



ASSEAN 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 an aquatic habitat inventory study was conducted on Assean 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.

Approximately 60% of Assean Lake is less than 3 m deep. The average depth of Assean Lake is 3.94 m, its deepest point is 19.88 m, found in the deep channel connecting the two shallow flat basins of Assean Lake proper and Little Assean Lake on the east end of the waterbody.

The majority of Assean Lake's shoreline is bedrock. Rock, including bedrock sills, fractured and broken bedrock and nearshore unconsolidated boulder and cobble accounts for 6.86% of the total substrate distribution. Silt/clay substrates, found throughout the waterbody account for 85.93% of the total substrate distribution. Compact clay contributed 5.6% to the total substrate distribution.

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. 2014. Coordinated Aquatic Monitoring Pilot Program (CAMP) Manitoba/Manitoba Hydro Coordinated Aquatic Monitoring Pilot Program (CAMP): Three Year Summary Report (2008-2010) Volumes 1-13

Prepared by North/South Consultants Inc.

