

## Salmon Falls, Milltown Dam and Fishway

The Milltown Dam is the first dam on the St Croix River located at the head-of-tide. This dam was built across a narrow channel of ledges known as Salmon Falls. Salmon Falls is the location of an ancient and important Passamaquoddy village site known as "Siquoniw Utenehsis." In 1704 Passamaquoddies living at this village area were attacked by a force of New Englanders led by Colonel Church. Passamaquoddies were killed and the tribal fish store houses destroyed. Later the Passamaquoddies were driven away from this fishing site. Settlers eventually built saw mills at Salmon Falls.

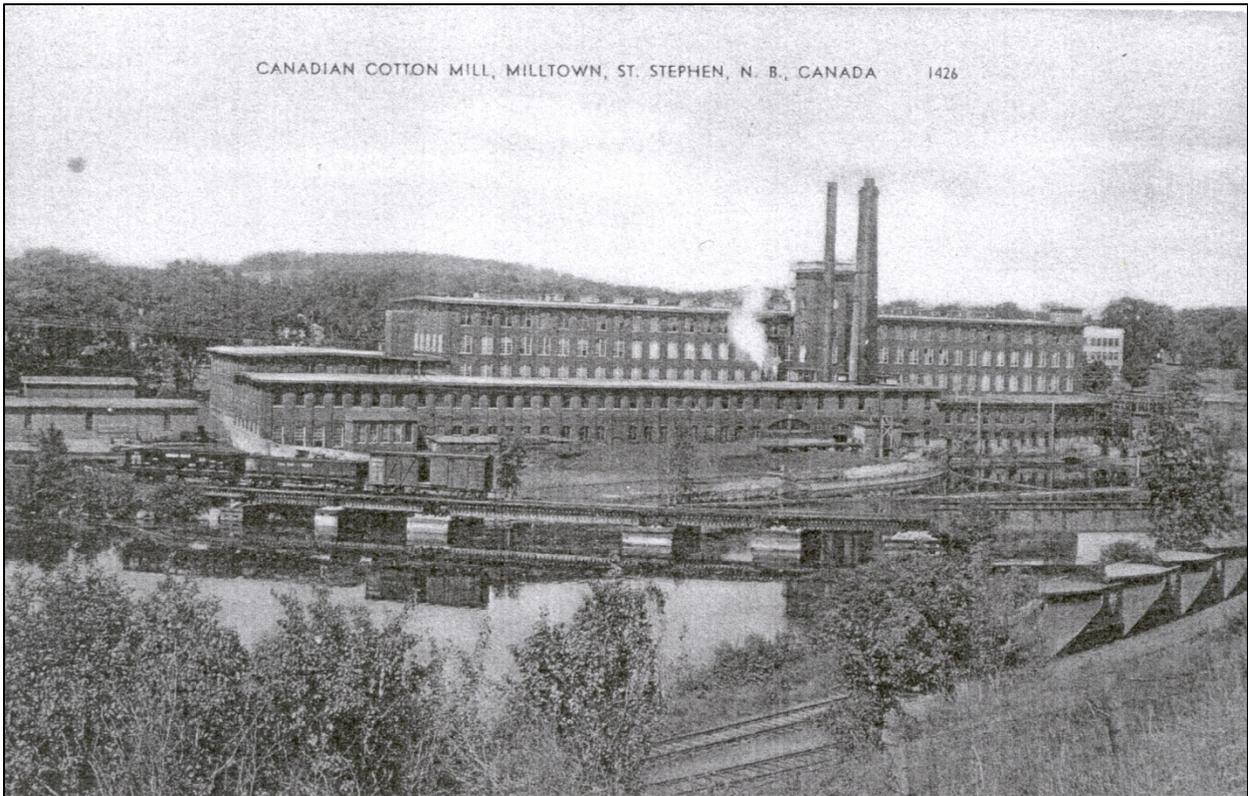
In 1791 a double saw mill known as the brisk mill was built at Salmon Falls on the Canadian side of the river. This saw mill was built on the same site where the cotton mill would later be built.

In 1851 piers for a railway bridge were built across Salmon Falls.

In 1881 an electric power dam was built on top of Salmon Falls. This new dam was to provide power to the Cotton Mill.

