# MOUSAM RIVER: HISTORY AND NAVIGABILITY



Prepared for

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#### Introduction

The Mousam River originates at Mousam Lake in northern York County, and flows approximately 25 miles within York County before it empties into the Atlantic Ocean west of Kennebunkport. The river has two distinct characters, one upland and the other lowland. The river drops approximately 480 feet in elevation during its course to the ocean through the upland portion with a mix of natural ledges and falls, extensive rapids, and level stretches before reaching the head of tide just below the Village of Kennebunk. Below the village, the lowland portion of the river meanders through a broad lowland plain bordered occasionally by marshes before passing over a natural sand bar at the Atlantic Ocean. This lower, tidal reach of the Mousam River allowed access to coastal vessels as early as the mid-17<sup>th</sup> century, bringing goods and people from Boston, Portsmouth, and other coastal markets and taking lumber products away from Kennebunk. Above the head of tide and extending for nearly 20 miles, the significant fall in elevation of the upland portion of the Mousam River, and the several natural falls and rapids, provided abundant sources of water power that drove mills and factories of many types.

The uses of the Mousam River for power to drive mills in the Town of Kennebunk, as with the neighboring towns of Sanford and Alfred, is extremely well documented. A wide array of historians of Kennebunk and its neighbors beginning in the early 19<sup>th</sup> century and continuing to the 21<sup>st</sup> century have provided a wealth of detail and description regarding the development of the Mousam River since the 17<sup>th</sup> century. Conspicuously lacking in this welter of historical documentation, however, are discussions of transportation on the Mousam River. Rivers in colonial and early national America generally were vital avenues of transportation, providing access to an otherwise unapproachable interior where raw materials of timber, stone, and more, along with open land for homes and farms, awaited development. Indeed, the tidal stretch of the Mousam below the village was well populated by coastal vessels into the late 18<sup>th</sup> century. In Wells and, after 1820, Kennebunk, however, paths and roads were laid out quickly, and

the many histories of the area identify these, and not the reaches of the Mousam River above the head of tide, as the vital avenues of transportation to the town's interior. This absence from the historical record, together with abundant evidence of other means of overland transport for both goods and people, including lumber products, leads to the conclusion that the Mousam River has historically not been used for navigation.

## **Early Development of the Mousam River**

As noted above, the history of Kennebunk has been remarkably well preserved and documented by historians from the early 19<sup>th</sup> century to the present. Those who desire a comprehensive historical overview of the Town, from the late 17<sup>th</sup> century when it was a part of the Town of Wells, past its gaining status as an independent town in 1820, and through the 19<sup>th</sup> and 20<sup>th</sup> centuries, can refer to any of the works referenced herein. The following brief historical overview, by contrast, is focused exclusively on the history of the Town of Kennebunk as it relates to the development of uses of the Mousam River. This narrowly focused history of the Town draws liberally from Bourne (1831), Butler (1996), Remich (1911), Clayton (1880), and others as specifically cited.

The earliest European explorers to spend time in what is now Kennebunk arrived in the first decade of the 17<sup>th</sup> century. These early explorers, including Bartholomew Gosnold and Martin Pring, ventured up both the Mousam and Kennebunk Rivers before 1605. These coastal exploration vessels ventured inland on the Mousam only as far as the head of tide; according to Bourne (1970: 11), writing in 1831, "The Mousam river was at that time wider than the Kennebunk; of not much less depth, unobstructed by falls, and navigable for vessels of the burthen of Pring, to what is now called the landing."

Following these early explorations, the first European settlements in Kennebunk were made in the 1620s along the coast. Grants to the land, both at the coast and the interior sections, were held by a series of proprietors through the early and mid 17<sup>th</sup> century. These proprietors promoted their investments by encouraging the construction of roads and mills in the interior of the area, above the immediate coastal areas, with the

hope of generating income and thus making their investment a profitable one. Once a governmental system was established, by the 1670s, the area surrounding Kennebunk was a part of the Town of Wells. The Town then began to grant land to settlers who would develop their property, particularly at various potential mill sites along the Mousam and Kennebunk Rivers.

