

# **Canadian Shipowners Association**

## **Position Paper**

### **Submitted to the International Joint Commission On the IJC Proposed New Order to Control Water Levels on Lake Ontario**

**July 2008**

The Canadian Shipowners Association (CSA) represents the interests of the Canadian companies that own and operate Canadian-flag vessels on the Great Lakes – St. Lawrence Waterway. These companies include: Algoma Central Corporation, Canada Steamship Lines, Groupe Desgagnés, Rigel Shipping, Seaway Marine Transport and Upper Lakes Group.

We would like to thank the Commissioners of the International Joint Commission for the opportunity to provide comments on the important issue of regulating water levels and flows in Lake Ontario and the St. Lawrence River.

The Canadian fleet is comprised of some 68 vessels that carried 75 billion tonne-km of cargo in 2007. The fleet provides Canadian and American communities and industries with reliable, economic and environmentally sustainable transportation. Quietly effective, the domestic marine transportation industry plays an essential role in the industrial and natural resources economies of Canada and the United States.

#### **Importance of environmental protection**

The Canadian Shipowners Association and its member companies recognize their responsibility to maintain a marine transportation system that is environmentally sustainable. This is accomplished through the application of an Environmental Management System to all facets of operations and management, and through participation in Green Marine, a program of continuous improvement of environmental performance.

The shipping industry wants to see a solution that maintains current navigability to the extent possible, with a flexible and responsive mechanism to allow deviations as required if the weather does not cooperate. Based on the analysis of our operations, there is no question that both Plan 2007 and Plan B+ are much worse for commercial navigation than the current system. The Canadian Shipowners Association supports Plan 1958DD.

## **Boundary Waters Treaty**

As you know the Boundary Waters Treaty of 1909 assigns a high priority to navigational usage – second only to sanitary uses – but it is clear to us that the rules and principles of the treaty are not being respected in the proposed new Order. We believe that they should be.

## **Flaws in economic analysis**

The economic analysis of the impact of the various options on commercial navigation does not reflect the reality of our operations. While the economic model considers the cost of delays due to current velocities, it does not accurately reflect the significant economic costs that will be borne by carriers, shippers and consumers due to loss of carrying capacity when water levels are low and/or inconsistent. The potential loss of business due to modal shifts is also not adequately reflected in the model used. As a result, the study shows economic benefits to commercial navigation under all of the candidate plans. We believe this representation is misleading.

When water levels are low and the available draught is decreased, ships have to reduce the amount of cargo they carry to compensate. This means that cargoes do not move and carriers' revenue decreases. It is not possible to distribute these cargoes over multiple trips, as sufficient hulls are simply not available; that cargo is lost to marine carriers and may move by another mode where practical. The economic analysis in the study does not consider this lost revenue to marine carriers, which will greatly outweigh any small gains that may be achieved.

Plan 2007 will reduce water levels for two years out of every twenty, and we cannot predict what may occur due to the weather. In a very dry year, the potential loss of tonnage carried by Canadian ships alone in the Lakes and the Seaway would be in the hundreds of thousands of tonnes. This represents a loss of tens of millions of dollars in revenue to the carriers. The cost to shippers of even short delays in the Montreal-Lake Ontario portion of the Seaway can range as high as three-quarters of a million dollars per day according to the Great Lakes St Lawrence Seaway Study released last fall. Major sectors of the Canadian and US economies would be affected by such costs – particularly the grain, construction, steel, power generation, petroleum and mining industries.

Economic losses to shipping go beyond just our industry to affect the industries that we supply. There is a cumulative impact on those industries if our capacity to move goods is impaired by water level fluctuations. A loss of tens of millions to the carriers would multiply to a loss many times that number in GDP for Canada and the US. Even a 10% diversion of cargo from just one company would result in an annual cost increase of \$28.8 million to that company's customers alone. (See Appendix).

