## Satellite-Derived Lake Huron Submerged Aquatic Vegetation (SAV) Map ault Ste Marie Elliot Lake Thessalon Blind River Alpena Midland Owen Sound ollingwood Kincard Goderich Midland Port Huror London Sarnia Michigan Ontario NOAA bathymetry (meters) **Bottom Type Classification** Light Submerged Aquatic Vegetation Sand/Uncolonized Substrate Dense Submerged Aquatic Vegetation Chatham-Kent Unclassifiable Due to Turbidity

This map, generated by the Michigan Tech Research Institute (MTRI) under Great Lakes Restoration Initiative (GLRI) funding (award no. GL-00E00561-0), represents the extent of Submerged Aquatic Vegetation (SAV) in the optically shallow areas (areas where there is a return of light from the bottom) of Lake Huron. The SAV is predominantly *Cladophora* with localized areas of vascular plants, other filamentous algae, and diatoms. The map, which has a 30 meter resolution, was generated using an MTRI-developed depth-invariant algorithm and utilized Landsat satellite data collected during the vegetative growing season (late April-September). Most of the mapped area was derived from images collected in 2008-2011. Small areas of Georgian Bay and the Northern Channel could not be classified due to consistently high turbidity. The total mapped area of optically shallow water is approximately 4,370 square kilometers, of which 665 square kilometers or 15% is mapped as SAV. The nominal estimate of the dry weight biomass of lakewide SAV is 36,500 metric tons using an average dry weight of 50 g/meter<sup>2</sup> and assuming that 90% of the total biomass is visible. A digital copy of this map is available at http://www.mtri.org/cladophora.html

Project Team: Dr. Robert Shuchman, Michael Sayers, Colin Brooks, Dr. Martin Auer, Nathaniel Jessee, Amanda Grimm. For additional information please contact Dr. Robert Shuchman (shuchman@mtu.edu) or Mr. Colin Brooks (colin.brooks@mtu.edu).

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