Massee Lumber Mill Dismantled
As Part of Plan to Restore Migratory Fish

Using trucks to move thousands of fish into a lake isn’t exactly the way nature intended, but sometimes that’s what it takes. In the spring of 2014 Maine’s Department of Marine Resources stocked 21,000 adult alewives in China Lake as an important first step in the Alewife Restoration Initiative. Another important step took place this summer when the collapsing Masse saw mill, on the site of the former Masse Lumber Company in East Vassalboro, was dismantled. And the mill pond behind the Masse Dam has been drawn down, allowing re-vegetation to occur in anticipation of the dam removal.

Alewives are native to China Lake but haven’t been seen there for generations, not since mills and dams were built more than one hundred years ago. A migratory species, adult alewives (also known as river herring or by their Latin name, *Alosa pseudoharengus*) migrate every spring from the ocean to lakes and ponds to reproduce before migrating back to the ocean. They are a small silvery fish, known as the “fish that feed all” because of the great number of creatures that eat them-- from whales, eagles and osprey to turtles, brook trout, otter and mink.

Above: Volunteers collect data during drawdown of Masse mill pond

Below: A winning 5th grade poster with an alewife’s lament: “Help me I am stuck! Get this dam breached, please!” at the 2016 China Lake Association annual meeting

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Spearheaded by Maine Rivers, the Alewife Restoration Initiative (ARI) is an ambitious partnership of organizations and community members working together to re-establish fish passage past six Outlet Stream dams; dams that block native migratory fish trying to make their way upstream to China Lake from the Sebasticook River. The goal of the project is to restore an annual run of 800,000-950,000 adult alewives. American eel, blueback herring, sea lamprey, white sucker and brook trout will also directly benefit from the project.

Associated with the former Masse Lumber Company, the saw mill and dam date back to about 1795. Now removed, the saw mill had become a serious liability for the East Vassalboro Water Company, LLC (EVWC), owners of the property. EVWC is a small public water company that serves about 200 people. Running under the mill, the company’s water pipes were at risk of damage and contamination as the old saw mill building slowly sagged, with window frames popping out panes of glass and floors collapsing into the stream channel. As part of the restoration work, water pipes, including a cast iron water main just below the dam and water lines located in the impoundment, will be moved permanently out of the stream. The project provides tremendous benefits to customers of the East Vassalboro Water Company, the small investor-owned company that could not afford these important upgrades.

Removing the Masse saw mill was a considerable undertaking. The old mill had been listed on the National Registry of Historic Places in 1982. Before it could be taken apart, the entire history of the site had to be fully documented according to precise specifications of the Maine Historic Preservation Office. While that work was being done, volunteers from the Maine Forest and Logging Museum in Bradley visited the site to look for historic equipment that they were able to bring to the museum where it will be part of their rotary sawmill display. Historic machinery was also donated to the Vassalboro Historical Society. While the saw mill has been dismantled and dam will be removed, the historic grist mill remains on the site, with the Outlet Stream flowing by.

The project has not been without controversy; dam removals always face challenging the status
Masse concluded

Not So Fast in Orland

In June, residents of Orland voted 433 to 242 in favor of retaining the Orland Village Dam. Built in the 1930s the dam was owned by Verso Paper until 2010 when it was turned over to the Town. Once home to a prolific alewife river, the Narramissic River fishery has greatly declined. Dam removal would benefit not only alewives but also American eel, blueback herring, American shad, rainbow smelt, brook trout, Atlantic salmon and, possibly, shortnose sturgeon. Voting to retain the dam, the community opted for dam maintenance costs and eventual costs associated with federal requirements for fish passage.

A version of this article appeared in the Town Line.

