

## Summary Information

<b>Version Date:</b> July 2018	<b>Prepared by:</b> Chris Briggs	<b>Reviewed by:</b> Adrian Meinke	<b>Approved by:</b> KayeDon Wilcox
<b>Waterbody ID:</b> 4542	<b>Surface Area:</b> 275 ha	<b>Hydrologic Unit Code Name (HUC_8):</b> Trout River	<b>Hydrologic Unit Code (HUC_8):</b> 18050202
<b>Sport Fish Species:</b> Walleye, Northern Pike, Lake Whitefish, Yellow Perch, and Burbot			
<b>Indigenous Fishery:</b> NLT 140 mm, Closed: Apr 1 – May 31			
<b>Environment and Parks Region:</b> Peace Region		<b>Fisheries Management Zone:</b> Northern Boreal 3 (NB3)	<b>Fisheries Management Office:</b> Peace River

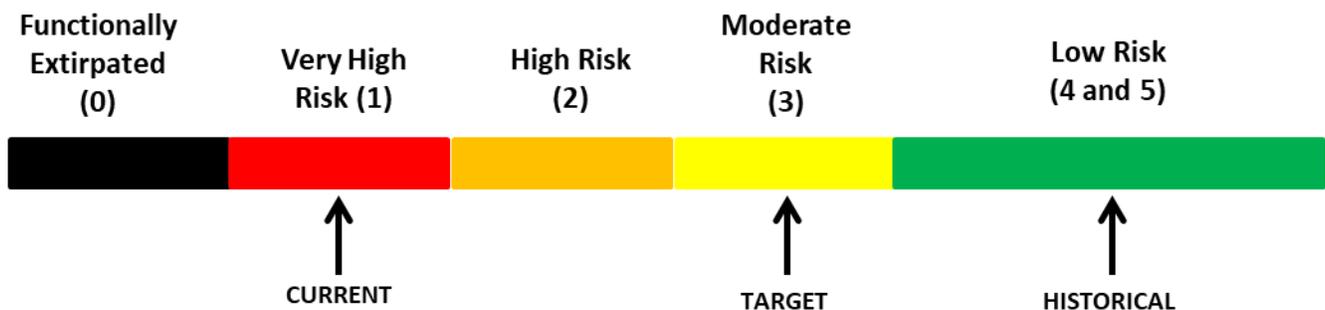
## Background

Equisetum Lake is located 40 km northeast of Red Earth. It has an average depth of 2.2 m, with a maximum depth of 5 m and there are no records of the lake suffering a winterkill. Equisetum Lake is known to support populations of northern pike, walleye, yellow perch, lake whitefish, white sucker, cisco, longnose sucker and burbot. Equisetum Lake forms a complex of three lakes that includes Goodfish Lake to the west and Long Lake to the east. Access to the lake is via an unimproved road and there are no formal camping facilities. The lake was surveyed in 2017 using the North American Standard Index Netting (NASIN) protocol which found low numbers of both walleye and northern pike. Catches of both species were consistent with the findings of the 2015 Fall Index Netting on neighboring Long Lake. Catch of northern pike in 2017 was lower than a survey conducted in 1990, but on par with a survey done in 2000. Walleye catch rates were higher than in previous years, but still considered at a high risk to sustainability. Commercial fishing has been conducted at the lake, with the last harvest in 1988. Domestic use of Equisetum Lake is low, with an average of three domestic licenses issued per year.

## Fish Population Status

### Northern Pike – Adult Abundance

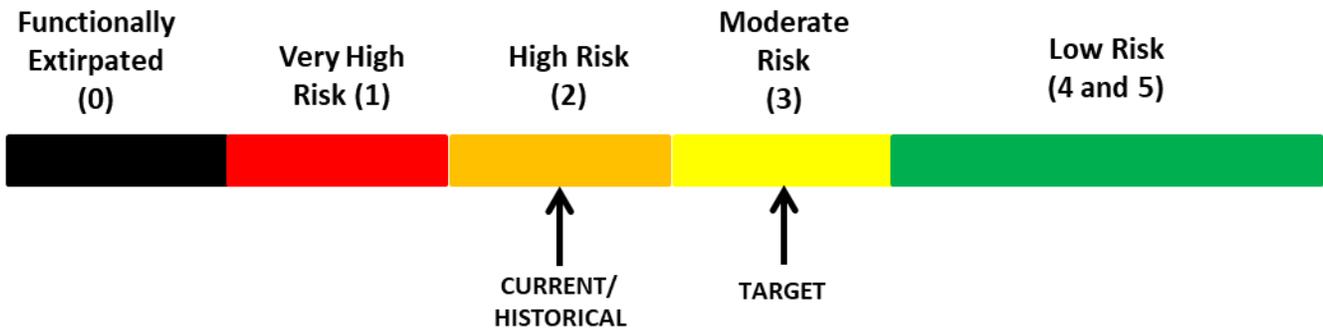
#### Fish Sustainability Index Adult Density Score



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## Walleye – Adult Abundance

### Fish Sustainability Index Adult Density Score



Lake Whitefish – Adult Abundance - Undetermined

Yellow Perch - Adult Abundance – Undetermined

Burbot – Adult Abundance - Undetermined

## Recreational Fishery Management Objectives

The **focal species** for recreational management is **Walleye**. The secondary species managed for recreational objectives are northern pike, yellow perch and lake whitefish. The **Overharvest Protection Need** is assessed as **Low**.

**Walleye:** Equisetum Lake is capable of producing quality size (>60 cm) walleye and could provide a **Quality Harvest** fishery. Quality Harvest opportunities are limited in the vicinity of Equisetum Lake and a desire has been expressed to have a variety of management objectives on the landscape. The corresponding Fish Sustainability Index score for the current adult density of walleye has recently been assessed at **High Risk** to sustainability. The walleye population is not currently meeting the status and criteria for the objective of a sustainable harvest fishery. Although a Quality Harvest would normally require an FSI score of 4, there is relatively little use of Equisetum Lake and it may be feasible to provide quality harvest at a moderate risk category. As the population is currently at a High Risk to sustainability, the management action is **to promote recovery** until such time as the population increases into the moderate (yellow) or low risk (green) category at which time, harvest options will be explored. Recovery options are catch and release (no harvest, but faster recovery time), or limited Special Harvest Licenses (harvest opportunity, but longer recovery time).

**Northern Pike:** The recreational management objective for northern pike is a **Sustainable Harvest** fishery. The corresponding FSI score for the current adult density of northern pike has recently been assessed at **Very High Risk** to sustainability. The northern pike population is currently not meeting the status and criteria for the objective of sustainable harvest fishery. The proposed management action is **to promote recovery through the use of catch and release** until such time as the population increases into the moderate risk (yellow) category, at which time, harvest options will be explored.

**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 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 regulation of a total 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	Walleye	Moderate	Recovery – Quality Harvest	Catch and Release or SHL
2	Northern Pike	Moderate	Recovery – Sustainable Harvest	Catch and Release
3	Lake Whitefish*	Moderate	Maintenance – Sustainable Harvest	10 any size
4	Yellow Perch*	Moderate	Maintenance – Sustainable Harvest	15 any size
5	Burbot*	Low	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.