

# HISTORY OF THE ST. LAWRENCE SEAWAY

The Saint Lawrence Seaway connects the heartland of North America with the Atlantic Ocean via the Great Lakes and the St Lawrence River. The extensive system of locks, dams, and canals allows for both the effective transportation of bulk freight, and the generation of vast amounts of electricity. The Seaway system is a major contributor to both the Canadian and American economies, with approximately ¼ of North America's population inhabiting the surrounding area. The development of the seaway has been long and arduous, requiring public finance, international negotiation, resettlement of significant communities, and considerable innovation in engineering.

#### **Origins of the St. Lawrence Seaway**

It has been nearly a half-century of construction and improvements to bring the official "St Lawrence Seaway" to its current state. However, the importance of developing a viable travel route along the St. Lawrence and into the Great Lakes has been recognized for centuries. In 1680, Dollier de Casson, a missionary from Montreal, tried to build a 1.5m deep canal to bypass the first major obstacle on the inland route of the St. Lawrence river – the Lachine rapids. The task was more difficult than he imagined and, by 1701, the canal was only 1.6 kilometres long and stranded with practically no funds to continue its construction.

Casson's work was revitalized in the late 18th century, when American businessmen began talks to build a canal at Lake Erie. This threatened Canadian trade and the viability of Montreal as a major port city, reigniting calls for the completion of the Casson Canal. A group of Montreal merchants took over the construction of the Canal, but they too failed to complete it. It would take the military interests of the British Crown to bring the canal to completion. Under British auspices, the 7 lock Casson Canal became known as the Lachine Canal and was completed in 1824.

With the completion of the Lachine Canal, interest began to build for further expansion along the St. Lawrence and the Great Lakes. In the province of Upper Canada (now Ontario), the Welland Canal Company formed under businessman William Hamilton Merritt. The company aimed to connect Lake Ontario and Lake Erie via a series of locks. It took five years to complete the Welland canal, but revenues were insufficient and in 1841 the government of Upper Canada intervened to save the unsustainable project. Under government control, the canal was widened and deepened, making it more economically viable for bulk shipments of wheat, copper, and iron ore. In addition to the Lachine and Welland canals, construction was done at Cornwall and Beauharnois to complete the route from Lake Erie to the Atlantic Ocean.

Despite the tremendous amount of effort put into constructing the route, the waterway was a rudimentary one. The early system of locks and canals had a depth of just 4 metres, while most ocean going ships needed at least 8 metres to navigate. The system was also closed frequently for bad weather, and was generally inoperable for 5 months of the year. The troubles faced by the new canals were amplified by the arrival of the railway in the late 19th century. Trains could handle large amounts of freight, transport them between the coast and the heartland, and do so year-round, challenging the viability of shipping as an efficient way to connect the continental interior to the coast.



### **Creation of the St Lawrence Seaway**

As the continental interior industrialized, public interest in shipping via the waterway grew. In Canada and the United States the demand for an effective seaway led to the establishment of the International Joint Commission in 1909. The IJC conducted engineering studies in the region and proposed the construction of the St Lawrence Seaway. However, the project was met with resistance from railway and port lobbyists in the US, and hampered by war and depression in the first half of the century. After rejecting numerous agreements to construct a Seaway, the US Senate finally assented in 1954 when Canada declared it was ready to proceed unilaterally with its own Seaway.

In addition to replacing the old lock and canal system, a major impetus for the creation of the Seaway was the need for hydro-electricity. Several dams were included in the construction of the Seaway in order to generate power for nearby residents, but these dams required the flooding of a large section of land along the St Lawrence. While this was not a problem on the sparsely populated American side of the designated site, there were over 6500 residents in several small towns and hamlets on the Canadian side in the province of Ontario. These people (and in some cases their homes) were relocated to the newly created towns of Long Sault, Ingleside, and Iroquois to make room for the man-made Lake St Lawrence.

The St Lawrence Seaway was completed in 1959, and opened by Queen Elizabeth and President Eisenhower. The project cost 470 million US dollars, 336.2 million of which was paid by the Canadian government. The revenues from the seaway are shared in proportion to the contributions made to its construction.

## The St Lawrence Seaway Today

By 1996 2 billion tonnes of cargo had been transported via the completed seaway, valued at more than \$400 Billion US. This 3700KM stretch of water has been developed through human engineering in order to meet the needs of the 90 million people that live on its route. The St Lawrence Seaway region produces one third of the continents gross national product, two thirds of Canada's industrial output, and 40% of US manufacturing. In spite of its historical contribution, the Seaway may now be in jeopardy. Cheaper international shipping routes for grain and steel, larger ocean-going ships that cannot enter the Seaway, and the deteriorating quality of the locks and canals pose serious challenges to the future of the St Lawrence Seaway.

## For More Information

Great Lakes St Lawrence Seaway System: Seaway History

History of the St Lawrence / Great Lakes Canal System (1783-1954)

St Lawrence Seaway

Teaching about the Great Lakes & St Lawrence Seaway System

The Lost Villages Historical Society

The St Lawrence River: "Great Canadian Rivers"The St Lawrence Seaway and Regional DevelopmentThe St Lawrence Seaway: Gateway to the World (video clips)