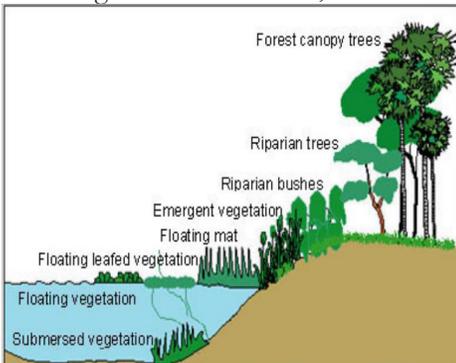


Buffer Zones: Maximizing the Potential of Your Lakefront Property

I am going to ask you to do me a favor... sit back and imagine the perfect lakefront view. Sunshine, a nice breeze, maybe some birds chirping. Now, how many trees or plants do you see along the shoreline? My guess is that most people would imagine the perfect lakefront to be void of shoreline vegetation. However, I am here to convince you otherwise. A buffer zone is an area of shoreline with planted grasses, shrubs, or trees that serves to separate the lake water from a lakefront property. This area is also known as the riparian zone. While these zones might seem like an obstruction to your view, they actually provide many valuable services which will ultimately keep your lake in a favored state.

Riparian zone

The riparian zone of a lake is the interface between land and water and is where a buffer zone should be installed. A perfect buffer zone would reach as far as possible from the water's edge toward your building, but ideally would be about 30 feet wide and extend the length of the shoreline. The riparian zone serves two major functions WHEN vegetation is present: the reduction of surface water runoff, which carries nutrients and pollutants, and the protection of banks from erosion. A vegetated riparian zone will act to buffer runoff water from big rain events or snowmelt, reducing the amount of nutrients and pollutants that would otherwise make it into the lake water. Once these compounds get into the lake, a number of things can happen including more turbid water, increased



An ideal riparian and lake habitat.
Image from: www.orangesenquak.com

potential for nuisance plant and algae growth, and increased sediment loads. A vegetated buffer zone along the shoreline will also help prevent erosion by holding sediment in place and protecting the shoreline from wind and wave action. When shoreline banks are eroded, more sediment is added to the water, which can increase turbidity as well as create environmental conditions that allow certain invasive plants, such as Eurasian watermilfoil, to thrive.

Additional benefits of buffer zones

Some buffer zone plants, due to their root structure and other characteristics, have the ability to consume nutrients already in the lake. Buffer zones also provide food, water, shelter and nesting sites for a wide variety of wildlife that are pleasant to observe. Shoreline vegetation can also improve fish habitat by reducing fine sediments and cooling summer water temperatures.



A lakefront cottage with vegetated buffer strip.
Image from: www.lakegeorgeassociation.org

With careful planning, it is possible to develop a lakefront view that is both aesthetically pleasing to you and beneficial to wildlife and water quality.

Growing your own buffer zone

When designing a buffer zone, variety is the key. Be sure to include trees, shrubs *and* grasses, not just one of these types of plants. Trees take up the most nutrients while also stabilizing the shoreline and attracting birds. Unmown grasses (not your typical lawn!) slow down the speed of surface runoff. Once the water settles, the grass can then use the runoff water, and all the nutrients it carried, to grow. Shrubs

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stand in the middle ground. Like grasses, they act to reduce the impacts of surface runoff and can stabilize shorelines as well as many trees. Where wind and waves are an issue, trees and shrubs are the most suitable choice for stabilizing topsoil along the shore. Where runoff water high in nutrients and pollutants is an issue, a mix of grasses and shrubs is the best approach. Native plants are always preferable because they are adapted to your climate and are more attractive to wildlife. The easiest way to grow your own buffer strip is simply to stop mowing your lawn! By letting part of your yard grow naturally, you permit native species to colonize the area and reduce the cost of a buffer strip project. Consulting a professional can help you to make wise choices for the most effective and attractive buffer strip.

If you wish to contribute to the state of your lake in a positive manner, installing a buffer zone is a very efficient and beneficial way to do so. Studies have shown that buffer strips substantially improve water quality by reducing nutrient loaded surface runoff and stabilizing shoreline soils. Now, imagine your lakefront view anew with a beautifully vegetated buffer strip. Grasses wave softly in the breeze, birds flit to and from new nests, kids catch fish in crystal clear waters. You can easily create a vegetated buffer strip that will serve all of the benefits mentioned here while providing recreational opportunities and increasing the aesthetic value of your lakefront property.



Buffer strips can add beauty and value to your landscape. Image from: www.hrwc.org