

## Island Lake

### Recreational Fisheries Management Objectives

<b>Version Date:</b> October 2017	<b>Prepared by:</b> Marcel Macullo Denyse Gullion	<b>Reviewed by:</b> Marcel Macullo	<b>Approved by:</b> Curtis Brock
<b>Waterbody ID:</b> 4911	<b>Surface Area:</b> 790 (Ha)	<b>Hydrologic Unit Code Name (HUC_8):</b> Athabasca Above Tawatinaw River	<b>Hydrologic Unit Code (HUC_8):</b> 17050101
<b>Sport Fish Species: Northern Pike, Walleye, Yellow Perch</b>			
<b>Indigenous Fishery: Yes</b>			
<b>Environment and Parks Region:</b> Upper Athabasca Region (UAR)	<b>Fisheries Management Zone: Northern Boreal (NB2)</b>		<b>Fisheries Management Office:</b> Athabasca

## Background

Island Lake is located approximately 28km northwest of Athabasca and 176 km north of Edmonton. It supports a sport fishery for northern pike, yellow perch and lake whitefish that receives high angling pressure due to the two summer villages, small campground facilities and distance from local communities.

Historically, Island Lake was stocked with walleye and lake whitefish pre 1940s from a local resident. In 1955, Alberta Environment and Parks stocked 2,850,000 walleye eyed eggs in efforts to establish self-sustaining population. Walleye were classified as collapsed in 1995. Currently, sufficient recruitment to support a sustainable walleye harvest has not occurred. However, walleye populations have steadily increased in abundance over the past 10 years.

Island Lake has traditionally supported excellent Northern Pike populations with large pike. Currently, the northern pike population is showing signs of size truncation and decreased abundance. Lake Whitefish up to 12 lbs have been captured in Island Lake.

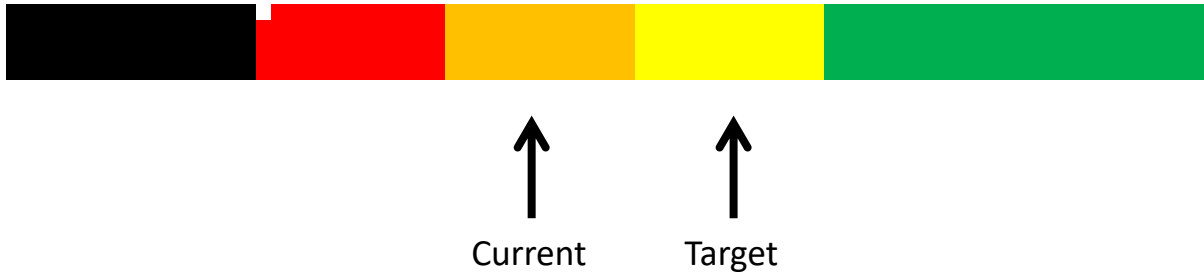
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## Section 1. Fish Population Status

### Northern Pike – Adult Abundance

#### Fish Sustainable Index Adult Density Score

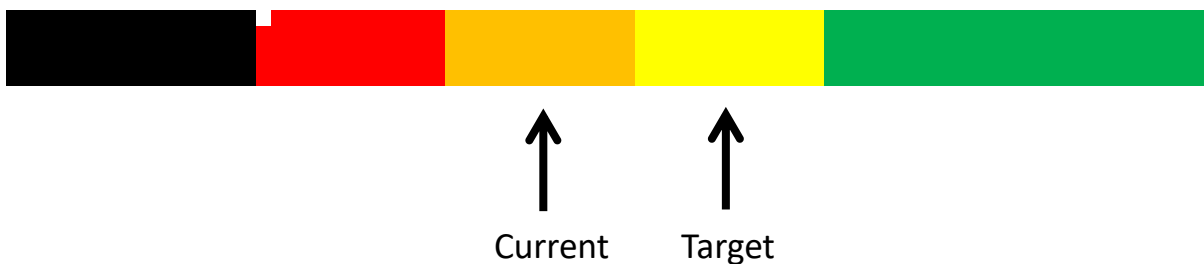
Functionally Extirpated (0)	Very High Risk (1)	High Risk (2)	Moderate Risk (3)	Low Risk (4 and 5)
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### Walleye – Adult Abundance

#### 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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Yellow Perch – Adult Abundance – Undetermined  
Lake Whitefish – 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 Walleye, Yellow Perch and Lake Whitefish. 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 corresponding FSI score for the current mature density of northern pike was assessed as **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 population and the outcome is a **Catch & Release regulation**.

**Walleye** – The recreational fishery management objective for walleye is **Sustainable Harvest**. The corresponding FSI score for the current mature density of walleye was assessed at (2) **High Risk** to sustainability. The walleye population is currently not meeting the status and criteria for the objective of a sustainable harvest fishery. The current management action is a **Catch & Release** regulation.

**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"> <li>1 any size (2017-18)</li> <li><b>Catch and Release (Implementation April 1<sup>st</sup>, 2018-19)</b></li> </ul>
2	Walleye	High	Recovery	Catch & Release
3	Yellow Perch*	High	Maintenance – Sustainable Harvest	15 any size
4	Lake Whitefish*	High	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.*