## **Flaws in environmental analysis**

Similarly, the environmental analysis is inadequate. The environmental criteria considered in choosing between the plans are focused mainly on habitat and wildlife conservation at the local scale. Larger-scale environmental impacts such as climate change and air pollution have not been considered.

We need to consider environmental benefits holistically. If the IJC adopts a plan that decreases the capacity of the marine fleet in the Great Lakes and the Seaway, those goods will either have to move by another mode or simply not move at all. If they move by road or rail, we will be looking at major increases in fuel consumption and emission of air pollutants – more than a tenfold increase in greenhouse gas emissions alone, relative to marine. If 10% of our cargo can no longer be carried in ships because of low water levels, hundreds of thousands of tonnes of additional GHGs would be emitted to the atmosphere because of the resulting modal shift. See Appendix for details on this predicted modal shift.

Marine transportation remains the most energy efficient mode of transportation, and generates the lowest quantity of greenhouse gas emissions per tonne-mile, directly contributing to our quality of life. In the current time of increasing energy insecurity and concern over climate change, these advantages are becoming particularly significant. It is important to ensure, therefore, that the new Plan does not adversely affect safe, reliable and efficient marine transportation systems.

## **Importance of deviations**

The current system of deviations is critical to provide the minimum water levels required for safe and efficient navigation. The deviations enable vessel navigation in the Seaway at Seaway draft but have little effect on the water level in Lake Ontario. The proposed policy of requiring deviations to be reconciled within one or two weeks is not workable in extended dry spells and the procedure for longer term deviations is not likely to produce timely results. Applying the new policy last fall would have had disastrous consequences for commercial navigation. Because the ability to accurately forecast supplies and conditions is limited, deviations from plan flows will be required for commercial navigation and other interests no matter what plan is being used to regulate the outflow from Lake Ontario.

Deviations must be allowed in order to protect shipping in cases where a drop in the level could pose a risk to navigation. Protections required to provide water levels and flows that are safe and acceptable for commercial navigation need to be written into the new Order of Approval. There must be some certainty regarding the Order's application.

## **Importance of preserving minimum water levels**

The current Order of Approval has a criterion which provides for a minimum water level on Lake Ontario during the Seaway Navigation Season. For navigational purposes, it is necessary to maintain water levels at Long Sault at or above 72.50m and on Lac St. Louis at or above 20.60m during the Seaway navigation season. It is also recognised that 9910 cubic metres per second is the maximum safe flow for navigation in the Seaway. None of these protections for commercial navigation are included in the proposed new Order of Approval, and they should be if the Boundary Waters Treaty is to be properly respected. Water levels at Montreal also need to be maintained at a level suitable for navigation.

Another feature of the Plans under consideration that gives us concern is the requirement to draw down Lake Ontario for two years in twenty. As the proposed plan reads now, a decision to draw the lake down is made early in the calendar year and from that point on the plan attempts to do this. If, after a decision is made to draw down the Lake, conditions then turn dry there may not be enough water left in the system to support full draft navigation for the balance of the year. If, on the other hand, conditions turn wet then river velocities may be so high that it would be unsafe for navigation, as the Plan would call for continued dumping of water to try and drain down the lake. We do not believe that these scenarios have been taken into account in the economic impact calculation either.

