# The White River Falls on the Connecticut River, Olcott, and Wilder

# Northern New England Chapter Society for Industrial Archeology Spring Tour

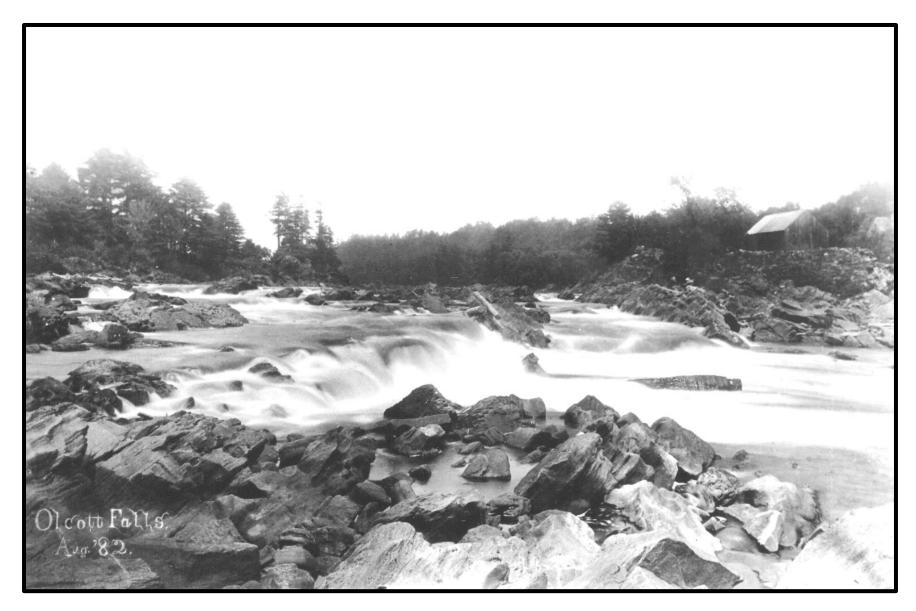
June 20, 2015 Frank J. Barrett, Jr.



## The White River Falls on the Connecticut River The Middle Falls Looking Upstream Circa 1859



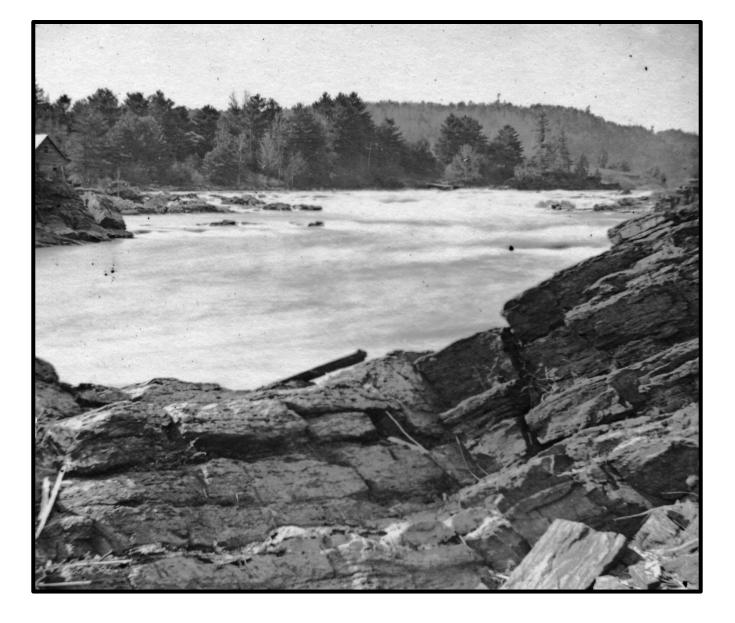
The White River Falls on the Connecticut River The Middle Falls Looking Upstream from the Sand Bars at the Eddy Circa 1860



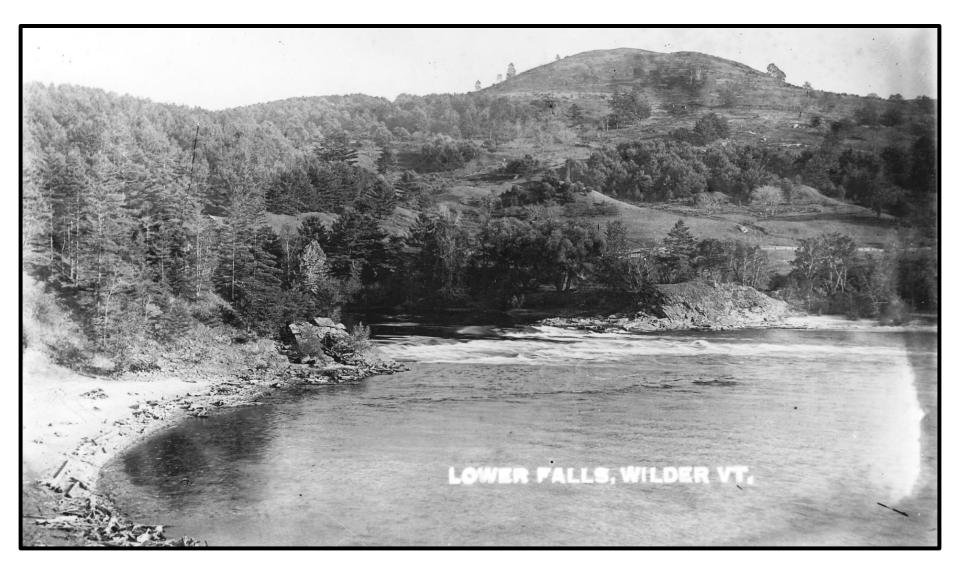
#### The Middle Falls 1882



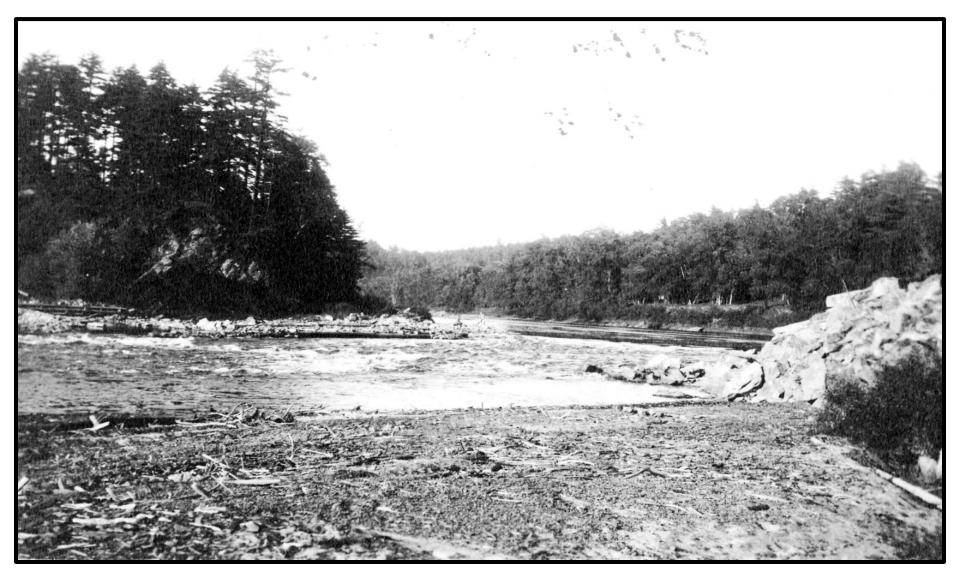
The Middle Falls and Goat Island Looking Upstream Circa 1880 Note the remains of an old wooden crib dam



# The Middle Falls Looking Downstream Circa 1880



# The Lower Falls at Phillip's Bar Looking Towards New Hampshire Circa 1915



The Lower Falls at Phillip's Bar Looking Upstream Now the site of Wilder Dam



# The Lower Falls at High Water Looking from New Hampshire towards Vermont Now the site of Wilder Dam



Typical Upper Connecticut River Flat Boat Up to 72' long, 11' wide, and drew about 3 feet of water



Remains of the two canal locks at the Lower Falls Looking North Circa 1870 There were three locks at the Middle Falls



Remains of the Canal Locks at the Lower Falls in 1901 Each lock measured about 16' wide X 88' long



#### Remains of the Canal Locks at the Lower Falls Circa 1915



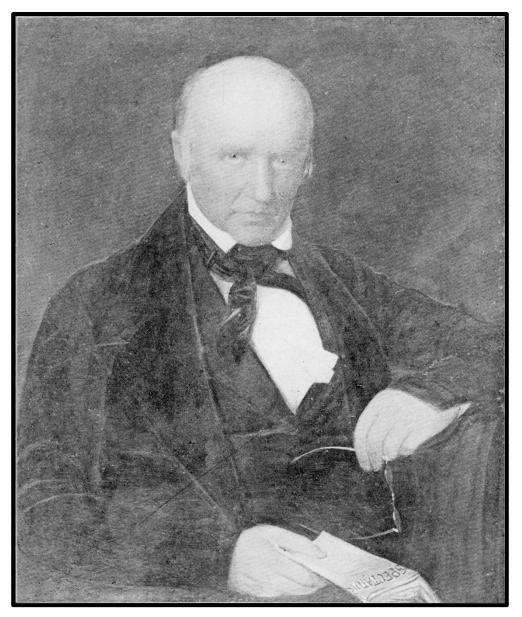
#### Blasted areas of ledge just above the Lower Falls 1948



