Testimony in Opposition to LD 1979, "An Act To Sustain Good-paying Jobs in the Forest Products Industry by Ensuring Consistency between Comprehensive River Resource Management Plans and State Water Quality Standards."

Jeff Reardon, Maine Brook Trout Project Director February 28, 2022

Senator Brenner, Representative Tucker, and members of the Joint Standing Committee on Environment and Natural Resources:

My name is Jeff Reardon. I am the Maine Brook Trout Director for Trout Unlimited, and I am testifying on behalf of Trout Unlimited's Maine Council in opposition to LD 1979, for three reasons. (1) LD 1979 is not necessary to "sustain good paying jobs in the forest products industry." (2) LD 1979 will not ensure consistency between Comprehensive River Resource Management Plans and State Water Quality Standards. Instead, it will outsource those decisions to bureaucrats at the Federal Energy Regulatory Commission. (3) LD 1979 ignores a mountain of evidence—much of it from comprehensive studies at the University of Maine—that suggests that even the best constructed fish passage is inadequate to restore sea-run fish, including endangered Atlantic salmon, above multiple dams.

1. **LD 1979 is not necessary to sustain good-paying jobs in the forest products industry.** The bill's supporters claim that it is necessary to prevent removal of the Shawmut Dam, which they believe would have unacceptable impacts to water intake and discharge infrastructure at Sappi's Hinckley mill in Skowhegan. We understand their concern. The Sappi mill is one the region's largest employers. We have members who work in the mill, or who depend on the mill as a market for wood products they harvest or haul. The legislature should understand that both Governor Mills and the Kennebec Coalition have assured Sappi management and workers that we would not press for removal of the Shawmut Dam unless it can be done in a way that either maintains the mill's existing infrastructure or replaces it before dam removal begins. The Kennebec Coalition's letter went out with my signature on it, among others, and we take that commitment seriously. (Both letters attached.)

   In addition to assurances from the administration and from us as proponents of the dam's removal, state and federal regulatory processes that would need to review any proposed dam removal would analyze any community or economic impacts of a proposed dam removal before issuing a permit that would allow it.

   Any project that would result in closing the mill would have a devastating impact to local communities and the regional and state economy and would be very unlikely to be approved. Review of a hydropower dam removal by Maine DEP under the Maine Waterway Development and Conservation Act would occur under the statutory approval criteria in the MWDCA (http://www.mainelegislature.org/legis/statutes/38/title38sec636.html) and the DEP's rules for administering it (http://www.maine.gov/sos/cec/rules/06/096/096c450.docx). These include (citing from the statute):

   Public benefits. The project will result in significant economic benefits to the public,

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including but not limited to, creation of employment opportunities for workers of the state.

There is no way that standard could be met by a project that would close a mill. For this reason, other dam removals that have occurred in Maine over the past 25 years have carefully considered the impacts of the proposed removal on private and public infrastructure and provided plans for and funded any necessary remediation or replacement. For example, when the Edwards Dam was removed, part of the dam removal effort was to construct a new water intake for the Keyes Fiber Mill. More recently, a much more expensive replacement water intake was constructed for what was then Old Town Fuel and Fiber—now Nine Dragons—when the Great Works Dam was removed. The water intake was a more expensive project than either the Great Works or the Veazie Dam removals.

2. **LD 1979 will not ensure consistency between Comprehensive River Resource Management Plans and State Water Quality Standards.** The bill proposes to change Maine statute in two places. The first would require the Maine Department of Agriculture Conservation and Forestry to complete Comprehensive River Management Plans for "each watershed with a hydropower project." The Federal Energy Regulatory Commission's (FERC) database contains hydropower projects sorted by "waterway" in 29 Maine watersheds. Completing those plans would be a substantial undertaking, well beyond the current capacity of the DACF to complete in a timely way. Even if we only look at the next few years, there are 20 Maine hydropower projects in 14 different watersheds with licenses that expire between 2022 and 2026. Maine would essentially be holding up both opportunities to improve Maine water quality and timely processing of applications for hydropower licenses until those plans are completed and approved by the Legislature. Expect a big fiscal note for that job.

   The second statutory change would amend the "anti-degradation" policy in Maine's water quality standards, to prevent the Maine DEP from requiring any condition related to a fish or wildlife species listed under the US Endangered Species Act that is stricter than a condition proposed by FERC. In addition to putting EPA's delegation of authority to administer Clean Water Act permits to the Maine DEP at risk, this change creates a circular do-loop of the FERC licensing process: FERC can't issue a permit for a hydropower project unless the state of Maine has issued a Water Quality Certificate. Maine can't issue a Water Quality Certificate that's any stricter than whatever FERC requires. I have no idea how that would work in practice—and neither does anybody else. The only solution might be for Maine to waive its authority and defer to FERC—which may be the intent of this provision and is likely to be the result whether intended or not. It will outsource decisions about Maine's fish and wildlife to FERC staff in Washington who may never have seen a Maine river before they set conditions for it that we'll have to live with for 40 or more years.

