Additional Factors that Alter Effectiveness of Vegetated Shores:

- Density and Composition of Shoreland Trees and Shrubs - multiple layers (overstory, understory, and groundcover), plant species, and age classes are vital to rainfall retention, and for soil and bank stabilization.
- Slope - the steeper the slope, the less stable the bank. Sloped shores require wider widths of vegetation. All widths are measured horizontally.
- Land Use above the Shoreland Area - surfaces that easily erode (e.g. gardens and farm fields), or are considered impervious (e.g. rooftops, driveways and decks), should be minimized to lessen their impact of increasing dirty runoff to the lake, and therefore increasing the “work load” on shoreland vegetation.

References on reverse of this page
Shoreline Stability:
Stabilization Measures for an Eroding Lakeshore. Vermont Lake Protection Series #3B. Vermont Agency of Natural Resources. Montpelier, VT. *(10’ to 15’ minimum width).*


Shoreline Habitat (in terms of Plant Diversity)
S. C. Spackman and J. W. Hughes. 1995. Assessment of minimum stream corridor width for biological conservation: Species richness and distribution along mid-order streams in Vermont, USA. Biological Conservation 71, 325-332. *(100’ minimal width for species richness in streams).*

Shallow Water Habitat


Kellie Merrell, Jeremy Deeds, and Mark Mitchell. March 14, 2013. Determining if Maine’s Mandatory Shoreline Zoning Standards are Effective at Protecting the Environment. A joint study conducted by the Vermont Department of Environmental Conservation and the Maine Department of Environmental Protection *(100’ minimal vegetative width for aquatic habitat).*

Nutrient Removal and Sediment Filtration

Fishes and Aquatic Insects

Kellie Merrell, Jeremy Deeds, and Mark Mitchell. 14 March 2013. Determining if Maine’s Mandatory Shoreline Zoning Standards are Effective at Protecting the Environment. A joint study conducted by the Vermont Department of Environmental Conservation and the Maine Department of Environmental Protection *(100’ minimal vegetative width for aquatic habitat).*


A. Fischer and J.C. Fischenich. 2000. Design Recommendations for Riparian Corridors and Vegetated Buffer Strips. US Army Engineer Research and Development Center pub# ERDC TN-EMRRP-SR-24 *(100’ minimal vegetative width for aquatic habitat).*

Mammals

Birds


Reptiles and Amphibians
R.D. Semlitsch and J. R. Bodie. 2003. Biological Criteria for Buffer Zones around wetlands and Riparian Habitat for Amphibians and Reptiles. Conservation Biology Vol. 17 No. 5 pp 1219-1228. *(Minimal width of vegetation of 385’ for salamanders; 400’ for turtles; 550’ for snakes; 675’ for frogs).*