

Lake Superior is 602 feet above the level of the sea.

The only water-way between Lake Superior and the lower lakes is the Saint Mary's River, which flows from Lake Superior at its eastern extremity, and empties into Lake Huron 37 miles east of Mackinac Island. The channel between the two lakes is about 75 miles long, and was, before improvement, obstructed in many places, but especially at the Rapids of Saint Mary, 15 miles from the head of the river. In their natural state these rapids formed a barrier to transportation by water, and made a portage necessary.

The fall of the river from Lake Superior to the rapids of St. Mary is one tenth of a foot; in the half-mile stretch of these rapids the fall is 18 feet; and from the foot of the rapids to the Lake Huron level, which is reached at Mud Lake, 35 miles below, the fall is 2.3 feet.

In 1837, the governor of the newly admitted State of Michigan called the attention of the State legislature to the advisability of constructing a canal around the rapids at Sault Ste. Marie, and three years later the subject was brought up in the United States Senate. In spite of violent opposition a survey was ordered, which was made by officers of the Topographical Engineers, U. S. Army. In 1852, a grant of 750,000 acres of public land was made to the State of Michigan, from the proceeds of which the canal was to be built.

The grant was attended with the conditions that the canal be at least 100 feet wide and 12 feet deep; the locks at least 250 feet long and 60 feet wide; that work be begun within three years and finished within ten; that tolls be limited to the amount necessary to keep the canal in repair, after the expenses of construction had been paid; that Government vessels be free of tolls; and that the donated land should not be sold until the location had been established and filed.

The State accepted the conditions and the grant, and handed the latter over to a private company, which undertook to build the canal for the proceeds of the land.