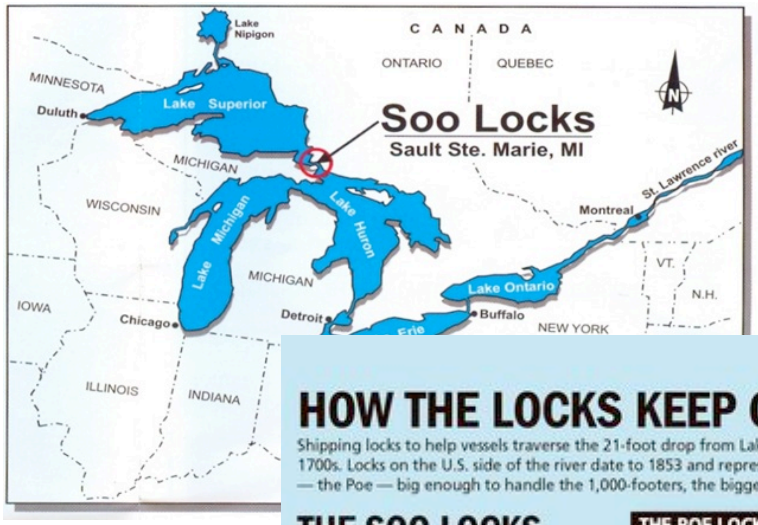
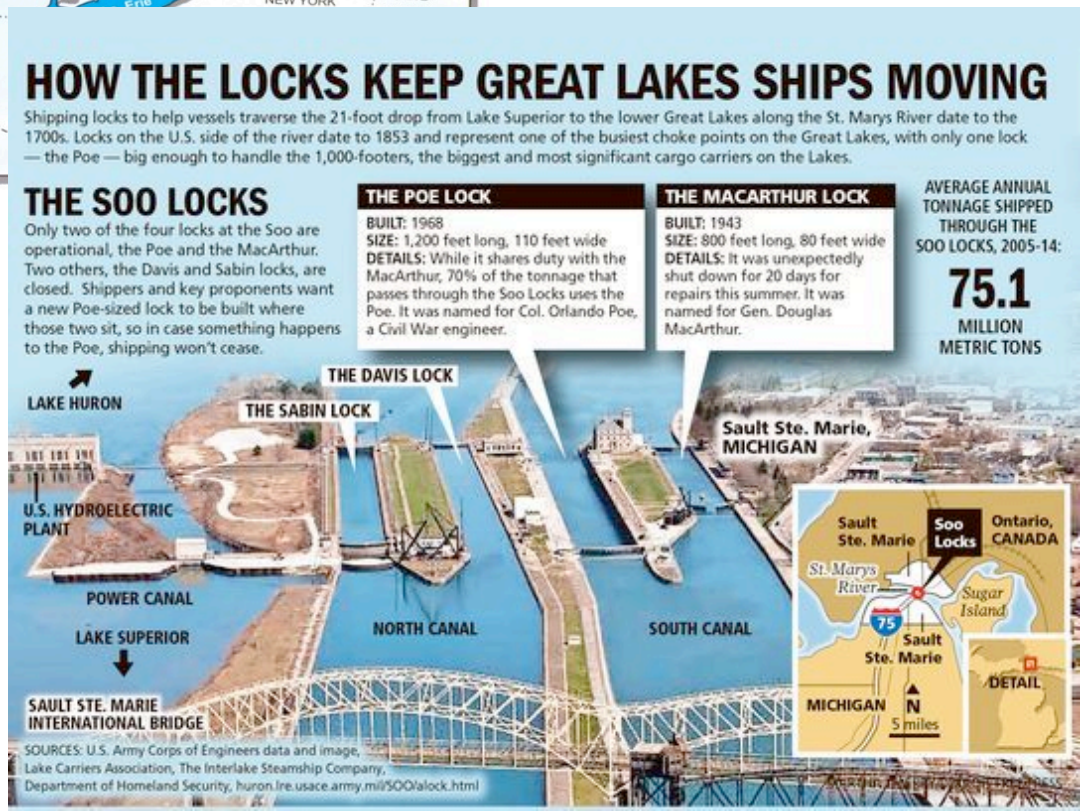
Shipping on Michigan's Great Lakes and Rivers

Using the buttons and YouTube videos provided on the web site, you can learn important and unique information regarding the shipping industry on Michigan's Great Lakes and rivers. Specifically, you can learn about the J.W. Westcott, the only floating post office in the United States, and the importance of the Soo Locks. These two topics take place on the Detroit and St. Mary's Rivers.

Begin by learning some cold, hard facts about the shipping industry by clicking on the "Welcome to Great Lakes Shipping" button. After visiting this web site, watch the two time-lapse videos of "Lakers" moving along the St. Clair and Detroit Rivers. Finally, click on the "Boat Nerd" button to view a map that shows real time boat traffic on the Great Lakes. Keep zooming in to get greater detail of the boats that are out there right now! But let's begin up north, in Sault Ste. Marie, at the Soo Locks.