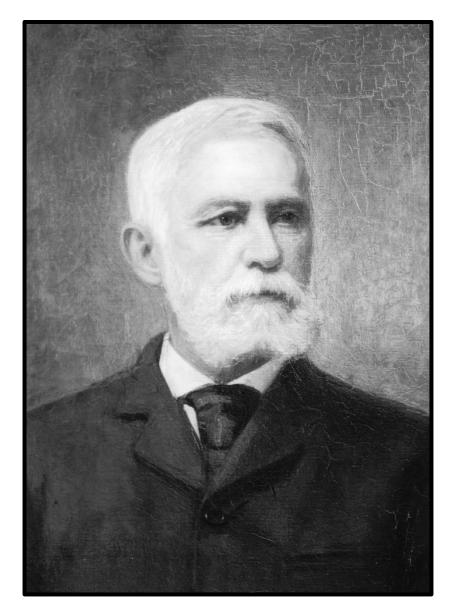
#### Remains of the canal locks at the Lower Falls 1948



Remains of the canal locks looking south at the Lower Falls. 1948



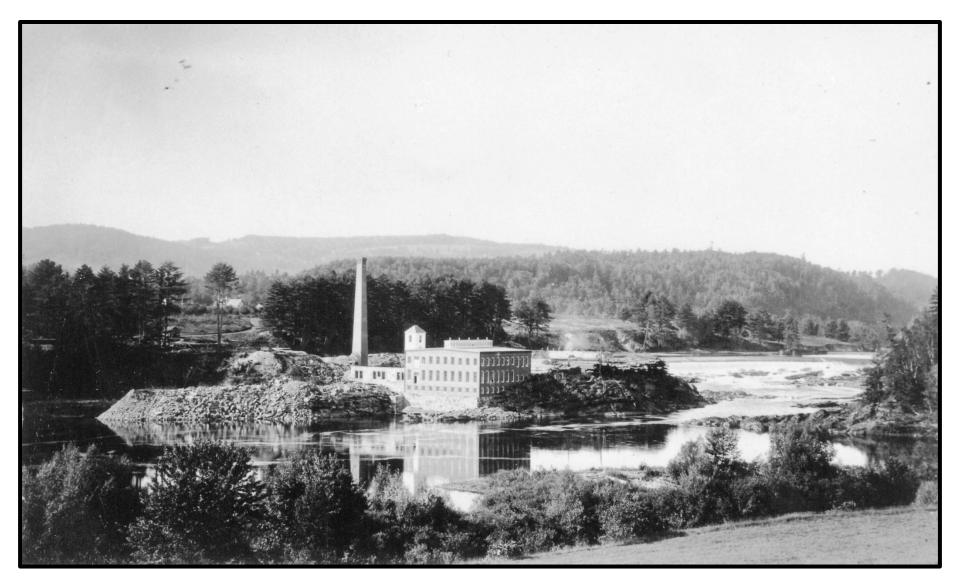
Mills Olcott (1774 – 1845) of Hanover, New Hampshire Spent \$23,000 to build the canals and locks at the falls.



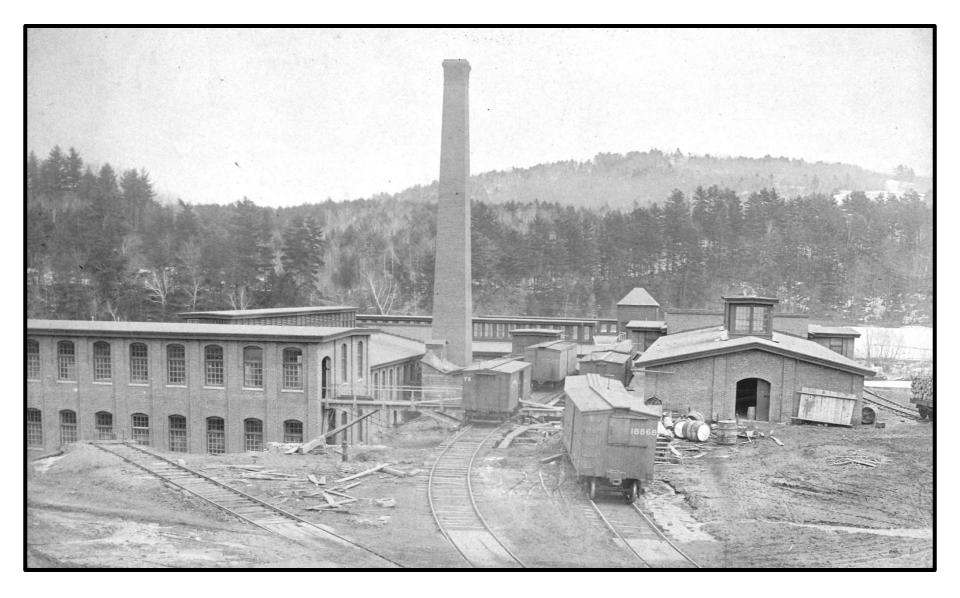
# Charles T. Wilder 1831 - 1897



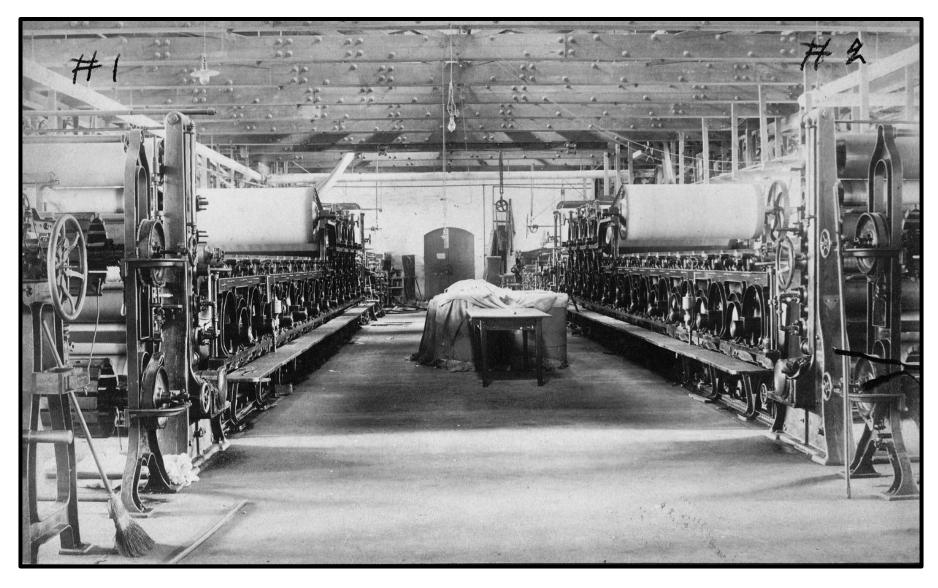
When completed, the new paper mill dam and canal was 808' feet long; it consumed 1.7 million feet of timber and 3,300 perches of stone; and cost \$50,000 to constructed.



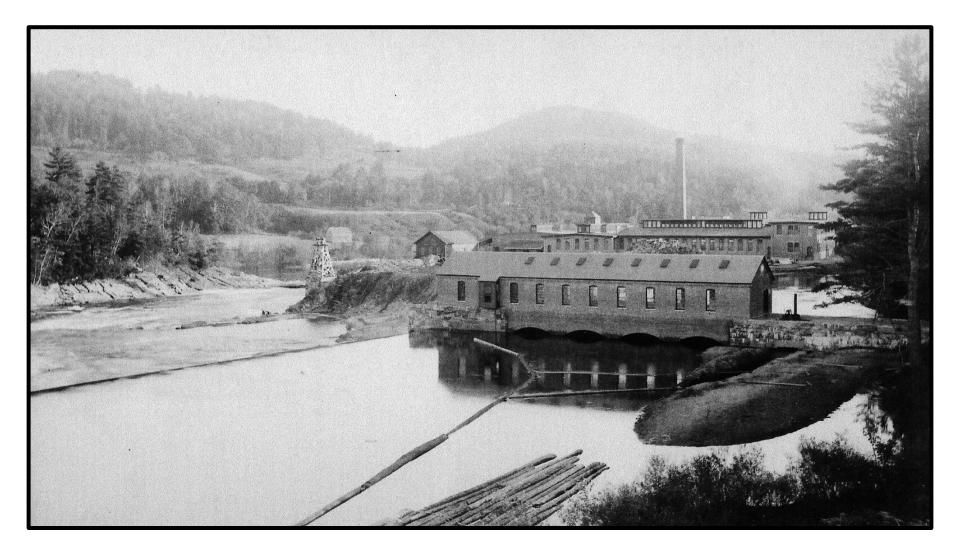
The first phase of the Wilder Paper Mill completed in 1884. 12,000 cubic feet of stone ledge was blasted using 13,000 pounds of dynamite.



