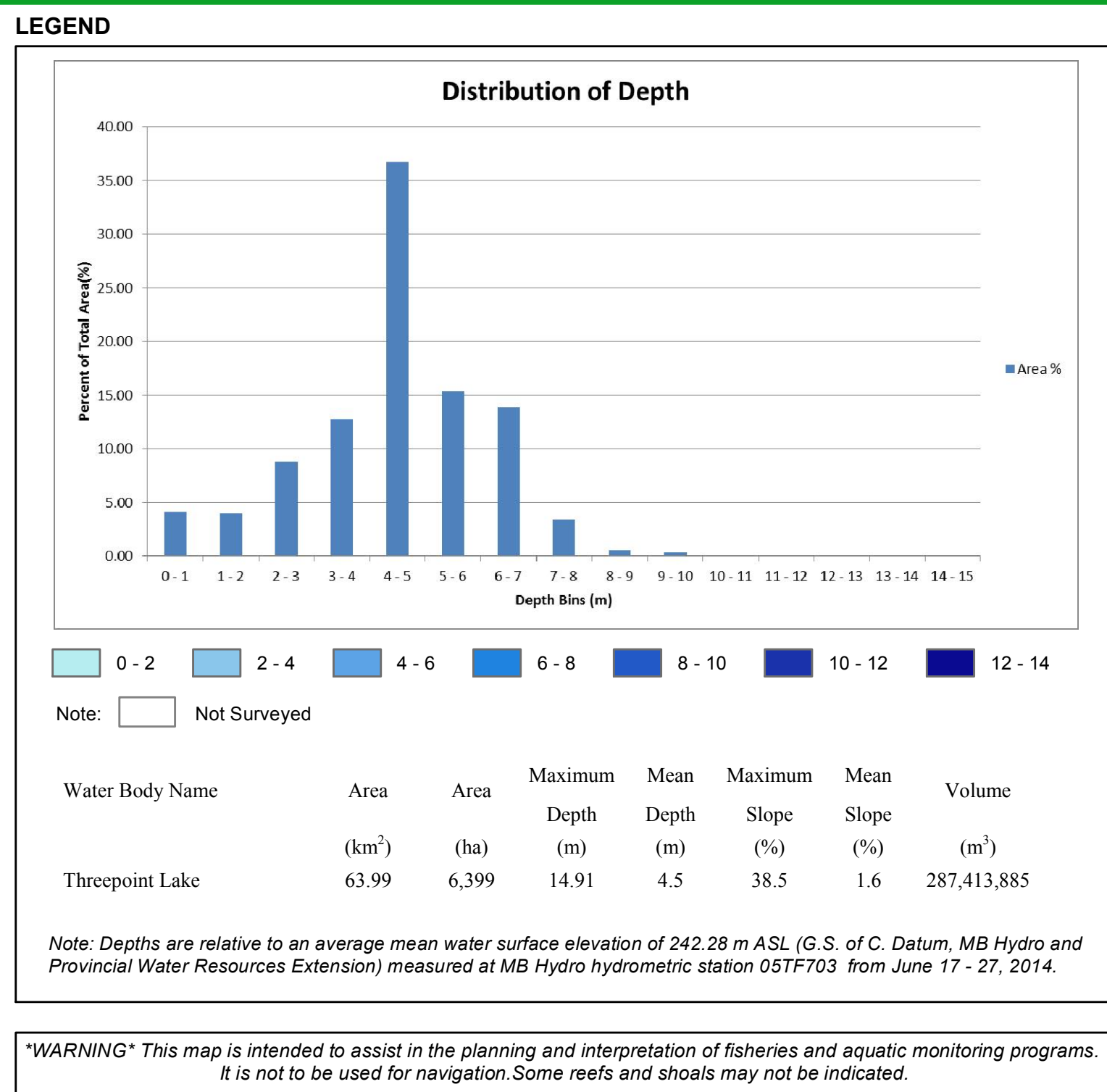


### Bathymetry



### THREEPOINT 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 2014 an aquatic habitat inventory study was conducted on Threepoint 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.

Threepoint Lake is a small to medium sized shallow waterbody within the Churchill River Diversion Region. Approximately 18% of its area is above 3 m in depth. Its mean depth is 4.5 m, and its average bed slope is 1.6%. The waterbody is flat throughout with the exception of the high-sloped channelized features of the Rat, Burntwood, and Footprint Rivers which enter into and flow through the lake. The maximum depth in the waterbody is 14.91 m where the thalweg of the Rat River enters into the western basin of the lake.

Threepoint Lake is largely composed of mud-based substrates. Silt/clay substrates comprise 73% and clean hardpan clay substrates comprise <1% of the waterbody. Flooded terrestrial areas comprised of organics, woody debris, and silt/clay substrates occupy the remaining 26% of the waterbody. The shore zone has sporadic bedrock and cobble/boulder outcrops.

#### References and Data Sources

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



### Substrate

