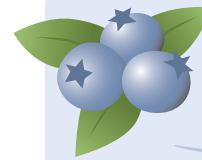




What is a buffer?

Vegetative shoreland buffers, located along lakes, rivers, streams, wetlands, and ponds are the single most effective protection for water quality, lake ecosystems, and essential wildlife habitat. These strips of ground covers, shrubs, and trees serve as transitional areas, where

land and water meet to create unique and highly productive ecosystems. The canopy created by trees, shrubs and herbaceous vegetation moderates the impact of heavy rains, shades the shoreline to reduce water temperature, and produces organic matter and woody debris essential to shallow-water ecology. Root systems give soil structure, hold soil in place, direct rainfall down into the soil instead of over the soil, and can extract nutrients and contaminants from the soil. The abundance of water and the diversity of plant communities in vegetated buffers help support a variety of aquatic and terrestrial life. They also provide valuable social, economic and environmental benefits.



buffers for
blue lakes

a program of The Federation of Vermont Lakes and Ponds

Why do we need them?

Some of the benefits of buffers include:

- Protecting water quality by absorbing excess nutrients (such as phosphorus and nitrogen) from natural and human sources.
- Recharging groundwater and limiting flooding by absorbing stormwater runoff.
- Filtering sediment and trapping pollutants, including fertilizer and pesticide residues, to purify drinking water.
- Stabilizing and protecting banks from stormwater and wave action erosion.
- Providing shade, woody debris, and nutrients to shallow-water ecosystems--the keystone of the web of aquatic life.
- Providing wildlife habitat and wildlife corridors that are essential for many species.
- Providing specialized habitat for rare, threatened, and endangered plants and other species.
- Providing economic values, including private and commercial uses.
- Providing aesthetic, recreational, educational, and research opportunities.

Natural shoreland buffers have been lost in many places. Restoring them can improve water quality, bank stability, wildlife and aesthetics around the state's lakes and ponds.



The Federation of
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