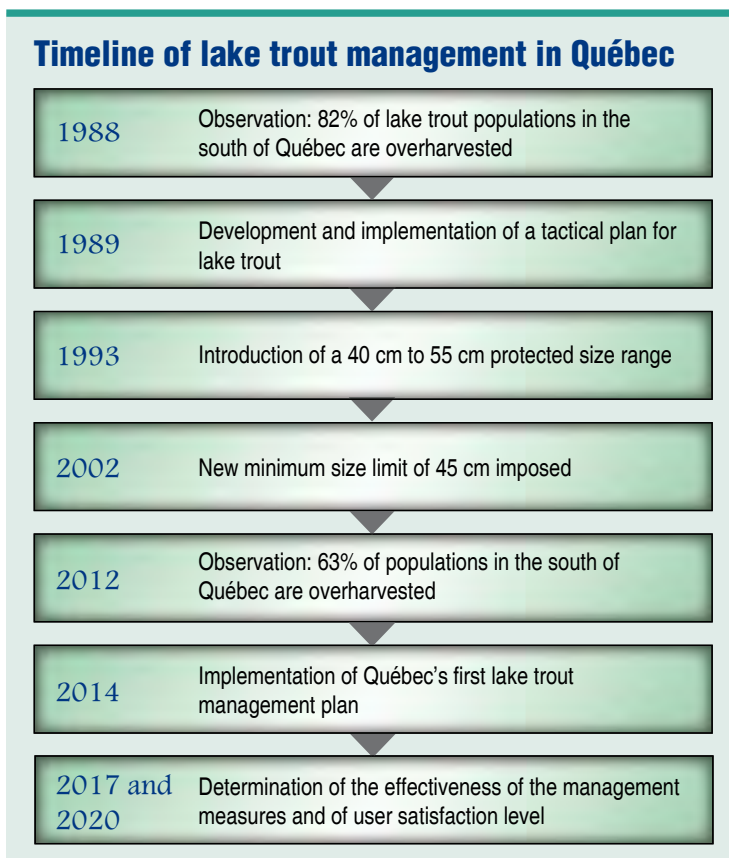
- Public access
- Wildlife reserve
- ZEC
- Outfitting establishment
- National park



The history of lake trout management

In the late 1980s it was established that lake trout was being overexploited on public access lands throughout southern Québec. In 1989, a tactical plan was created and a series of regulatory measures were put in place to reduce harvesting in the area by at least 30%.

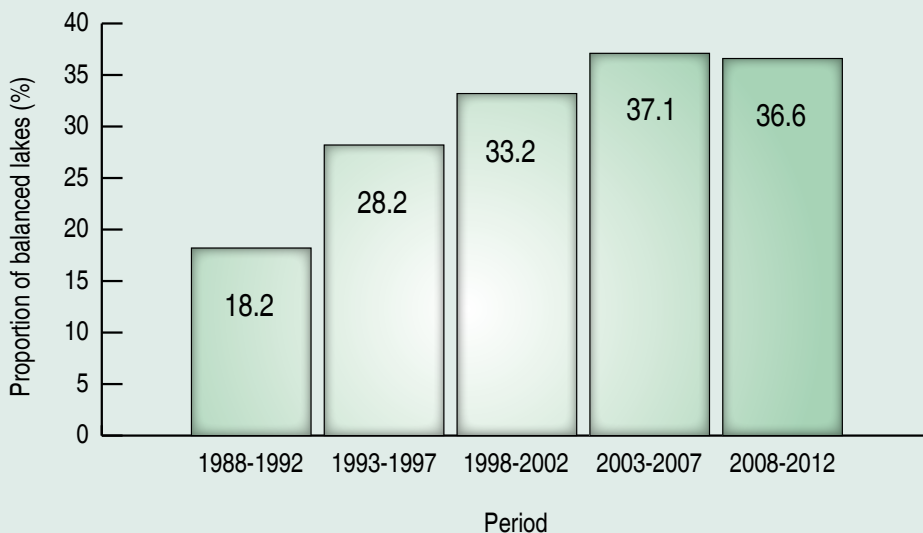
Starting in 1993, a protected size range of 40 cm to 55 cm (total length) was imposed. Five years after this measure was implemented, studies showed that it had only been partly effective. In the area south of the St. Lawrence River and in southwestern Québec, a reduction in the lake trout harvest was observed despite constant fishing pressure. While this reduction allowed populations to increase in those two sectors, it did not have the expected effect in the eastern and central parts of the province, where fishing pressure was highest. A recommendation was made to replace the protected size range by a minimum 45 cm size limit. In the fishing zones south of the St. Lawrence, however, the 40–55 cm size range limit was maintained.



Status of lake trout populations

In the late 1980s, only 18% of lake trout populations on public access lands were considered balanced. By 2012, an estimated 37% of populations were considered balanced or on their way to being balanced. The status of lake trout in Québec is therefore slowly but surely improving.

