



APPLICATION FOR CONDITIONAL USE PERMIT

Greenleaf Design, LLC
Holly Greenleaf
greenleafholly@gmail.com

Hello,

SEPTEMBER 16TH, 2025

We are submitting an application for a conditional use permit for a shoreland restoration and lake access upgrade project at 127 Aspenhurst Road on Lake Caspian. The purpose of this project is to stabilize the shoreline and prevent further erosion of shoreland soils with bioengineering methods, including biodegradable erosion control materials, a naturally vegetated native buffer planting, and a small stone toe. Erosion has occurred due to a lack of woody vegetation in combination with high water levels, wave action, ice push, and upland runoff. The lake access upgrade will also protect shoreland soils by replacing temporary aluminum stairs with infiltration steps to capture and infiltrate upland runoff that flows to this point.

Development Review Board
Town of Greensboro
PO Box 119
Greensboro, Vermont
05841

This project will help to protect the water quality of Lake Caspian by slowing down and infiltrating upland water runoff, preventing excess runoff, sediments, and nutrients from entering the lake. Establishing a minimum 15 foot wide naturally vegetated buffer will slow down and soak up water coming from the hillside above. Currently, runoff is funneling underneath the temporary stairs. Infiltration steps built with natural timber framing into the slope, lined with filter fabric, and filled with pea stone will intercept the runoff and allow it to percolate into the ground before flowing into the lake. The steps will be 3 feet wide and about 14 in length, with a total of 7 to 8 steps.

This project will improve the ecological health of the shoreland habitat by mimicking the naturally occurring shoreline of a rocky edge and woody vegetation to prevent erosion and protect the shoreline from high water levels, wave action, and ice push in the future. The biodegradable erosion control materials, including encapsulated soil lifts and erosion control blankets made primarily of coconut coir fibers and secured with wood stakes will provide protection from erosion in the short-term and will biodegrade as the root systems of strong woody plants will spread and take hold, providing protection for the long-term. Native plant species are selected for their hardiness, strong spreading root systems, and for aesthetic and height goals to frame the view of the lake.

This design solution was determined to be the most low-impact and naturalistic way to restore the eroding shoreline. All precautions will be taken to protect soils and the lake during construction, including the use of a silt fence on the beach and covering all bare soils after each day. All work occurs above Mean Water Level and does not remove any existing vegetation, exempting it from Lake Encroachment or Shoreland Protection permits. Please reach out with any questions.

Sincerely,
Holly Greenleaf