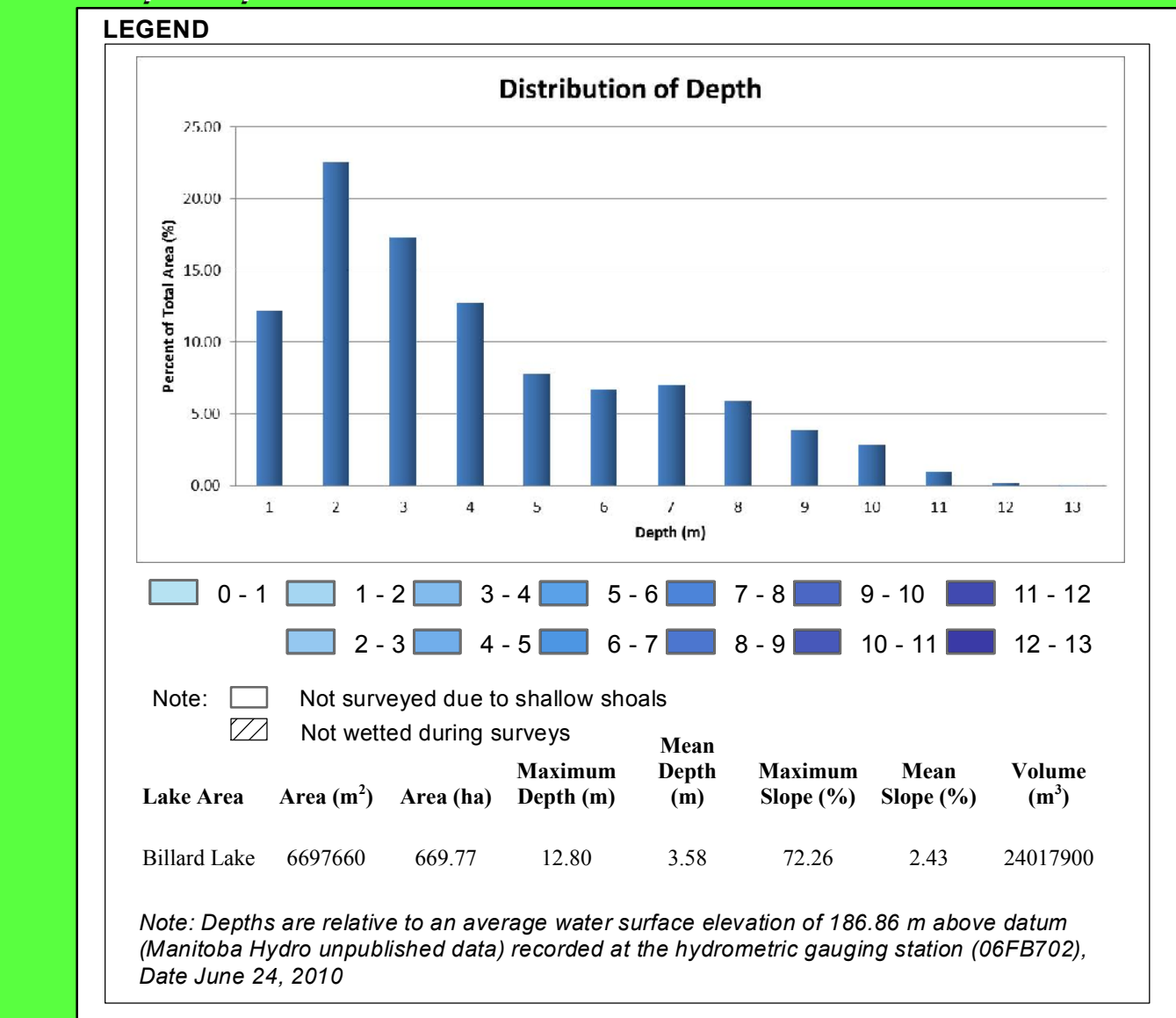
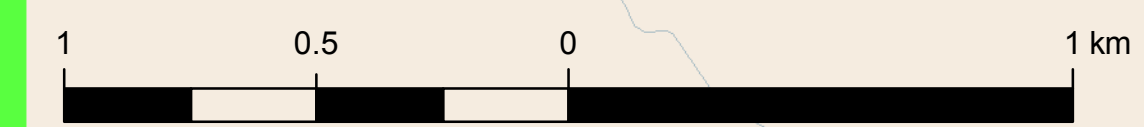


Bathymetry



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.



BILLARD 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 2010, under very low water conditions, an aquatic habitat inventory study was conducted on Billard 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.