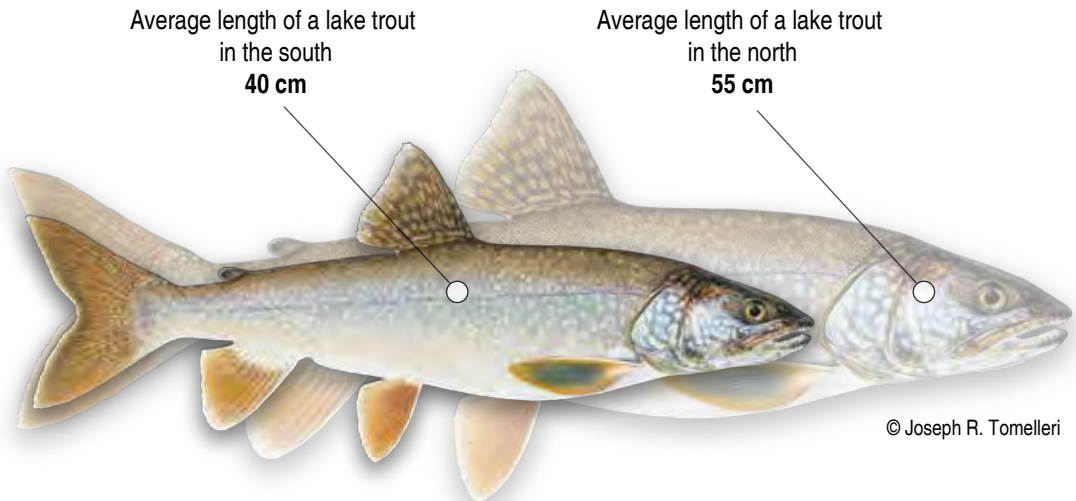
In other words, the species is responding positively to the management practices put in place over the past 20 years. Nevertheless, a critical analysis of these measures has concluded that current practices must be reviewed to optimize the reestablishment and conservation of this species in certain zones. While the situation has improved, the fact remains that at least 63% of lake trout populations are still considered as being overharvested, and numbers have leveled off in certain zones.



Keeping anglers coming to the north

Northern Québec's appeal for anglers resides not only in the abundance and diversity of fish, but also in the presence of trophy sized specimens. In fact, the average size of a lake trout above the 55th parallel in Québec is 35% higher than in the south.

Populations in the north have decidedly lower levels of reproduction than southern populations because the higher latitude and lower temperatures limit ecosystem diversity and productivity. That means northern populations are more sensitive to fishing than southern populations, so they cannot support an equal amount of pressure. To maintain a quality fishery, it is essential to introduce special management regulations before access to the north expands. Without these regulations, larger specimens will quickly disappear, resulting in a drop in reproduction levels. This will diminish the quality of the fishery, and fewer anglers will be drawn to the north.



Management methods

(Exceptions may apply)

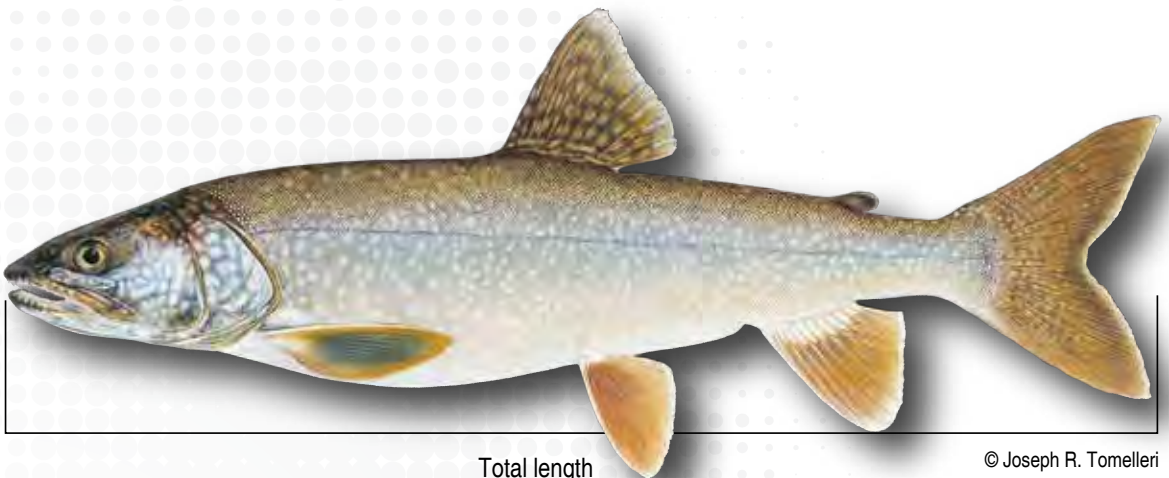
New Regulations (April 2014)

The following size limits for lake trout and hybrids (splake/brookina) come into effect on public access land as of April 1, 2014. These limits apply to the total length (in centimeters) of the fish. Total length is the maximum possible length of the fish, measured from the tip of the snout to the tip of the tail fin. Lake trout must be transported whole or whole and gutted so the fish can be identified and measured. Certain exceptions may apply (mddefp.gouv.qc.ca/faune/peche/plan-gestio-touladi.htm).