3. **There is growing evidence—much of it based on studies conducted by researchers at UMaine—that traditional upstream and downstream passage structures are not effective, especially on rivers where fish must pass more than one dam to migrate from ocean to inland habitat.** I suspect you are going to hear a lot today about 96% vs 99% fish passage success. This greatly oversimplifies the challenge that endangered salmon and other fish face on the Kennebec River, with are four dams between the mouth of the Kennebec at Popham and spawning habitat in the upper reaches and tributaries of the Sandy River. To complete its life

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cycle, a salmon born in the Sandy River on its way to the ocean needs to survive passage over four dams in the 32 miles between the mouth of the Sandy River in Norridgewock and the Waterville—27 miles of which are impounded behind the four dams, making them deeper, warmer, slower, and better habitat for predators. If they survive that on the way downstream and return as adults, they face the same four dams and the same 27 miles of warm impoundments full of predators, on their way back upstream.

If you think 96% sounds pretty good—after all, 96% is an A! —consider that the loss at each dam is compounded over a total of 8 dam passages during the lifecycle of each generation of salmon will suffer cumulative losses, for a cumulative loss of about 20% the population. That's assuming everything goes right: no equipment ever breaks, floods and droughts and human error don't lower fishway effectiveness, and we don't consider the impacts of delays and stress and predators that occur at each dam, and we ignore the impacts of the impoundments behind them.

Researchers at UMaine have been studying tagged adult and juvenile fish and their passage success on the Penobscot and the Kennebec for well over a decade to assess what happens in the real world. It's a bleak picture. For example, in her 2021 thesis[1], Sara Rubinstein documented weeks of delay for salmon attempting to pass the Lockwood Dam and demonstrated that these delays lower spawning success and prevent salmon from surviving to spawn a second time. Similar delays at the other dams would compound these impacts and might prevent salmon from reaching upstream habitat at all. In a presentation presented last month at the Atlantic Salmon Ecosystems Forum here in Maine, another UMaine student, Matthew Mensinger, based on data from tagged juvenile salmon on the Penobscot River, found that more than 30% of tagged salmon smolts were lost to predation, and that predation was 36 times higher in impoundments than in free-flowing river segments.[2] Joe Zydlewski, a faculty member at UMaine, recently published a paper assessing passage of American shad at dams and concluded that even with optimistic assumptions about fish passage success, constructing fishways at every dam could restore no more than 9% of the spawning potential lost to dam construction.[3]

This bill is unnecessary. It takes decisions about Maine rivers and Maine dams out of the hands of officials at the Maine DEP and Maine Department of Marine Resources and puts them instead in FERC's hands. It will create a massive amount of work for the Maine DACF, with no staff or resources for them to complete it. And by ignoring the best science about dams, fishways, and recovery of sea-run fish—much of which is coming directly from faculty and researchers at UMaine—it will prevent further recovery of sea-run fish in Maine and doom the nation's last salmon to extinction.

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[1] Rubenstein, Sarah R., "Energetic Impacts of Passage Delays in Migrating Adult Atlantic Salmon" (2021). *Electronic Theses and Dissertations*. 3468. https://digitalcommons.library.umaine.edu/etd/3468

[2] Mensinger, M. et al. Using acoustic predator tags to characterize predation on Atlantic Salmon smolts. Atlantic Salmon Ecosystems Forum; 2022 January 11-12. Abstract at page 39: https://atlanticsalmonforum.org/assets/2022%20ASEF%20Full%20Program%20and%20Abstracts.pdf).

[3] Zydlewski J, Stich DS, Roy S, Bailey M, Sheehan T and Sprankle K. (2021) What Have We Lost? Modeling Dam Impacts on American Shad Populations Through Their Native Range. Front. Mar. Sci. 8:734213. Accessed at: https://www.frontiersin.org/articles/10.3389/fmars.2021.734213/full

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Sean Wallace, Managing Director
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Via Electronic Mail

November 15, 2021

Dear Mr. Wallace:

We are writing on behalf of the Kennebec Coalition[1] and the Conservation Law Foundation (CLF) concerning Brookfield's four Kennebec River dams between Waterville and Skowhegan. We share the view expressed by Governor Mills, Senator Troy Jackson, and many others that whatever solution works to improve sea-run fisheries in the Kennebec must allow the Somerset Mill to continue to thrive. We would like to set up a Zoom or phone call with you to make clear our interest in finding a workable solution.

As you know, we believe that the best solution to restoring endangered Atlantic salmon and other migratory fish to the Kennebec is the removal of these four dams. These dams are the most destructive in Maine in terms of their impacts to Atlantic salmon and sea-run fish, and they generate an insignificant amount of power. For example, these four dams account for only 0.43%[2]of Maine's energy generation, and the Solar Energy Industries Association estimates that the capacity of new solar installations in Maine over the next five years will be more than five times greater than the capacity of these four dams.[3]

Like removals of the Great Works and Veazie Dams on the Penobscot River and the Edwards Dam on the Kennebec, which required moving in-river infrastructure, there could be a win/win solution on the Kennebec that benefits the environment and addresses impacts on businesses and communities, including the water intake and discharge at Sappi's Somerset Mill. The ecological and recreational benefits that would occur through restoration make us confident that private and government funding would be available for these purposes, as has occurred with these other projects in Maine and across the nation.

