Natural Resources Council of Maine
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**Testimony in Opposition to LD 430, An Act to Impose Moratoria on Hydropower Dam Removal and on Water Release from Nonhydropower Dams and to Make Other Changes to the Laws Regulating Such Dams (Emergency)**

**Before the Committee on Environment and Natural Resources**

**Luke Frankel, Staff Scientist**

**April 7, 2025**

Senator Tepler, Representative Doudera, and distinguished members of the Environment and Natural Resources Committee, my name is Luke Frankel, and I am the Staff Scientist at the Natural Resources Council of Maine (NRCM). NRCM is Maine's leading nonprofit, nonpartisan membership organization dedicated to protecting the environment on behalf of our nearly 20,000 supporters statewide and beyond. I am here today to testify in opposition to LD 430.

Historically, dams have played a key role in supporting Maine's heritage industries of logging, papermaking, and textile production by controlling river flows and generating mechanical power. However, as these industries and their supporting technologies have changed over time, many of the dams in Maine have long outlived their primary functions. Some of the larger historical dams have since been retrofitted to produce hydropower and some continue to provide recreational benefits; however, for many dams in Maine, the negative ecological impacts can overshadow economic and cultural benefits.

Like any form of development, dams come with a host of environmental impacts. Most notably, these include restricting the passage of fish and other aquatic organisms, disrupting the transport of sediment and nutrients, altering the natural flow of water, and promoting negative water quality conditions. When these environmental impacts greatly outweigh economic benefits or a dam is no longer economically viable, dam owners often seek to relinquish ownership of the asset or remove it.

Across the more than 1,000 known dams in Maine,[1] the positive and negative impacts at each one vary substantially depending on the conditions present. For some dams, the positives outweigh the negatives, and the continued operation of the asset makes sense from a risk-benefit perspective. For others, the negatives far outweigh the positives by almost every metric, and removal of the asset is the only logical course of action. As a result, we strongly oppose any blanket mandate that ignores this nuance, even if it is only temporary.

Most of the dams in Maine are old, with an average age of 108 years, and require costly upgrades to continue operating while ensuring public safety.[2] Many communities across Maine today are facing tough decisions about what they should do with this aging infrastructure – decisions like whether they should increase property taxes to cover required maintenance costs and comply

[1] Maine Section of the American Society of Civil Engineers, 2024 Report Card for Maine's Infrastructure, Accessed March 27, 2025.
[2] US Army of Engineers (USACE), National Inventory of Dams, Accessed Mar 11, 2024.

with state and federal laws or remove dams that have historical and cultural significance. We believe that it is counterproductive to take viable options off the table for these communities.

The process of removing a dam is a long one that requires extensive feasibility studies, stakeholder engagement, planning, fundraising, permitting, environmental assessments, engineering studies, and finally deconstruction. NRCM is intimately familiar with this process through our involvement with several dam removal projects over the years. Instituting a temporary moratorium for dam removal would introduce a level of uncertainty in this long process that could jeopardize future dam removal projects after 2027.

In addition to the moratoriums on dam removal and water level release, this bill also includes two other main provisions. One is several amendments to statute related to the release from dam ownership and water level maintenance, increasing key deadlines for consultation, reporting, and evaluation by 30 days. The second is a directive to the Maine Department of Environmental Protection (DEP) to evaluate options for programs and initiatives that address negative impacts associated with dam removal. We defer to Maine DEP's judgement on whether the extension of deadlines outlined in the bill are warranted and believe that many of the negative impacts that the directive to the Department aims to address are issues that are already carefully evaluated and considered under the current permitting process for dam removal.

At a time when so many communities across Maine are grappling with how they should deal with aging infrastructure under difficult economic constraints, we should be providing them with more options, not fewer. In this case, taking options off the table even temporarily would also open the door to unintended consequences and potential long-lasting impacts. For these reasons, we strongly encourage the Committee to vote Ought Not to Pass on LD 430. Thank you for your time and consideration.