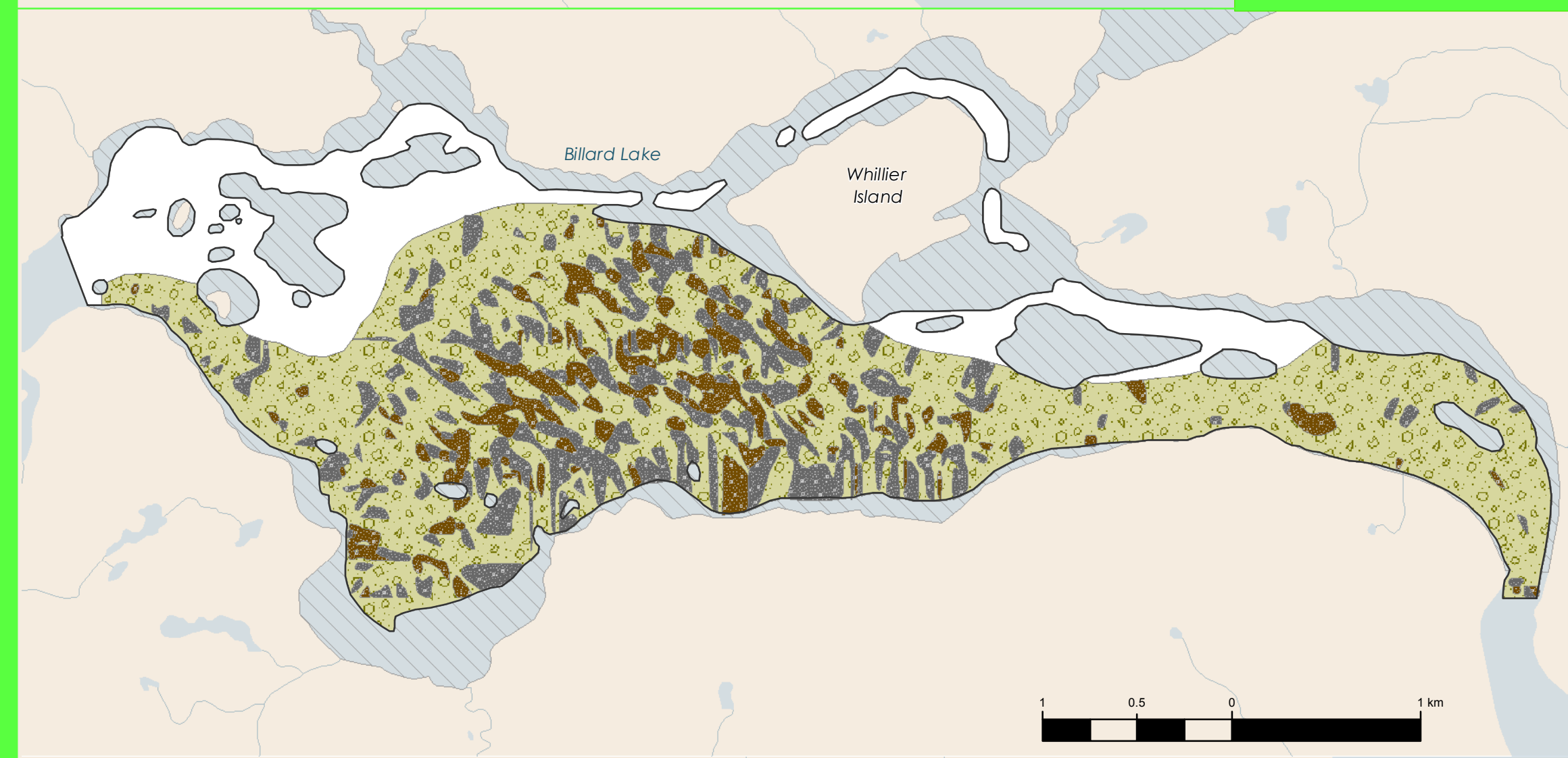
The results of the study and subsequent mapping indicated that Billard Lake is very shallow, 52% of the mapped area of the lake is above 3 metres in depth with a mean depth of 3.58 m. The maximum depth in the lake is 12.8 m found in the thalweg channel of the Churchill River.

Billard Lake is largely comprised of fine sandy substrates. The shore zone is dominated by sand and sandy loam substrates interspersed with cobble and gravel sized materials, accounting for 464.04 ha (52.9%). The extensive low sloped south shore of Whillier Island is dominated by sand and sandy loam beach habitat. Offshore deep areas contain more loamy fine substrates with a higher percent composition of silt and clay sized material, contributing 77.64 ha (8.9%).

References and Data Source:

- Contains information licensed under the Open Government Licence – Canada. (CanVec digital topographic information from Geogratis)
- Information pertaining to the collection and analysis of aquatic habitat data will be found in: North/South Consultants Inc. 2014. Coordinated Aquatic Monitoring Pilot Program (CAMPP) Manitoba/Manitoba Hydro Coordinated Aquatic Monitoring Pilot Program (CAMPP): Three Year Summary Report (2008-2010) Volumes 1-13

Prepared by North/South Consultants Inc.



Substrate