Hydropower Not So Green After All

New research to be published in BioScience indicates that reservoirs behind dams contribute significant amounts of methane, a greenhouse gas, to the atmosphere. Unlike natural lakes, man-made reservoirs and impoundments flood existing ecosystems of trees and vegetation, which emit gases as they decompose underwater. Drawing down impoundments also exposes the shoreline and alters the pressure of water on the reservoir, allowing methane to bubble into the atmosphere. As research has advanced, estimates of the amount of methane put into the atmosphere by reservoirs have increased 25%. Unlike power plants that only emit carbon when they operate, hydroelectric dams as well as non-hydro reservoirs created for irrigation and drinking water, appear to continually pollute the atmosphere.

St. Croix Returns

This year a total of only 33,016 river herring were counted at the Milltown, the first dam on the St. Croix; a large drop from the previous year and millions below the river’s vast potential. Plagued by known technical problems, the Milltown fishway’s issues are being addressed jointly by Canadians (the dam is owned by New Brunswick Power Corporation) and Americans as the US federal fisheries agencies and Passamaquoddy tribal members remain engaged in restoring this international waterway.
Reflections on a Year of Advocacy on the Stream

By Tina Wood

Cobbosseecontee Stream, “The gathering place of many sturgeon,” in Abenaki, has captured my heart.

I didn’t intend to spend every free moment helping Gardiner folks understand the need to preserve, protect and create fish passage on our gem of a stream in downtown Gardiner, it was just that this sweet little waterway behind old shattered forgotten mills and abandoned industrial sites was the closest wild place to my home in the leafy neighborhood perched above it banks. Its roar and gurgle called to me, the whistle of osprey beckoned me down over the weedy banks to explore. The beavers and muskrats captivated me with their busy work circling in the pools, while the eagles and herons used the stream as a supersky highway. Foxes, fishers, otters, minks ran the banks as thousands of alewives struggled to pass derelict granite dams. The townspeople would not abide the magnitude of loss and destruction if they only knew and they would want to celebrate the life the stream supported.

One small voice, one tiny step led to another and another until quite a passionate group was created to inform change on Cobbossee Stream. Our simple motto, “Do one small thing for fish passage a day” keeps the load light as we navigate a course through, over and around three downtown dams. Together as a community we demonstrated for fish passage, celebrated alewives and migration through art, we led nature walks on our stream, we hosted educational workshops and forums and we went on field trips to educate ourselves on the possibility of fish passage on the stream we love.

Over three! We can do it! Won’t you join Upstream as we begin another year of advocacy and fun on the stream? Or advocate for your stream in your backyard. It will change your life and help create a vibrant natural resource for the wildlife who call it home. -Tina Wood is an artist, teacher and resident of Gardiner. Visit Upstream’s Facebook page for updates.

Alewife art images courtesy of Tina Wood and Upstream
Maine Rivers Board of Directors Welcomes Two New Members

With a long and successful history of advocacy efforts to support healthy rivers, the Maine Rivers Board of Directors is pleased to welcome Chuck Verrill of Islesboro. For many years Chuck practiced law in Washington D.C., most recently at Wiley Rein LLP, where he is now of counsel and Chair Emeritus of their International Trade Practice. Chuck has been an Adjunct Professor of International Trade Law at Georgetown University Law Center since 1978 and a Senior Lecturing Fellow at Duke Law School. Chuck has acted as pro bono counsel on a number of river restoration issues involving the Penobscot, Kennebec, Sebasticook, and St. Croix Rivers. For the past several years, he has been president of Islesboro Islands Trust. Chuck has six children and eight grandchildren, and is an avid fly fisherman and devoted fan of Duke basketball.

Dave Courtemanch spent much of his career with the Maine Department of Environmental Protection as the Director of the Division of Environmental Assessment, responsible for monitoring and assessment of the state’s lakes, rivers, wetlands, marine, and ground water. He developed many of the state’s water quality standards. A focus of his work has been biologically-based water quality standards and biomonitoring methods for assessment of water quality. He was also involved in the defeat of Dickey-Lincoln and Big A dam proposals; Edwards Dam and other dam removal projects; analysis and licensing of major dischargers; the initial detection and removal of dioxin; analysis of mercury contamination; treatment of color, odor and foam in Maine’s rivers; development of statewide environmental flow criteria; and most recently the Penobscot River restoration project. He now works with The Nature Conservancy.

