

Rock Island Lake

Fisheries Management Objectives

Version Date: October 2017	Prepared by: Denyse Gullion Marcel Macullo	Reviewed by: Marcel Macullo	Approved by: Curtis Brock
Waterbody ID: 5681	Surface Area: 2078 (Ha)	Hydrologic Unit Code Name (HUC_8): Calling Lake	Hydrologic Unit Code (HUC_8): 17050202
Sport Fish Species: Walleye, Northern Pike, Yellow Perch			
Indigenous Fishery: Yes			
Environment and Parks Region: Upper Athabasca Region (UAR)		Fisheries Management Zone: Northern Boreal (NB1)	Fisheries Management Office: Athabasca

Background

Rock Island Lake is located approximately 88km north of Athabasca. It supports a sport fishery for walleye and northern pike that receives high angling pressure due to the small campground facilities and distance from major communities. However, during times when nearby Calling Lake is difficult to fish or boat due to poor weather, Rock Island Lake receives substantially more pressure as it provides a more sheltered location.

Historically, sport and non-sportfish were commercially fished in Rock Island Lake since the turn of the century, however, detailed records only exist since the 1940s. Commercial fishing no longer occurs on the lake.

Previous to 1998, walleye angling limits were extremely liberal and Rock Island Lake walleye populations gradually decreased in abundance until they were classified as collapsed. In response, catch and release walleye regulations were implemented in 1998. Once the population recovered a sustainable harvest regulation of 1 walleye greater than 50cm was implemented. Despite this stricter regulation the walleye population has once again collapsed.

Historically, northern pike sport fishing regulations were extremely liberal and lead to decreases in abundance. Regulations have gradually become more restrictive in attempts to maintain a sustainable population. Despite these efforts, the Rock Island Lake northern pike population is collapsed and in need of recovery.

Section 1. Fish Population Status

Walleye – Adult Abundance

Fish Sustainable Index Adult Density Score

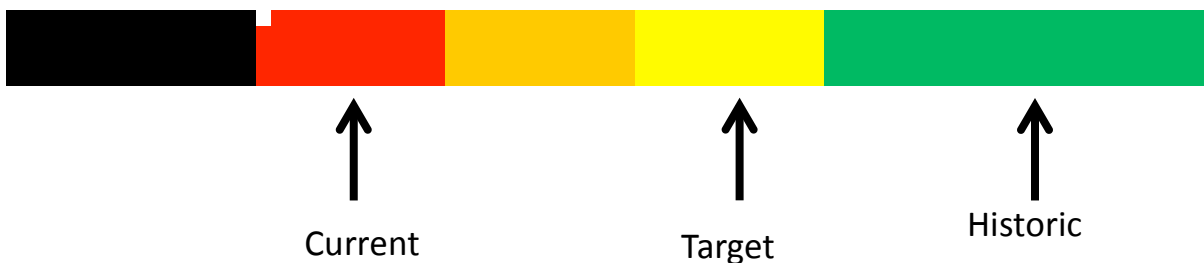
Functionally Extirpated (0)	Very High Risk (1)	High Risk (2)	Moderate Risk (3)	Low Risk (4 and 5)
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Northern Pike – Adult Abundance

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

Walleye – The recreational fishery management objective for walleye is **Sustainable Harvest**. The Fish Sustainability Index (FSI) score for current mature density of walleye was assessed in 2017 as (1) **Very 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**.

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 2017 as (1) **Very 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**.

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	Walleye	Moderate	Recovery	<ul style="list-style-type: none"> 1 > 50cm (2017-18) Catch and Release (Implementation April 1st, 2018)
2	Northern Pike	Moderate	Recovery	<ul style="list-style-type: none"> 1 > 63cm (2017-18) Catch and Release (Implementation April 1st, 2018)
3	Yellow Perch*	Moderate	Maintenance – Sustainable Harvest	15 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.*