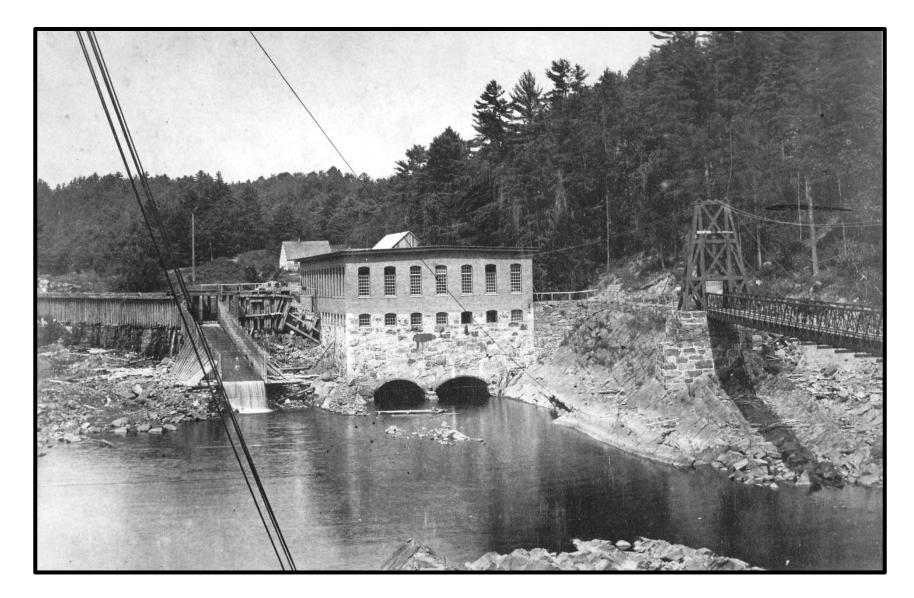
Construction of additions to the Wilder Paper Mill complex in 1888. A Connecticut & Passumpsic Rivers Railroad siding ran into the mill. Looking east towards New Hampshire.



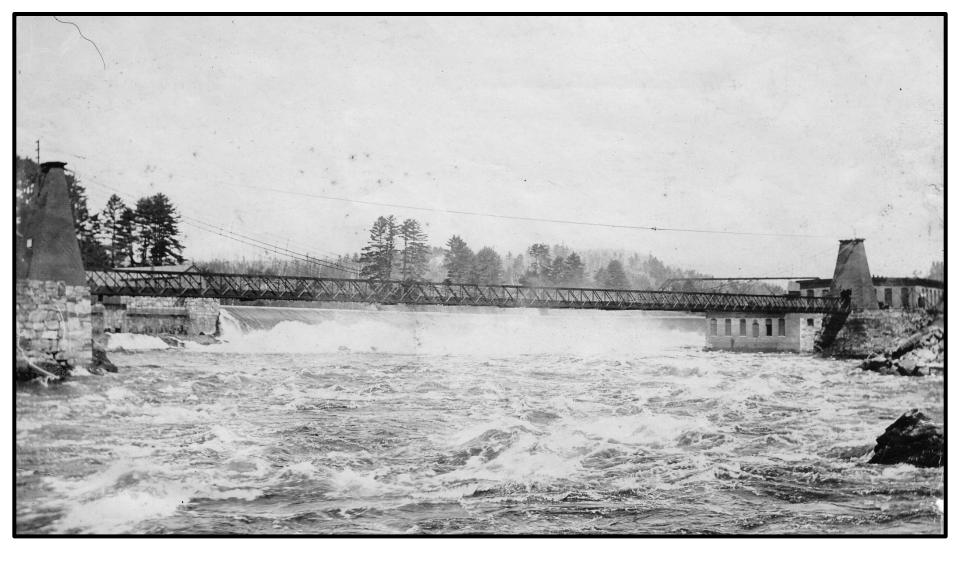
Manufacturing paper inside the mill complex. Working 24 hours a day 30 cords of wood was turned into 45 tons of wet pulp which made nine tons of newsprint.



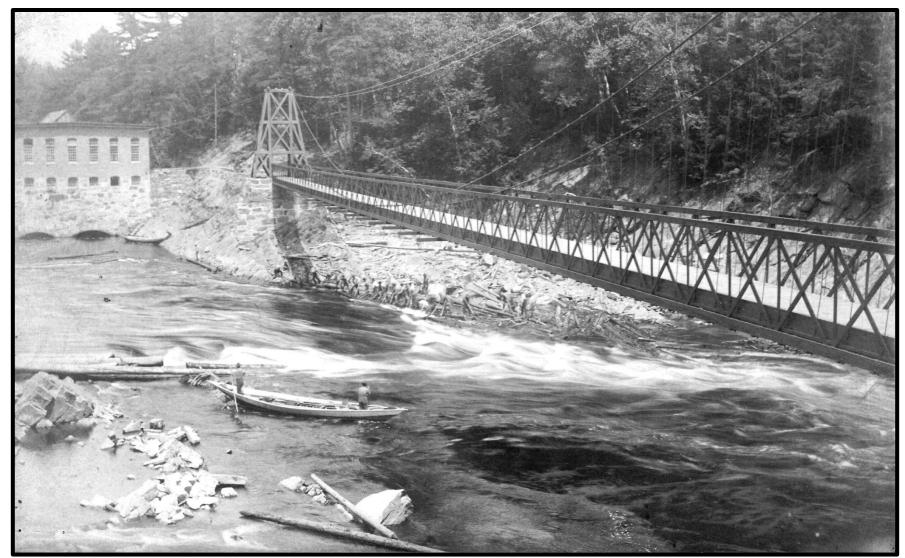
The Gate House that let water flow into the canal that in turn powered the paper mill. Looking south towards New Hampshire circa 1890.



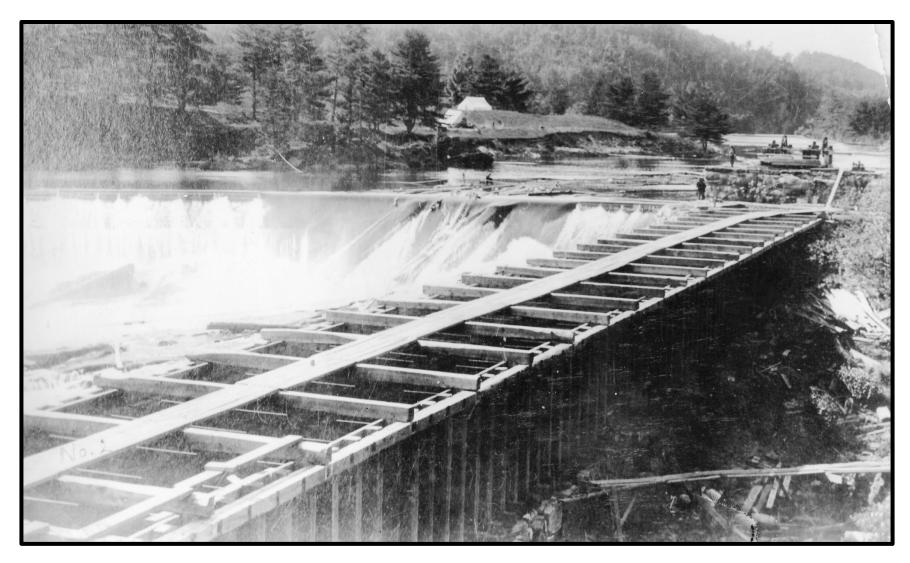
In 1890 a new pulp grinding mill building was constructed along the New Hampshire bank of the river.



A new suspension bridge was constructed to connected the new pulp grinding building across the river with main paper manufacturing plant complex.



