

January 9, 2024

To: Sarah Player, Town of Ipswich Select Board Chair

Copy: Stephen Crane, Town Manager

Ipswich River Watershed Association

Re: Position of the Ipswich Historical Commission on Removal of the Ipswich Mills Dam

"This Towne is scituated on a faire and delightful river, whose first rise or spring begins about twenty-five miles farther up the country, issuing forth a very pleasant pond. But soon after it betakes its course through a most hideous swamp of large extent, even for many miles, being a great harbour for bears. After its coming forth this place, it groweth larger by the income of many small rivers, and issues forth in the sea, due east against the Island of Sholes, a great place of fishing for our English nation."

- Capt. Edward Johnson, in his 1646 Wonder Working Providence"

The Ipswich Historical Commission (IHC) was established in 1964 under the aegis of Massachusetts General Law (M.G.L.) Chapter 40, Section 8D "for the preservation, protection, and development of the historical or archeological assets of such city or town." In this light, the IHC has used a historic lens to consider the proposed removal of the Ipswich Mills Dam. We have considered the Ipswich River and its watershed from a holistic perspective spanning its entire history. For almost all of this time, it was a rich ecosystem with an abundance of fish that served as an important resource, first for Indigenous Peoples and then for the Europeans who settled here. For a relatively short span of several hundred years, man-made mills on the Ipswich River powered a range of industries. Although these industries no longer exist and dams are no longer used to generate power, some mills, including the Ipswich Mills Dam, remain. The IHC addressed this central question: Is it essential to preserve the Ipswich Mills Dam to mark our recent industrial history, or should it be removed so that the river can run as it has for millennia?

Natural History and Indigenous Inhabitants

The Ipswich River was formed by a massive glacier, the Laurentide Ice Sheet, during the last ice age. The glacier retreated from this area about 12,000 years ago, leaving behind the drumlins, moraines, and eskers that form our geologic landscape and determine much of the Ipswich River's course from its origin 35 miles away. In the spring, blueback herring, shad, salmon, and alewife swam upstream to spawn at the Great Wenham Swamp and numerous ponds and tributaries. Smelt, American eel, sea-run trout, and sturgeon were also among the migratory species that populated the river. Along with the freshwater lakes and ponds, the 148 square miles of the Ipswich River Watershed contained a cornucopia of large- and smallmouth bass, red, yellow, and white perch, pickerel, catfish, and black bass, foraging on what once seemed like an unlimited supply of alewives.

The rich ecosystem of this area supported human habitation beginning around 11,500 years ago, soon after the Ipswich River emerged from the ice age. Over millennia, successive waves of Indigenous Peoples hunted and fished, harvested shellfish, and farmed the surrounding land. In the spring, spawning fish moving upstream were an important supply of animal protein; alewives were caught by weirs constructed of sticks and brush to force the fish into narrow channels, where they could be easily netted.

Rise and Fall of Stream-based Fisheries

The industrious first Europeans settlers of Ipswich readily took advantage of the abundant fish, forming both coastal and stream-based fisheries. The stream fisheries focused on catches of sturgeon, bluefish, shad, and alewives. The Upper Falls of the river, near the current location of the Ipswich Mills Dam, was a natural location for harvesting fish on their upstream journey. This area was the site of a stone fish weir, built in 1647, that reaped fish in great numbers. By 1700, most of the Ipswich workforce was involved in some form of fishing activity, with stream-based fishing remaining an economically viable enterprise through most of the 19th century.

The development of stream-based fishing overlapped with the construction of man-made dams on the Ipswich River. The first was constructed on the Upper Falls in 1635 or 1637, for a gristmill. By the turn of the century, this stretch of the river, including the Lower Falls, was occupied by dams that powered fulling mills, sawmills, woolen mills, bark mills, and grist mills. And, in short order, the stream-based fishing and mill industries were at odds.

Legislation to protect the passage of fish in the Ipswich River was a concern as early as 1709. An act in 1735 required dam owners to provide a "convenient sluice or passage" for alewives during the spring migrations and sufficient flow of water to allow young alewives to return to the sea. Despite political pressure from mill owners, a 1770 state law was passed to prevent the destruction of alewives and other fish in the Ipswich River by requiring dams to maintain a passage for fish during the migratory period from late April to mid-June.

AN ACT TO PREVENT THE DESTRUCTION OF ALEWIVES AND OTHER FISH IN IPSWICH RIVER, AND TO ENCOURAGE THE ENCREASE OF THE SAME.