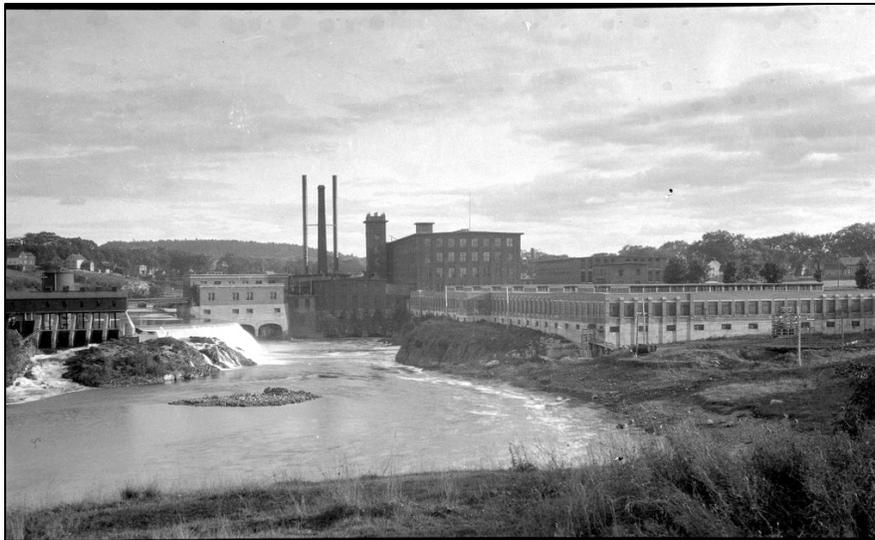


*Picture of the Cotton Mill (taken from the Canadian side)*



*Picture of the Cotton Mill (taken from the American side)*

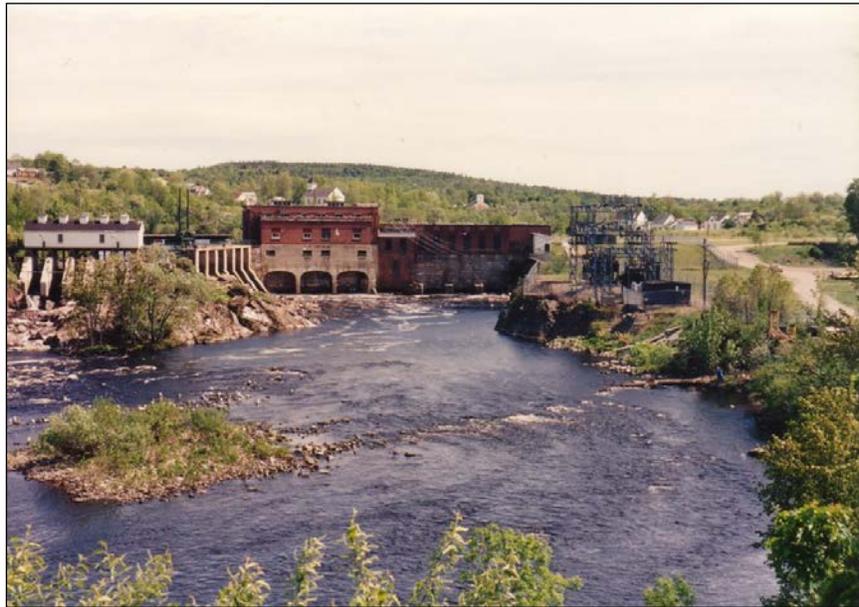
Click these links to see other pictures of the [cotton textile mill](#). [another picture of the cotton mill](#)



*Milltown dam, circa 1925.*

In the mid 1930's the dam was rebuilt with concrete. The cotton textile mill contributed significant chemical and biological wastes into the river. The cotton mill closed in the 1950's. Thereafter the cotton mill building was torn down and the dam portion remained.

After the cotton mill closed New Brunswick Power took over the dam and expanded the dam for electrical power generation.



*Photo of the Power Dam at Milltown, NB.  
Photo taken in 2008, looking upstream*



*Photo Courtesy of: Point of View Helicopter Services*

*Milltown Dam in 2016 (Canada on the left)*

The Milltown dam in place today is on top of Salmon Falls. It has 24 feet of head, and currently floods the upper part of the falls. Since this electrical generating facility is built in Canada the US Federal Energy Regulatory Commission (FERC) has no jurisdiction over this dam.

### **The Milltown Fishway**

In 1883 a fishway was built at the Milltown Dam site.

In 1980 a channel was blasted in the ledges in order to build a new fishway into this channel. The fishway goes around the Milltown dam and Salmon Falls on St. Stephen side of dam. This new fishway replaced the old existing fishway that ran underneath the powerhouse. The new fishway is a pool and weir design that includes a metal cage fish trap at the upstream exit. The fishway and dam is operated by NB Power. Fish passage is under jurisdiction of the Canadian Dept. of Fisheries and Oceans (DFO). Fish passage is monitored with funding from U.S. Fish & Wildlife Service, DFO and IJC.

### **Milltown fishway specs**

Built in 1980, the fishway contains 27 cells, three resting pools and another pool which contains the fish cage. The resting pools are at either end of the long straight section of the fishway with the third in the middle. The entire fishway is 317 ft long and there is a 9" rise for each cell; the fishway passes 10cfs of water when 12" of water is flowing over the aprons. The fishway entrance is located beside the downstream end of the turbines' drafftubes. Downstream fish passage is located at the spillway side near the Maine side of the river. In 2017 NB Power replaced and refurbished the auxiliary water supply system for the fishway.

Fish passage issues:

Upstream fish passage issues involve powerful turbine and spillway hydraulics possibly interfering with the fishway attraction flows. Migrating fish may not be able to find the entrance of the fishway.

Downstream fish passage may not be safe. There are issues that involve potential false attraction flows that would take fish into the turbines. The fish that find the downstream passage way (near the Maine shore) may suffer high injury/mortality.

The above information courtesy of:

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Jeff Babcock (NB Power)  
US Fish and Wildlife Service  
St Croix Historical Society

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