

Graham Lake

Recreational Fisheries Management Objectives

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Waterbody ID: 4724	Surface Area: 4170 ha	Hydrologic Unit Code Name (HUC_8): Trout River	Hydrologic Unit Code (HUC_8): 18050202
Sport Fish Species: Walleye, Northern Pike, Lake Whitefish, Yellow Perch, and Burbot			
Indigenous Fishery: NLT 140 mm, Closed: Apr 1 – May 31			
Environment and Parks Region: Peace Region	Fisheries Management Zone: Northern Boreal 3 (NB3)	Fisheries Management Office: Peace River	

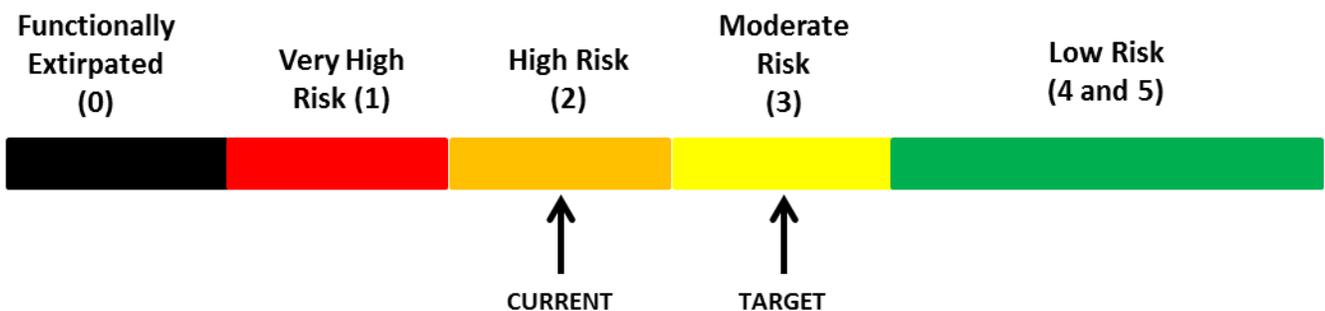
Background

Graham Lake is located approximately 45 km east of the town of Red Earth. The Lake has a surface area of 4170 hectares, with an average depth of 8.0 m and a maximum depth of 14.6 m. Access to the lake is via a gravel road and there is a campsite with basic amenities and two boat launches that give access to the channel in between Peerless and Graham Lakes (known as the ‘Narrows’). Graham Lake supports a natural population of northern pike, walleye, lake whitefish and burbot as well as several non-sportfish species. Despite connection to Peerless Lake, lake trout are not known to occur in Graham Lake. Commercial fishing has occurred sporadically on the lake, with the last recorded catch in 2009. Domestic licenses are issued each year for the lake, but actual use and harvest is unknown.

Section 1. Fish Population Status

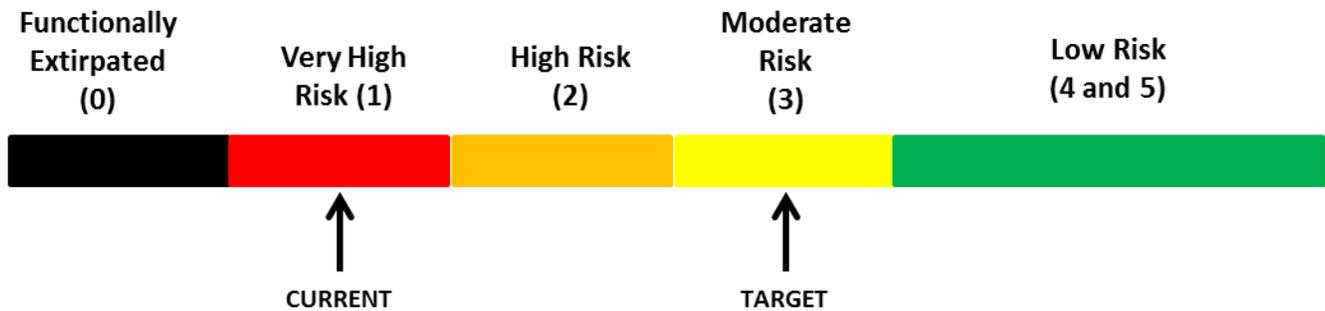
Walleye – Adult Abundance

Fish Sustainability Index Adult Density Score



Northern Pike – Adult Abundance

Fish Sustainability Index Adult Density Score



Lake Whitefish – Adult Abundance – Undetermined

Yellow Perch – Adult Abundance – Undetermined

Burbot – Adult Abundance – Undetermined

Section 2. Recreational Fishery Management Objectives and Management Summary

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 **Moderate**.

Walleye – The recreational management objective for walleye is a **Sustainable Harvest** fishery. 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. The required 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. This is a change from the current regulation of 1 walleye over 50cm.

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 required 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. 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 (**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 – Sustainable Harvest	<ul style="list-style-type: none"> 1 > 50cm (2017-18) Catch and Release (Implementation April 1st, 2018-19)
2	Northern Pike	Moderate	Recovery – Sustainable Harvest	<ul style="list-style-type: none"> 3 > 63cm (2017-18) Catch and Release (Implementation April 1st, 2018-19)
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.