The International Joint Commission

The International Joint Commission (Commission) was created under the Boundary Waters Treaty of 1909 to help prevent and resolve disputes over the use of waters along the boundary between Canada and the United States. The Commission is charged with impartially reviewing all proposed projects that could change water levels on either side of the international boundary. If the Commission approves a project, an Order of Approval is issued that may require flows of water through the project meet certain conditions to ensure interests in both countries are protected.

The International Lake Superior Board of Control

The International Lake Superior Board of Control (Board) was established by the International Joint Commission in its 1914 Order of Approval. The 1914 Order of Approval granted permission for increased hydropower development in the St. Marys River. The Board's responsibilities include setting Lake Superior flows, and overseeing the operation of the various control works. Furthermore, the Board is charged with conducting studies to develop and improve the regulation plan, monitoring repairs and maintenance of the control facilities, and directing the flow measurements in the St. Marys River for the purpose of determining the discharge capacities of the various control works.

The Board provides the Commission with advice on matters related to: adverse hydrologic conditions on the lakes; modifications of the control facilities; and levels and flows in the St. Marys River, including the environmentally sensitive St. Marys Rapids. The Board meets semi-annually, conducts an annual public meeting, and provides the Commission with a semi-annual report on its activities.

Board Members

The International Lake Superior Board of Control is comprised of two members, one individual from Environment and Climate Change Canada and one individual from the U.S. Army Corps of Engineers. The Board Members impartially serve without stipend in both their personal and professional capacities, and not as representatives of their home organizations.

To assist the Board in carrying out the Commission's directives, each member has a Secretary, a Regulation Representative, and an On-Site Representative. The Regulation Representatives provide technical support to the Board. The On-Site Representatives oversee the operation of the control structures on the St. Marys River.

Superior Board of Control website:

www.ijc.org/lsbc

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International Lake Superior Board of Control

Contact Us

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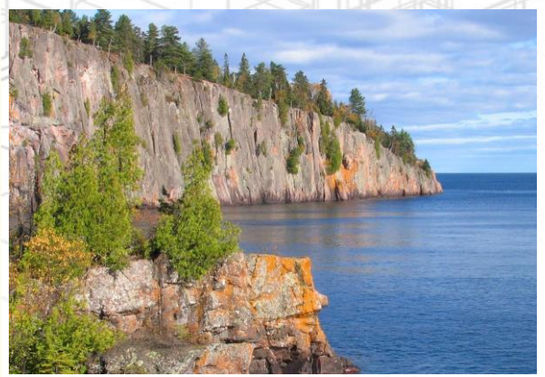
The International Joint Commission

United States and Canada

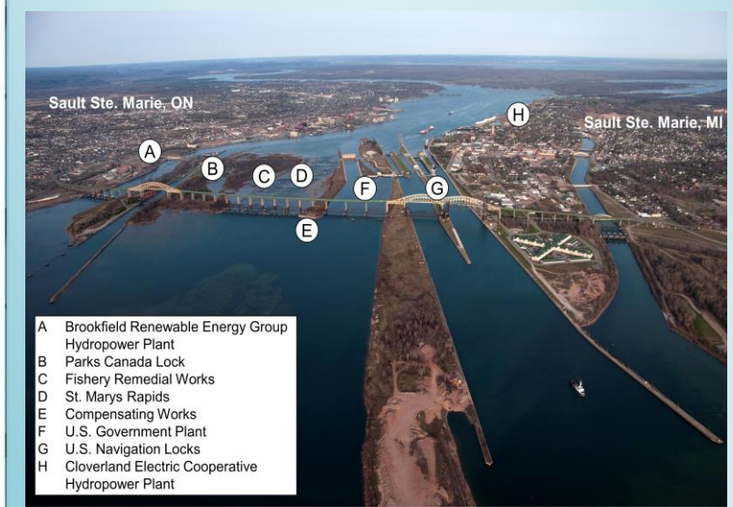


International Lake Superior Board of Control

Outflow from Lake Superior

Between the cities of Sault Ste. Marie, Michigan and Ontario, water flows from Lake Superior through the St. Marys River and into Lake Huron. In this area, known as the St. Marys Rapids, the St. Marys River falls approximately 6 metres (20 feet) in a distance of 1.2 kilometres (0.75 mile). Since 1797, when the first lock was built to allow boats to bypass these rapids, various navigation and power structures have been erected along the river.

Today, the water from Lake Superior flows through a collection of structures that stretch across the river. These works include three hydropower plants, five navigation locks, and a gated dam at the head of the rapids known as the Compensating Works. The release of water from Lake Superior has been completely regulated since the completion of the Compensating Works in 1921.



St. Marys River, looking downstream

Regulation

In its 1914 Order of Approval allowing increased hydropower development in the St. Marys River, the International Joint Commission established the basic objectives for and limits to the regulation of Lake Superior's outflow. The conditions for regulation given in the original Order acknowledged the needs of various interest groups on Lake Superior and the St. Marys River, such as navigation, hydropower, and riparian owners.

Since 1978, the Commission has issued several additions to the original Order of Approval. As a result, the Order now specifies that the level of Lakes Michigan and Huron must also be considered when determining the outflow from Lake Superior, and addresses concerns for the fishery habitat in the rapids.

The current regulation plan, *Plan 2012*, was implemented in January 2015. The primary goal of the plan is to regulate levels and outflows of Lake Superior in consideration of conditions and interests both upstream and downstream. The plan maintains much of the natural variability in lake levels, while being consistent with the capacities of the current discharge structures at Sault Ste. Marie, and with winter flow restrictions employed to reduce the risk of ice jams. At the same time, the plan tries to prevent the level of Lake Superior from rising above or falling below certain levels specified in the Order. The plan also contains provisions to safeguard against high levels in the harbor below the locks, provide a fixed minimum release, and limit winter flows.

The ability to regulate the outflow from Lake Superior does not mean that full control of lake levels is possible. This is because the major factors affecting the water supply to the Great Lakes—over-lake precipitation, evaporation, and runoff—cannot be controlled; nor can they be accurately predicted in the long term.

Allocation

The regulated release of water from Lake Superior is made through the various structures located on the St. Marys River. The allocation of flow to these facilities is determined monthly, based on the outflow specified by the regulation plan and the conditions given in the Order of Approval. This water is used for domestic water supply, navigation through the locks, hydropower production, and to maintain the fish habitat in the rapids.

St. Marys Rapids, looking upstream