

This Land is Shoreland

Introduction

In June, the VLCT Municipal Assistance Center will release a model lake shoreland district bylaw and technical paper, which can provide guidance to municipal officials who want to adopt lake shoreland zoning. The model includes measures such as setbacks, clearing limitations, vegetation protection, land disturbance management, and impervious area standards to protect shoreland buffers and water quality from the adverse impacts of development.

How a town chooses to manage its shorelands can greatly impact the water quality and aquatic and wildlife habitat of Vermont's lakes. Maintaining shoreland buffers – the vegetated areas adjacent to lakes and ponds – is the most widely recommended and scientifically supported approach to protecting lake habitat and reducing pollution in stormwater runoff from uphill land uses. Building too close to the water, clearing a shoreland lot of its natural vegetation or covering too much of it with driveway and rooftop surfaces can increase stormwater runoff, erosion, nonpoint source pollution (especially phosphorous and sediment), harm habitat, and destabilize shoreline banks.

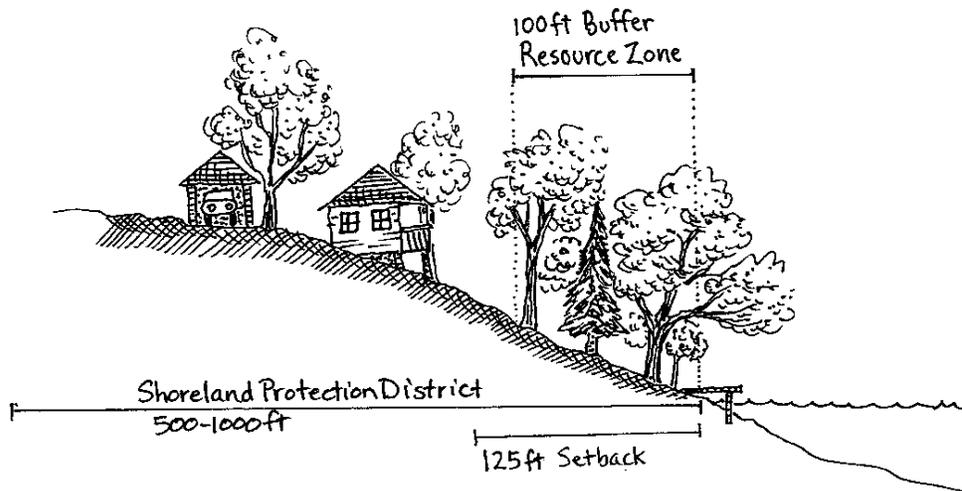
Need for Shoreland Protection

Vermont has 280 lakes that are 20 acres or greater in size, and more than 800 lakes that are five acres or larger. According to the Vermont Department of Environmental Conservation (DEC), the rapid growth along Vermont's lakeshores threatens to increase water quality problems such as excessive algae and plant growth and degradation of in-lake habitat. Much of this development pressure takes the form of redevelopment where seasonal small camps located close to shore are being converted to year-round permanent residences with larger lawns and increased impervious surfaces. This trend toward bigger homes and more clearing poses the largest threat to Vermont lakes.

In a report to the Vermont General Assembly in 2011, the DEC indicated that only about 20 percent of Vermont's towns have regulations protecting buffers and requiring building setbacks adequate to protect shoreland vegetation, lake water quality, and habitat. Biologists from the Lakes and Ponds Section of DEC have been studying the effects of shoreland development on shallow water habitat for several years. The science supporting the evidence that buffered shores are essential for maintaining healthy lakes is indisputable; leaving a vegetated buffer between a structure and a lake lessens the effect of development. In many cases, there is little or no difference in the lake water quality and shallow water habitat between undeveloped sites and developed sites with adequate buffers. However, unlike other "lake rich" states in New England and the Midwest – including New Hampshire, Maine, Wisconsin, and Minnesota – Vermont does not have a mandatory statewide approach to protecting the vegetated areas along lakes and ponds. Therefore, it is up to municipalities to adopt shoreland zoning regulations that are adequate enough to protect shoreland vegetation and thus protect the water quality and habitat of our lakes.