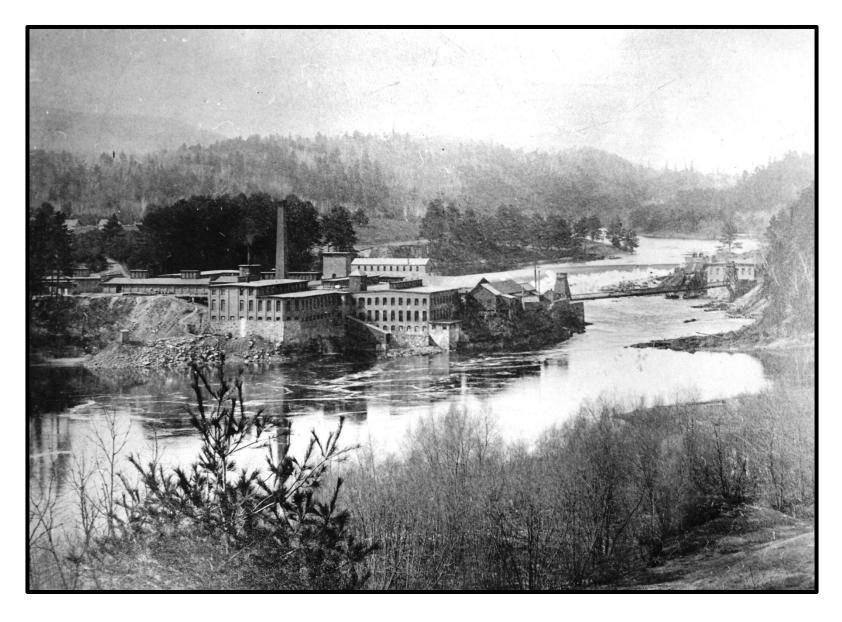
The new suspension bridge constructed in 1890. Looking toward New Hampshire and the new pulp grinding mill building



The wooden canal that fed water to the new pulp grinding building constructed in 1890. 10 grinders developing 2,250 hp each.



Pulp grinding building on the left; Goat Island in the middle; and the Gate house for the main mill complex on the right. Looking south circa 1895.



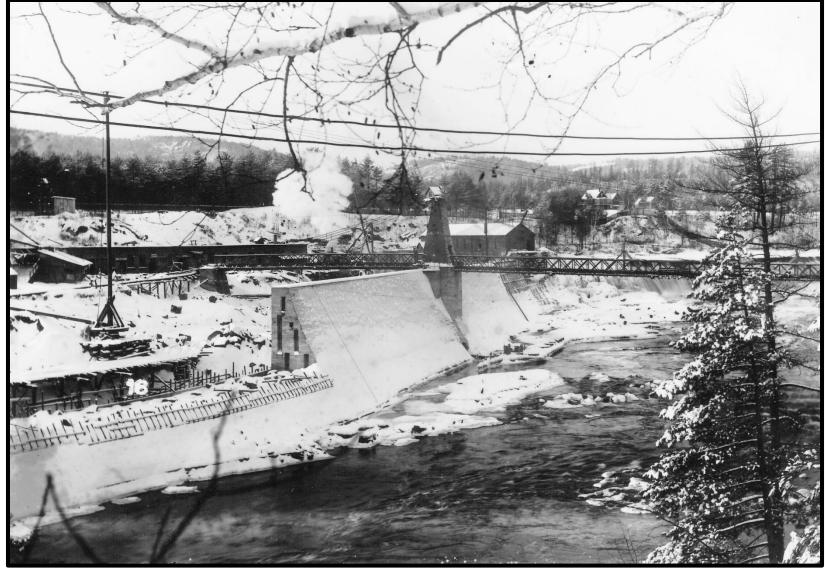
The entire mill complex circa 1900. Looking upstream towards Vermont.



In 1908 the original dam and canal works constructed of wood and rock was replaced by poured in place concrete. View of the canal wall under construction.

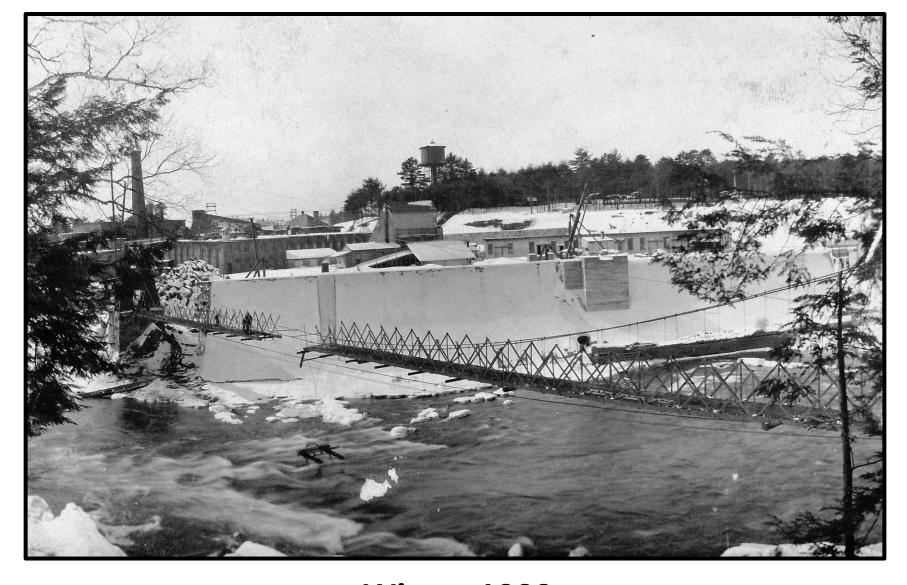


1908 new reinforced concrete canal wall under construction and preparing to construct the new electrical generating power house

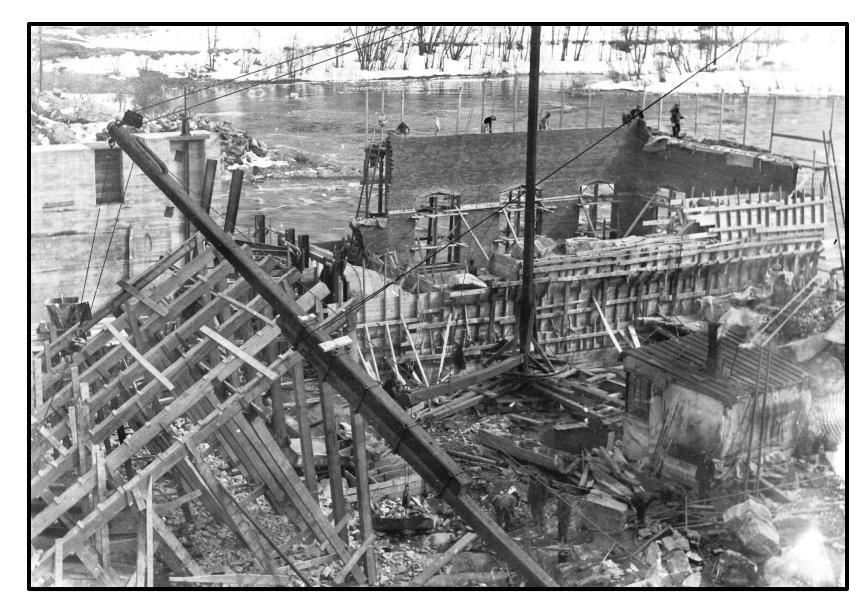


#### Winter 1909

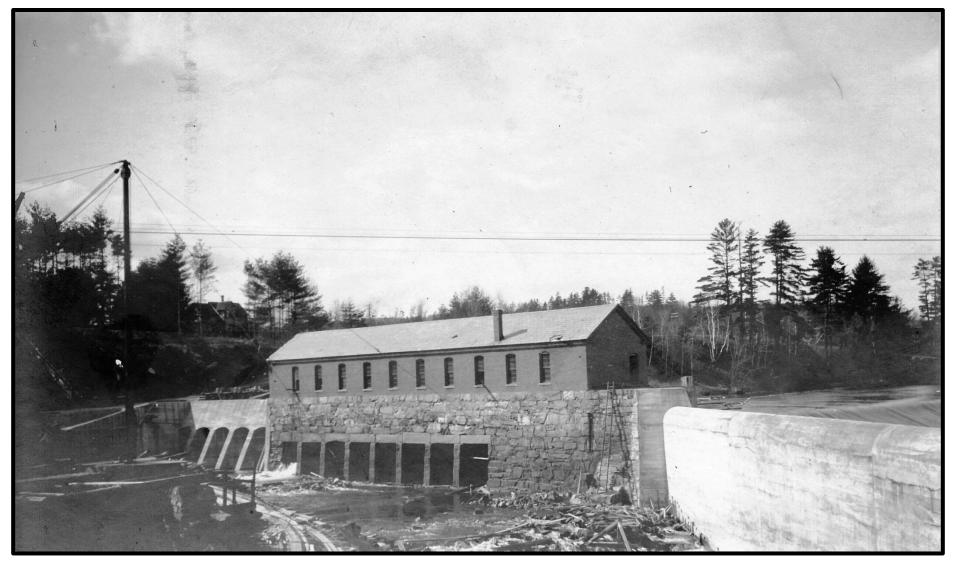
# Construction of the new canal works. Looking from New Hampshire towards Vermont.