In addition, to accelerate the restoration process in certain very low density lakes and provide fishing opportunities on lakes that were heavily stocked in the past, a 10-year restocking, repopulation, and fishery development action plan will be implemented.

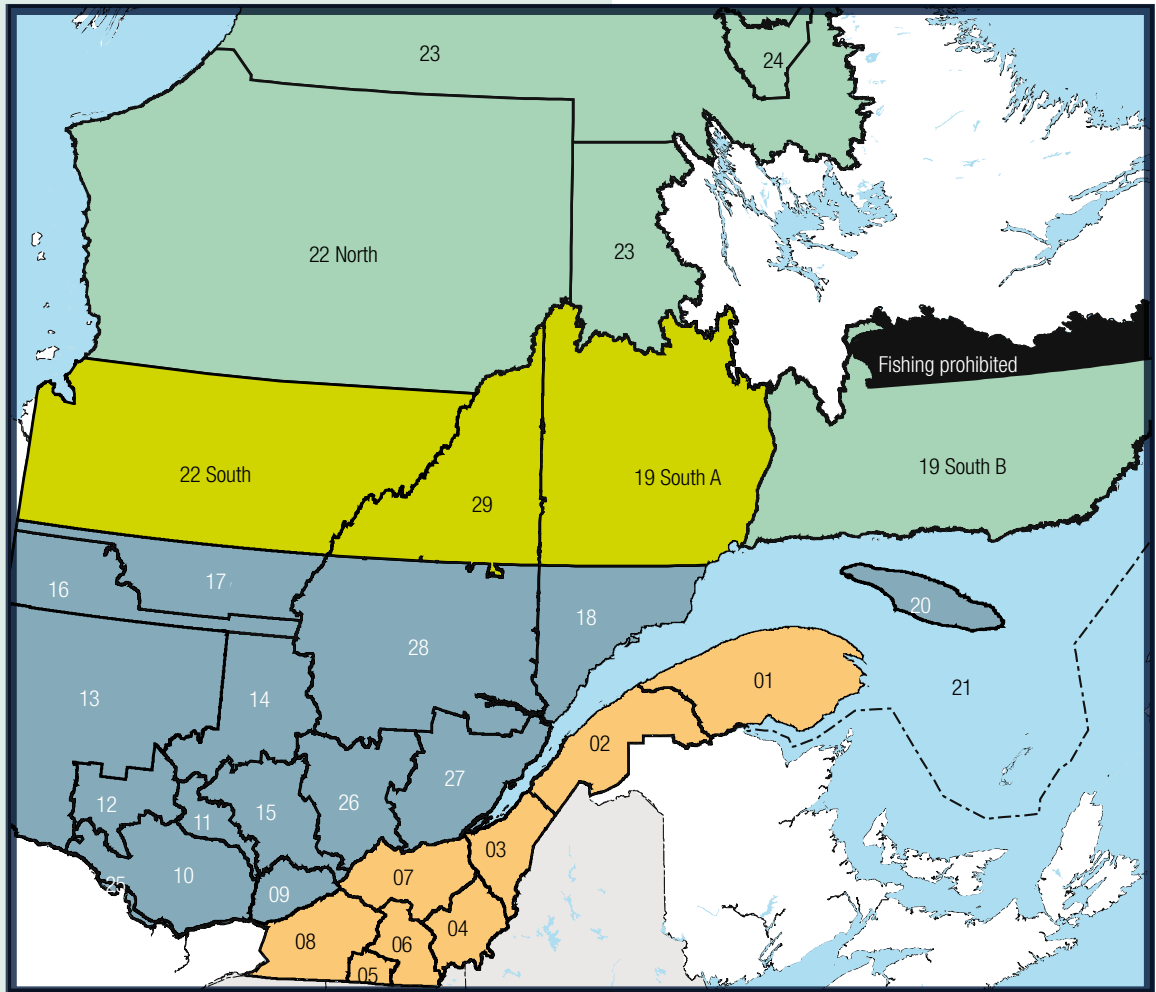
Regulation highlights

- Continuation of management through annual quotas within structured wildlife areas (ZECs, wildlife reserves, and outfitter establishments)
- Creation of sub-zones A (west) and B (east) in zone 19 south
- Closure of winter lake trout fishing throughout Québec
- Closure of lake trout lakes in zones 1 to 15, 18, 26, 27, and 28 to all winter fishing regardless of species
- Length limits applied to lake trout and its hybrids (splake)
- Requirement to return all lake trout to the water when caught in bodies of water undergoing restoration



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Map of Québec's fishing zones



General rules (Exceptions may apply)

Fishing zones	Allowable length limit	Catch and possession limits
1, 2, 3, 4, 5, 6, 7 and 8	60 cm and over	2
9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 20, 21, 25, 26, 27 and 28	45 cm and over	2
19 South A, 22 South and 29	Under 60 cm	3
19 South B, 22 North, 23 and 24	Under 60 cm	3, one of which may be over 60 cm

To learn more about all the applicable regulatory measures, consult the regulatory information "Sport fishing in Québec" on the ministry website.

More Information

Customer Service

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