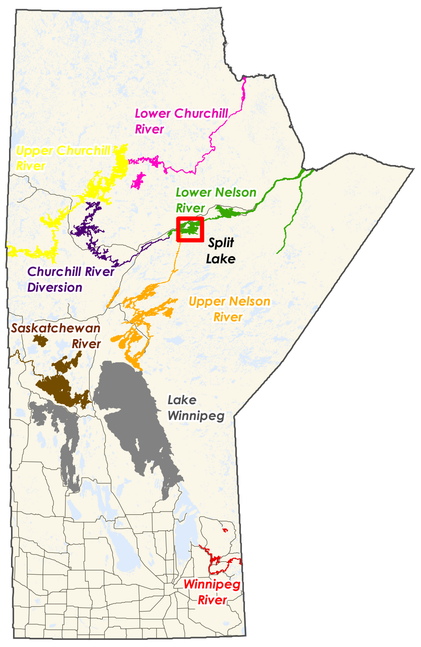
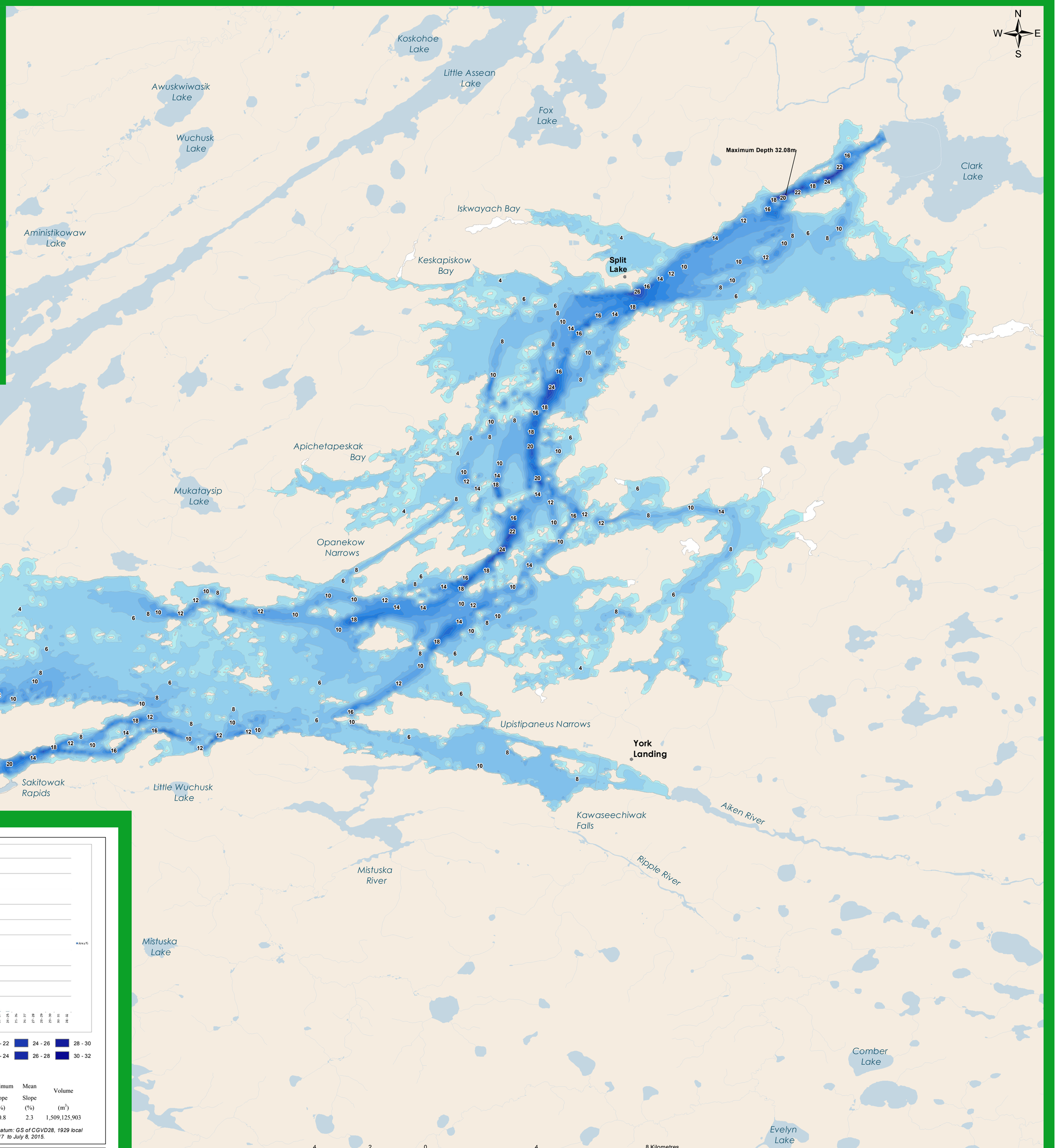
CAMP