Within what is now the Town of Kennebunk, two mill sites on the Mousam River were developed in the late 17<sup>th</sup> century, and a third in the early 18<sup>th</sup> century. In what is now the Village of Kennebunk, Jonathan Corwin and Eleazer Hawthorn received a grant for the falls and water privilege in 1679, while Henry Sayward also had a mill in the location. These men built and operated both saw and grist mills at the location, the first set of falls on the Mousam above the head of tide. These early mills were destroyed in the Indian wars of the 1680s; as Clayton (1880: 232) has noted with the typical assumptions of the time, "they were the only monuments of civilization on the who territory; and, as was the fate of many of the buildings in the inhabited part of the town of Wells, those mills became a prey to the ravages of the red men in the second war, so that Kennebunk, with the exception of one or two houses on the beach, was an entire wilderness." The mill sites on the Mousam remained largely undeveloped until the early 18<sup>th</sup> century when a new series of mills were built at the falls.

Further upstream on the Mousam River, the Town of Wells granted land for mill development at an upper falls, what became known as the Great Falls or Fluellen Falls, in 1681-1682. A new grant for this property was made in 1692, when John Wheelwright, Joseph Taylor, Thomas Cole were given permission to build one or two sawmills upon Mousam Great Falls, along with dams and booms; according to Remich (1911: 43), the sawmill was built sometime before 1700. John Wheelwright, Samuel Wheelwright, heirs of Joseph Taylor then received a grant on May 10, 1720 for 200 acres adjoining Mousam Great Falls. The deed referenced a mill pond, which Remich (1911: 65) takes as proof of a mill at the location. This site is now the Old Falls Dam, located immediately upstream of the Kennebunk Light & Power District's dams and a part of the Estes Lake Hydroelectric Project.

In the early 18<sup>th</sup> century, a third mill site was developed between the Village and the upper falls. Known variously as Cat Mousam and Middle Falls, the site had a sawmill by the early 1730s. Destructive freshets and periodic upgrades led to a series of mills at the site through the mid and late 18<sup>th</sup> century until 1790, when an association of shareholders built a new saw mill.

In these early years of Kennebunk, even before there was a permanent village settlement, goods and people in and out of the region used a combination of water and overland transportation. The tidal section of the Mousam River saw a regular procession of coastal vessels from the early 1670s, when the first lumber and grist mills were built along the Mousam, until the Indian wars of the late 1680s. The trade resumed in the 1720s and 1730s with the cessation of most hostilities and continued into the late 18<sup>th</sup> and early 19<sup>th</sup> centuries. This was a regular trade with other ports to the west, primarily Boston, Newburyport, Nantucket, and Portsmouth. The coastal vessels, with shallow drafts, crossed over the sand bar at the mouth of the Mousam River and followed the meanders upriver to the head of tide, just below what is now the south end of the Village of Kennebunk. According to Remich (1911: 166), "Whether she was made fast near the large pine—a modicum of the stump of which is still visible, an object of interest to those with antiquarian tastes—or a few rods father up stream [1 rod=16.5 feet], at the foot of the falls, is not known; probably, however, her sails were furled and her hatches opened at the last-named spot."

As described by Remich, this tidal section of the Mousam River came to an end at the natural falls which lie beneath the current Kesslen Mill dam in the village. This area beyond which the coastal vessels could not travel came to be known by the 18<sup>th</sup> century as the Mousam Landing, where ships were loaded with lumber and other goods, and where people and equipment destined for the various mills were unloaded.

Coincident with the development of mills along the Mousam River in the late 17<sup>th</sup> and early 18<sup>th</sup> centuries, the Town of Wells and the various mill owners built a network

of roads through the woods. The most important purpose of these roads was to provide access for people, and for the output of the mills, to the coastal vessels at the Mousam Landing. As early as the 1670s, according to Bourne (1831: 52), "The road which has caused so much trouble in the village, began at the boom, near the small house built by Corvin and Hawthorne, on the eastern side of the river, and ran down by the river to a point twenty rods below the Landing place, and was laid out in the year 1679, six rods wide." In 1692, according to Remich (1911: 155), the Town of Wells allowed the owners of the mill privilege at Great Falls to build a road "for the conveniency to transport to the salt water." In 1765, he noted, the selectmen laid out a highway from Middle Falls down to the mill pond above the Mousam Mill (now Kennebunk).

