

The Canadian Engineer

A weekly paper for Canadian civil engineers and contractors

Stream Regulation in Quebec Province

Lakes St. Francis and Aylmer Now Used as Storage Basins, Increasing Power by 7,450 H.P.—Total Fall of the St. Francis River is 900 Ft., Affording Important Possibilities For Development—From Annual Report Prepared Under Direction of

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PARTIAL regulation of the flow of the St. Francis River by the storage of water in Lakes St. Francis and Aylmer has been completed. Lake St. Francis is located at the head of the St. Francis River, in the County of Frontenac, P.Q. Its watershed has an area of 472 square miles, and the lake has an area of 13 square miles

value of the rights of the company and its improvements was submitted to arbitration.

The increase to the water-powers developed on the St. Francis River has been estimated at 7,450 horse-power-year, as follows:—

St. Francis Hydraulic Company	1,212	h.p.-year
Compagnie Champoux	606	"
Two Mile Falls (City of Sherbrooke)	1,191	"
Brompton Pulp & Paper Co.	3,340	"
Canada Paper Company	630	"
Southern Canada Paper Company	471	"

Total7,450 h.p.-year

The construction of the Lake St. Francis dam was completed in December, 1917. The work had to be stopped in the beginning of April, when it was found that it could not be completed before the spring floods, and it was necessary that sufficient openings be left to take care of

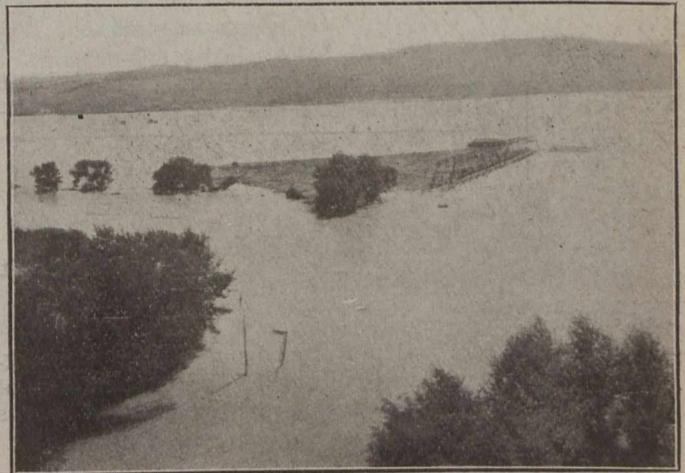


St. Francis Storage Dam

at natural high water. Lake Aylmer, located between the town of Disraeli at its head and the village of St. Gérard near its outlet, has a watershed of 135 square miles. Its area is 10 square miles.

The water from these two lakes was partially stored by dams owned by the Brompton Pulp and Paper Co. Surveys made in 1914 have shown that it was possible to completely store the water from Lake St. Francis' watershed by building a dam, the crest of which would be 15 feet higher than the company's dam. As to Lake Aylmer, its capacity under existing conditions was sufficient to store the water from its own watershed. But it would not be practicable to raise the water surface of this lake owing to considerable damage to the Quebec Central Railroad and the adjacent municipalities.

The Quebec Streams Commission was authorized to construct those works during the 1915 session of the Quebec Legislature. To avoid a double control of the storage in both lakes, it was advisable to acquire the rights of the Brompton Pulp and Paper Co to the existing improvements. It was the only sure way by which all the power users could be placed on the same basis. The



St. Joseph de Beauce Bridge During Chaudiere River Flood

the said floods. We had proposed to start work immediately after the driving of logs was finished, in the early part of June, but on account of the floods, which occurred in the month of June, it was possible to resume work in the latter part of the summer only.

The fact that we had to provide for a discharge of water sufficient for the requirements of the power users below, rendered the unwatering of the river quite diffi-