

Chickenhill Lake

Fisheries Management Objectives

Version Date: October 2017	Prepared by: Rebecca Skarsen	Reviewed by: Dwayne Latty	Approved by: Kathy Hendren
Waterbody ID: 4262	Surface Area: 310 (Ha)	Hydrologic Unit Code Name (HUC_8): Moose Lake	Hydrologic Unit Code (HUC_8): 12020102
Sport Fish Species: Northern Pike, Yellow Perch, Lake Whitefish, and Burbot			
Indigenous Fishery: Yes			
Environment and Parks Region: Lower Athabasca Region (LAR)		Fisheries Management Zone: Northern Boreal 1 (NB1)	Fisheries Management Office: Cold Lake

Background

This FMO pertains to Chickenhill Lake and its tributaries including the inlet stream from Bentley Lake, only upstream to 495891 5990165 (UTM 12). Chickenhill Lake is a moderately nutrient rich (mesotrophic) lake with a surface area of 310 ha, a mean depth of 2.5 m, and a maximum depth of 9.0 m; however, this information was collected in 1981 and we would expect these values to be different now. Decreasing water levels are a problem in this watershed. Chickenhill Lake experiences fish kills due to declining lake levels and low dissolved oxygen. Current issues with declining water levels may mean that the Northern Pike population is unlikely to recover from its current state. Habitat protection and remediation efforts may not correct the water quantity issues. Chickenhill Lake is closed to recreational angling from April 1st to May 14th of each year.

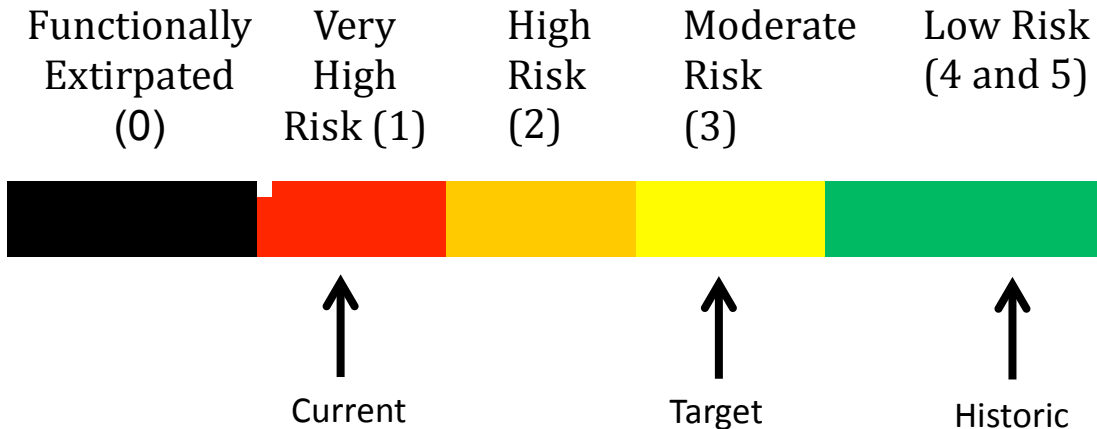
This lake is a 2.5 hour drive from the City of Edmonton, and within an hour of the City of Cold Lake. A small campground owned by the Municipal District of Bonnyville and cottage subdivision exists at the north end of the lake, with resultant shoreline disturbance in this area. Approximately one-third of the shoreline is crown-owned. The watershed is a mix of forested and agricultural lands.

Walleye have been extirpated from Chickenhill Lake. The last reported Walleye in Chickenhill Lake was in 1980 during a test netting survey conducted by Fisheries Management. No Walleye were caught in the 2009 Fall Walleye Index Netting (FWIN) survey.

Section 1. Fish Population Status

Northern Pike – Adult Abundance

Fish Sustainable Index Adult Density Score



Yellow Perch – Adult Abundance – Undetermined
Lake Whitefish – Adult Abundance – Undetermined
Burbot – 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 Lake Whitefish, Yellow Perch, and Burbot. These sport-fisheries are passively managed. The **Overharvest Protection Need** is assessed as **Moderate**.

Northern Pike – The recreational fishery management objective for Northern Pike is **Sustainable Harvest**. The corresponding FSI score for the current adult density of Northern Pike was assessed at (1) **Very High** risk to sustainability. The Northern Pike population is not currently meeting the status and criteria for the objective of a sustainable harvest fishery. The current management action is a regulation of **1 Northern Pike over 63 cm**. The required management action will be a **Zero Harvest** regulation for Northern Pike.

Yellow Perch – The recreational fishery management objective being applied is the provincial default (**Sustainable Harvest**). The status of the Yellow Perch population has not been assessed. The current management action is a harvest regulation of **10 Yellow Perch, any size**.

Lake Whitefish – The recreational fishery management objective being applied is the provincial default (**Sustainable Harvest**). The status of the Lake Whitefish population has not been assessed. The current management action is a harvest regulation of **10 Lake Whitefish, any size**.

Burbot – The recreational fishery management objective being applied is the provincial default (**Sustainable Harvest**). The status of the Burbot population has not been assessed. The current management action is a regulation of **10 Burbot, any size**.

Management Summary

Management Priority	Species	Overharvest Protection Need	Management Action	Sport Fishing Harvest Regulation
1	Northern Pike	Moderate	Recovery – Sustainable Harvest	<ul style="list-style-type: none"> 1>63cm (2017-18) Catch and Release (Implementation April 1st, 2018)
2	Lake Whitefish*	Moderate	Maintenance – Sustainable Harvest	10 any size
3	Yellow Perch*	Moderate	Maintenance – Sustainable Harvest	10 any size
4	Burbot*	Moderate	Maintenance – Sustainable Harvest	10 any size

**Recreational management objectives for Lake Whitefish, Yellow Perch, and Burbot 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.*