BUILD A BETTER BUFFER

Keep or plant gardens as a buffer at the base of hills, in ditches, and along the road and water's edge to slow runoff, filter pollutants from water, and provide food, cover and breeding habitat for native species.

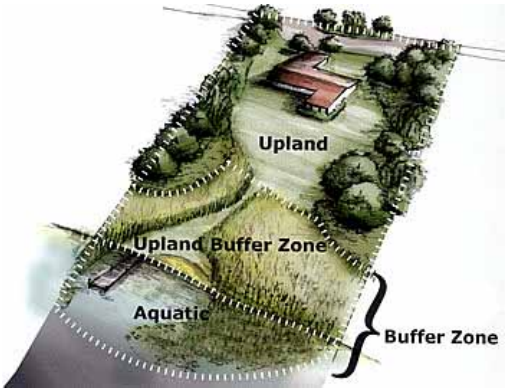
The Problem

Grass mowed to the water's edge provides a conduit for pollutants to enter waterways. The lack of deeper root systems in turf grass and removal of the natural shoreline can lead to erosion at the water's edge. Compromised or missing buffers can increase the effects of polluted runoff, reduce the quality of our water, and decrease property values.

The Solution

Buffers are the single most effective protection for our water resources – plus they provide priceless recreational and aesthetic value. Buffers are a low-tech, high-performance option for stormwater management and resource protection that you can do in your own backyard.

Start Simple: To create a shoreline buffer, you have two choices: a) let the shoreline grow back naturally or b) plant native plants. The easiest thing to do is to do nothing! Just let the area regenerate. This means no mowing, spraying or fertilizing. Stop mowing to the water's edge and allow a strip of grass, called a no-mow zone, to grow between the yard and the road, shoreline or streambank. Native plant seeds that have been dormant in the soil will germinate and valuable native plants will start to grow on their own. Be patient! In the first year your buffer will probably look like a messy, unkempt area. By year two, you should have shrubs and trees starting to grow. Then wildlife will start to appear.



Buffer It: Maintain a buffer of taller vegetation (preferably native plant species) around the perimeter of your property, especially adjacent to waterways, to slow runoff, to filter pollutants from runoff exiting your property, and to prevent erosion along the shoreline or streambank. You should aim to have at least 50 to 75% of your property edge buffered. The depth of your buffer depends on topography, hydrology and soil, vegetation, and stormwater impacts. However, at least the first 50 feet should be covered with native vegetation.

A good buffer should have several vegetation layers and a variety of plants to maximize the benefits of each type. Include ground cover, shrubs and taller trees – catching water at all levels, providing varied habitat and shade, and allowing for deep root systems stabilize soils and to absorb and filter water and nutrients.

Did you know?
A 100-foot buffer removes 60% or more of pollutants (although in clay soils this may not happen within 500 feet).

The duff layer is the accumulated leaves, pine needles, and other plant matter on the forest floor. This layer acts like a sponge, to absorb water, trap sediment, and prevent erosion. Duff is a host to microorganisms that break down plant material and recycle nutrients.

Continuity Counts: If you need to clear a path to the water through the buffer for recreational purposes, create curves in the path to ensure stormwater doesn't have a straight run to the water. Cut as small a path as possible through your buffer to access your waterfront. This will save both money and time that otherwise would be spent on maintaining your lawn!

Go Native: Native plants have extensive root systems that cut down watering needs, help infiltrate water back into the ground, minimize soil erosion, filter pollutants from runoff before leaving your property, and provide vital habitat for native species. Landscaping with native plants is economical because they are adapted to local soil and climate conditions and once established will require less watering and fertilizing. Native plants also naturally resist pests and diseases, eliminating the need for harmful pesticides. Plant a diversity of native plant species for optimum wildlife habitat. For a complete list of Maine native plants, go to www.umext.maine.edu/onlinepubs/htmpubs/2500.htm. For a list of Maine nurseries and garden centers offering native plants, see http://www.umext.maine.edu/onlinepubs/htmpubs/2502.htm#Maine_Nurseries or http://www.yardscaping.org/sources.htm

Did you know?
Invasion by exotic plants is second only to habitat destruction as the greatest threat to the natural ecosystems of the US.

For more information about Maine native plants, see Bulletin #2502, "Native Plants: A Maine Source List" at http://www.umext.maine.edu/onlinepubs/htmpubs/2502.htm.

Know Your Stuff: Be aware of Maine's most common invasive plants and the most appropriate methods to control or eliminate them. Make sure you don't start pulling out areas infested with invasive plant species— invasives have root systems and leaves and are doing some "buffer" functions. You'll need to replace them with equally or better functioning plant materials.

- Asiatic Bittersweet
- Common and Glossy Buckthorn
- Common Reed (Phragmites australis)
- Eurasian Milfoil
- Garlic Mustard
- Japanese Knotweed
- Multiflora/Rambler Rose
- Purple Loosestrife

The Maine Invasive Plants fact sheet series are available online at http://www.maine.gov/doc/nrimc/mnap/features/invsheets.htm. See also "Mistaken Identity? Native Plants and Their Lookalikes" at http://www.nybg.org/files/scientists/rnaczi/Mistaken_Identity_Final.pdf.

Know Your State & Local Regulations

Since buffers are among the very best means for protecting rivers and streams, state and local authorities protect buffers in several ways. There are specific Federal, State and local laws for protecting water - including location and maintenance of septic systems, determining setbacks from surface waters, and about cutting in and modifying the shoreland zone. Your property may also be subject to further Maine DEP and Town of Kittery or Eliot restrictions if you live in a development or planned neighborhood. Visit the DEP site for more information (www.state.me.us/dep).

For more information on using vegetation to protect water quality and planting and maintaining buffers, visit http://www.pwd.org/pdf/water_resources/conservation%20fact%20sheets/PLANTING%20and%20MAINTAINING%20BUFFERS.pdf.

PROTECT KITTERY WATERS

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