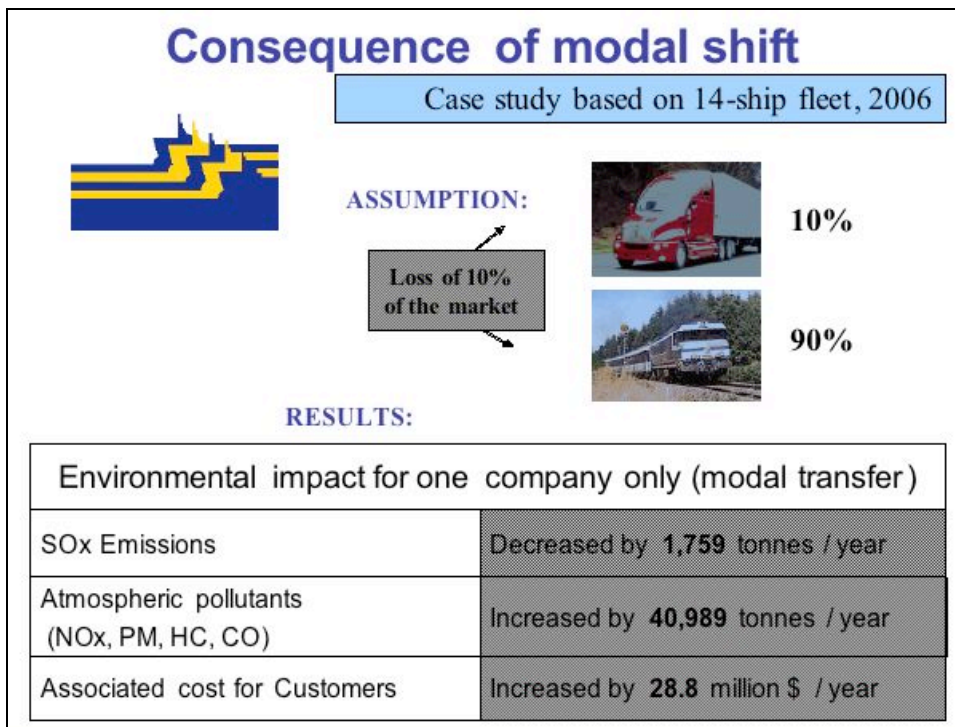
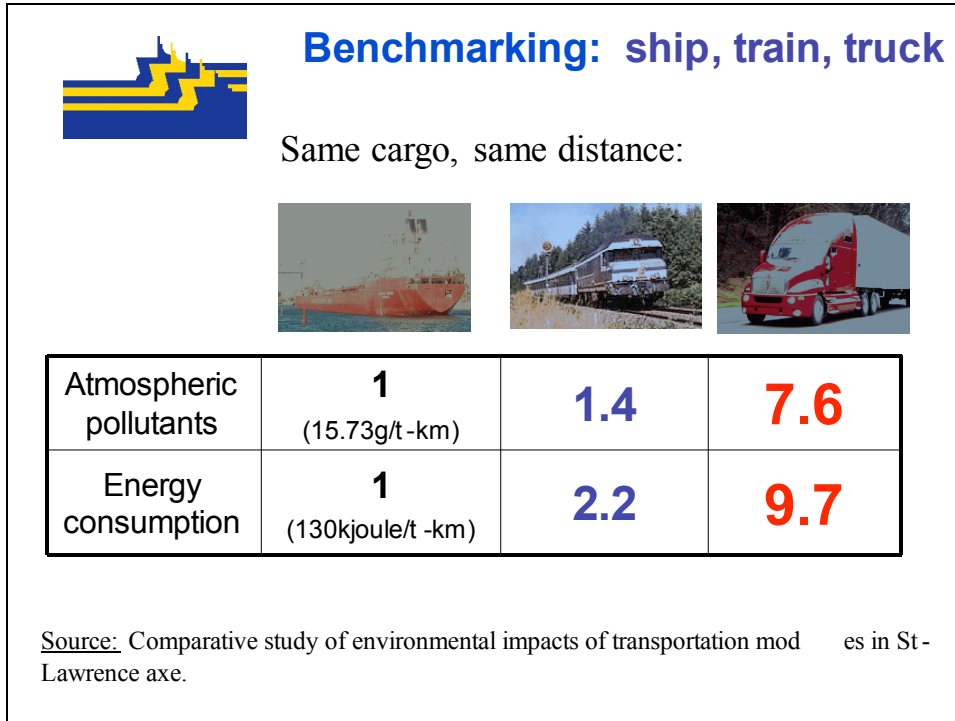
## **Conclusion**

The shipping industry questions the validity of the economic analysis used to inform the decision being made. We also caution that a focus on habitat and wildlife conservation above all else turns a blind eye to other, potentially more damaging impacts on the large scale.

