

The first co-operative action of the Governments of Canada and the United States leading towards the Seaway development may be said to date at least as far back as 1905. At that time, a Joint International Waterways Commission was established to deal with all matters pertaining to international waters between the two countries. In 1921 this Commission recommended a treaty for a joint project from Montreal to Lake Erie to deepen the waterway. Both countries signed the St. Lawrence Deep Waterway Treaty in 1932 but two years later it was rejected by the United States Senate. In 1938 attempts were made to negotiate a new treaty, without success. The wartime need for power led to the Great Lakes-St. Lawrence Basin Agreement of 1941 but it, too, failed to receive the ratification of the United States Congress. Then in 1951 an agreement was reached between the Federal Government of Canada and the Provincial Government of Ontario, which provided for the construction of the Seaway by the Federal Government and for the development of power in the International Rapids Section by The Hydro-Electric Power Commission of Ontario and a United States agency to be designated later. In 1952 Canada and the United States concluded an agreement on power development and Canada expressed the intention to go alone in developing navigation facilities on the Canadian side of the St. Lawrence River between Montreal and Lake Erie to provide for 27-foot depth. In 1953 the United States Supreme Court confirmed the previous action of the Federal Power Commission in granting a licence to the Power Authority of New York State, which decision made American co-operation possible. Meanwhile, however, the United States Congress enacted the Wiley-Dondero Act authorizing and directing the Saint Lawrence Seaway Development Corporation to join the St. Lawrence Seaway Authority, established in Canada in 1951, in constructing on United States territory all the navigation facilities necessary in the International Rapids Section of the River.

At last the imaginative and creative aspirations of generations in both Canada and the United States had been translated into action—no doubt the future will justify the wisdom of this decision and prove its economic value to both countries.

Waterway Service and Transport Facilities.—The St. Lawrence Seaway involves a total declivity of about 600 feet. From the water level of Lake Superior, the Great Lakes-St. Lawrence inland waterway falls to sea level in five steps: (1) St. Mary's River between Lakes Superior and Huron, with a drop of 21 feet; (2) the St. Clair-Detroit passage joining Lake Huron and Lake Erie, with a drop of eight feet; (3) the Welland Canal from Lake Erie to Lake Ontario, with a drop of 326 feet; (4) the upper St. Lawrence River from Lake Ontario to Montreal, with a drop of 225 feet; and (5) the long passage from Montreal to the sea, with a drop of 20 feet. The eastern section of the route is the deep-water section from Montreal to the sea, including the St. Lawrence Ship Channel extending from Montreal to 30 miles below Quebec City. Canadian Government dredges maintain this channel at a depth of 35 feet and it has been widened and straightened to provide for increased traffic with the completion of the Seaway. The Seaway lies entirely in Canada except for a stretch of 47 miles in the International Rapids Section—from Cornwall to Iroquois—and a stretch in the Thousand Islands.

Navigation facilities have been improved by the elimination of the 14-foot canal bottleneck that existed between Montreal and Prescott and the provision of a channel of minimum 27-foot depth. Six St. Lawrence canals with 22 locks have been replaced by four canals with seven large locks—two of them in the United States across from Cornwall—which lift and lower vessels about 225 feet to and from Lake Ontario. The Welland Ship Canal, 27 miles in length, has been deepened from 25 to 27 feet. The old narrow and shallow canals allowed, on the average, ships to carry up to 3,000 tons only, as compared with the new capacity of 25,000 tons of bulk cargo in a modern lake carrier. Ocean-going ships may carry a maximum of about 10,000 tons.

St. Lambert Lock, at the southern end of the Victoria Bridge, lifts ships some 15 feet from the level of Montreal harbour to the level of Laprairie Basin in an 8½-mile-long channel. The Côte Ste. Catharine Lock lifts ships from the level of Laprairie Basin 30 feet to the level of Lake St. Louis. The Seaway allows ships to bypass the Lachine Rapids on the