

North Buck Lake

Fisheries Management Objectives

Version Date: October 2017	Prepared by: Marcel Macullo Denyse Gullion	Reviewed by: Marcel Macullo	Approved by: Curtis Brock
Waterbody ID: 5457	Surface Area: 1895 (Ha)	Hydrologic Unit Code Name (HUC_8): Amisk River	Hydrologic Unit Code (HUC_8): 12010102
Sport Fish Species: Northern Pike, Walleye, Yellow Perch			
Indigenous Fishery: Yes			
Environment and Parks Region: Upper Athabasca Region (UAR)		Fisheries Management Zone: Northern Boreal 1 (NB1)	Fisheries Management Office: Athabasca

Background

North Buck Lake is located approximately 36km northeast of Boyle. It supports a sport fishery for northern pike and yellow perch that receives high angling pressure due to the campground facilities, small subdivisions next to the lake and distance from local communities. Historically, North Buck Lake was stocked with walleye in 1932 where 5,000,000 eyed eggs were stocked and then annually from 1984-1988 (total 477,000 fingerlings) with the exception of 1985 in efforts to establish self-sustaining population. However, sufficient recruitment to support a sustainable harvest has failed.

The abundance of northern pike has decreased since the current regulation of 1 fish under 63cm or over 100cm was implemented. Further, this lake suffered a localized fish kill in the winter of 2016-17 due to decreases in both water quality and water quantity.

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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↑
Current

↑
Target

Walleye – 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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↑
Current

↑
Historic

Yellow Perch – 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 is Yellow Perch. These sport-fisheries are directly assessed at intervals, and therefore are actively managed. The **Overharvest Protection Need** is assessed as **High**.

Northern Pike – The recreational fishery management objective for northern pike is **Sustainable Harvest**. The Fish Sustainability Index (FSI) score for current mature density of northern pike was assessed in 2015 as (2) **High Risk** to sustainability. The northern pike population is currently not meeting the status and criteria for the objective of a sustainable harvest fishery. The required management action to recover the northern pike population to this outcome is a regulation of **Catch and Release**.

Walleye – Have been extirpated from this fishery and at this time there are no future plans to reintroduce.

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 regulation of 15 perch, any size.

Management Summary

Management Priority	Species	Overharvest Protection Need	Management Action	Sport Fishing Harvest Regulation
1	Northern Pike	High	Recovery	<ul style="list-style-type: none"> 1 > 63cm (2017-18) Catch and Release (Implementation April 1st, 2018)
2	Yellow Perch*	High	Maintenance – Sustainable Harvest	15 any size
3	Walleye	High	Extirpated	NA

**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.*