We urge Sappi to work with Maine's resource agencies and federal fisheries agencies to examine the effects of the potential removal of the Shawmut Dam on the Somerset Mill. We believe that a careful and transparent examination of the situation will produce a solution where the in-river infrastructure of the mill could be modified in a manner that meets the mill's needs should the Shawmut Dam be removed. The increased river velocity and mixing that would result from dam removal might also allow

[1] The Kennebec Coalition is the Atlantic Salmon Federation, Maine Rivers, the Natural Resources Council of Maine, and Trout Unlimited and its Kennebec Valley chapter.
[2] Maine Department of Marine Resources. 2020. Kennebec River Management Plan Diadromous Resources Amendment. P. 30. Accessed at: https://www.maine.gov/dmr/laws-regulations/documents/Final%20Amendment_12_22.pdf#page=30
[3] See https://www.seia.org/state-solar-policy/maine-solar.

Sappi to meet water quality standards more easily in the river reach where it discharges wastewater. However, if such an analysis finds that there is no way for the Sappi mill to function without the impoundment created by the Shawmut Dam, the Kennebec Coalition and CLF would work with all parties to come up with a fish passage solution that maintains the water levels needed to operate the mill, including retaining the dam if necessary.

We know that Brookfield's proposed construction of a single fish lift at Shawmut will not work to meet its legal obligations, a conclusion also reached by the Department of Marine Resources. Brookfield's proposed measures at Shawmut and the other three lower Kennebec dams are inadequate and will never work for Atlantic salmon and the river's full suite of native sea-run fish. Similar approaches on the Connecticut and Merrimack Rivers, for example, have resulted in the extirpation of Atlantic salmon in those rivers.

Brookfield's Milford Dam fish lift on the Penobscot does not meet upstream Atlantic salmon passage standards, even though those standards are less ambitious than what Brookfield has proposed on the Kennebec. In fact, no fish lift at any dam anywhere meets the upstream Atlantic salmon standards that Brookfield claims it can meet at its Kennebec dams. For this reason, Brookfield's proposed approach is doomed to fail.

This is Brookfield's problem to solve. Brookfield is violating federal law, and Brookfield must recognize that the harm these dams do vastly outweighs their small contribution to energy generation in Maine.

We look forward to finding an opportunity to discuss this issue with you further.

Sincerely,

John Burrows, Executive Director of U.S. Operations, Atlantic Salmon Federation

Sean Mahoney, Vice President, CLF Maine

Landis Hudson, Executive Director, Maine Rivers

Nick Bennett, Staff Scientist, Natural Resources Council of Maine

Jeff Reardon, Maine Brook Trout Project Director, Trout Unlimited

STATE OF MAINE
OFFICE OF THE GOVERNOR
1 STATE HOUSE STATION
AUGUSTA, MAINE
04333-0001

August 25th, 2021

To all SAPPI employees,

The Sappi mill is critical to Skowhegan, the surrounding region, and the State of Maine, providing good-paying jobs to Maine people and an important tax base for local residents. As one of the last remaining pulp mills in the state, it is also an integral component of our forest economy supply chain, supporting landowners, loggers, and truckers, among others. Closure of this mill, and the resulting ripple effect across the industry, including job losses, would not be acceptable to me – and I will not allow it to happen. My Administration's commitment to the mill is clear and unwavering.

My Administration also supports pursuing avenues to help restore the Kennebec River, an important habitat for migratory fish like Atlantic salmon, shad, and river herring. Currently, these fish are not able to reach prime spawning habitat, including the Sandy and Carrabassett Rivers, which risks their survival as a species and causes the Kennebec River to fail to meet State and Federal standards. Some people have wrongly suggested that the State is requiring the removal of the Shawmut Dam, going so far as to employ scare tactics and to suggest that my Administration wants to close the mill. Let me be clear: this is untrue. It is not necessary to remove the Shawmut Dam in order to allow fish to pass through successfully. There are good options to achieve fish passage goals without adverse impacts to the mill. For example, the Department of Marine Resources has proposed a natural fish passage that would protect the dam and support revival of Atlantic salmon – a solution I am very interested in.

I have spent my career, both as Attorney General and now as Governor, focused on finding practical solutions to real world problems because that's what Maine people do: we work hard and solve problems. My Administration will protect the mill and its important contributions to Maine's economy, and we will work to restore Atlantic salmon passage by pursuing innovative solutions. My Administration will continue to stand by Sappi, as we have always done, and will work with stakeholders and Federal regulatory agencies as this process moves forward. Brookfield owns the dam and they must play a constructive role in protecting the mill and improving prospects for fish passage to meet state and federal standards. I am calling on them to come to the table to work in good faith to improve this situation, not to engage in fear-mongering of local communities.

Sincerely,

Governor Janet T. Mills

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