

Modern fishway is essential for dam's future

After following *The Ellsworth American's* coverage of the fish kills at the Leonard Lake Dam, resulting letters to the editor and commentaries and the recent articles "The future of the Union River Dam" and "Dam still a vital part of Ellsworth," I am compelled to respond because the discussion has moved far off topic.

The issue before the Federal Energy Regulatory Commission (FERC) is: Does the hydropower facility provide adequate fish passage for migrating fish as required for relicensing?

The simple answer is "No, and a modern fishway needs to be installed." The current existing conditions do **not** provide adequate fish passage for several reasons, all documented by reputable organizations and scientific studies.

The Downeast Salmon Federation has documented numerous mutilated and dead juvenile alewives and adult eels below the dam each fall since 2014. A quick online search yields many articles and photos showing the inadequacy of the fishway.

FERC required the federal license holder, Black Bear Hydro Partners, LLC (BBHP), to perform several studies including fish passage issues in response to concerns about the fall fish kills associated with the Leonard Lake Project.

BBHP prepared the 2015 Annual Report to the Union River Fisheries Coordinating Committee, which states that 330,000 river herring were trapped and trucked to Graham and Leonard lakes in 2015.

Current stocking efforts are merely 17 percent of the Department of Marine Resources (DMR) standard for a sustainable commercial harvest, which recommends a minimum population density of 235 river herring per acre. The Department of Inland Fisheries and Wildlife (DIFW) lists the combined acreage of Leonard and Graham lakes at 7,955 acres. Nearly 1.9 million river herring would need to be stocked to reach this goal.

The 2015 study also includes a radio-telemetry study indicating 43 of 47 tagged adult eels released above the Leonard Lake dam were detected passing through three of the four

turbines at the dam with an overall 53 percent survival rate. The physical condition of the surviving eels was not examined. Four eels passed the dam undetected, and no eels were observed using the existing downstream fishway.

So why should we be concerned about improving fish passage on the Union River? Who cares if a few eels get chopped up?

The value of the 2012-14 Union River elver fishery totaled \$5.4 million. Landings data obtained from DMR indicate 1,500 pounds of elvers, with an average value of \$1,800 per pound, were harvested from the Union River in 2013. This fishery provided harvesters with \$2.7 million. Unfortunately, the swipe card data from 2015 and 2016 have not been compiled by DMR.

The Union River Watershed could produce over 2 million river herring annually, with a modern fishway at the Leonard Lake Dam. Ecological and economic advantages to maximizing river herring production in the Gulf of Maine would have major local impact.

The preferred bait for Maine's iconic lobster industry is the Atlantic herring, but concerns about its status have led to bait shortages. Fishermen now use frozen bait imported from places that may contain dangerous, invasive, non-native organisms that might survive being frozen. A healthy river herring population could sustain the lobster industry in the spring and reduce the need for alternatives.

Increasing the productivity of the Union River is critical to the economic stability of Hancock and Washington counties. Eastern Maine is one of the most economically depressed areas in the United States and relies heavily on responsible harvesting of our natural resources, especially our marine resources.

This important issue is evident in Colonial Law and early Maine Law, which required fish passage at dams. Maine became a state in 1820 and soon passed Chapter 213 of the Laws of the State of Maine in 1823. This chapter states in part: "Be it enacted... That if any person shall make or continue any dam or other obstruction, in or across the Union River,... through or into which salmon, shad and alewives have ever been accustomed to pass, for the purpose of casting their spawn, without providing and keeping constantly

open and clear, a sufficient passage or sluice way for such salmon, shad and alewives to pass and repass,...every such person shall forfeit and pay a fine not exceeding two hundred dollars, nor less than fifty dollars.” That would equate to a maximum fine of roughly \$4,500 today.

Concerned citizens should take this opportunity to insist the majority owner, Brookfield Asset Management, install a modern fishway at the Leonard Lake Project that is capable of providing safe passage for all known migratory fish species living in the Union River Watershed, before a 30-year license is issued to its subsidiary, Black Bear Hydro Power, LLC.

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