

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 of Lake Michigan (areas where there is a return of light from the bottom). The SAV is predominantly *Cladophora* with localized areas of vascular plants, other filamentous macroalgae, and diatoms. The map, which has a 30 meter resolution, was generated using a MTRI-developed depth-invariant algorithm and utilized Landsat satellite data from 2008-2011 collected during the vegetative growing season (late April-September). The total area of optically shallow water mapped is approximately 4,390 square kilometers, of which 1,220 square kilometers or 28% is mapped as SAV. The nominal estimate of the dry weight biomass of the SAV is 67,000 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

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