

# Thunder 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> 5993	<b>Surface Area:</b> 815(Ha)	<b>Hydrologic Unit Code Name (HUC_8):</b> Paddle River	<b>Hydrologic Unit Code (HUC_8):</b> 17030203
<b>Sport Fish Species: Northern Pike, Yellow Perch</b>			
<b>Indigenous Fishery: No</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	

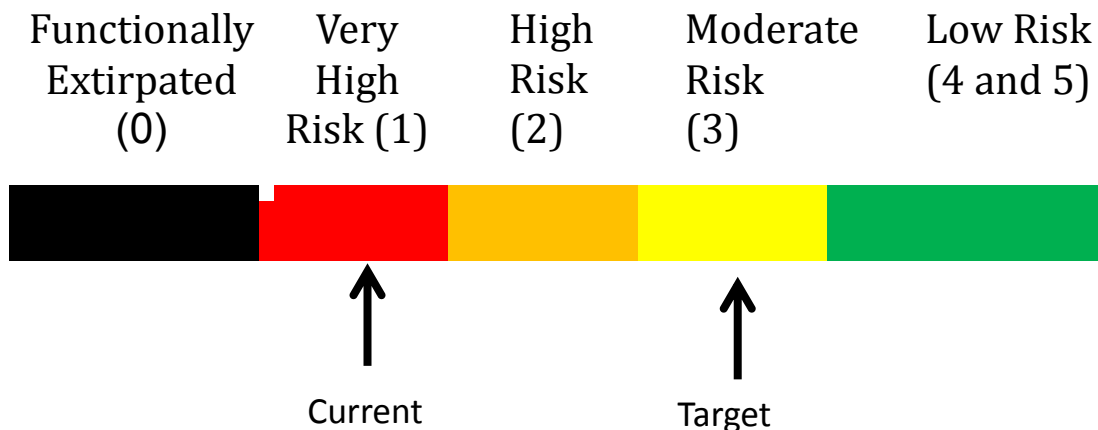
### Background

Thunder Lake is located approximately 22km west of Barrhead and has a documented history of winter fish kills dating back to the 1950s. By the 1990s, winter fish kills were becoming more frequent and stocking the lake became ineffective and uneconomical due to recurring fish mortality. The drainage and lake area suggest that Thunder Lake is susceptible to drawdown and it has an evaporation dominated water balance. If the current water diversion did not exist, Thunder Lake would be a wetland. Currently, Thunder Lake does not support a sustainable sport fishery due to recurring unsuitable habitat. Frequent anoxic conditions prevent it from becoming a viable candidate for fishery restoration.

### Section 1. Fish Population Status

#### Northern Pike – Adult Abundance

#### Fish Sustainable Index Adult Density Score



#### Yellow Perch – Adult Abundance – Undetermined

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## 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 not directly assessed at intervals, and therefore are passively managed. The **Overharvest Protection Need** is assessed as **High**.

**Northern Pike** – The recreational fishery management objective for Northern Pike is **Sustainable Harvest**. The Northern Pike population is currently not meeting the status and criteria for the objective of a sustainable harvest fishery due to habitat limitations. The required management action is a regulation of 1 Northern Pike greater than 70 cm.

### Management Summary

Management Priority	Species	Overharvest Protection Need	Management Action	Sport Fishing Harvest Regulation
1	Northern Pike	High	None	<ul style="list-style-type: none"><li>3 &gt; 63 cm (2017-18)</li><li>1 &gt;70 cm (Implementation April 2018-19)</li></ul>
2	Yellow Perch*	High	None	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.*