

Mistehae Lake

Recreational Fisheries Management Objectives

Version Date: October 2017	Prepared by: Myles Brown	Reviewed by: Myles Brown	Approved by: Norbert Raffael
Waterbody ID: 5346	Surface Area: 880.2	Hydrologic Unit Code Name (HUC_8): Pastecho River	Hydrologic Unit Code (HUC_8): 18050107
Sport Fish Species: Northern Pike, Yellow Perch, Lake Whitefish, Cisco			
Indigenous Fishery: Yes, NLT 140mm, No lake closures			
Environment and Parks Region: Upper Athabasca Region (UAR)	Fisheries Management Zone: Northern Boreal 3 (NB3)		Fisheries Management Office: Slave Lake

Background

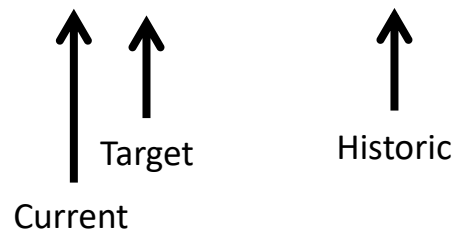
Mistehae Lake is passively managed lake located approximately 76km northeast of Slave Lake. The lake is comprised of a single, shallow basin with a maximum depth of 8.2m and has an average depth of 3.9m. There are resident populations of northern pike, yellow perch and lake whitefish and periodically migrant walleye from the Pastecho River and Muskwa River systems. Mistehae Lake supports Indigenous and recreational fishing pressure. The recreational fishery focuses on northern pike and periodically yellow perch. In the summer the lake is accessible by ATV, in the winter it can be accessed with a highway vehicle by a winter road if it is plowed or by ATV and snowmobile. There are no designated camping facilities around the lake.

Section 1. Fish Population Status

Northern Pike – Adult Abundance

Fish Sustainable Index Adult Density Score

Functionally Extirpated (0)	Very High Risk (1)	High Risk (2)	Moderate Risk (3)	Low Risk (4 and 5)
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Yellow Perch – FSI Adult Abundance – Undetermined

Lake Whitefish/Cisco – FSI Adult Abundance – Undetermined

Section 2. Recreational Fishery Management Objectives and Management Summary

The **focal species** for recreational management is **Northern Pike**. The secondary species managed for recreational objectives are Yellow Perch, Lake Whitefish and Walleye. These sport-fisheries are directly assessed at intervals, and therefore are actively managed. The **Overharvest Protection Need** is assessed as **Low**.

Northern Pike – The recreational fishery management objective for northern pike is **Passive Sustainable Harvest**. The corresponding FSI score for the current mature density of northern pike was assessed as **Moderate Risk** to sustainability. The northern pike population is currently meeting the status and criteria for the objective of a passive sustainable harvest fishery. The required management action to maintain this outcome is a regulation of **1 fish over 70cm** total length. This is a change from the current regulation of 3 pike over 63cm.

Yellow Perch – The recreational fishery management objective being applied is the provincial default (**Passive Sustainable Harvest**). The status of the yellow perch population has not been assessed using FSI. The current management action is a maintenance regulation of **15 perch, any size**.

Lake Whitefish/Cisco – The recreational fishery management objective being applied is the provincial default (**Passive Sustainable Harvest**). Cisco in Mistehae Lake can grow relatively large in size, and may be easily confused for Lake Whitefish. The status of the Lake Whitefish/Cisco population has not been assessed. The current management action is a maintenance regulation of a total of **10 Lake Whitefish or Cisco, combined, of any size**.

Management Summary

Management Priority	Species	Overharvest Protection Need	Management Action	Sport Fishing Harvest Regulation
1	Northern Pike	Low	Maintenance – Passive Sustainable Harvest	<ul style="list-style-type: none"> 3 > 63cm (2017-18) 1 > 70 cm (Implementation April 1st, 2018-19)
2	Yellow Perch*	Low	Maintenance – Passive Sustainable Harvest	15 any size
3	Cisco/Lake Whitefish*	Low	Maintenance – Passive Sustainable Harvest	10 any size

**Recreational management objectives for Lake Whitefish and Yellow Perch have not been fully developed into management frameworks, and will be subject to change pending on-going work and development. However, general action statements have been listed for these species within the context of relative abundance, catch rates and trends associated with index netting assessments, in relation to the management of these species at a provincial level.*