**Can the Kennebec River be a Shangri-La for Fishes Again?**

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Can the Kennebec River be a Shangri-La for fishes again? Only if the relevant agencies reject failed “same old, same old” management paradigms.

There is an opportunity at the moment that should not be squandered. Allowing a “trial” of fish ladders on the four lowermost dams on the Kennebec will almost certainly greatly retard any Atlantic salmon recovery, something easily surmised by examination of the performance of fishways for the salmon species, especially when multiple fishways form a gauntlet. We are at a fork in this road where we either commit to standard practices and their track record of failure or we steer towards the oft-proven remedy of dam removals.

In his classic 1937 work “The Kennebec: Cradle of Americans,” Robert Tristam Coffin called Maine’s sprawling river a “a Shangri-La for fishes,” but an array of dams blocking spawning runs for its suite of iconic migratory species, including Atlantic salmon, sturgeon, and shad put an end to that. Most critically, there are four hydro-dams in the lower river that prevent federally endangered salmon from reaching their single most important spawning tributary in the U.S., the Sandy River. A confluence of factors makes this the time to right this wrong.

The number of salmon in New England has fallen from as many as one-half million to fewer than one-thousand, and the Kennebec’s population alone from more than two-hundred thousand to single digits in some years. Sadly, because of these dams, the few salmon that still show up in the mainstem Kennebec must rely on the internal combustion engine to reach their spawning grounds—they are netted and driven by truck to reach the Sandy.

In its influential 2023 Biological Opinion, The National Marine Fisheries Service offered a tortured analysis, stating that the proposals by the dam owner, Brookfield Energy “may adversely affect but not likely to jeopardize the continued existence of Gulf of Maine . . . Atlantic salmon . . . “ This gloomy assessment points to the need to reject the relicensing of the four dams and Brookfield’s plan that features engineered fish passage facilities such as fish ladders and fish elevators—half-way measures that would lock in another thirty years of failure. Not only do fishways on rivers with just a single dam often perform poorly but the track record for such contrivances on rivers with two or more dams is dismal.

The solution of dam removal has already proven itself across the U.S., including on the Kennebec. The landmark demolition of its Edwards Dam in 1999 allowed migratory fish access to 17 miles of river that had been occluded for 162 years. This reach immediately came back to life, most notably with an important lobster baitfish, river herring, recolonizing the Sebasticook tributary where in a few years their numbers skyrocketed from zero to six million. Such was the impact that a local community launched an annual festival celebrating return of these fish. And Bald Eagles took note too, with daily counts as high as sixty-four of the avian predators feasting on the herring, and forming what may be the largest summer aggregation of Bald Eagles in the Northeastern U.S.

There is a parallel circumstance on the West Coast where four dams blocked California’s Klamath River, but one with a more progressive conclusion. There, instead of relying on fishways, all four dams were removed in a bold effort to help ensure ecological recovery. It has shown immediate benefits to its migratory fish, something that would no doubt also occur on the Kennebec.

The Kennebec plan proposed by FERC also does not acknowledge the major changes in Maine’s energy mix that will occur in coming years. The four hydro dams provide only modest electricity generation, with a total capacity of about 43 MW, a quantity that my research has shown could be replaced with just over 200 acres of solar facilities, or 22% of the existing reservoir area. https://onlinelibrary.wiley.com/doi/abs/10.1002/fsh.10619

However, over the next two decades there is also the promise of enough offshore wind power development to dwarf hydropower output, in Maine and elsewhere. By 2040, it is expected that the Gulf of Maine will generate three-thousand MW of electricity, more than seventy times that of the lower Kennebec hydropower array, a surfeit of power that would compensate for removal of the four dams many times over.

It is heartening to see nature accelerate in response to restoration efforts; the Kennebec is shouting that it could be a Shangri-la again. In June 2023, there was a never-before-seen migration of giant sturgeon into a small Kennebec tributary, the Cobbosseecontee Stream. At its peak there were about two-hundred sturgeon ranging to ten-feet long spawning in a trout-stream sized pool, all visible to an enraptured public viewing it from a bridge.

Arriving too late to witness this phenomenon, I sat on a nearby dock on the mainstem and was privileged to see a four-foot long sturgeon in make a great arching leap just yards away from me and an osprey carry off a river herring—strong signs of a river already partially reborn from the removal of just the Edwards Dam alone.

FERC’s rejection of the dam removal option flies in the face of removals elsewhere that show that the results of engineered fish passage on multiple dams on the paths of migratory fishes is woefully ineffective. And replacement sources of energy are at hand that could provide the leeway to free the Kennebec. Removals of the four dams on the lower Kennebec are needed to further resurrect the ecology of this great river.

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