

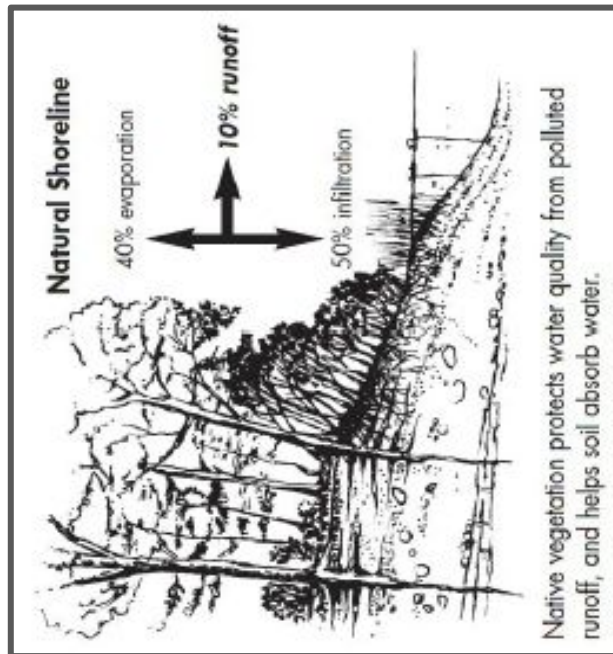
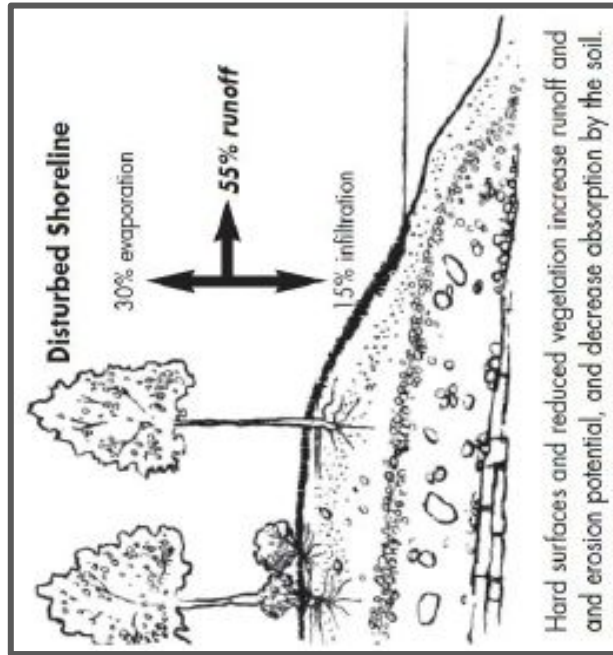
Natural Shoreline / "Ribbon of Life":

90% of all lake life is born, raised and fed in the area where the land and water meet. The shallow water and the first 10-15 metres of shoreland form a "ribbon of life" around lakes and rivers that is essential to the survival of many species. This rich and complex habitat supports plants, micro-organisms, insects, amphibians, birds, mammals and fish.

Best Practice: A healthy buffer zone is potentially the most important factor in protecting the quality of water of our lakes and rivers for future generations to enjoy. As a best practice, every waterfront property owner should strive to maintain 75% of the buffer zone in its natural state.

The Township of HBM strives to work with its ratepayers, associations, recreational users and various agencies to maintain and restore natural shorelines in order to protect the quality of water and health of our lakes and rivers.

The Township's Comprehensive Zoning By-law provides a balance of property owners' rights and protection for our lakes and rivers. The by-law requires all new development in the Seasonal Residential zone shall be located greater than 30 metre (100 feet) from the high water mark.



Waterfront Property Owners Information

Protecting & Restoring Healthy Shorelines

The Township of Havelock-Belmont-Methuen (HBM) is gifted with abundant lakes and rivers that are enjoyed by our residents, visitors and wildlife.