Whereas, heretofore, great variety of fish, particularly salmon, bass, shad and alewives, used to pass up Ipswich River, so called, to cast their spawn in the natural ponds emptying into the same, but, for a long time past, the passage of the said fish up the said river, by mill-dams across the said river and its branches, has been almost totally obstructed, to the great damage and distress of the inhabitants, especially the poor, of divers towns in the count[ies][y] of Essex and Middlesex thro' which the said river and its branches run, as well as to the prejudice of the cod-fishery on the coasts of the province; and whereas the laws now in force relating to opening and keeping open passages for fish in rivers and streams within this province are by experience found to be ineffectual for opening a sufficient passage for the said fish up the river aforesaid,—

Caption: 1769-70 Massachusetts Chap. 6: An Act To Prevent The Destruction of Alewives in the Ipswich River

Legislative efforts continued into the 1800s, with many aimed at compelling factory mill owners to provide fishways of specified construction. The decline in alewife fishery, however, continued – not due to a lack of good laws, but rather due to lack of their enforcement. By the end of the 1800s, alewife fishing as a profitable industry had ended, and by 1900, few alewives remained in the Ipswich River. More than one factor was deemed responsible for the demise of the alewife in Ipswich: the diversion of spawning grounds for municipal water supplies, obstruction of streams and rivers by dams without functioning fishways, pollution, and lower quantities of water in the river and its tributaries.

The Industrial Mill Industry and the Ipswich Mills Dam

The early- to mid-1800s in Ipswich saw the rapid growth of the mill industry, which moved away from small-scale operations to industrial production. The Ipswich Manufacturing Company, the first substantial manufacturing mill in Ipswich, was built on the North side of the river in 1828. A new dam for the company was built at or very near the location of the present Ipswich Mills Dam. Over the next 40 years, the Ipswich Manufacturing Company produced cotton, with mill ownership changing hands several times.

The most significant phase for the mill and the dam began in 1868, when they were purchased by Amos A. Lawrence. Renamed the Ipswich Mills Company, the business grew substantially, with new buildings, including a hosiery mill touted as the largest in the country. In 1908, Ipswich Mills entered a new period of growth, which included the construction of additional mill buildings and reconstruction of the dam. The Ipswich Mills Company reached a zenith in both productivity and prosperity during World War I. Soon after, however, it experienced a rapid decline due to increased competition and demand for higher-quality hosiery than the mill produced. In 1928, the doors of the Ipswich Mill Company closed.



Caption: Neither the older abandoned fish ladder or the 1995 replacement have been very effective.

For a short time period of 150 years, the natural flow of the Ipswich River has been obstructed by a mill dam that no longer serves its original purpose, and will never be used as such again. At six feet tall, the present dam exceeds the maximum height that spawning fish can jump. The construction of two fish ladders has had minimal effect, and the great fish migration so characteristic of almost the entire history of the Ipswich River has ended.

The Ipswich Mills Dam is not currently an historic property—it has not been listed in nor determined eligible for listing in the National Register of Historic Places, and it is not included in the Massachusetts Historical Commission's inventory. Although it is adjacent, the Mill Dam is not part of the Ipswich Mills Historic District or the South Green, which are both listed in State and National Registers. Nevertheless, the IHC recognizes that, whatever the fate of the Ipswich Mills Dam, it should be memorialized, and its story told alongside the other mills and dams that were so much a part of the development of our town.

In summary, the IHC used a historic lens to consider not just the last few hundred years of history along the Ipswich River, but also the many millennia that preceded it. The Ipswich River is far more than a ribbon of water dumping its contents into the sea. For 14,000 years, it has shaped the land, nourished flora and fauna, sustained the lives of Indigenous Peoples and European settlers, and was instrumental in the birth of our historic town. The IHC believes that we can best preserve the history of the Ipswich River by freeing it from unnecessary man-made encumbrances. To further this end, the IHC is in favor of removing the Ipswich Mills Dam.

We are encouraged by other dam removal projects already underway in upstream communities, and by vigorous local and state programs to restore our state's rivers. Removal of the Ipswich Mills Dam will restore the natural Upper Falls and may expose the early ford that disappeared in the 19th century. Thirty feet above the mill dam, a low 17th- or 18th-century crib dam that is believed to still exist may reappear. The homing migrations of alewife will be an annual attraction and a source of pride for our residents.