

Summary Information

Version Date: October 2018	Prepared by: Chris Briggs	Reviewed by: Adrian Meinke	Approved by: KayeDon Wilcox
Waterbody ID: 5635	Surface Area: 400 ha	Hydrologic Unit Code Name (HUC_8): Hay River	Hydrologic Unit Code (HUC_8): 19010102
Sport Fish Species: Walleye, Northern Pike			
Indigenous Fishery: NLT140, no seasonal closures			
Environment and Parks Region: Peace Region		Fisheries Management Zone: Northern Boreal 3 (NB3)	Fisheries Management Office: Peace River

Background

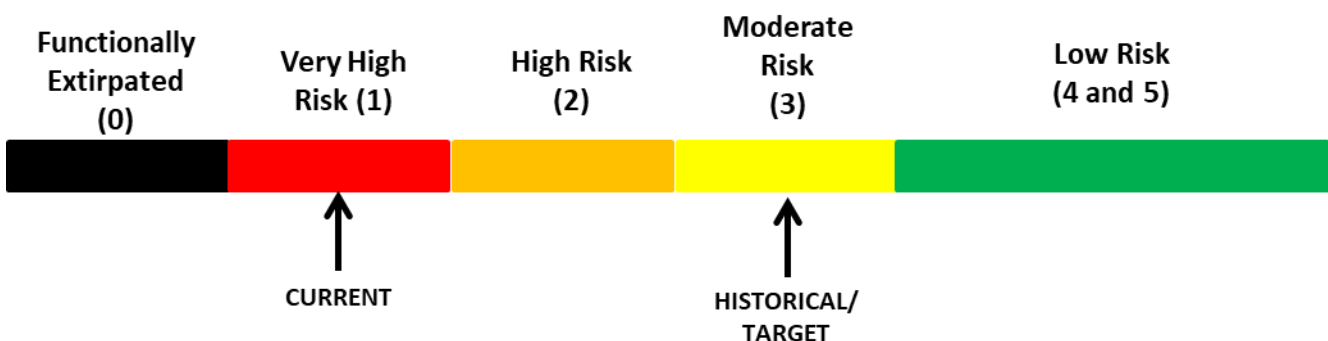
Rainbow Lake is located approximately 40 km south of the town of Rainbow Lake, Alberta, in Township 107, Range 8, west of the 6th Meridian. The Hay River flows into Rainbow Lake from the east and drains out back into the Hay River on the west side. The watershed encompasses the biologically diverse Hay Zama complex. The lake is approximately 400 ha and is moderately “S” shaped and spans up to 10 km in length and varies between 130 m – 300 m wide. Rainbow Lake has an average depth of approximately 3.7 m and maximum depth of approximately 8.0 m. A deeper channel runs through the centre of lake representing what used to be the Hay River prior to the lake forming. The lake has one provincial campground developed on the north shore with a low degree of shoreline habitat development.

Rainbow Lake is a popular, local walleye sportfishing destination in northern Alberta. The lake provides domestic and recreational fishing opportunities throughout the year. The primary user group of the lake are typically anglers from the local community. Domestic harvest is considered relatively low and angler harvest has not been monitored to date, other than anecdotal information gathered in enforcement patrols. There has been no commercial fishing allocation on Rainbow Lake. The most recent survey was conducted in 2018. Prior to that, the lake was last sampled in 2009.

Fish Population Status

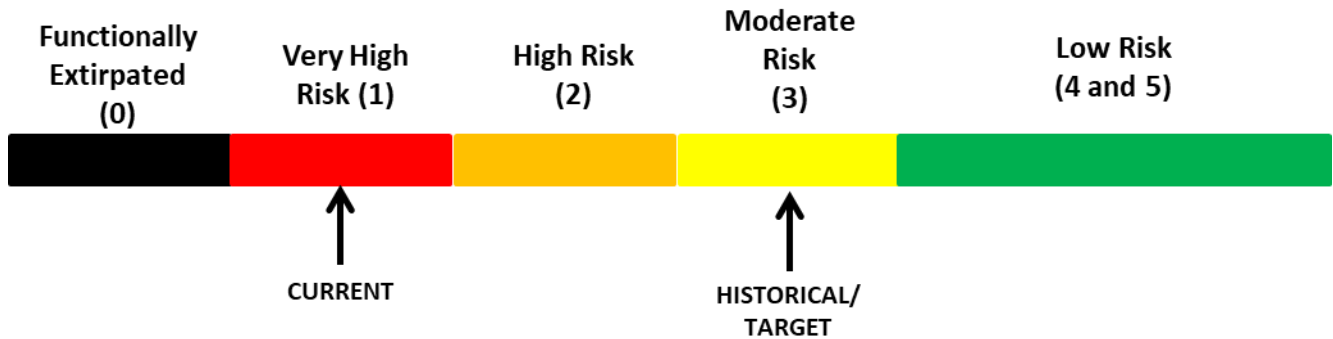
Walleye – Adult Abundance

Fish Sustainability Index Adult Density Score



Northern Pike – Adult Abundance

Fish Sustainability Index Adult Density Score



Recreational Fishery Management Objectives

The **focal species** for recreational management is walleye. The secondary species managed for recreational objectives are northern pike and yellow perch. The **Overharvest Protection Need** is assessed as **Low**.

Walleye: The recreational management objective for walleye is a **Sustainable Harvest** fishery. The corresponding Fish Sustainability Index (FSI) score for the current adult density of walleye was assessed at **Very High Risk** to sustainability. The walleye population is not currently meeting the status and criteria for the objective of sustainable harvest fishery. The proposed 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, opportunities for harvest will be explored.

Northern Pike: The recreational management objective for northern pike is a **Sustainable Harvest** fishery. The corresponding Fish Sustainability Index (FSI) score for the current adult density of northern pike was assessed at **Very High Risk** to sustainability. The northern pike population is not currently meeting the status and criteria for the objective of sustainable harvest fishery. The proposed 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, opportunities for harvest will be explored.

Management Summary

Management Priority	Species	Overharvest Protection Need	Management Action	Sport Fishing Harvest Regulation
1	Walleye	Moderate	Recovery – Sustainable Harvest	Catch and Release
2	Northern Pike	Moderate	Recovery – Sustainable Harvest	Catch and Release