SPLIT LAKE





Bathymetry

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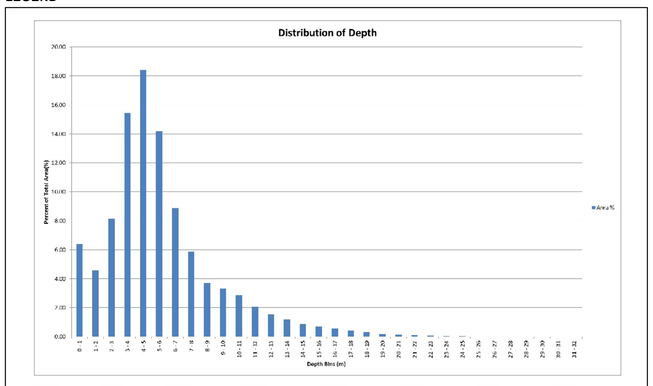

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Note: Not Surveyed

Water Body Name	Area (km^2)	Area (ha)	Maximum Depth (m)	Mean Depth (m)	Maximum Slope (%)	Mean Slope (%)	Volume (m^3)
Split Lake	274.26	27,426	32.08	5.56	70.8	2.3	1,509,125,903

Note: Depths are relative to an average mean water surface elevation of 167.5 m ASL (Datum: GS of CGVD28, 1929 local adjustment) measured at WSC hydrometric station 05UF003 from June 17 to July 8, 2015.

**WARNING* This map is intended to assist in the planning and interpretation of fisheries and aquatic monitoring programs. It is not to be used for navigation.Some reefs and shoals may not be indicated.*

SPLIT LAKE

Coordinated Aquatic Monitoring Program Overview

The Coordinated Aquatic Monitoring Program (CAMP), established in 2008, is a long-term aquatic monitoring program to study and monitor the health of water bodies (rivers and lakes) affected by Manitoba Hydro's generating system.

A Memorandum of Understanding (MOU) between the Province of Manitoba (MB) and Manitoba Hydro (MH), signed in 2006, summarizes and defines the need for coordinating aquatic monitoring to address:

- growing expectation from environmental regulators, local communities, and the general public;
- monitoring and assessment of Manitoba Hydro's hydroelectric generation system.

Design of the CAMP integrates components of existing MB and MH long-term monitoring programs and developed new components and sites to fill necessary gaps. The geographic scale of CAMP makes it the largest holistic, ecosystem-based aquatic monitoring program in Manitoba.

Habitat Summary

In 2015 an aquatic habitat inventory study was conducted on Split Lake. Surveys were conducted via boat-based hydroacoustics. Acoustic surveys were validated with observations of substrates and shoreline habitat features. The resulting data was processed and analyzed to produce bathymetric and substrate maps.

Spit Lake is a medium to large sized relatively shallow waterbody within the Lower Nelson River Region. Approximately 20 % of its area is below 3 m in depth. Its mean depth is 5.56 m, and its average bed slope is 2.3 %. The waterbody is flat throughout, with no distinct deep basins, with the exception of the high-sloped channelized features which enter into and flow through the lake (Burntwood and Nelson Rivers). The maximum depth in the waterbody is 32.08 m in the deep northeast channel near the outlet to Clark Lake.

Split Lake is largely composed of mud–based substrates. Mixed silt and clay substrates comprise 45 %, sandy, silty, clay substrates comprise 12%, and clay substrates comprise 28% of the waterbody. Some small back bays contain mixtures of clay and organic bottom types, which account for 3% of the overall substrate composition. Sand and gravel substrates (5%) can be found along the bottoms of the channelized areas of the lake. Much of the nearshore areas and shorelines of the lake are dominated by bedrock, boulder, and cobble substrates, which account for 5% of the overall substrate composition of the lake.

References and Data Sources

1. Contains information licensed under the Open Government Licence – Canada. (CanVec digital topographic information from Geogratis)

2. Information pertaining to the collection and analysis of aquatic habitat data will be found in:

North/South Consultants Inc. TBD. Coordinated Aquatic Monitoring Program (CAMP)
Manitoba/Manitoba Hydro Coordinated Aquatic Monitoring Program (CAMP): Nine Year Summary Report (2008-2016)

Prepared by North/South Consultants Inc.