# Winter 1909 Dismantling the old suspension bridge to relocate it upstream.

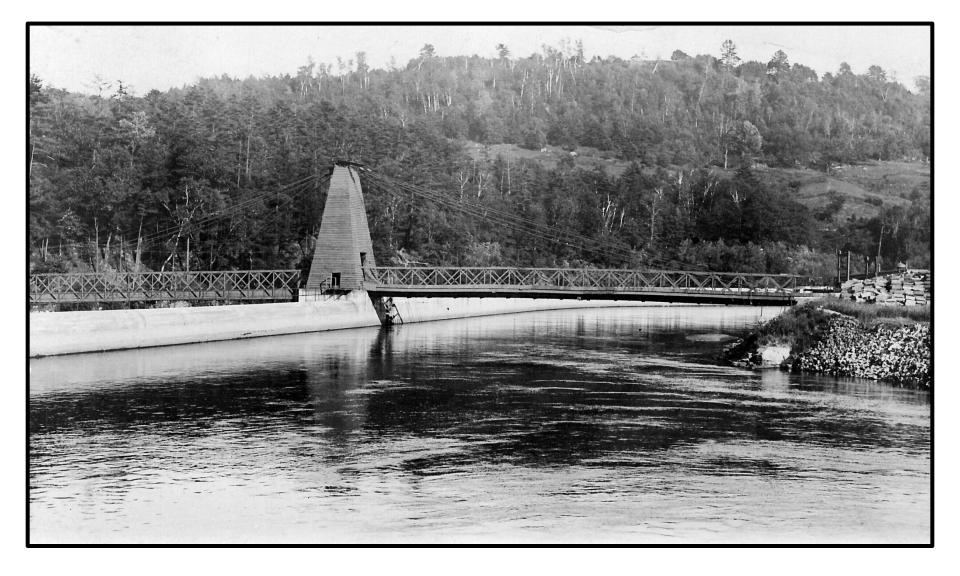


Construction of a new electrical generating power house Winter 1909

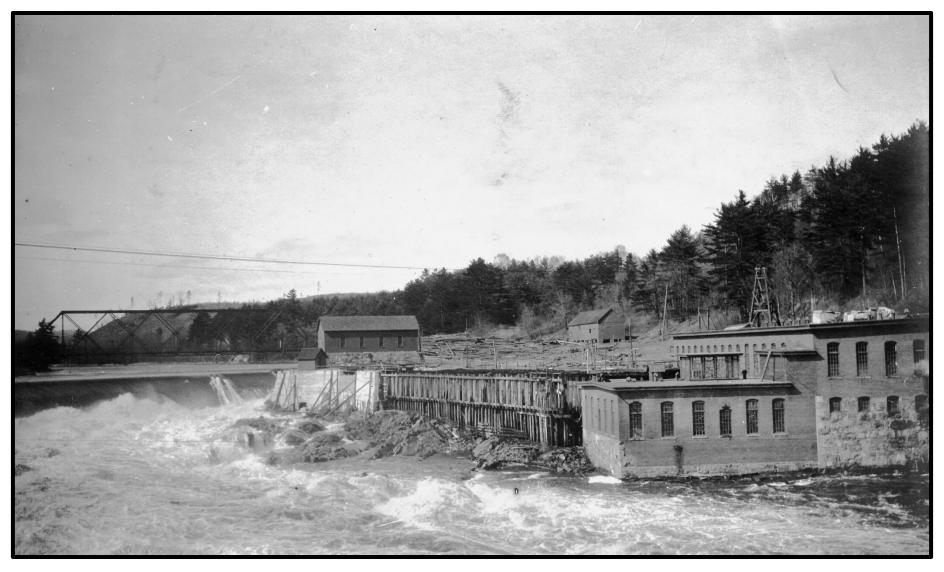


#### 1909

The completed new canal works and existing gate house. View taken before flooding the canal with water.

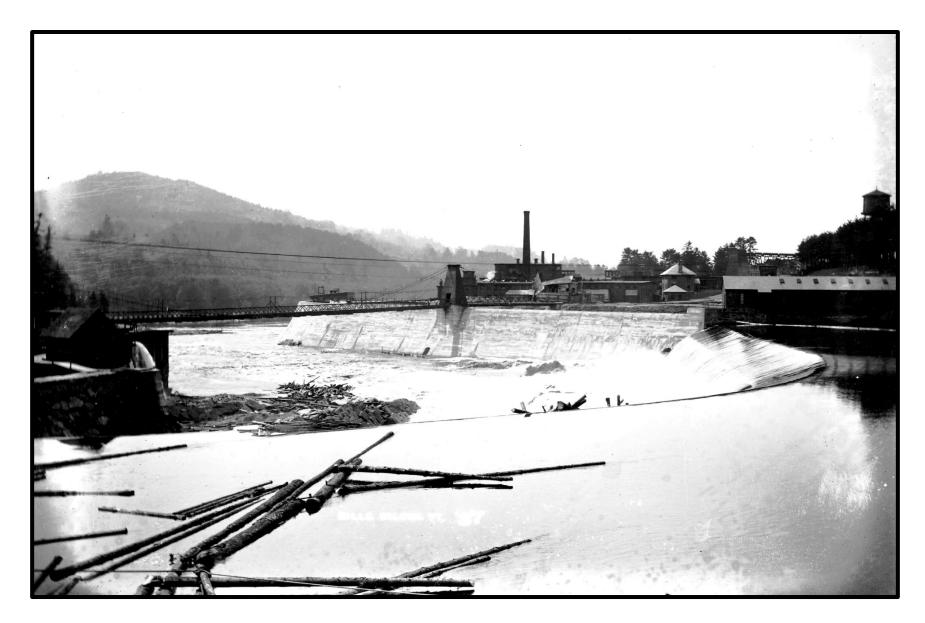


The rebuilt suspension bridge and canal. Looking south across the flooded canal from Vermont towards New Hampshire.

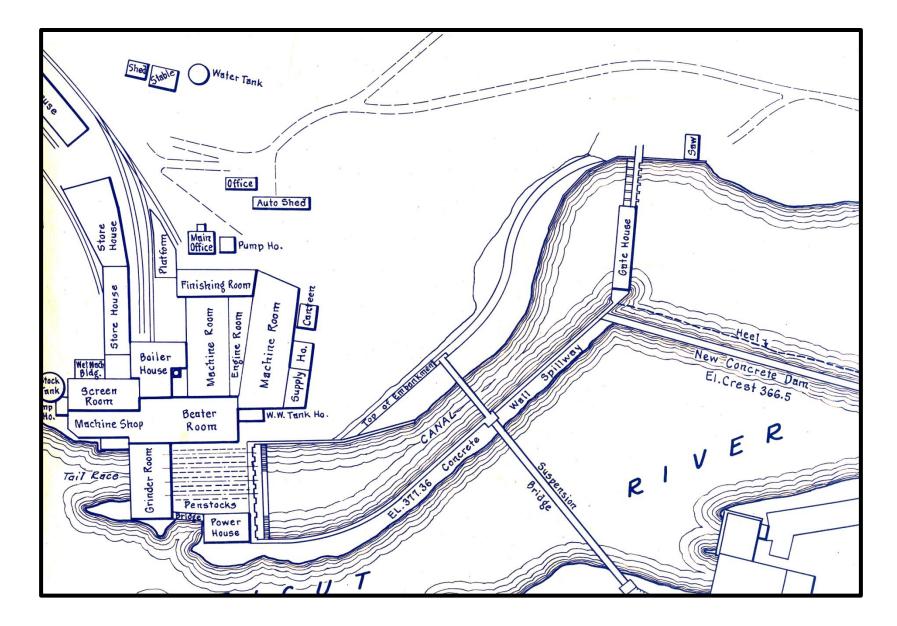


1909 looking upstream.

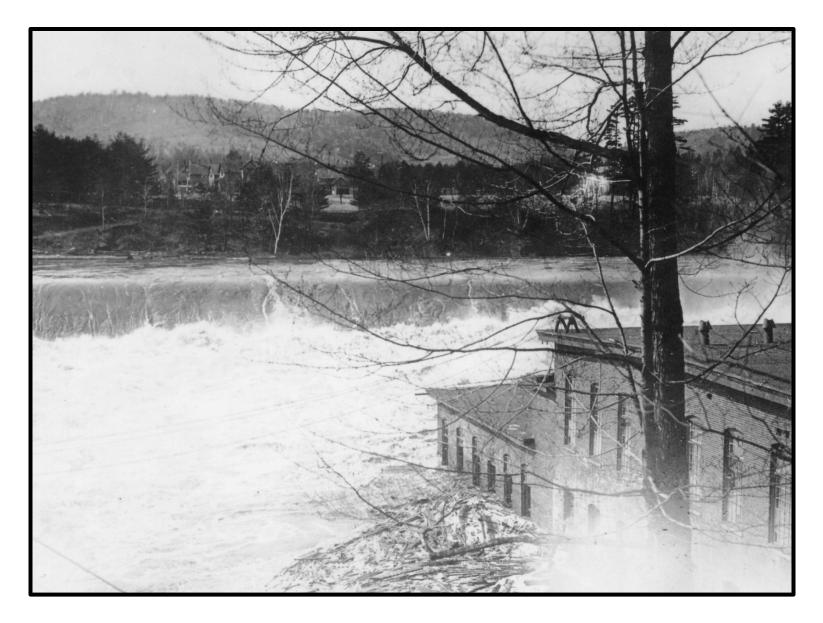
Pulp grinding mill with canal and gate house at left. Rebuild dam and a new highway bridge at left.