The VLCT Model Shoreland Protection District Bylaw

The VLCT Model Shoreland Protection District Bylaw defines the regulated Shoreland Protection District as the width of land measured horizontally from the mean water level to 500–1,000 feet from all lakes and incorporates the Shoreland Buffer Resource Zone, which includes the first 100 feet of the district.



Shoreland Protection District with 100 ft. Buffer Resource Zone

Towns can use a variety of approaches when considering how to administer shoreland district zoning. The choice will depend on the characteristics of the area, such as existing development and steepness of slope, as well as zoning already in place. Towns can utilize the VLCT model to protect their shoreland resources in the following ways:

- The **Shoreland Overlay District** is best suited for towns that already have shoreland areas within another zoning district. A shoreland overlay district is especially appropriate for shore areas along a lake where the underlying district standards have allowed development within the shoreland buffer. The model can be used to increase the level of shoreland protection by prohibiting further encroachment into the shoreland buffer.
- The **Separate Shoreland District** could be the only zoning district in town and limited to a specific lake or lakes. A separate shoreland district surrounding a lake in town would differ from an overlay district in that it does not overlap with any other district. The model can provide comprehensive coverage for all lake shoreland within a town, shoreland around lakes of a certain size, a specific lake, or a particular shoreland segment of a single lake.
- The **Shoreland Conservation District** protects shorelands in a pristine or largely undeveloped state from development that would adversely affect scenic and natural values,

productive habitat, wetlands and water quality. The model can protect undeveloped, fragile or scenic shorelands, wildlife habitat, and drinking water sources.

- The **Shoreland Design Review District** requires shoreland design review based on the need for increased stormwater management. The model incorporates construction site stormwater control measures and low impact development design standards that can be adopted for new development within a Shoreland Design Review District.

New Uses within the Shoreland Buffer Resource Zone

The Shoreland Buffer Resource Zone comprises the first 100 feet of the Shoreland Protection District. The objective of shoreland zoning is to maintain this area in a naturally vegetated state. New uses within the Shoreland Buffer Resource Zone are limited to access footpaths and stairways constructed so as to prevent erosion, avoid soil disturbance, and disperse runoff into vegetated areas.

Limited clearing of healthy trees and saplings within the Shoreland Buffer Resource Zone is allowed as long as it is managed in accordance with the “grid and point” system included in the model. The grid and point system ensures the maintenance of a well distributed stand of trees and is similar to systems used in Maine and New Hampshire. An explanation of how the grid and point system is administered is included in the technical paper that accompanies the model bylaw.

New Uses within the Shoreland Protection District outside the buffer

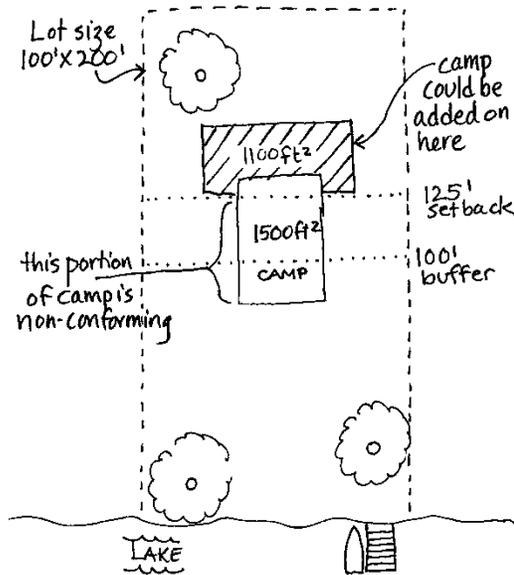
The model specifies that new development be set back at least 125 feet from all lakes. This distance includes the minimum Shoreland Buffer Resource Zone of 100 feet, plus an additional 25 feet to prevent incursion into the buffer zone during construction.

