

Great Lakes St. Lawrence Seaway Study



Transport Transports
Canada Canada



U.S. Army Corps of Engineers



U.S. Department of
Transportation



The St. Lawrence Seaway
Management Corporation



The St. Lawrence Seaway
Development Corporation



Environment Environnement
Canada Canada



U.S. Fish and Wildlife Service



Response to the Report on Stakeholder Engagement

May 2005

Introduction

The Great Lakes Commission (GLC) and St. Lawrence Economic Development Council (SODES) have completed their work of collating the information submitted by interested parties at the Great Lakes St. Lawrence Seaway (GLSLS) Study Stakeholder Engagement meetings held in June and July 2004 in five U.S. and Canadian cities. The submissions were allocated to one of three categories - environmental, engineering or economic – corresponding to the Study teams.

The *Report on Stakeholder Engagement* sets out the full range of comments that the Study teams are considering in their deliberations and research. Many thought-provoking and controversial comments have been submitted by organizations with frequently differing, sometimes antithetical views. Each has been examined and whenever feasible considered within the framework of the Study's mandate.

Environmental

Two issues that elicited widespread condemnation among environmental groups - winter navigation (or season extension) and construction of larger locks with attendant dredging - will not be discussed here as all participating organizations agreed long ago that these were not options under review in this Study.

The methodologies recommended by many environmental groups included use of full cost accounting and best practices procedures. Study managers agree that potential savings suggested by implementing various industry procedures should and will be measured against possible harmful effects on the environment.

Most groups agreed on the advisability of assessing environmental impacts to any proposed Study changes and some felt that a more detailed review including cumulative damage and historical analysis were needed. Key topics being addressed include dredging and disposal of dredged material, sediment impacts, vessel passage impacts including effects of increased/decreased traffic and ice breaking impacts. In addition, the Environment Team will describe a general framework/approach from the perspective of cumulative effects.

No issue received greater attention than that of invasive species and we share the recognition by stakeholders of the grave ecological and environmental threat these creatures pose to the System. However, resolution of this problem is receiving priority attention and funding and the Study team believes that draconian recommendations such as banning international shipping from the waterway are untenable solutions that ignore economic implications and are incapable of guaranteeing eradication of an existing problem.

Another major challenge confronting the region is habitat restoration. Several participants cited the need of measuring costs due to navigation, which they trace to Seaway

construction. We note that the binational International Joint Commission (IJC) has been a focal point for environmental restoration of the Lakes for decades. Furthermore, in the U.S., this issue has recently received added attention with the establishment of a presidentially-mandated Great Lakes Task Force last summer.

Several groups raised important environmental issues that are ill suited for inclusion in our ongoing study in the detailed manner suggested. They include:

- Water diversions - legislation exists precluding unauthorized diversions. Furthermore, the Study is only focusing on issues related to commercial navigation.
- Dredging - no legislative authority exists for more than residual dredging of the St. Lawrence Seaway, not to exceed 6” past the current 26’6” depth now extant and periodic maintenance dredging required to maintain currently authorized project depths throughout the system.
- Climate change - the current state of flux is far beyond the approved resources and scope of the Study.
- Erosion, habitat loss and water and air quality - though acknowledged as relevant topics meriting scientific study, the scope of the Study will not permit detailed research on them. However, we will document all environmental impacts associated with maintaining commercial navigation throughout the existing system.

Some of the issues raised are clearly conducive for easy inclusion within the study framework and we are making the changes required to do so. For example, water levels are critically important for both navigation and the environment. The study team agrees with the suggestion to use existing water level data maintained by the IJC. Similarly, we support documenting the environmental benefits accruing from the use of marine transport versus surface movement vis-à-vis reduced harmful air emissions.

Economic

Several issues pertaining to analysis and methodology were raised. As suggested, we are assembling a Marine Network Database with commercial and navigation data for the period 1995 - 2004 and also a set of Port Profiles.

Comments relating to Cargo and Markets essentially focused on the strategic role for the Great Lakes St. Lawrence Seaway System as part of an integrated transportation network and trade corridor. The System is a vital transportation link that is currently being used at only 50% of its capacity – traffic, cargo and revenues are primarily driven by bulk. We are evaluating the implications of trade growth and changing markets and trying to determine the strategic role of the System in contributing to transportation options, strengthening modal integration and leading to new efficiencies.

