

The Lower Beauharnois Lock by-passing the Beauharnois Power House lifts the ship 41 feet so that it may pass through a short canal to the Upper Beauharnois Lock, where it is again lifted 41 feet to the level of Lake St. Francis; after some 13 miles in the Beauharnois Canal, the ship enters Lake St. Francis. It sails westward for some 30 miles by dredged channels to the head of the lake.

All locks and channels to this point have been built by Canada's St. Lawrence Seaway Authority.

d) United States Locks:

The ship canal leaves Lake St. Francis at the southwest corner and before long crosses the International Boundary just opposite St. Régis, Quebec. From here to the first lock on the United States side is only five miles. Entering the Bertrand H. Snell Lock, the ship is lifted 45 feet into the Wiley-Dondero Canal (10 miles long) and is then lifted another 38 feet by the Dwight D. Eisenhower Lock into Lake St. Lawrence, the power pool on which HEPCO and PASNY draw for the water used in the turbines at Barnhart Island-Cornwall Power House Dam, a mile to the north. The ship canal through Lake St. Lawrence passes where rapids once tossed the water into an angry foam.

e) Iroquois Lock:

At the western end of Lake St. Lawrence, the Seaway Authority of Canada has built a lock to allow ships to by-pass the Iroquois Control Dam. The lift here is only about one foot. Once in the waters of the St. Lawrence west of Iroquois, the ship channel meanders through the Thousand Islands past Prescott and Brockville, on to Kingston or Cape Vincent on Lake Ontario, thence by the open waters of the Lake to the great port of Toronto, to industrial Hamilton and to Port Weller.

f) Welland Canal:

From Port Weller on Lake Ontario to Port Colborne on Lake Erie is 27 miles. Through a series of eight locks (three of them twin locks in flight allowing passage of ships in both directions simultaneously), the ship is raised through 326 feet to the level of Lake Erie.

West on the Seaway route lie the Lake Erie ports, the chief ones being in the United States, such as Ashtabula, Cleveland and Toledo. Next, ships pass through the Detroit River, where Detroit and Windsor face each other across the International Boundary. Then, north through Lake St. Clair and the St. Clair River, the route serves Sarnia and the Lake Huron and Georgian Bay ports, important in Canada's wheat trade.

Access to Lake Michigan from Lake Huron is by means of the Strait of Mackinac, but the through route takes shipping north and west through the St. Mary's River, with a lift of some 20 feet by means of one of the four United States locks or the Canadian one at Sault Ste. Marie, to Lake Superior. Beyond lies the long run across the open lake to the United States lakehead at Duluth-Superior or the Canadian lakehead of Port Arthur-Fort William, at the very heart of the North American Continent, a full 2,000 miles from the Atlantic Ocean.

Seaway Economy

By most recent figures, new work on the Seaway proper from Montreal to Lake Erie will have cost Canada about \$340 million; work in the international reaches of the river will have cost the United States some \$130 million. (The two power entities will have spent \$600 million in developing the power at Barnhart - \$300 million by HEPCO and \$300 million by PASNY. These sums, which have been raised by floating bonds and by other types of borrowing, will be financed out of revenues realized from the sale of power.)