



For the record, my name is Sam Lincoln. I own and operate a Master Logger certified mechanized timber harvesting business in Randolph Center. In addition to my career as a farmer and logger in central Vermont, I also served four years as the Deputy Commissioner of the Department of Forests, Parks, and Recreation in the Scott administration and I currently serve on the board of directors of the Professional Logging Contractors of the Northeast (PLC). Thank you for the opportunity to testify on H.624.

Due to the increasing periods of unsuitable ground conditions for harvesting timber, the Vermont steering committee of the PLC has been developing this concept of climate resilience and adaptive timber harvesting practices, and ultimately this bill, since the summer of 2023. It is a priority for us and we're grateful for Representative Sims and Lipsky, and the co-sponsors, for supporting it.

What is the need?

Vermont logging contractors are typically responsible for the implementation of Vermont's Acceptable Management Practices for Protecting Water Quality on Logging Jobs in Vermont (the AMPs) during forestry operations. Depending on the site conditions – soil type, the presence of streams and wetlands, terrain and slope, historical trail locations, and legacy practices - these costs can be significant and require extensive pre-harvest planning and a large investment during and after the harvest to implement.

Protection of water quality during timber harvesting has components that are fixed and understood before the harvesting occurs, but the weather, particularly precipitation intensity, frequency, and duration, incorporate a significant variable factor into the cost of protecting water quality and working forest infrastructure. Once a timber sale contract is signed, the variable conditions typically become the responsibility of the logging contractor.

With the increasing severity of our weather, logging contractors must cease production during extended periods of unsuitable weather and take action, such as deploying excavators and bulldozers to install waterbars in trails, adding sediment control near streams and wetlands, purchasing additional aggregate, to maintain log truck access – all to minimize the volume and velocity of water moving on the site. Logging contractors have become the shock absorbers for these rapidly increasing costs. The reduced production and added costs are leading to unprofitable harvesting operations. It also leads to less adequate AMP implementation. I do not believe the professional logging contractors in Vermont can continue to absorb these costs and maintain an economically viable business.

When I am evaluating a parcel of land in anticipation of a timber harvest, I calculate the cost of AMP implementation. Stream crossings and wetlands are identified; the total length of skid trails is estimated; the costs for seed, mulch, labor, and heavy equipment to do the installations and closeout are calculated; and finally, a cost is established, and a plan is put in place. Again, these are the fixed features and costs of the process, but once frequent and intense precipitation, and/or unfrozen ground conditions in the winter, are applied to the equation, predicting what might be spent is nearly impossible. I completed a harvest in the summer of 2021. I budgeted to install temporary waterbars two times during the harvest, anticipating at least some periods of rainfall that would require an operational shutdown. It rained so much that summer that I stopped tracking the practice after we installed

waterbars for the eighth time. During the past two winters, logging contractors have found themselves trying to implement AMPs that are normally only needed in summer conditions. I can't predict when these additional costs might occur. If I budget for them on every job, I will become uncompetitive. If I don't budget for them, I become unprofitable.

A typical logging contractor may have a goal of achieving a 10% return on investment on each harvest as a gauge of profitability. Vermont loggers are reporting revenue reductions as high as 30% for 2023, with revenue losses for many professional operations well into the hundreds of thousands of dollars.

We have approached the administration and the legislature as the proverbial canary in the coal mine, asking for assistance with adaptation to turn this situation into a new program with the capacity to build climate resilience in our working forests. Much like state government has taken on a portion of the cost for municipalities and agriculture, we believe it is time to share the cost of protecting water quality in forestry operations.

What are the practices?

As the committee heard yesterday from Tom Pavlesich at the Watershed Agricultural Council in New York, a wide array of practices are implemented to protect water quality during forest operations. What we envision for Vermont would be similar, and include, but not be limited to cost share for the pre-harvest planning, installation, or implementation of:

- Temporary stream crossings
- Permanent and temporary culverts right-sized for higher flow
- Aggregate and geotextile fabric for the construction of durable forest access roads and landings
- Ditches lined with erosion stone or grass to capture sediment and prevent erosion
- Water diversion structures
- Sediment control at the outlets of water diversion structures and in stream and wetland buffers
- Seed and mulch
- Ground protection mats (a/k/a crane mats) to create temporarily drivable surfaces

These practices are implemented on state managed lands, and funded, with stipulations, by the Clean Water Fund.

Where will these practices be implemented?

This program should be open to eligible professional logging contractors implementing forestry operations in managed forests anywhere in the state.

What will it cost?

H.624 authorizes FPR to establish eligibility criteria for who could apply, what practices would be eligible, and the cost share amount of the practices, which will influence any budget. For simplicity, modeling the payment schedule after the Watershed Agricultural Council Forestry BMP program would be a sensible starting place. The original amount in the bill was for \$2.5 million annually to establish a statewide program, which we estimated would cost share *approximately* 300 harvests annually. We recognize that the are challenges in the state budget for this fiscal year and are seeking a reasonable amount to establish the program and grow from there.

There is an administrative and field staff cost to the program for the Department or Agency that administers it, and that must also be accounted for.

What are the benefits?

Climate resilience and return on investment -

- Roads, trails, structures, and buffers that are better built are better protected from more
 intense periods of precipitation and will be less prone to storm damage. The more widespread
 the implementation of these practices occurs, a greater amount of stormwater, and cleaner
 stormwater, will be diverted or channeled into filter strips and undisturbed soil to allow it to
 infiltrate into the soil, reducing the volume and velocity moving toward the streams, rivers, and
 valleys.
- The practices are almost entirely permanent installations that will be in place the next time a landowner initiates a forestry operation as part of their management plan.
- State agencies have been working for years to find solutions to legacy erosion issues and phosphorous loading in our waterways. This program is implementable *quickly* and is a cost effective way to protect managed forests from becoming future remediation sites due to current financial and operational constraints in the forest economy.
- Each harvest that is implemented with these more durable practices will be a point on the map in which Vermont's vulnerability to climate change has been addressed hundreds per year.

Water quality protection and reduced phosphorous runoff -

• Roads, landings, trails, and buffers that are built and protected to high standards will be less prone to transport sediment, and the phosphorous that is bound to those soil particles, into our streams, rivers, and lakes.

An investment in the rural economy -

- Reducing the climate change induced pressures on forestry operations enhances the business viability of professional logging contractors and rural employers.
- During previous testimony from the Agency of Natural Resources, you heard about the need for a "clean water workforce." Logging contractors operate on parcel after parcel across the state and have a uniquely suited skillset and equipment lineup to fulfill part of the state's need.
- This programming in H.624 is aligned with goals in the Forest Future Strategic Roadmap.
- Maintaining a strong forest economy supply chain, and managing forests for a multitude of benefits, while continuing to produce raw materials for essential human needs will reduce the externalization of those impacts.

Regarding Section 2. of H.624, the funding to increase the number of Master Logger certified logging companies in Vermont is an important investment in professionalism and reducing the costs of these enterprises. Master Logger certified companies go through an unmatched certification process that evaluates their work, including background checks with state regulators, and are eligible for a 15% discount on their workers' compensation insurance premiums. Reducing the cost of this professional certification by 50% is an impactful investment in our sector and is aligned with one of the goals of the Forest Future Strategic Roadmap.