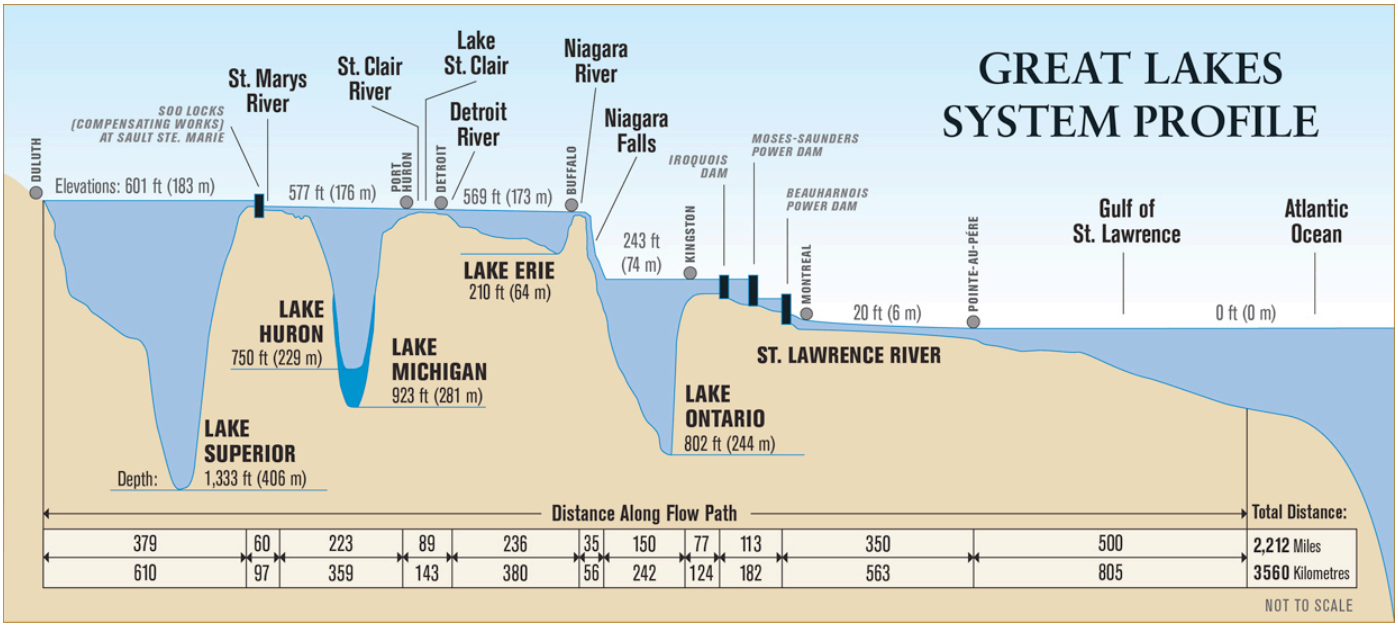


The Soo Locks

First of all, did you know...

- 90% of the world's iron ore moves through the Soo Locks.
- Duluth Minnesota to the Atlantic Ocean, through the St Lawrence Seaway, is 2342 miles or a 7 day trip.
- The Soo Locks have no pumps as they are 100% gravity fed.
- The Poe Lock requires 22 million gallons of water to lift or lower a boat.
- The Soo Locks close from January 15-March 25 each year for repairs.

The graphic below shows a profile picture of the Great Lakes. We all know the world is round, but it is not flat. Lake Superior is 601 feet above sea level, while Lake Michigan and Huron are only 577 feet above sea level. That means there is a waterfall in the St. Mary's River where the water flows out of Lake Superior. Freighters don't like waterfalls so the Soo Locks were built to move the lakers up and down the river. Notice what is found at the other big drop on this profile picture?



It would take about five hours to drive to the Soo Locks. Luckily we have technology that can take us there right now. Use the "Soo Locks Site" button to check out live web cams to see if a freighter is moving through right now. You can also watch an animation of how the locks work - all powered by gravity!

The Soo Locks - Why are they so important?

Name & Number: _____

Use the "MDOT Soo Locks" file to answer the following questions....

1. What is the distance freighters are raised and lowered to pass in and out of Lake Superior? _____ft.

2. Who built the very first lock in 1798? _____.

3. There are five locks, but only two are used for freighters today. What about the rest? _____

_____

_____

4. What are the five main items (commodities) transported through the locks? _____

_____ _____ _____ _____

5. The Poe Lock, which us used for ____% of all traffic would need _____ months to upgrade.

6. In what two decades were studies done that stated a need for a larger lock? _____

7. _____ million U.S. jobs could be lost due to a shut down of the Poe Lock, even more in Canada & Mexico.

8. It could take up to _____ years to build a new lock, at a cost of $_____ million!

9. In what year did the U.S. Congress authorize a new lock? _____ How many years ago was that? _____

10. So what do you think? Is this a big deal or not? Explain what you think. _____

_____