# EXECUTIVE SUMMARY

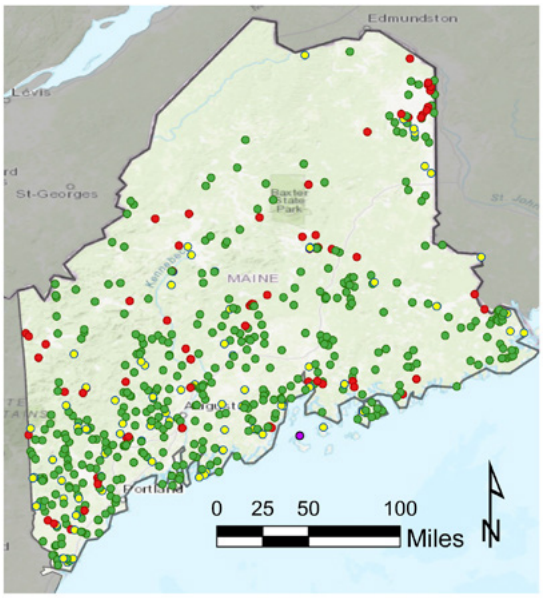
The average age of Maine's 672 dams is 108 years; of the 54% of these dams whose conditions have been assessed, half are in satisfactory condition. Overall, 159 Maine dams are classified as significant- and high-hazard potential dams, meaning failure would result in considerable damage and/or loss of life. Unfortunately, a quarter of these high-hazard dams are in poor or unsatisfactory condition. Despite inconsistent funding and three years without a State Dam Safety Inspector, the Maine Dam Safety Program has achieved 100% compliance with emergency action plans for significant- and high-hazard dams, exceeding the national average of 75%. However, to raise the grade, the Maine Dam Safety Program needs increased and dedicated funding, additional staff, and increased authority to continue ensuring public safety and oversee nearly $1 billion of estimated repairs to improve the condition of Maine's dams.

## BACKGROUND

Dams are artificial barriers built across rivers, streams, or lake outlets to impound or divert water. In Maine, dams are operated for a variety of purposes, but hydropower (39%), recreation (21%), and flood control (11%) are the most often-cited[1]. Maine's dams range from small, empirically designed dams built in the 18th and 19th centuries to modern, engineered hydropower dams largely constructed between 1900 and 1960[2]. Nearly half (48%) of Maine's dams are privately owned (e.g., lake associations, farms, energy producers); the remaining dams are owned by public utilities (6%) and federal (4%), state (8%), or local (25%) governments[1].

A total of 672 dams in Maine are regulated[3] based on their size being 1) greater than 25 feet in height with a storage capacity greater than 15 acre-feet (5 million gallons) or 2) greater than 6 feet in height with a storage capacity greater than 50 acre-feet (16 million gallons)[4]. Of these 672 dams, the Federal Energy Regulatory Commission (FERC) regulates most hydropower facilities including 149 dams[4]. The Maine Emergency Management Agency (MEMA) regulates the remaining 523 dams, including two co-regulated with the International Joint Commission[3].

### FIGURE 1: HAZARD POTENTIAL OF MAINE'S DAMS[1]



## CAPACITY

Although 672 dams are subject to regulation in Maine, there are over 1,001 dams in Maine (Figure 1) when 322 non-jurisdictional and 7 dams with unclassified hazards are included[3]. However, the true number of dams is unknown as a state statute requiring registration of dams was repealed in 1993[5]. Although the true number of dams is unknown, there is a trend towards dam removal in recent decades: whereas three dams have been built since 2000[1], all for recreation, 41 dams have been removed in Maine during that same time[6]. Combined with the fact that dams cannot be abandoned in Maine and MEMA's observation that many owners of non-revenue producing dams neglect their dams[2], the need to remove unsafe dams that have outlived their economic lives is presently greater than the need to build additional dams in the state.

## CONDITION

The average Maine dam is 108 years old[1]. Some of these dams may have been constructed before the establishment of formal dam engineering practices and many of Maine's dams are showing signs of deterioration. As documented in Table 1, of the 316 dams having condition assessments in the US Army Corps of Engineers' National Inventory of Dams (NID), only half were in satisfactory condition and almost a quarter, were in poor or unsatisfactory condition[1]. Also presented in Table 1 is the condition of dams relative to the number of low-, significant-, and high-hazard potential dams which are determined by assessing the potential adverse consequences of the dam if it were to fail or be misoperated[4]. Reviewing Table 1, there are 15 High-hazard dams in poor or unsatisfactory condition in which loss of human life is probable if the dam were to fail or misoperate[4]. Also, regular inspection of low-hazard dams is not required under Maine law (only verification of their hazard potential once every 12 years)[4] so many low-hazard dams, and almost half of all regulated dams in Maine, have little to no data on their condition.

### TABLE 1 SUMMARY CONDITION OF MAINE DAMS[1]

| Hazard Potential | Assessed Condition | | | | | |
|---|---|---|---|---|---|---|
| | Satisfactory | Fair | Poor | Unsatisfactory | Not Rated | Total a |
| Undetermined | - | - | - | - | 1 | 1 |
| Low [b] | 96 | 35 | 28 | 1 | 270 | 430 |
| Significant [c] | 33 | 21 | 25 | 3 | 2 | 84 |
| High [d] | 41 | 18 | 9 | 6 | 1 | 75 |
| Total | 170 | 74 | 62 | 10 | 274 | 590 |

*a Per National Inventory of Dams which does not have data for all the 672 dams cataloged by MEMA*

*b No probable loss of human life and low economic losses or environmental damage if the dam fails/misoperates[4]*

*c No probable loss of human life but major economic losses or environmental damage if the dam fails/misoperates[4]*

*d Probable loss of human life if the dam fails/misoperates[4]*