

WHAT IS THE GREAT LAKES - ST. LAWRENCE BASIN?

It is a vast drainage system covering an area of 678,000 square miles, 493,000 of which are in Canada and 185,000 in the United States, over which there is an average annual precipitation of over 30 inches. It includes Lake Superior, Michigan, Huron, St. Clair, Erie and Ontario and the St. Lawrence River, together with all the tributary rivers and streams.

WHAT DOES THE GREAT LAKES - ST. LAWRENCE BASIN CONSIST OF?

It consists of five steps which are its chief assets in that they contain 9 million horsepower of hydro-electric energy, all of which is located reasonably close to large and growing industrial areas, a large part of this power being as yet undeveloped. Conversely, these five steps are its chief liabilities because they constitute a series of natural obstructions consisting of rapids and waterfalls which intervene between the successive steps and must be surmounted to facilitate through navigation. The five steps are:-

1. St. Mary's Falls, lying between Lake Superior and Lake Huron, where there is a drop of 21 feet.
2. The St. Clair - Detroit passage joining Lake Huron and Lake Erie, where there is a drop of 8 feet.
3. Niagara River, emptying from Lake Erie into 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.
5. Montreal to the sea - a drop of 20 feet.

As I have said, these five steps, it is estimated, would develop approximately 9 million horsepower, divided as follows:

At Niagara.....	3,600,000 H.P.
In the International Rapids Section.....	2,200,000 H.P.
In the Soulanges Section.....	2,000,000 H.P.
In the Lachine Section.....	1,200,000 H.P.

Nine million horsepower of hydro-electric energy which is derived from a drainage area of 678,000 square miles, having an average annual precipitation of over 30 inches per annum, is an extremely important natural asset which should be fully exploited, as the resulting energy which can be derived therefrom will be continuous so long as the rainfall over the drainage area continues.

WHAT IS THE NATURE OF THE GREAT LAKES - ST. LAWRENCE NAVIGATION SYSTEM AS WE KNOW IT TODAY?

As a navigation system as presently constituted, it divides into four sections, as follows:-

1. From the Gulf of St. Lawrence to Montreal, a distance of 1,000 miles, with controlling navigation channels of 35 feet in depth.
2. From Montreal to Lake Ontario, a distance of 180 miles, with controlling navigation channels of 14 feet.
3. From Lake Ontario to Lake Erie, a distance of 200 miles, with controlling navigation channels of 25 feet.
4. From Lake Erie to the head of the Lakes, a distance of 970 miles, with controlling navigation channels of 25 feet downbound and 21 feet upbound.

In other words, this whole transportation system extends for a distance of well in excess of 2,000 miles into the very heart of the North American Continent.

The boundary line separating Canada and the United States follows the 45th Parallel of Latitude until it strikes the St. Lawrence River at a point where oddly enough the boundaries of the State of New York, the Province of Quebec and the Province of Ontario meet a short distance east of Cornwall, and thence, for a distance of 115 miles westerly, follows the middle of the stream until it strikes the foot of Lake Ontario. It is in a portion of this area, namely, in the International Rapids Section, that 2,200,000 h.p. of electric energy is going to waste, one half of which belongs to your country, and the other half to mine. It is over this section lying in boundary waters that there has been so much talk, but so little action.