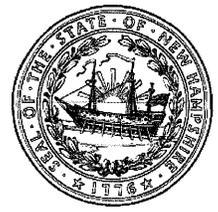




The State of New Hampshire
Department of Environmental Services



Robert R. Scott, Commissioner

February 4, 2020

The Honorable Suzanne Smith
Chair, House Resources, Recreation and Development Committee
Legislative Office Building, Room 305
Concord, NH 03301

RE: HB 1126, AN ACT relative to removal of trees from state property

Dear Chair Smith and Members of the Committee:

Thank you for the opportunity to testify on HB 1126. The bill would prohibit the clear-cutting of trees from state-owned land that is within 75 feet from the boundary with abutting privately-owned developed land. The New Hampshire Department of Environmental Services (NHDES) opposes the bill as written and requests that it be amended to exclude from prohibition clear cutting on state-owned dams that must be performed to keep the dam embankments free of woody vegetation which can pose a threat to the dams and downstream infrastructure.

The State of New Hampshire, through its state agencies, owns 274 dams. Inundation maps, which have been developed to determine the areas that would be flooded downstream of these dams, if the dams were to fail, indicate that there are more than 20,000 people whose lives could be at risk, as well as 130 state road crossings and 800 town road crossings that would be damaged or destroyed if these dams were to fail. With this population and significant infrastructure at risk, it is essential to maintain these dams in a safe condition.

The majority of state-owned dams are either completely or partially earthen embankment structures. The stability of these dams can be threatened by the presence of trees or woody vegetation for the reasons described below:

- **Uprooting/Overturning** Probably the most dangerous aspect of tree growth on dams is the potential for them to overturn and be uprooted. This can result in displacement of a relatively large amount of embankment material, thereby lowering the dam crest, reducing the effective width of the dam, and facilitating seepage through it.
- **Root Spreading/Infiltration** Roots of trees and woody vegetation can provide seepage paths through the dam. This type of seepage occurs slowly as the roots reach towards the impoundment and open paths for seepage, which can, in time, penetrate deeper into the dam embankment. If the seepage eventually finds an exit and attains a velocity that is fast enough to carry away embankment material, it could lead to a rapid failure of the dam.

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- **Hindering Visual Inspection** Concentrations of trees and woody vegetation on an embankment can become so dense that a visual evaluation of the dam cannot be performed. This can lead to deficiencies going unnoticed, which, in turn, can affect the integrity and stability of the dam.
- **Providing Excessive Shade** Trees and woody vegetation growing on or near dams can act as obstructions that prevent sufficient sunlight from reaching the embankment. This can hinder or eliminate the potential for establishing a desirable grassy vegetation. The absence of stabilizing growth makes the earth embankment sections of a dam susceptible to erosion damage.

It is for these reasons that NHDES requires the owners of all dams in the state, both public and privately-owned, to keep the dams free from all trees and woody vegetation to a distance 15 feet beyond the abutments of the dams and 15 feet beyond the downstream toes of the dams. In nearly all cases, that limit is within 75 feet of the developed land of a private developer.

If this bill is enacted as written, NHDES could not remove trees and woody vegetation that threaten the integrity and stability of state-owned dams, which would increase the probability of failure of these structures, causing potential loss of life and property damage downstream, as well as the economic loss of the impoundments themselves. NHDES requests that the bill be amended to exempt state-owned land associated state-owned dams from the provisions of the bill.

Thank you again for the opportunity to comment on HB 1126. Should you have questions or need additional information, please feel free to contact Jim Gallagher, Administrator of the Dam Bureau, at James.Gallagher@des.nh.gov, or via phone at 271-1961.

Sincerely,



Robert R. Scott
Commissioner

cc: Sponsors of HB 1126: Representatives Fedolfi, Edwards, Kolodziej; Senator Ward