

Trent river, flowing diagonally through Ontario to the bay of Quinte, has several powers developed, and the dressing up of the river for navigation purposes may lead to further installations. Below Prescott, the St. Lawrence river plunges through a series of rapids, falling 100 feet in 30 miles. The sloping surface does not lend itself as readily to power purposes as an abrupt fall, and the rapid water creates ice difficulties. Consequently, nothing has been done so far, but a company is now seeking permission to build a dam and power house in the vicinity of Cornwall.

From Coteau, at the foot of lake St. Francis, to the head of lake St. Louis, 20 miles above Montreal, the St. Lawrence falls over 80 feet in 15 miles, but the same difficulties present themselves as at Cornwall. Lately, however, a power has been obtained from the Soulanges canal, and another development is proposed at Cedars; while the old Beauharnois canal has been transferred to a company that is constructing a power at St. Timothée. No attempt, however, is being made to completely dam the river, although the numerous islands indicate this to be possible, and a river arranged in successive steps is a most valuable power stream.

Montreal has had a hydraulic pumping system since 1854, but not until 1897 was an attempt made to procure power from the great Lachine rapids. Only 14 feet head was secured, and great trouble was experienced from ice. It is an example of the waste incurred by partial development. The rapid water above Montreal prohibits surface ice from Dorval down to Lachine, and large quantities of anchor ice form in this open stretch. This drifts down through the rapids and blocks the whole river in the vicinity of Montreal so that the water rises and floods the wharves and shores in its endeavour to pass through its ice-gorged channel. If a large rock-fill dam, similar to those used on the Winnipeg river, were constructed across the Lachine rapids, then the surface of lake St. Francis would be produced to Heron island, where sluices and a power house could be constructed, making the whole flow available through a fall of 25 feet. Another dam at St. He'len island would pen up the Laprairie basin 25 feet higher than the harbour, creating another great water-power. As the surface of these ponds would be level and quiet, they would freeze over early in the season, thus preventing the formation of the ice that now causes such havoc in the port of Montreal and boats would pass up from the harbour through only two locks with great basins between them, instead of through the many locks and narrow channel of the Lachine canal.