



US Army Corps  
of Engineers

# OM-GLTM-Dam Capacity Study, Regional, MI

**Project Location:** Great Lakes Basin

**Project Description:** The US Army Corps of Engineers (USACE) is tasked with maintaining the navigability of waters of the United States. Historic land use development patterns in the Great Lakes have contributed to an altered state of sediment production entering rivers. Despite massive increase in sediment production, little is delivered to harbors and out to the Great Lakes where upstream dams are present. This is due to the impoundment of sediment behind a network of dams. As dams collect sediment to capacity, a wave of sediment will move downstream, inundating fisheries habitat and navigation channels. Flooding also increases as channels lose flow capacity and impoundments lose storage. This project is a regional study that looks at the mechanisms influencing sediment production and storage at dams in the Great Lakes. Historic and existing sediment samples at dams will be analyzed to determine how the storage capacity has changed overtime and to forecast the remaining life-span of the impoundments. Sediment loading rates will be determined using several techniques and modeled with Soil and Water Assessment Tool (SWAT). This project is authorized under Section 516 (e) of the Water Resource Development Act (WRDA) of 1996, as amended – Great Lakes Tributary Model.

**Non-Federal Partner:** N/A

**Project Status:** The study was initiated in FY13. Analysis efforts have been completed. During FY17 the U.S. Army Corps of Engineers (USACE) shared results and continued efforts to assess the effectiveness of sediment yield forecasting. The FY17/18 report details how many of the reservoirs analyzed have hundreds of years to reach capacity (10 of 12). However, one was deemed full and another will reach capacity in just over a decade.



Estimated Project Costs	
Federal	827,900
Non-Federal	0
Total	827,900

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