Bourne (1831: 52), likewise pointed to the substantial output of lumber from the Mousam River mills in the 17<sup>th</sup> and early 18<sup>th</sup> centuries, and the importance of roads to the ability of the mill owners to get their boards to markets. While the lumber went to the rapidly growing coastal cities by means of coastal vessels that plied the lower reach of the Mousam and Kennebunk Rivers, roads were vital to bringing the lumber to the coastal vessels. A road that had been built in 1679, for example, "was for many years a very important road. All the boards sawed at the mill were carried down here, for the purpose of being rafted to the mouth of the river. And when the sawmill was erected at Great Falls, a road was cut out by the owners of it, down to the bridge where it united with this, so that it then became doubly important. The quantity of lumber made at both mills was very great."

Yet another road was laid out in 1681, this time on the west side of the Kennebunk River toward the Mousam Landing (Bourne 1831: 52). Abandoned later in the century as a result of the Indian wars, Bourne noted, it was rebuilt in 1730, "down to the flowing of the salt water, just below the sawmill of Mr. Storer. This was then, as now [1831], called the upper Landing. As the road originally had not been laid out by metes and bounds, the owners of the sawmill net with some difficulty in ascertaining where it was, and on this account it was renewed. After this, it continued to be used for many years. As many boards were cut at this mill, and, as the logs were obtained on and near

the road, it was much travelled as long as the mill stood. The boards were carried to the harbor by rafts. I do not know when this road ceased to be used. Probably from the great freshet of 1755, when the mill was carried away."

In 1755, a devastating freshet, a flood created by rapid snow melt, destroyed all of the mills and dams that had been built on the Mousam River. As Remich has noted and the various records indicate, the river already had quite a lot of dams and mills along its length, producing both lumber and grain. All of the dams that provided water power for the mills were small in scale and were not designed to withstand flood waters: "The dams on the river at this time, as they had been in preceding years, were weak structures poorly calculated to withstand the flood that, during these freshets, filled and overflowed the banks of the stream" (Remich 1911: 89). The mills on the Mousam River were rebuilt in the years after the 1755: "A few years later, when new mills were in operation, it is certainly within the bounds of probability that the lumber they exported was carted to the lower part of the town and shipped thence. The additional cost of carting was more than counterbalanced by the saving in freight in consequence of the easier access to the harbor and the avoidance of the annoying detentions which must have been quite often experienced in passages up and down the river" (Remich 1911: 167). Remich was a model of historical caution throughout his work, a relative rarity for that period of historical scholarship, and clearly was loathe to assert as fact the prevalence of overland transportation of goods and people from Kennebunk's many mills to the ports. He made this cautionary statement, however, clearly based on the utter absence of any evidence suggesting river-based transportation.

In the years following the great freshet of 1755, the several mill sites on the Mousam River were rebuilt in large part to serve an important new industry: shipbuilding. Coastal New Englanders with their natural harbors in Boston, Portsmouth, Newburyport, and others operated a fantastically lucrative trade with the islands of the West Indies that involved molasses, rum, and, unfortunately, African slaves. The elegant 18<sup>th</sup> and early 19<sup>th</sup> century mansions in these coastal cities provide testimony to the enormous profits accruing from this trade, which relied on fast and efficient vessels.

While Kennebunkport is more well known today as a prominent shipbuilding site, the Mousam River below Kennebunk was a natural location for the construction of oceangoing vessels in the late 18<sup>th</sup> century given what was by then a century-long tradition of producing vast amounts of timber from the surrounding forests. Kennebunk clearly was considerably more active through the 1780 and early 1790s then its western neighbor. As Bourne (1831: 58) noted, the Mousam River had the center of population for the immediate area, with small vessels regularly coming in to pick up cargoes of lumber from the mills and Kennebunk and Great Falls.

Remich (1911: 169) points out that the bulk of the coastal shipping trade had shifted from the Mousam to the Kennebunk River by the late 1750s and early 1760s. The area surrounding and just below the Mousam Landing, however, proved to be a good location for shipbuilding; it "had been found an excellent place for piling lumber, as well as for the loading and unloading of coasters," but "was no longer needed for these purposes. It possessed, however, many advantages for shipbuilding and was used, more or less, for tis industry until about 1795." The use of the Mousam River for shipbuilding was limited, however, by the natural sandbar at the mouth of the river. While shallowdraft coastal vessels could pass over it with relative ease, even when loaded with lumber, ocean-going vessels could traverse it only with difficulty. By the 1790s, nearly all of the region's shipbuilding had relocated to the mouth of the Kennebunk River, which had a considerably more accessible port. Butler (1993: 3), in her discussion of the relocation to the Kennebunk River by the prominent industrialist, Tobias Lord, noted that "By 1790, frustrated by the navigationally flawed Mousam, Tobias had moved his family and his shipbuilding operation to The [Kennebunk] Landing, leading the way in its rise as Kennebunk's premier shipbuilding district."