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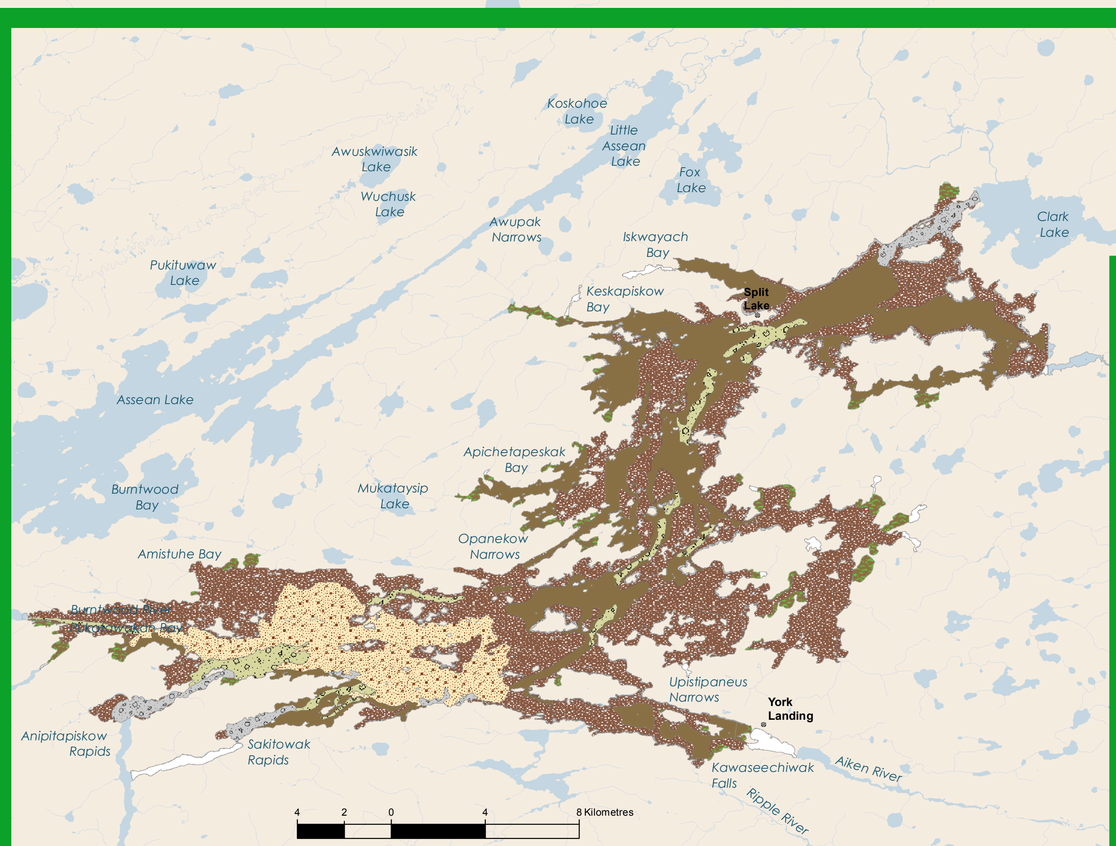
Aquatic Environment Specialists



Substrate

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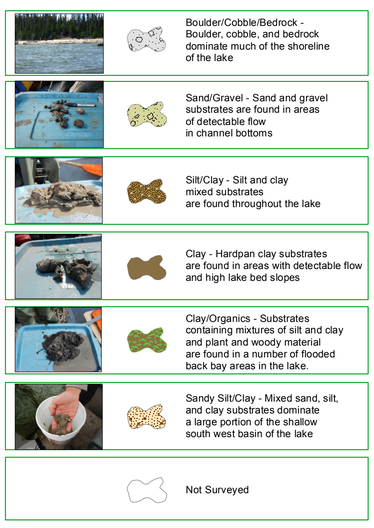

- Boulder/Cobble/Bedrock - Boulder, cobble, and bedrock dominate much of the shoreline of the lake
- Sand/Gravel - Sand and gravel substrates are found in areas of detectable flow in channel bottoms
- Silt/Clay - Silt and clay mixed substrates are found throughout the lake
- Clay - Hardpan clay substrates are found in areas with detectable flow and high lake bed slopes
- Clay/Organics - Substrates containing mixtures of silt and clay and plant and woody material are found in a number of flooded back bay areas in the lake.
- Sandy Silt/Clay - Mixed sand, silt, and clay substrates dominate a large portion of the shallow south west basin of the lake
- Not Surveyed