

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 Erie. 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 an MTRI-developed depth-invariant algorithm and utilized Landsat satellite data collected during the vegetative growing season (May-September). Most of the mapped area is derived from images collected in 2010-2011. Much of the western basin could not be classified due to consistently high turbidity. The total mapped area of optically shallow water is approximately 530 square kilometers, of which 160 square kilometers or 30% is mapped as SAV. The nominal estimate of the dry weight biomass of lakewide SAV is 8,700 metric tons using an average dry weight of 50 g/m² 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).