#### The mill complex looking downstream from the new dam. Circa 1915.



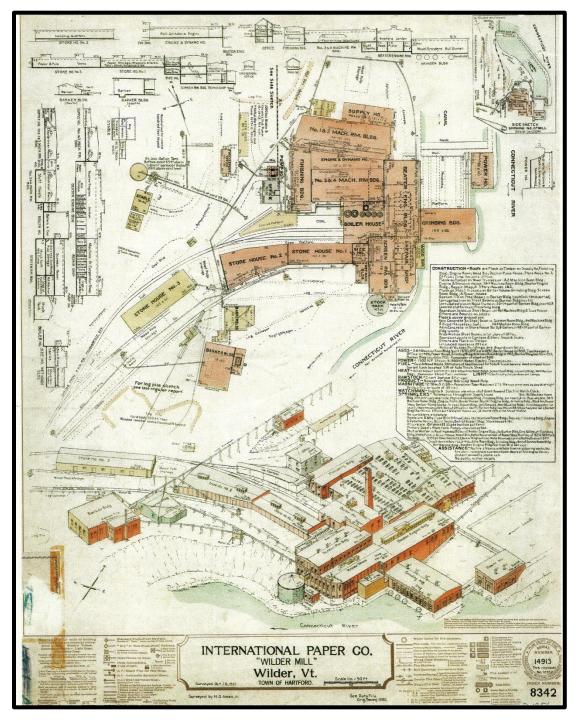
#### Plan of the Mill Complex. Circa 1915



#### The pulp grinding building and the dam during the March 23 – 26, 1913 Connecticut River Flood



International Paper Company stone office building. Constructed in 1900.



## The International Paper Company Mill Complex Wilder, Vermont 1921

The mill was permanently closed by IPC in 1928.

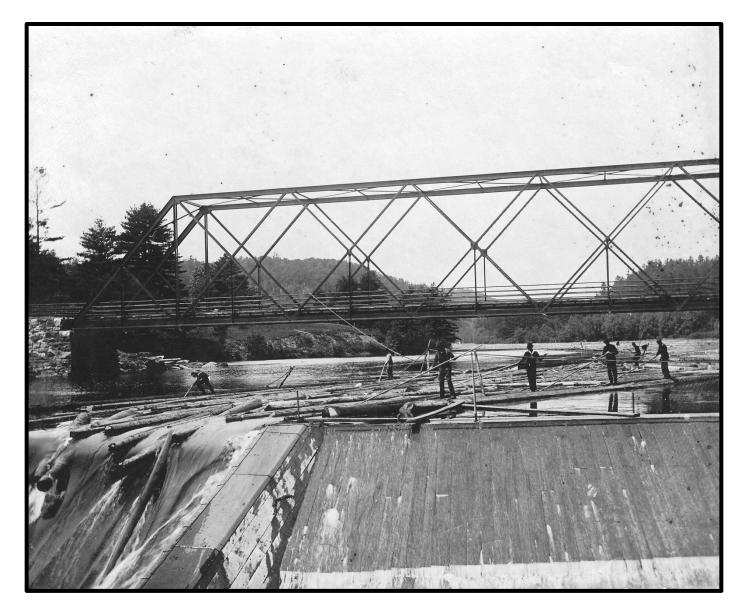
The Olcott Falls Power Company continued to generate electricity at the site until it was acquired by the Bellows falls Hydro-Electric Company, a subsidiary of New England Power Company, in 1942.



#### The 1915 Connecticut River Log Drive. The last one.



The 1915 Log Drive. 500 men and 40 horses in boats and on rafts, worked 65 million feet of logs 230 miles downstream over a period of 170 days.



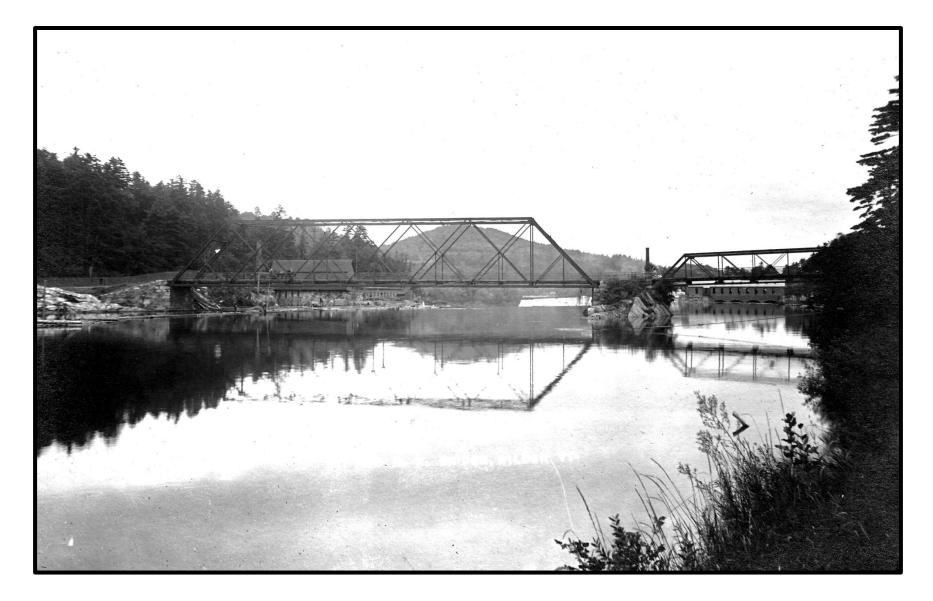
The 1915 Log Drive. Sending the last of the logs over the dam at Wilder.



The New Highway Bridge Built in 1898. Looking toward New Hampshire. Pulp grinding mill gate house is at right.



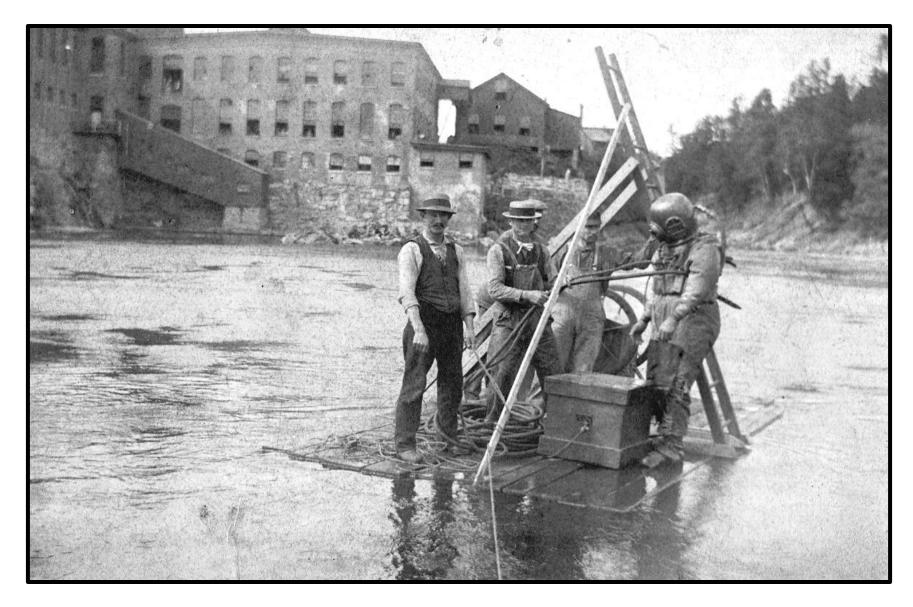
The new Wilder highway bridge and Goat Island. Looking from the New Hampshire.



The Wilder highway bridge and goat Island. Looking Down Stream.



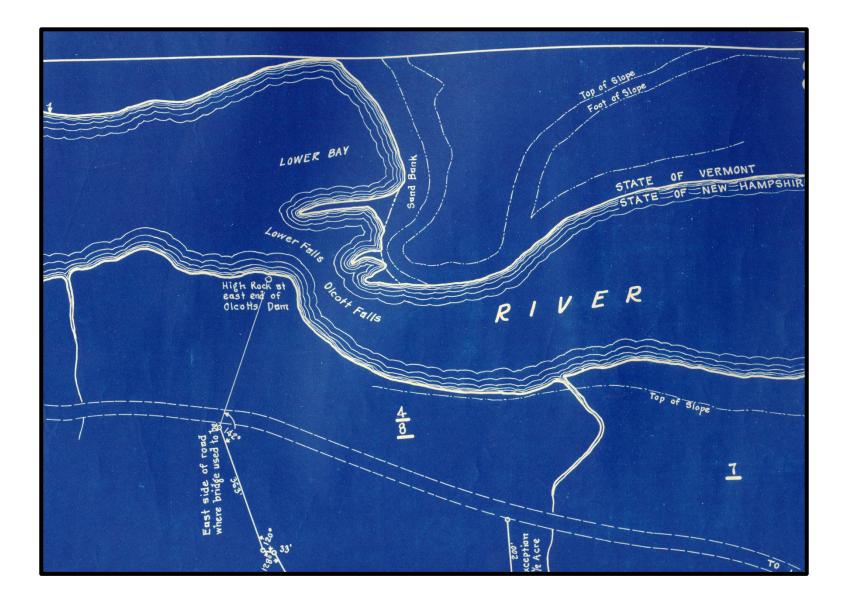
Moving a building within the paper mill complex. In the background is the company's stone office building.