Whether at Mousam or at Kennebunkport, however, shipbuilding clearly required vast amounts of lumber, which the forests surrounding both the Mousam and the Kennbunk Rivers provided for several decades. The shipbuilding process throughout the 19<sup>th</sup> century followed a typically seasonal pattern in which boats were constructed during the spring and summer months using lumber that was delivered during the winter. This

cyclical pattern drew in part on a similarly patterned nature of the lumber industry in which lumber was sawn during the summer months when the millponds above the mills were flowing and free of ice, and then stored until the winter for delivery to the shipyards. It is clear, from later photographic sources as well as written records, that the trees prior to being cut at the various mills were stored in the millpond. Given the absence of any contrary information, however, it is clear also that the only transportation of lumber on the river was accidental, and a catastrophe that was greatly to be avoided. On April 20, 1852, for example, Andrew Walker described in his journal a powerful freshet; fortunately, the raging waters did no damage "except in carrying away a boom above Mitchell's mill [now the location of Twine Mill dam]; by which accident or rather casuality [sic.] four or five hundred of small logs were let loose in the stream below. A large proportion of them lodged in the intervals and shallow places in the river, but a few not more than fifty of them passed over the dams and went toward the sea. A temporary boom was swung across the river a short distance above the upper dam [in the Village of Kennebunk], but the current was so rapid that the logs passed over or under the boom, without detention."

The sawn lumber was brought from the mills to the shipyards, first on the Mousam and later on the Kennebunk River, in the winter because the snow made the transportation of logs so much easier and faster. Records from the late 18<sup>th</sup> and into the 19<sup>th</sup> century regularly refer to sledding timber, using teams of oxen and horses on the existing roads, during the winter. Remich (1911: 243), for example, notes that William Taylor advertised for ship timber in February of 1815. Taylor, he continued, "bought considerable ship timber, and in the spring, when the sledding here was bad and grew worse toward the Landing and harbor, the teams were unloaded in the space between his dwelling-house (now Mrs. J.S. Perkins's) and Mr. Lord's, which was sometimes filled and the road opposite encroached upon. Here it was usually hewn before being hauled to the shipyard." Andrew Walker likewise noted in his journal on January 24, 1851 that "All or nearly all of the ship builders at the landing and port [Kennebunkport] are now buying ship-timber to be used the coming season. The present good sledding has been improved by the owners of timber to haul the same to market."

Similar statements regarding the overland transport of lumber to the Mousam River land can be found in nearly all of Kennebunk's histories and reminiscences. Gilpatric (1935: 9), for example, noted that in Kennebunk in 1860s, "In the winter Water Street is filled with logs to Main Street." Likewise William Barry (1911: 9), writing in his distinctive way, noted that the highway on the east side of the river at the bridge was "plentifully stored with logs leaving scarce room for the mail coach to pass. Ah well I recall the day when ye selectmen husked about to clear the main street in ye village and on Zion's Hill also, so choked were they with teams of oxen with timber!"

A company of Kennebunk men attempted in the early 1790s to construct a channel that would bypass the sandbar at the mouth of the Mousam River, and thus allow ocean-going ships to reach the ocean safely and consistently. These plans were destroyed when a severe storm damaged the canal in process, and the company was unable to raise the financing to rebuild the next year. By the late 1790s, nearly all of the shipyards had transferred from the Mousam to the Kennebunk.