The model includes standards for new uses within the Shoreland Protection District outside the buffer zone, including:

- limitations on the size of cleared openings;
- limitations on the percentage of impervious surface;
- minimum lot frontage and depth; and
- best management practices for stormwater control.

Nonconformities

“Nonconforming” is a term used to describe structures, lots and uses that were legally in existence at the time of bylaw adoption but do not meet current bylaw standards. Local ordinances and bylaws are written, in part, with the aim of reducing nonconformities over time. There are, however, legal allowances for the continued use of nonconforming situations and for limited expansions of nonconforming structures. Generally, however, a nonconforming situation is not allowed to become *more* nonconforming.

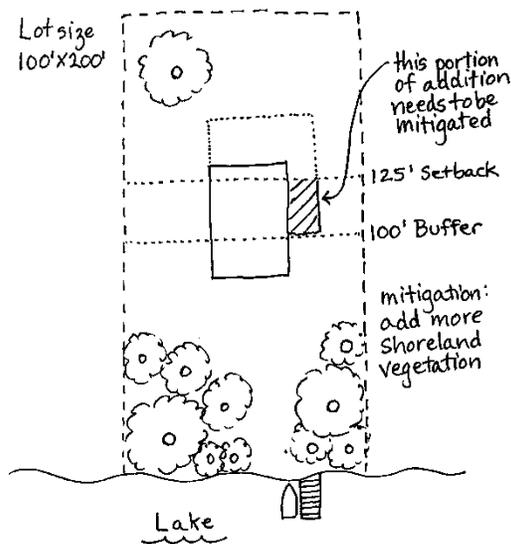


Nonconforming Structure

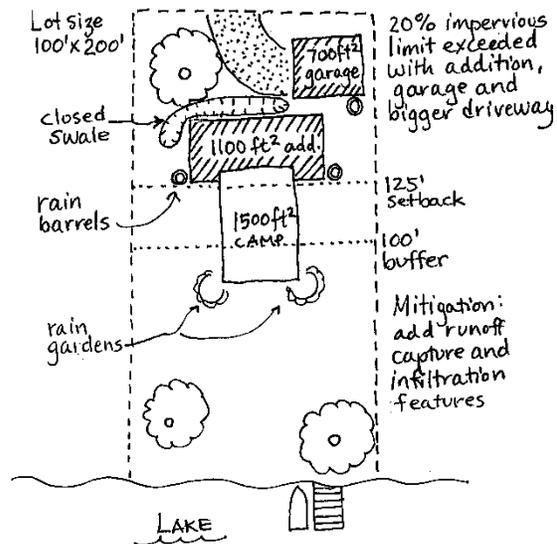
In the case of shoreland development, a typical nonconforming structure is a seasonal cabin partially or wholly within the protected buffer zone. Under the model, nonconforming structures can be repaired and maintained, provided no expansion occurs. The model does not permit any expansion, including decks or patios towards the water, if the structure is located within the Shoreland Buffer Resource Zone.

Mitigation

Mitigation is an action required of a shoreland property owner designed to compensate for shoreland buffer lost to impervious surfaces within the Shoreland Protection District. In circumstances where nonconforming structures are improved or expanded within the shoreland buffer, the model recommends language that allows the review board to require the shoreland property owner to return any mowed or cleared areas to a naturally vegetated state to restore the lakeshore buffer, or to create detention infiltration structures to prevent stormwater runoff from reaching the lake.



Mitigation, added vegetation



Mitigation, stormwater detention/infiltration

Conclusion

The VLCT Model Lake Shoreland Protection District Bylaw is designed to offer municipalities a clear-cut framework that is simple to develop and administer. The lake shoreland protection model language can easily be incorporated into an existing land use regulation and can be adapted to meet the unique conditions of your community. For assistance, contact Milly Archer, Water Resources Coordinator, at the VLCT Municipal Assistance Center, 800-649-7015, or marcher@vlct.org. To access the online version of the Bylaw, please visit the VLCT Resource Library at <http://resources.vlct.org/>.

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