Focusing on new cargoes and new vessels we will define the character of new cargo markets, the nature of the competitive environment, the vessel and infrastructure technology options, the levels of service options and the nature and applicability of the

international experience and expertise. Intermodalism, shortsea shipping and international opportunities are included in our research on how we can improve the utilization of waterway capacity.

Another series of questions related to the importance of fishing, tourism, cruise ships and agriculture for the regional economy. An estimation of the regional impacts of recreation and tourism will be considered in the Study, including fishing, recreational boating and the cruise ship industry. Agricultural aspects are covered in terms of traffic - markets and industries relying on marine transportation.

As for the environmental benefits of marine transportation, our economic modeling will look at congestion, emissions and accidents. The scope is not fully developed at this stage with respect to such aspects.

It was suggested that we evaluate increasing water transportation capacity and include scenarios for low water levels. Historic data on water levels is being collected as part of the Marine Network Database task (with validation by the Environment Team). As part of the Transportation Rates Analysis and Carrier Cost Estimation tasks, the Economics Team will assess changing water levels and the potential implications for cargo capacity and costs (projections of future water levels have been obtained from the Environment Team).

Concerning the needs of the economy and strategic importance of System as well as alternatives to it, the Steering Committee is still discussing how to address these issues.

“Thinking outside the box” was demanded of us to evaluate scenarios such as the taking on more cargo in the System to reduce road congestion, making improvements to reduce human error and moderating water level requirements through future enhancements. We are looking at some of these issues.

Engineering

Many of the ideas put forward at the stakeholder meetings were about possible infrastructure changes. Some concerned changes to facilities such as adding new waiting areas and turning basins. On a more general level, the Study team was asked to consider reasonable engineering changes to benefit the environment. The mandate of the team is not to look at infrastructure improvements but rather at the status quo and potential impediments to the smooth functioning of the System. Therefore, we are not considering new waiting areas and turning basins.

The economic feasibility and viability of new technological advancements and improvements to the System was proposed as a subject for analysis. The scope of the Study is limited to the provision of alternative maintenance scenarios currently defined as: reactive (fix-as-fails), aggressive (repair and implementation of modern technology where warranted), and potentially preventive (replacement-in-kind of projects). An

example of modern technology improvements currently being carried out by the Canadian Seaway Corporation includes innovations such as the ongoing hydraulics conversion program in the Welland Canal and the installation of quick release hooks in locks. The only locations where the preventative scenario would be evaluated would be those projects where their deteriorated condition is such that replacing the existing structure might be a better economic alternative over the long-term.

Other comments focused on water levels. One participant suggested additional dredging to maintain project depth. As noted in the environmental section, legislative authority exists allowing residual dredging of the St. Lawrence Seaway to maintain currently authorized project depths throughout the system. Suggestions were made to the effect that the existing draft should be utilized more efficiently before considering any potential deepening. Vessel operators already optimize cargoes to take advantage of existing drafts, and the study is not considering any increase in channel depths beyond what is currently authorized.

Another contributor suggested changing ship design to reduce pollution. This is an issue for ship owners to ponder and they are in fact looking at ballast free ships, ships using less fuel and more efficient vessels.

Questions were raised as to the reliability of the System. Can we depend on it in the future? How do we maintain the aging infrastructure? What would be the consequences of a major breakdown or catastrophic failure and how can these be prevented? Within the mandate of the study, we are examining the aging infrastructure and quantifying the costs of keeping the existing system going. Economic modeling will be used to evaluate the provision of maintenance scenarios as they pertain to infrastructure reliability. We will be modeling, analyzing and projecting infrastructure maintenance and capital costs in accordance with alternative scenarios. Therefore, all of these questions will be addressed as a part of this study.

An intervener suggested that we calculate engineering needs and costs so that we can compare costs of rehabilitation of aging facilities versus costs of rebuilding them. This alternative could be evaluated conceptually if it is determined that the deteriorated conditions of select locks are such that it may be more economical in the long-term to replace the structures. This would fall under the “preventative” scenario described earlier.

Conclusion

We hope that these comments, along with the cogent GLC-SODES analysis and comprehensive listing of key issues provided to them will prove helpful in giving everyone concerned the macro-level view Study officials seek to achieve in addressing diverse and often diverging stakeholders concerns.