#### **Modern Dams and the Mousam River**

At the same time that Kennebunk was losing its shipyards to Kennebunkport, however, the Mousam River was entering into a period of vast expansion of its industrial capacity. The new Village of Kennebunk with its two dams was the center of this manufacturing boom, together with the two dams that were next upriver from the village. The earlier mills on the Mousam River were designed primarily for lumber and grains, and the mills upstream at the Middle Falls (soon known as Kennebunk Depot or West Kennebunk) retained that use well into the 19<sup>th</sup> century. At the lower falls where the village is now located, however, a widely diversified range of factories emerged beginning in the late 18<sup>th</sup> century. Two dams spanned the Mousam River to provide power to these factories, an upper dam where the current Kesslen Mill Dam is now located, and a lower dam downstream of the current US Route 1 bridge, now removed.

The upper dam, built on the first natural falls in the river above the head of tide, is the location of the original mills in the area in the 1670s. A new dam was built at the site with the resumption of economic activity in the area in the 1720s and 1730s. Washed away in the great freshet of 1755, the dam was rebuilt in 1756, with a new sawmill in 1759. This dam was rebuilt in 1825, over two feet taller and with a timber crib structure, which was again replaced in 1873 by another timber crib dam resting on a cement foundation. That later dam was badly damaged in a flood in April 1920, and was replaced with a similar dam, which in turn was rebuilt in 1954 by a dam which eventually took the name of the last factory to draw power from it, the Kesslen Shoe Company. The initial lower dam, meanwhile, was in place by 1770, when an iron foundry was built, and was replaced in 1826. The Leatherboard Company replaced the lower dam in 1876, adding a long flume that delivered water to its plants downstream of the dam. This dam was replaced in 1919, and was finally removed in the 1960s when the Rodgers Fiber Company, the last factory to draw power from it, had disappeared (Magnuson 2005: 4-6; Gilpatric 1935: 44).

These two dams in the village initially powered sawmills and grist mills, but in the late 18<sup>th</sup> and early 19<sup>th</sup> century the focus turned to textiles of various sorts. A fulling mill, which prepared woolen textiles for production, was located on the west side of the river at the upper dam by 1785, while a carding factory was in place at the lower dam by 1811. The first cotton factory was located on the river by 1814, though it soon went out of business. In 1825, following in the recent pattern of the Merrimack Manufacturing Company in Massachusetts, the Kennebunk Manufacturing Company was organized in 1825. The new company purchased the water privilege of the Mousam River at both the upper and lower dams in the village, and rebuilt both dams en route to establishing new textile factories that would draw from the increased power. It also attempted to purchase a controlling interest in the shares of the community-built Cat Mousam sawmill at the Middle Falls/Kennebunk Depot, and perhaps also the mill further upstream at Old Falls/Fluellen Falls (Gilpatric 1935: 46-47). Unfortunately, their revenues were unable to keep up with the expenditures, and the company went bankrupt in 1829.

In 1832, however, a new company was formed to improve the water power of the Mousam and carry out the manufacturing development envisioned by its predecessor. The new Mousam Manufacturing Company was chartered by the State of Maine in 1834, and had much greater success in using the water power of the river to drive a cotton mill and several other factories. A sketch plan drawn in 1840 shows the concentration of mills on the Mousam River in Kennebunk (Figure 1).

The Mousam Manufacturing Company used the latest water power technology available to power their various mills on both sides of the river. They shored up the river bank with a stone wall, and built an open flume on the west side of the upper dam, controlled by four large head gates. The open flume conveyed water to a vast wooden water wheel, 16 feet wide and 20 feet in diameter. The historian of the early 20<sup>th</sup> century, William Barry (1911: 10-11), described the water power in his typically idiosyncratic way: "in the basement of ye mill, at the upper end near ye bridge, the water brought by canal with thick plank sides and oak-log covering, beneath ye highway, fell on the wheel a little back of its center, from a platform or shelf 16 feet wide." This vast wheel then provided power to a complex of mills including saw mills, textile factories, and a machine shop, while the company also operated a farming operation with pasture lands on the east side of the river south of the bridge.

