#### **Decrease Nutrient Run-off**

Increased development leads to increased nutrient runoff into the water. Without management, pesticides, herbicides, fertilizers, pet waste, and sediment from roadways and eroded banks all find their way into the lake. This decreases water quality both for the animals that depend on the lake and the humans that would like to enjoy it!

Vegetative buffers decrease sediment, nutrients, and toxins entering the lake by providing a physical barrier that slows runoff and creating soil conditions that allow more infiltration. Increased infiltration into the soil reduces the surface runoff of stormwater and increases cooler, cleaner shallow groundwater entering the lake. In addition, the extensive root system of native plants increases absorption of water and nutrients allowing for cleaner water to enter the lake.



Dogwoods are a great shrub to plant on your shoreline. Their fibrous roots help to filter out pollutants and hold back sediment. Dogwoods also uptake and utilize excess nutrients found in runoff.

### **BEST MANAGEMENT PRACTICES**

Making conscious decisions about managing your land and waste prevents unexpected and unintended pollution from entering to adjacent waterbodies. By following simple guidelines you can protect water quality for future generations to enjoy.



For more information about Lake Wise visit DEC's website or contact us through email or over the phone.

Website: https://dec.vermont.gov/watershed/lakes-ponds/lakeshores-lake-wise/bmp

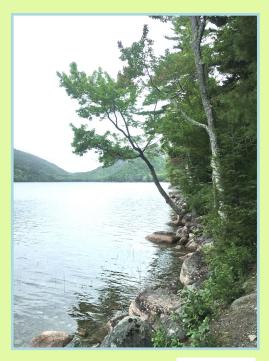
Email: <a href="mailto:info@pmnrcd.org">info@pmnrcd.org</a>
Phone: (802) 287-6880



Poultney Mettowee Natural Resources Conservation District

# **Shoreline Buffers**

Protect your Lake by Planting Native Vegetation



Funding for this project was provided by the Lake Champlain Basin Program through the New England Interstate Water Pollution Control Commission and Lake Champlain Sea Grant









## Why Shoreline Buffers?

Living along a shoreline provides you with amazing views and abundant recreational activities. Having a shoreland property also comes with the responsibility to protect the health of your lake. Vegetated buffers can work to beautify your shoreline while also protecting water quality. Some ways that vegetated buffers ensure water quality and lake health are:

- Reducing runoff carrying with it phosphorous, other nutrients, and pollutants into the lake
- Allowing infiltration of stormwater to occur
- Providing habitat for native animals
- Stabilizing the shoreline bank
- Preventing erosion
- Reducing flood, wave, and ice damage

### **Provide Habitat for Wildlife**

Native plants along your shore will attract other native species, benefitting pollinators and other insects, birds, and even fish.

Many native plants produce beautiful flowers and fruit for homeowners, pollinators, and birds to enjoy. Shrubs and trees provide nesting areas for birds, while the shade cast over the water lowers the shoreline water temperatures, making more suitable habitat for fish.





Insects dependent on specific native plants for food and shelter will be supported by the plants in your buffer. These insects provide much of the food that native birds depend on. Insects dropping off shoreline branches into the water also offers a large food source for fish.

While the addition of any plant has benefits, the ideal buffer is at least 15 feet wide and consists of five layers; duff, ground cover, shrub, understory, and canopy.

### **Prevent Erosion**

Many shorefront owners may notice their shoreline slowly slipping into the lake over the years. Vegetative buffers help stabilize shorelines, prevent erosion, and minimize effects of flooding events. The mass of vegetation above ground slows the movement of water and sediment, while the deep roots of native plants below ground physically holds onto your soil. Having plants on the bank also helps to prevent erosion due to wave action.

While sedimentation in lakes is naturally occurring, human activities can greatly accelerate this process. This expedition of what would naturally take place over thousands of years has many negative impacts on the lake environment.

Preventing erosion not only helps protect the health of the lake, but also helps maintain your shoreline.