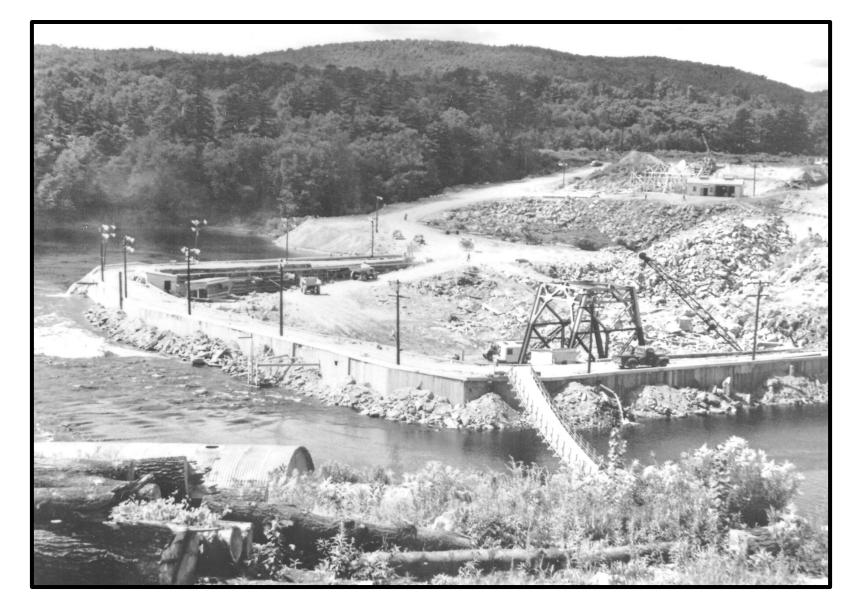
Divers in the river downstream of the mill complex. Circa 1905.



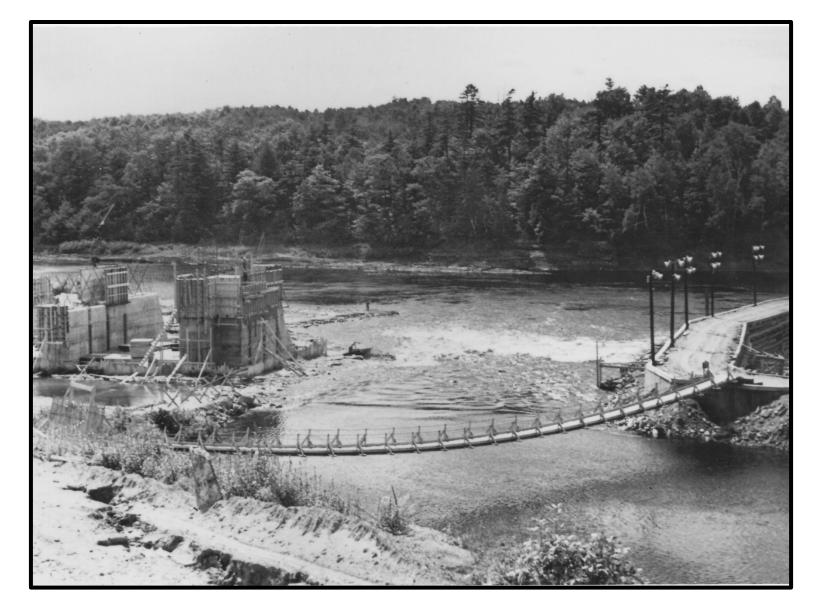
#### The Lower Falls looking from New Hampshire - September 1947 Future site of Wilder Dam



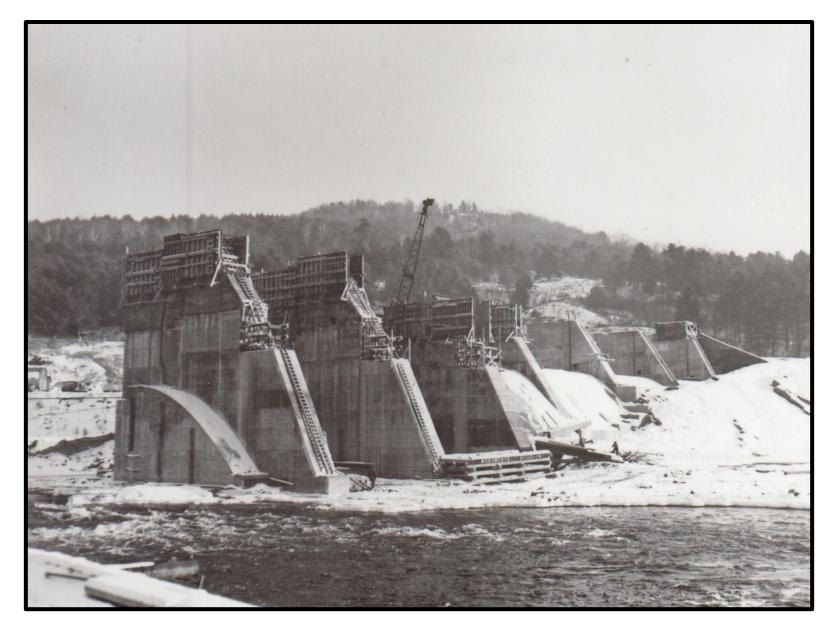
#### Map of the Lower Falls.



#### Construction of Wilder Dam. Looking from New Hampshire in 1948.



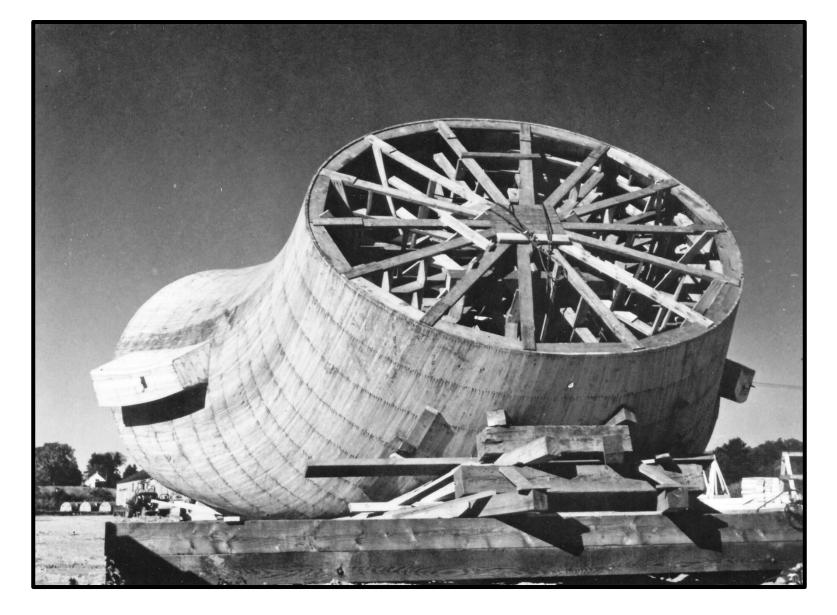
#### *Construction of Wilder dam. Looking downstream in 1948.*



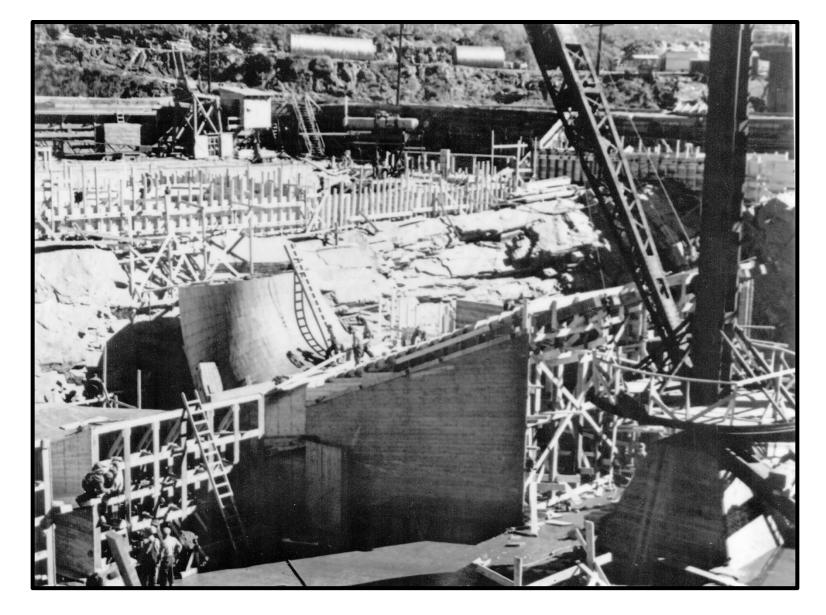
Construction of Wilder Dam. Looking Towards New Hampshire Winter 1948 – 49.