A variety of industries used the water provided by the upper and lower dams in the Village through the mid and late 19<sup>th</sup> century. The Mousam Manufacturing Company sold its facilities at both dams to William Lord in 1859. With Lord's investment, a number of new factories came into the being on the shores of the Mousam River including makers of yarn, sashes and blinds, and shoes, the Union Lace Company, and the vast Leatherboard factory complex at the lower dam, a company that produced a synthetic leather derived from cellulose. By 1881, the Davis Shoe Company operated a large factory at the eastern edge of the upper dam at the bridge. A succession of shoe manufacturers operated at that site through the late 19<sup>th</sup> and into the 20<sup>th</sup> century, before as massive fire destroyed the complex in 1903. The mill was rebuilt, and in 1927, the Kesslen Shoe Company arrived to begin again the manufacturing of shoes in Kennebunk



Figure 1: 1840 Map of Kennebunk showing mills on the Mousam River. Source: Brick Store Museum, Kennebunk

(Magnuson 2005: 68-71). Figure 2 is a map drawn by the local historian, William Barry, in 1911 that points to the intense concentration of factories surrounding the two dams in the Village of Kennebunk. Figure 3, meanwhile, is an undated photograph from the late 19<sup>th</sup> or early 20<sup>th</sup> century, looking upstream from the head of tide toward the lower and the upper dams.

The mills at the Upper Falls (Old Falls) and Middle Falls (Cat Mousam) remained only partially active through the middle part of the 19th century. A mill at Cat Mousam was built in the early 19<sup>th</sup> century using community funding and ownership, with shares of time apportioned among those who had contributed to its construction. This fractured ownership of the site made it difficult to fund repairs to the dam and mill when it was damaged by floods, and by the 1820s and 1830s it was in disrepair and little used. The Kennebunk Manufacturing Company attempted to purchase a majority of the shares in the 1820s, but was unsuccessful. In the 1850s, however, Oliver Perkins and Joseph Dane successfully acquired enough of the shares to construct a new sawmill and secure the associated water privileges. By then, the mill was adjacent to the depot for the new Portsmouth, Saco, and Portland Railroad (completed in 1842), soon known as Kennebunk Depot. This mill remained in operation under Dane and Perkins and then under the ownership of B.C. Jordan, a lumber miller based in Alfred, until it burned in 1904. At that point, R.W. Lord & Co. purchased the dam and water privilege for use as a storage basin for his factory that was just downstream (Gilpatric 1935: 43; Remich 1911: 89-90). Figure 4 is an 1872 map that shows both of the mills and dams. The map also notes that the Dane-Perkins mill was located at a 14-foot drop in the Mousam River, with a sevenfoot drop in the roof shortly downstream, and an 11-foot fall at the Twine Mill dam.

Immediately downstream of the Cat Mousam Mill was the Mitchell Mill. Robert Mitchell had built a grist mill at the site in the mid 18<sup>th</sup> century. Early in the 19<sup>th</sup> century the prominent Lord family, who also owned an important shipyard in Kennebunkport along with mills in the Village of Kennebunk, acquired a share of the mill. By the early 1860s Robert Lord owned the site outright, and converted the former grist mill into a factory designed to produce twine and netting, the R.W. Lord Cotton Twine Mill. Their

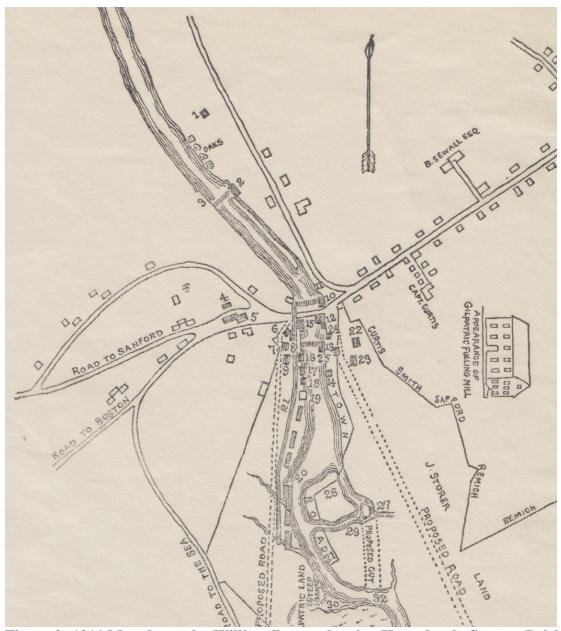


Figure 2: 1911 Map drawn by William Barry, showing Kennebunk. Source: Brick Store Museum, Kennebunk



Figure 3: An undated photograph of the Mousam River, looking upstream toward the lower dam and upper dam in Kennebunk. Source: Brick Store Museum, Kennebunk

