Commercial Navigation

Étude internationale sur le lac Ontario et le fleuve Saint-Laurent
International Lake Ontario - St. Lawrence River Study

www.losl.org

Photo: U. S. Army Corps of Engineers

4

1 What is the Commercial Navigation Technical Work Group doing?

This group is evaluating the impacts to commercial navigation from variations in water levels. The impacts identified and evaluated concentrated on changes for all commercial vessels that use the system.

2 Why are we evaluating changes in vessel operating costs?

Vessel operating costs are directly related to any impacts resulting from water level changes. Impacts can be delays, traffic being diverted, reduced loading capacity and using more fuel. Therefore, operating costs have to be established and evaluated to accurately reflect impacts of changing water levels.

3 What areas are we evaluating?

The group identified five geographical areas for evaluating the impacts on commercial navigation. These five areas are the following reaches of the system:

1) Port Weller to Kingston (Lake Ontario)
2) Kingston to Cornwall
3) Cornwall to Beauharnois
4) Beauharnois to Montreal
5) Montreal to Bécancour

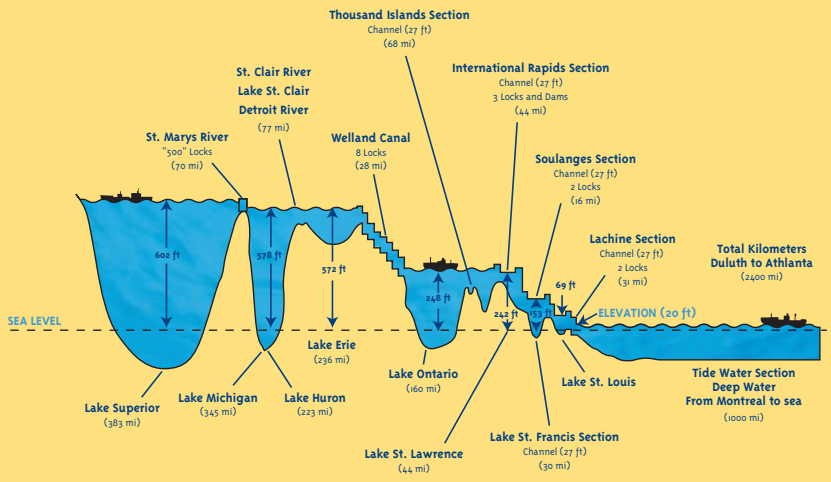
How are we doing our evaluation?

Five years of commercial navigation ship movements through the Study area (1995-1999) are the basis for determining the impacts of changing water levels.

We developed an impact model that identifies when impacts to navigation are encountered. There are 42 measures in all and they include things like speed reductions, loading reductions, and cessation of vessel movement due to unsafe current conditions.

We have performance measures for high water level conditions, low water level conditions, timing of discharges and target gradients for each of the five geographical areas. Performance measures were also developed that enhance the development of a stable ice cover which is important to winter navigation at the Port of Montreal. We then converted these performance measures into economic impacts.

Great Lakes/St. Lawrence River



Seaway Navigation System