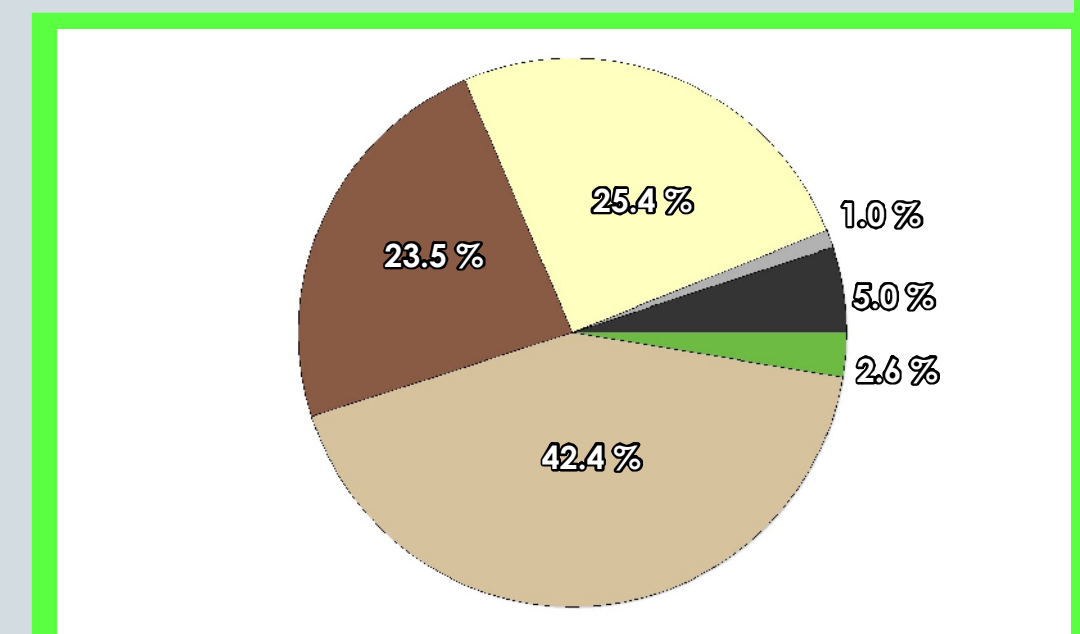


Substrate

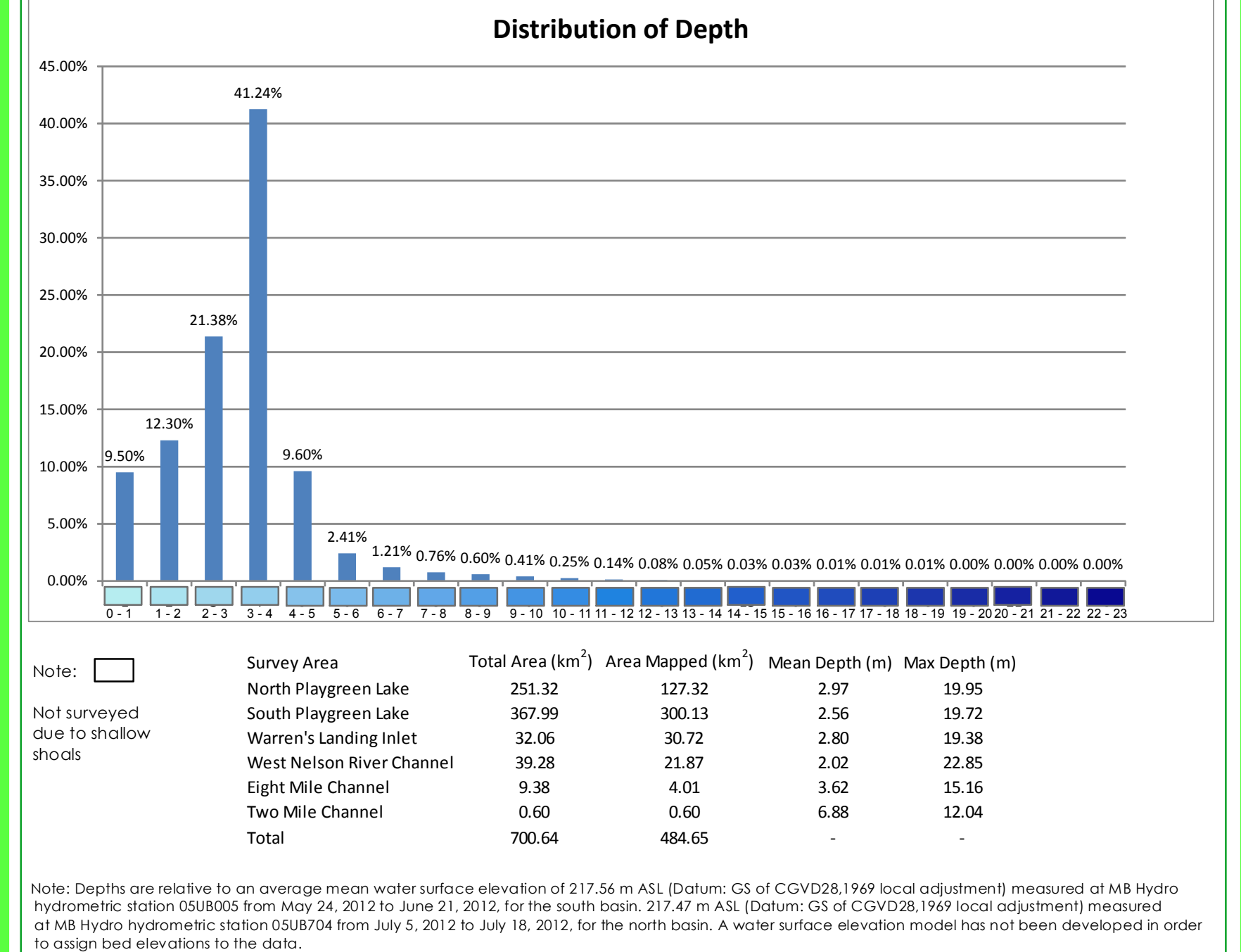
LEGEND

- 1 - Rock - Includes bedrock and rock shoals
- 2 - Coarse - Includes cobbles and gravel, often interspersed with and embedded within fine substrate.
- 3 - Sand - Sand substrates are found throughout the lake in both nearshore and offshore areas.
- 4 - Clay - Clay substrates are typically cohesive they can contain varying amounts of silt and sand substrates.
- 5 - Silty/Clay - Loose, unconsolidated fines make up the dominant substrate class in Playgreen Lake
- 6 - Organics - Flooded terrestrial organic soils (peat) are common along the west shoreline of Playgreen Lake



Bathymetry

LEGEND



PLAYGREEN 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 2012 an aquatic habitat inventory study was conducted on Playgreen 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 Playgreen Lake is very shallow (84.41% of the mapped area of the lake is less than 4 metres deep) with a mean depth of 2.8 m. The maximum depth in the lake is 22.85 m, located in the West Channel of the Nelson River, which connects the north and south basins of Playgreen Lake.

The dominant substrate in the lake is unconsolidated silty/clay. Rocky shoals are prominent throughout the lake which often limited the extent of surveys.

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: Manitoba/Manitoba Hydro Coordinated Aquatic Monitoring Program (CAMP): Six Year Summary Report (2008 - 2013). A report prepared for the Manitoba/Manitoba Hydro MOU Working Group. In prep.