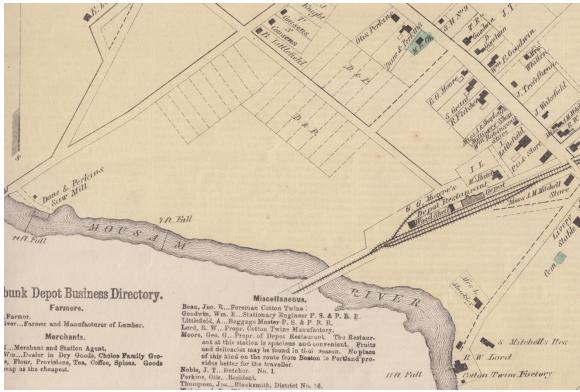


Figure 4: A portion of the 1872 Atlas of York County showing the Dane & Perkins Mill on left, R.W. Lord Twine Mill on right. Source: Brick Store Museum, Kennebunk

principal market was commercial fishing enterprises, which needed the strong cotton netting. The Lord family operated the twine mill successfully into the early 20<sup>th</sup> century, and sold the facility, along with the upstream Dane Perkins Dam, in 1907 to the American Net & Twine Company, which in turn was a part of the larger Linen Thread Company. The Linen Thread Company then built the current brick mill building in 1922 (Vaughn 2013). A Sanborn Fire Insurance Company map from 1926 shows the extent of the new factory complex (Figure 5).

#### **Electrical Generation on the Mousam**

With the advent of the 20<sup>th</sup> century, much had begun to change with regard to the technology and economics of water control and power production. In a word, electricity had arrived. All of these earlier mills on the Mousam River had relied on hydromechanical power in order to operate. Water, which was pooled up behind a dam, was fed by a raceway past a water wheel that was directly connected through gearing and belts to the manufacturing equipment. While technical developments during the 19<sup>th</sup> century significantly increased the ability of hydromechanical systems to transmit power, they remained inefficient power sources. In addition, hydromechanical systems had to be located immediately adjacent to the source of water to retain any type of efficiency. However, this changed with the advent of commercially-available electricity in the 1860s, and the development of hydroelectric power in the 1880s.

The Kennebunk Light & Power District (KLPD) appropriated this technology very early on. KLPD had its origins in a three-person committee in 1893 that purchased, on behalf of the Town, the former Davis Shoe Factory on the east side of the upper dam, along with a portion of the water privilege. They used their water privilege to power a small direct-current (DC) generator, which they used to light the factory and the street lights of Kennebunk; the generator could also be powered using a steam plant which they also installed. This first generator was destroyed in 1903 when the Davis Shoe Factory burned. When the building was rebuilt that same year, the KLPD installed a new

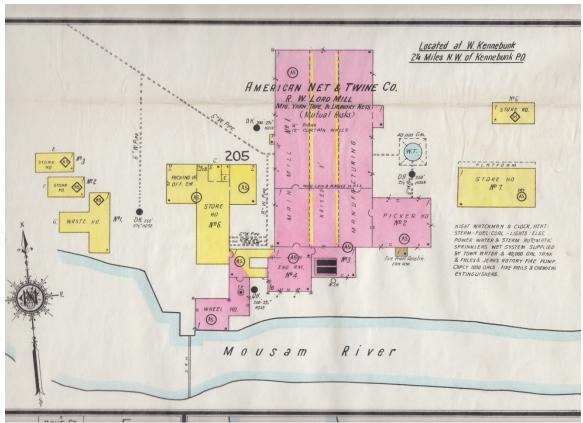


Figure 5: Detail of 1926 Sanborn Fire Insurance Map showing the Twine Mill and dam on the Mousam River. Source: Special Collections Department of Fogler Library, University of Maine

alternating-current (AC) generator and sold its electricity to residential customers in the Town. That generator was then replaced in 1928.

In 1937, the KLPD purchased the two dams at the former Cat Mousam site from the Linen Thread Company: the principal mill site at the Twine Mill dam, and the Dane Perkins dam, used for water control. The KPLD renovated the dams following damages from the flood of 1936. Based on a photograph in the KLPD archives, it appears that the Twine Mill Dam may have been rebuilt at that time, in the identical location. In 1954, the KLPD replaced the former Kesslen Mill dam in Kennebunk with the present concrete dam in the identical location.