You may be a HBM property owner fortunate enough to have property with a lake or river shoreline. With that comes all the special opportunities to boat, swim, paddle, fish, see wildlife and just enjoy the ever changing views. But, with that also comes a **RESPONSIBILITY** to be a good steward of the water, for the lake and river environment, to preserve it for your family and future generations to come.

This pamphlet suggests a few of the most important things **YOU** can do to ensure our lakes and rivers continue to be healthy ecosystems for people, fish, aquatic plants and other life.

THANK YOU!



Some Traits of an Unhealthy Shoreline

1. **Cleared manicured lot** - lacks shade and privacy; loss of native plants leads to more erosion, runoff and work for you.
2. **Runoff** - flows over solid surfaces, accelerating erosion; pollutants and excess silt degrade aquatic habitat.
3. **Chemicals/Sprays (pesticides, herbicides, fertilizers and road salts)** - degrade water quality; are hazardous to your health; can be deadly for fish and other wildlife.
4. **Lawn to the water's edge** - lacks deep roots required to stabilize the bank.
5. **Hardened shoreline** - can deflect erosion downstream, eliminates "natural filtering" of pollutants and sediment; degrades habitat.
6. **Artificial Beach** - requires ongoing sand replacement; reduces water quality; degrades aquatic habitat.
7. **Old 2-stroke engine** - dumps 25 - 40% of fuel, non-combusted, into water and air.
8. **Solid crib dock** - destroys aquatic habitat; alters currents; can deflect erosion downstream.
9. **Malfunctioning septic system** - allows phosphorus and bacteria to leach into adjacent waterways.
10. **Harmful household chemicals and cleaners** - damage septic system and degrade water quality.



Some Traits of a Healthy Shoreline

1. **Prune trees rather than removing them** - plant low maintenance native trees and shrubs to reduce erosion and absorb runoff.
2. **Replace solid surfaces with porous materials where possible** - redirect runoff into settling areas, away from the water's edge.
3. **"Mow it high and let it lie"** - leave grass 8 cm (3 in) high to retain moisture; mulch clippings for fertilizer.
4. **Start a buffer zone** - leave some grass uncut along the water's edge; restore with deep rooting native plants.
5. **"Soften" your shoreline** - improve erosion protection with native trees, shrubs, grasses and aquatic plants.
6. **Create a "dry land" beach above the high water mark** - let imported sand erode away naturally and native plants grow back.
7. **Use an electric outboard, or a four-stroke engine** - keep them well maintained.
8. **Remove solid dock** - Install a pipe, cantilever or floating dock.
9. **Care for your septic system** - by having it pumped out and inspected regularly, every 2-5 years, based on usage; upgrade it when necessary.
10. **Use environmentally friendly products or alternatives** - like baking soda and vinegar.

What you can do to protect and restore healthy shorelines:

- Preserve natural vegetation
- Naturalize degraded areas
- Enhance with native species
- Restore cleared areas

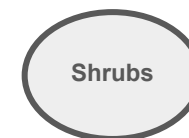
Help your investment grow!

Recent studies demonstrate that property values decrease as water quality declines. The single most important thing you can do to protect the value of your waterfront investment is to maintain the water quality in your lake or river. Think of the natural vegetation on your property as a free shoreline insurance policy.

Sample of Native Trees, Shrubs and Plants



- White Pine
- Red Pine
- White Birch
- Silver Maple
- Yellow Birch
- Hemlock



- Alternate Leaf
- Dogwood
- Serviceberry
- Nannyberry
- Blue Vervain
- Spicebush



- Canada Anemone
- Helen's Flower
- Black-eyed Susan
- False Sunflower
- Switchgrass

Other Sources of Information:

- Local Cottage Associations
- Federation of Ontario Cottagers' Associations (FOCA) - [Healthy Waterfronts: A Shoreline Owner's Guide](#)
- [Watersheds Canada](#)