
Soo Locks

Sault Ste. Marie, Michigan



The Soo Locks

Watch in amazement as large freighters, almost close enough to touch, move through one of the busiest lock systems in the world. Located in Sault Ste. Marie, Michigan, on the St. Marys River, the United States locks are just across the water from the Canadian lock in Sault Ste. Marie, Ontario, Canada.

The Soo Locks consist of two canals and four locks: Davis Lock, Poe Lock, MacArthur Lock, and the Sabin Lock (closed), that allow vessels of many types and sizes to safely traverse the 21-foot drop in elevation of the St. Marys River between Lake Superior and Lakes Michigan and Huron.

History

Why the locks were needed



The Old State Lock, 1855.

about 21-feet from the level of Lake Superior to the level of the lower lakes. This natural barrier to vessel navigation made necessary the construction of the locks project known as the St. Marys Falls Ship Canal.

Long ago the Ojibway (Chippewa) Indians, who lived in the area, would carry their canoes around the rapids to reach Lake Superior from the St. Marys River.

The St. Marys River, the only water connection between Lake Superior and the other Great Lakes, known as the St. Marys Rapids, falls

As European pioneers arrived creating larger settlements with increased trading the need for larger boats grew. It became necessary to unload the boats, haul the cargo around the rapids in wagons, and then reload alternate boats on the other side. This process took valuable time. The need to build a lock became apparent thus the world-famous Soo Locks were built to form a passage around the rapids in the river.

When the locks were built

In the late 1700s a Canadian company built a lock on the Canadian side of the river. It was destroyed in the War of 1812. A private American company built locks on the U.S. side of the river in 1853. These locks were turned over to the State of Michigan in 1855 and then designated the State Locks. Although the state charged a lockage toll, commerce grew and the locks became important on a national level.

When the Corps took over

In 1881 the locks were transferred to the U.S. government giving jurisdiction to the U.S. Army Corps of Engineers. Currently, the Corps operates the locks toll free to any vessel wishing to pass through the St. Marys Falls Canal.

Future of the Locks

In the early days lock gates were opened manually. Now the gates are opened with the push of a button. The Corps is currently planning to automate the hydropower plant bringing that facility up to 21st Century technology also.

Visitor's Center

The award winning Soo Locks, one of the finest tourist attractions in the United States, can be seen up close at the observation platforms located just outside of the world class Soo Locks Visitors Center.

The Corps is proud of its facilities and welcomes visitors from all over the world to this American treasure.

The grounds surrounding the locks contain many buildings and structures such as the spectacular fountain located in the park adjacent to the lock complex.

The park, open to the public most of the year, is host to many activities, including weddings, and arts and craft festivals held throughout the year.



Visitor's Center

Every year the general public has access to the locks, on Engineers Day, always the last Friday in June. On this day visitors can venture past the MacArthur Lock into the Administration Building and further into the lock area between the MacArthur and Poe Locks to watch the vessels up close.

The beautifully remodeled visitors center is open from May to November. The Center provides a welcome to visitors, an overview and history of the Locks, and the Army Corps of Engineers' role in the development of the Great Lakes region. Included in the many interesting exhibits is a working model of the locks. A small theater features videos on locks history, the Great Lakes, and

Great Lakes water levels. Several television monitors within the center display the ships transiting the locks while the knowledgeable staff at the center provide audio information on the vessels as they approach the locks. Information about the size of a vessel, its national origin, tonnage, cargo, destination, and arrival time are provided throughout the day. The Center also contains many artifacts, charts, maps and photographs.

You may also see ships locking through the system on the internet at: www.crrel.usace.army.mil/ierd/webcams/soo/

Lock Facts

■ As proud stewards of the locks the Army Corps of Engineers, Detroit District operates and maintains the entire facility, at the St. Marys Falls Canal, with the Area Engineer at the Soo Area Office handling immediate supervision of the facilities.

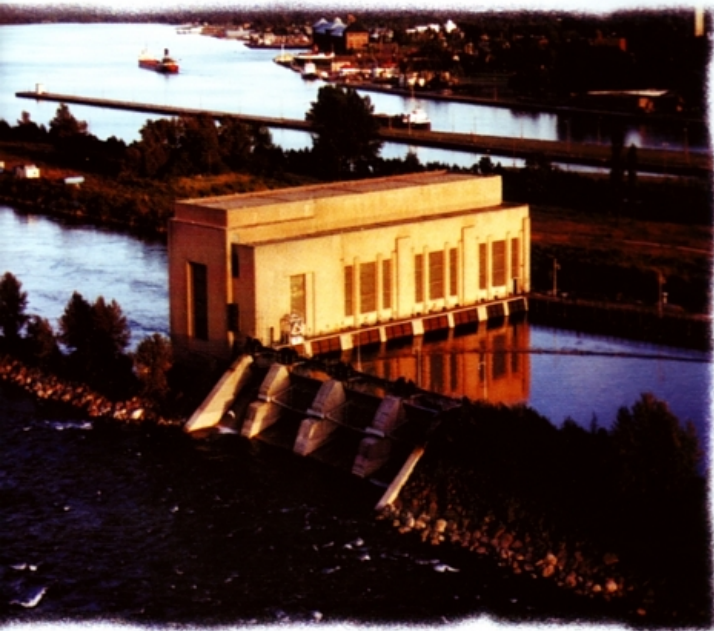
■ More than 11,000 vessels, carrying up to 90 million tons of cargo pass through these locks every year. Many different types of vessels lock through the system varying in size from small passenger vessels and workboats to large 1,000 foot ships carrying more than 72,000 tons of freight in a single load. Most cargo contained in these ships is either iron ore, coal, grain, or stone.

■ The channels through the St. Marys River are maintained at a maximum draft of 25.5 feet at low water datum. When lake levels are above low water averages larger ships take advantage of the deeper water and load up to an additional 200 tons of cargo per inch of additional draft.

■ The Poe Lock, the largest of the four locks, was rebuilt in 1968 to accommodate 1000 foot vessels. It took six years to build and is the only lock ever rebuilt over an existing lock between two operating locks.

■ The Hydropower plant, just north of the locks, generates more than 150 million kilowatt hours of electrical power each year to operate the locks. Whatever power is not used at the locks is distributed to homes and businesses in Sault Ste. Marie, Michigan and surrounding communities.

■ The lock system is periodically inspected for structural soundness usually during the winter when lock operations close.



S. Hydroelectric Power Plant



Ships pass the Administration building located between the MacArthur and Poe Locks

Dale Fisher Photo

The Corps has plans to replace the Davis and Sabin Locks with a larger state-of-the-art lock, similar to the Poe Lock, to assist in handling the larger vessels of the Great Lakes fleet.

The new lock will be the first lock built at the Soo since 1968. The Corps is looking forward to building this project and bringing this technologically advanced facility to the people of the United States.



Artist conception of new lock

Contact Information:

Vessels wishing to use the locks can reach the Chief Lockmaster on VHS-FM channel 14 (preferred) or channel 16.

US Army Corps of Engineers, Detroit District:
www.lre.usace.army.mil

US Army Corps of Engineers, Navigation Data Center:
www.wrsc.usace.army.mil/ndc

1-888-694-8313 Detroit District

1-800-990-0231 Soo Area Office



**US Army Corps
of Engineers**
Detroit District