#### Summary

In 1996, the Federal Energy Regulatory Commission (FERC), acting on a petition from Consolidated Hydro Maine, Inc. (CHMI), issued a Declaratory Order finding that the Estes Lake Hydroelectric Project on the Mousam River did not require a license. FERC issued this Order on the grounds that the segment of the Mousam River on which the Project is located is not navigable under the terms of Section 23 (b) (1) of the Federal Power Act, 16 U.S.C. §817 (1) (1982). The Estes Lake Project is located immediately upstream of the Dane Perkins Dam, the furthest upstream of KLPD's facilities.

FERC commissioned a historical study of the Mousam River and its potential navigability, which was completed in 1988 (Crosspaths, Inc. 1988). This study recommended that the Mousam River was navigable on the basis that it was the site of lumber mills that operated more or less continuously from the 17<sup>th</sup> century to the early 20<sup>th</sup> century. The presence of so many lumber mills, according to the report, meant that the lumber must have been transported both to and from the mills by means of the Mousam River, thus making it a navigable waterway. Reporting on the proliferation of lumber mills on the Mousam River in Sanford, for example, the report notes that "No evidence has been found to indicate that Sanford area lumber was transported overland at

that time, rendering it reasonable to conclude that the lumber must have been floated down the Mousam" (Crosspaths, Inc., 2008: 7).

In its response, CHMI pointed to legal precedent in contending that the presence of lumber mills in a river is not sufficient grounds to infer the transportation of lumber either to or from a mill. The CHMI response, which FERC found convincing and which served as the basis for the Declaratory Order, observed that the 1988 historical study did not substantiate its inference of lumber being transported by means of the Mousam River.

The present study concurs with the CHMI response, at least in so far as it pertains to the Mousam River in the Town of Kennebunk. In negative terms, the present study included an exhaustive search of published and unpublished records pertaining to the history of the Mousam River in Kennebunk. This research failed to find any references to the transportation of lumber, or people, on the Mousam River upstream of the head of tide. The lowland, tidally-influenced portion of the Mousam River clearly was used extensively for the transportation of people and produce from the very earliest years of European settlement in the 17<sup>th</sup> century, and well into the late 18<sup>th</sup> and early 19<sup>th</sup> centuries. This river-based transportation, however, came to an end at the first set of falls below what is now the Village of Kennebunk; no coastal vessel ventured further upstream than this.

In addition, the numerous histories of Kennebunk fail to cite any vessels plying the upland portions of the Mousam River other than the strictly localized use of pleasure boats on the few stretches of level water (see Bourne and Lord 1965: 12). The use of the Mousam River for lumber was likewise intensely localized, principally in the impoundments behind the various mills' dams waiting to be sawn, as historic photographs attest. While the histories of Maine's other rivers—the Androscoggin, the Kennebec, the Penobscot, and the nearby Saco—are replete with stories of logging drives, not one is mentioned on the Mousam. For such a thoroughly documented river and Town, this is a significant lacuna.

The evidence is not entirely negative, however. It is clear that vast amounts of lumber was milled on the Mousam River, from the 17<sup>th</sup> well into the 20<sup>th</sup> centuries. Crossroads, Inc. (1988) asserted that because no evidence was found to substantiate alternate means, the Mousam River must have been used to transport this vast output. In contrast, however, the present research included a close reading of the various histories of Kennebunk which contain numerous references to the overland transportation of lumber and people. In particular, Kennebunk had a dense network of roads through the woods that began in the 1670s and expanded rapidly throughout the 18th century. From the earliest years of settlements, these roads were tied explicitly to the development of lumber and grist mills; their purpose was clearly stated as allowing the transportation of lumber to markets. These roads were designed to be wide enough to allow the passage of teams of oxen and horses hauling sleds filled with lumber. Histories of Kennebunk written in the early and mid 19th century, together with a journal kept by Andrew Walker in the early 1850s, references the presence of teams hauling sleds of lumber, destined generally for the shipyards on the Kennebunk River, as a matter of course. These were not isolated instances necessitated by a temporary cessation of river-based lumber drives, but the standard method of transportation.

In the absence of references to water-based lumber drives on the Mousam, and with significant evidence of overland transportation of people and goods, we recommend that the upland portions of the Mousam River, including the section of the river containing the three dams that are operated by the KLPD, was not used for the purpose of navigation.

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