Maine Rivers has hired Matt Streeter as the Alewife Restoration Initiative Project Manager. Matt has completed successful river restoration work for Trout Unlimited, including the Swett Brook Dam removal project in the Crooked River watershed near Sebago Lake. The project restored access to three miles of prime spawning habitat for native landlocked salmon migrating out of Sebago Lake, and for native brook trout in the watershed. The ARI project has received a second year of funding from the Elmina B. Sewall Foundation that will support Matt’s work on the project, as well as generous support from The Nature Conservancy.

www.mainerivers.org
Mousam River Update

After much consideration, the Trustees of the Kennebunk Light and Power District voted not to seek a new license from the Federal Energy Regulatory Commission for the three lowest Mousam River dams and cease operating its hydropower facilities. The Board judged that continuing hydropower operations was uneconomical, given the high costs of relicensing and likely fish passage requirements. This decision has become controversial. A number of households whose properties abut the Kesslen Dam impoundment have banded together to save the dams despite knowing such a decision will impose massive financial costs on the rest of the Kennebunk community, and forego this once in a generation opportunity to restore the river’s health. The ‘save the dams’ contingent has put a series of questions on Kennebunk’s November ballot, however none of the questions address the costs associated with retaining and maintaining the inefficient hydro operations.

Union River Update

The Union River dam in downtown Ellsworth was built in 1906 and, at the time, was the highest dam in the state. It generated power for the residents on Mount Desert Island. Today it only generates peak power—when electricity prices are the highest. The dam’s federal license must be renewed next year. The last time it was renewed, in the early 1990s, the license stipulated that the owner (not Brookfield at the time) must build a fish passage over the dam. After the license was issued, the owner convinced the regulatory agencies that it could effectively and adequately transport fish over the dam by using the trap and truck method; fish are trapped at the foot of the dam and trucked over it and released into the watershed upstream. It hasn’t been very effective. Now the Downeast Salmon Federation and partners are actively working the relicensing process to ensure that the owner, Brookfield, is required to get at least 95% of the fish over the dam within 24 hours of their arrival at the dam. How they do it is up to them, but it’s not likely to be by trap and truck.

Coopers Mills Dam—Going, Going

In March a majority of the 100 or so registered voters in Whitefield who turned out for the annual Town Meeting approved a proposal to remove the Coopers Mills Dam on the Sheepscot River. The Atlantic Salmon Federation, the Midcoast Conservancy and the Coopers Mills Dam Committee worked for more than a year to draft a proposal that called for building three dry hydrants, creating historic and environmental interpretation at the site. A federal grant of $393,000 from the National Oceanic and Atmospheric Administration will finance the dam removal. Whitefield voters also voted to install solar panels on the fire station roof.
Fish-friendly in Brownfield

The Sebago Chapter of Trout Unlimited worked with the Town of Brownfield to obtain a Maine Water Bond grant to replace two undersized culverts on Porter Road at Linscott Brook with an open bottom, fish-friendly aluminum arch bridge. A barrier to fish passage, the culverts were prone to ice jams that caused road closure and flooding. Linscott Brook is a feeder to the Shepards River in Brownfield - the watershed contains some of the area’s best small-water brook trout habitat. Next year a larger project will be executed on the main stem of the Shepards River. Together, the two projects will reconnect nearly ten miles of high quality, wild native brook trout habitat upstream to over 25 miles of habitat downstream all the way to the Hiram Falls Dam on the Saco River.
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We love healthy rivers and the life they support. But we can’t do our work without your support. Please make a generous donation to support our work to protect and restore Maine’s rivers and streams. Heron courtesy of Linwood Riggs