

HIGH IMPACT TARGETING

HIT stands for HIGH IMPACT TARGETING. It is a web-based decision support tool for multi-scale prioritization of agricultural areas contributing sediment to the Great Lakes and their tributaries. HIT combines an erosion model (RUSLE - Revised Universal Soil Loss Equation¹) and a sediment delivery model (SEDMOD - Spatially Explicit Delivery Model²) to calculate annual erosion and sediment loading to streams. This combination yields two outputs: field-scale maps identifying areas at risk for erosion and sediment loading, and tonnage estimates for erosion and sediment loading at watershed scales. This on-line tool allows users to interact with these data spatially, and evaluate the potential impacts of best management practices (BMPs) on selected watersheds.

HIT's maps of erosion and sediment loading risk are displayed over a Microsoft Bing Maps backdrop, allowing users to evaluate HIT's estimates over high resolution aerial photography in 2D and 3D, and through low-elevation Bird's Eye photography (where available). Users can also generate watershed-scale priority maps of BMP cost-effectiveness to aid in the development of watershed management plans. HIT data, along with detailed metadata, is downloadable for use in desktop GIS for more in-depth spatial analysis.

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