The industry needs to see a flexible and responsive plan in place to provide certainty about water levels required to support commercial navigation and to allow deviations in case of unforeseen difficulties with the weather. We need guarantees that safe and acceptable conditions for navigation will be maintained in accordance with the priorities of the Boundary Waters Treaty. Protection of navigation through the application of deviations and recognition of minimum water levels must be specifically provided in the Order.

Thank you for the opportunity to present our views on this important topic.

## APPENDIX – Consequences of potential modal shift





## Case Study 1

Salt from Goderich, ON to Milwaukee, WI

Annual tonnage: 597, 000 net tonnes

|               | Marine   | Rail        | Truck       |
|---------------|----------|-------------|-------------|
| Fuel (tonnes) | 678      | 5190        | 9 444       |
| <b>Fuel</b>   | <b>1</b> | <b>7.7</b>  | <b>13.9</b> |
| CO2 (tonnes)  | 2 135    | 16 349      | 29 749      |
| <b>CO2</b>    | <b>1</b> | <b>7.7</b>  | <b>13.9</b> |
| CO (tonnes)   | 5.6      | 22          | 120         |
| <b>CO</b>     | <b>1</b> | <b>3.9</b>  | <b>21.4</b> |
| HC (tonnes)   | 1.9      | 16          | 40          |
| <b>HC</b>     | <b>1</b> | <b>8.4</b>  | <b>20</b>   |
| NOx (tonnes)  | 41       | 63          | 642         |
| <b>NOx</b>    | <b>1</b> | <b>1.5</b>  | <b>15.7</b> |
| SOx (tonnes)  | 23.1     | 5.2         | 9.4         |
| <b>SOx</b>    | <b>1</b> | <b>0.23</b> | <b>0.41</b> |

Source: 'Great Lakes and St. Lawrence River Commerce: Safety, Energy and Environmental Implications of Modal Shifts '



## Case Study 2

Grain from Thunder Bay, ON to Port -Cartier, QC

Annual tonnage: 697, 000 net tonnes

|               | Marine   | Rail + Truck |
|---------------|----------|--------------|
| Fuel (tonnes) | 1464     | 18 144       |
| <b>Fuel</b>   | <b>1</b> | <b>12.4</b>  |
| CO2 (tonnes)  | 4 612    | 57 154       |
| <b>CO2</b>    | <b>1</b> | <b>12.4</b>  |
| CO (tonnes)   | 46       | 196          |
| <b>CO</b>     | <b>1</b> | <b>4.3</b>   |
| HC (tonnes)   | 15       | 72           |
| <b>HC</b>     | <b>1</b> | <b>4.8</b>   |
| NOx (tonnes)  | 337      | 1010         |
| <b>NOx</b>    | <b>1</b> | <b>3.0</b>   |
| SOx (tonnes)  | 49.8     | 18.1         |
| <b>SOx</b>    | <b>1</b> | <b>0.36</b>  |

Source: 'Great Lakes and St. Lawrence River Commerce: safety, Energy and Environmental Implications of Modal Shifts '



## THE CSA FLEET

**2006 Fleet : 68 vessels, 1.1 million tonnes GRT**

- ⌘ 17 bulkers
- ⌘ 31 self-unloaders
- ⌘ 12 tankers
- ⌘ 8 other general cargo type vessels



## 2006 COMMODITIES (millions of tonnes)

|                          |             |
|--------------------------|-------------|
| Iron Ore                 | 16.0        |
| Coal                     | 13.7        |
| Limestone                | 8.9         |
| Salt                     | 7.4         |
| Grain                    | 6.0         |
| Petroleum                | 6.1         |
| Miscellaneous bulk/other | <u>6.5</u>  |
| <b>Total</b>             | <b>64.6</b> |

