

Improving Lake Water Quality:
Lake Latonka Shoreline Riparian Buffers

*Presented by the LLPOA Lake Preservation Committee
Adapted from the article Lake Shoreline Buffers by the Water
Management Division of Shonomsih County*

What is a home owners best defense against non-migratory Canada geese invading their yard? A buffer. What is a lake's best defense against fertilizer running into the lake? A buffer. What is one of the best ways to protect and stabilize your shoreline? A buffer. What is a landscape buffer? What is a riparian buffer? What is a vegetation buffer? For the sake of our discussion we can consider each to be one and the same although technically there are some differences depending on the purpose of the buffer.

Can I plant mature native plants, grasses and wildflowers along the shorelin? Yes. Can I start by simply spreading seed? Yes. Is there a riparian buffer seed mix? Yes. When is the best time to plant riparian buffer seed? **November or early Spring**. How much does it cost? About \$36 per pound. One bag (i.e., one pound) of seed will cover approximately 2,000 square feet or most lake front areas. Where can I get riparian buffer seed? At Ernst Conservation Seed in Meadville. You can contact Ernst at 800.873.3321 or visit their website at <http://www.ernstseed.com/products/planting-guide/riparian-sites/> A single one pound bag will cover 2,000 sq. ft. and cost only \$36.

From the original *Lake Shoreline Buffers* article: The lake shoreline is the last line of defense for lakes. A naturally vegetated shoreline filters excessive nutrients and pollutants and stabilizes the shoreline from wind and wave action. Maintaining a strip or buffer of native plants along the shoreline can be an important step to protecting our lake.

Unbuffered Shoreline: When lawn extends into the lakeshore (or up to a seawall) nutrients, pesticides, and other pollutants easily run into the lake during rainstorms. Unbuffered shorelines are also more susceptible to erosion and shoreline loss.

Buffered Shoreline: A buffer of native vegetation is not only attractive but beneficial. Buffers slow storm water runoff and trap harmful nutrients and pollutants. They also help stabilize shorelines without costly shoreline armoring

What is a lake shoreline buffer?

A buffer is in an area of natural vegetation that separates your home and lawn from the lakeshore. Buffers can also be planted behind seawalls and other barriers that have already been installed on the lake shoreline. Effective buffers consist of native plants that would typically be found on a shoreline. Buffers can be a mix of groundcover plants, shrubs, or trees and they can be completely natural or can be planned and landscaped.

What are the benefits of shoreline buffers?

Reduce the Amount of Nutrients Entering Your Lake

Buffers of native vegetation act like a sponge by filtering storm water runoff. Storm runoff is filled with particles laden with nutrients, pesticides and other pollutants. The buffer plants slow down the runoff and trap particles preventing them from entering the lake. By slowing the water, the amount of groundwater infiltration also increases.

Protect and Stabilize Your Shoreline

Typical turf grass has a very shallow root system making shorelines with lawn susceptible to erosion caused by wave action and flooding. Native vegetation typically has deeper more extensive root system that holds the shoreline together. In fact, a well-planned buffer can be an excellent alternative to protective structures such as sea walls and rip rap. In addition, native plants will continue to function during flooding as they are accustomed to seasonal inundation.

Improve Habitat for Fish and Wildlife

Ninety percent of all lake life is born, raised and fed in the area where the land and water meet. Shoreline plants provide essential habitat and food for birds, amphibians, insects, and mammals.

Reduce Maintenance Time and Mowing

Mowing, watering, and caring for a lawn, can be time consuming and costly. Replacing all or part of your lawn with native vegetation can save you time and money. Once established, native plants require little effort. They are accustomed to the climate and need little watering.

Deter Excessive Geese

Excessive geese and the mess they leave behind can become a nuisance. Geese are attracted to short vegetation adjacent to open water, making a lakeshore lawn an ideal feeding location. Vegetation buffers are an ideal method to prevent excessive geese in your yard. The taller vegetation reduces their line of site to the water making your yard a less desirable feeding ground.

Make Your Shoreline Beautiful

Buffers don't only benefit the health of your lake, but can increase the beauty and value of your property. A mix of native plants can supply structure to your yard and provide beautiful blooms or berries all year round. A well-planned buffer can also enhance your privacy while still maintaining lake views and access.

Buffered Shoreline

How do I create a shoreline buffer?

Lake buffers simply require having native plants grow along your shoreline. The easiest method to create a shoreline buffer is to stop mowing your lakefront and plant a 'riparian buffer seed mix'. Such mix is available here locally, contact the office for details..

Although this method is easy and free, you may want to have a more landscaped approach. When planning a buffer the key elements to a buffer are as follows:

1. Even a little bit of a buffer is better than none, but generally the larger the buffer (5-6' wide) the more effective it will be. Many buffers do not have to exceed 18 – 24 inches in height.
2. The greater diversity of plants in the buffer will improve its effectiveness and generally make it more attractive.
3. All plants need to be adapted to living in wetter conditions - look for high water tolerance. Appropriate plants may also be referred to as riparian plants.
4. Plants should also be chosen to suite other environmental factors including sun exposure and soil types.
5. Avoid using fertilizer or using pesticides in your buffer area.