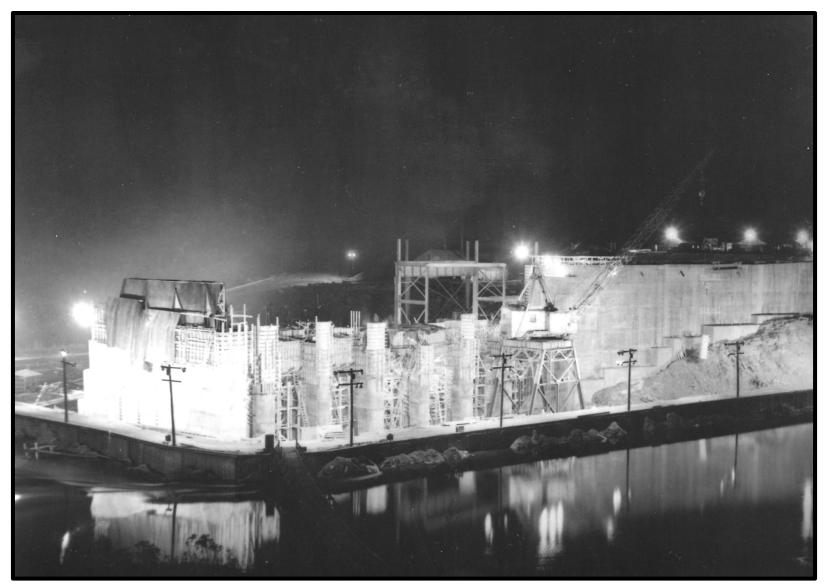
### Construction of Wilder Dam. Pouring Concrete.



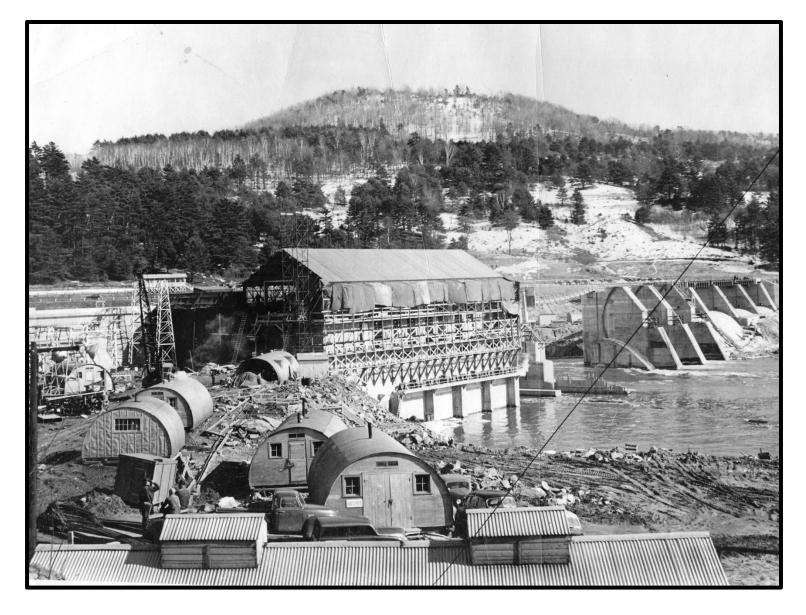
#### Construction of Wilder Dam. Wooden form for one of the two draft tubes.



Construction of Wilder Dam. Showing one of the draft tube forms in place.



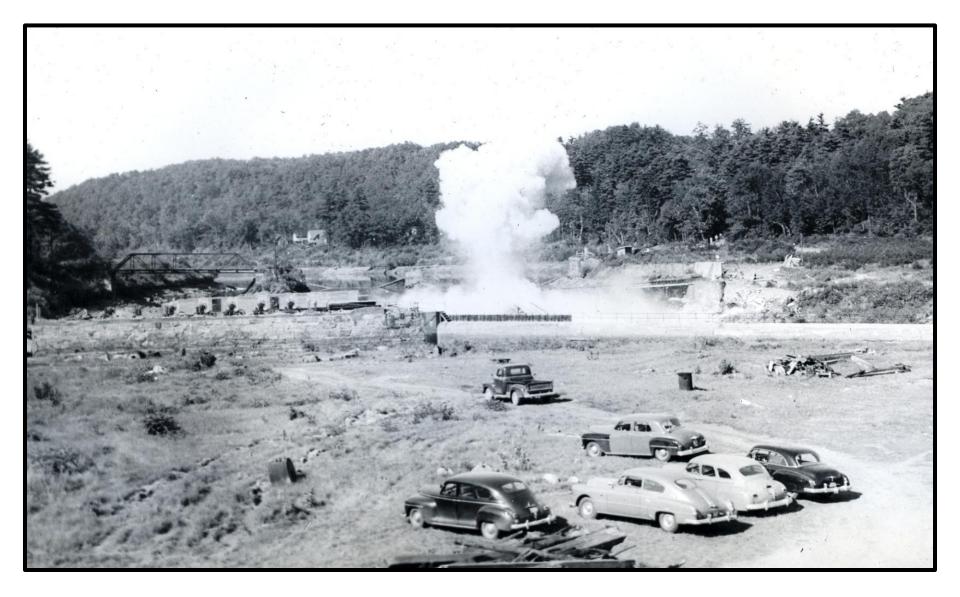
Construction of Wilder Dam. Work on the Power House at night. Looking from New Hampshire.



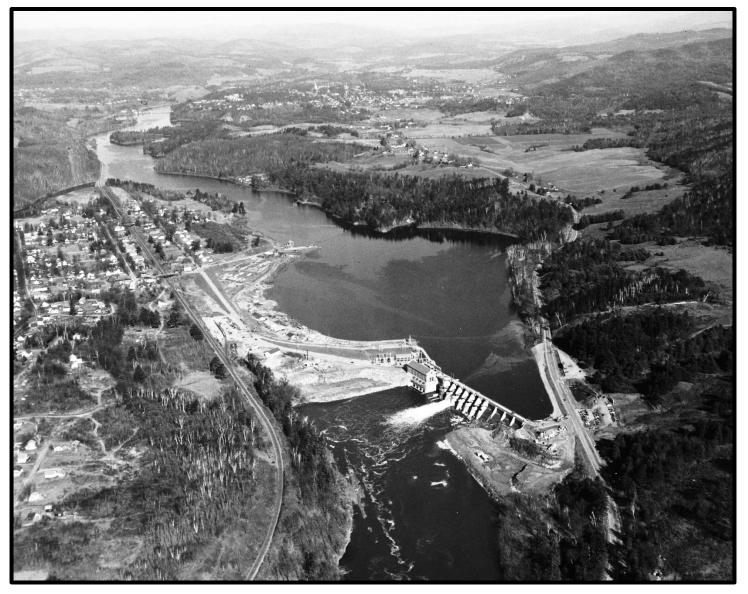
### Construction of Wilder Dam. The Power House and Dam Taking Shape.



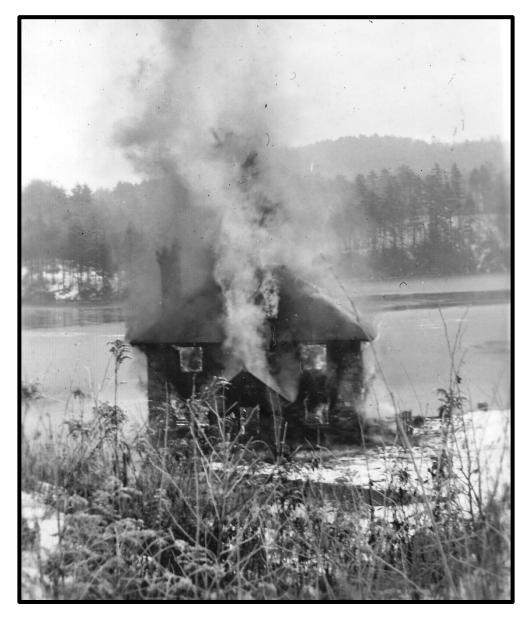
#### Demolition of the old Wilder Paper Mill Complex and Dam. 1949



#### Dynamiting the old paper mill dam. Looking upstream 1950



The \$16 million dollar Wilder Dam. 16 feet higher then the paper mill dam. Dedicated November 29, 1950.



Spring 1951. Razing the office building at the former paper mill complex.

# THE END