

Long Lake

Fisheries Management Objectives

Version Date: October 2017	Prepared by: Owen Watkins	Reviewed by: Stephen Spencer	Approved by: John Tchir – Resource Manager
Waterbody ID: 5137	Surface Area: 603 (Ha)	Hydrologic Unit Code Name (HUC_8): Amisk River	Hydrologic Unit Code (HUC_8): 12010102
Sport Fish Species: Walleye, Northern Pike, Yellow Perch, and Burbot			
Indigenous Fishery: No			
Environment and Parks Region: Red Deer North Saskatchewan Region (RDNSR)		Fisheries Management Zone: Northern Boreal 1 (NB1)	Fisheries Management Office: Spruce Grove

Background

Long Lake is located approximately 130 km northeast of Edmonton and 15 km south of the town of Boyle, Alberta. The eutrophic lake has a surface area of 603 Ha, a mean depth of 4.3 m, and a maximum depth of 9.1 m. The lake is fed by several intermittent watercourses and drained by an unnamed creek flowing north to Amisk Lake and the remainder of the Beaver River watershed. Shoreline development at Long Lake includes a Provincial Park with 220 campsites and approximately 160 lakeshore and backshore residences. Development is limited to a portion of the west shore and much of the 30 km long shoreline remains undeveloped. The southeast portion of the lake resides in the White Earth Valley Natural Area. In 2003, Long Lake was opened for harvest (June 20 to July 13), for harvest of 1 Walleye > 50 cm. A Fall Walleye Index Netting (FWIN) survey was conducted in the fall of 2003 to obtain an updated measure of the Walleye stock status, and to evaluate the response of Walleye stocks to this short harvest season. Results from the FWIN survey indicated that the three week harvest season slowed Walleye stock recovery, and therefore, this short-term regulation was eliminated to allow the population to resume its 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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Historic, Current,
and Target

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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Current



Target



Historic

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

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 (4) **Low Risk** to sustainability. The walleye population is currently meeting the status and criteria for the objective of a Sustainable Harvest fishery. The current management action is a **Maintenance** regulation of **Special Harvest Licence**.

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 at (2) **High Risk** to sustainability. The northern pike population is not meeting the status and criteria for the objective of a **Sustainable Harvest** fishery. The current management action to maintain this outcome is a **Recovery** regulation of **Catch and Release**.

Yellow Perch – The status of the yellow perch population has not been assessed. The current management action is a regulation of 15 yellow perch, any size.

Management Summary

Management Priority	Species	Overharvest Protection Need	Management Action	Sport Fishing Harvest Regulation
Primary	Walleye	Very High	Maintenance – Sustainable Harvest	Special Harvest Licence
Secondary	Northern Pike	Very High	Recovery	Catch and Release
Secondary	Yellow Perch*	Very High	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.*