North Kawartha Township 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.

The County Official Plan, Section

6.2.5.3 (h) states, "The preservation of naturally-vegetated shoreline is encouraged in order to minimize the destruction to the shoreline and wetland habitat, minimize visual impact on the water body, maintain wildlife habitats and corridors and improve water quality."

The North Kawartha Comprehensive Zoning By-Law 26-2013 provides for a balance of property owners' rights and the protection of our lakes. Development (renovation) of a non-complying main structure (i.e. main cottage) located in the 30 metre (100 foot) setback zone may be permitted if the application meets the specific requirements set out in the <u>Comprehensive Zoning By-Law #26-2013</u>

Other Sources of Information:

- Local Cottage Associations
- Federation of Ontario Cottagers' Associations (FOCA) - <u>Healthy</u> <u>Waterfronts; A Shoreline Owner's</u> <u>Guide</u>
- <u>Watersheds Canada</u>

What you can do to protect and restore healthy shorelines:

- Preservation of the natural vegetation
- Naturalization of degraded areas
- Enhancement with native species
- Restoration of 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. Think of the natural vegetation on your property as a free shoreline insurance policy.



Thank you to The Environment Council for Clear, Ston(e)y and White Lakes and North Kawartha Lakes Association

PROTECTING & RESTORING

HEALTHY SHORELINES

The Township of North Kawartha is fortunate to contain numerous unspoiled lakes that are enjoyed by all of our residents, recreational users and wildlife. Maintaining water quality and healthy lakes is essential.

The North Kawartha Strategic Plan 2019-2022 Vision is of "A united and healthy community connected to our natural heritage."

This pamphlet is designed to provide shoreline property owners with important information when working on shoreline properties. Please read carefully before applying for a building permit.



0.2-2022



Needs Improvement

- 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 habitat for aquatic life.
- 3. Chemical fertilizers and pesticides 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 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 24 40% of fuel, uncombusted, 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.



- 1. Prune trees rather than removing them: plan 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 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.
- 8. Remove solid dock. Install a pipe, cantilever or floating dock.
- 9. Care for your septic system by having it pumped out and upgrade it when necessary. Consult an expert.
- 10. Use environmentally-friendly products, or alternatives like baking soda and vinegar.

The Ribbon of Life Ninety percent of all lake life is born, raised and fed in the area where land and water meet. The shallow water and the first 10 to 15 metres of shoreland forms a ribbon of life around lakes and rivers that is essential to the survival of many species. This rich and complex habitat supports plants, microorganisms, insects, amphibians, birds, mammals and fish.

Unaware of the importance of shoreline vegetation, many landowners clear their shorelines and transform them into urban landscapes. They destroy the cattails, bulrushes and other native species. They also build retaining walls, docks and boathouses. These changes destroy the balance of the aquatic and shoreline ecosystems. They also alter the wildlife habitat, natural beauty and character of our lakes and rivers.

Natural shoreline vegetation plays an important role in preventing soil erosion. Plant roots anchor the soil, preventing shoreland from being washed away by currents, waves and rain. The roots of mature trees reach down to the upper levels of the water table. Dogwood and meadowsweet roots form a web that extends a half-metre downward. These native species are far more effective in protecting properties from erosion than the roots of grasses, which only reach 8 centimetres below the surface.

By preventing erosion and runoff, natural shoreline vegetation also improves water quality. When soil and excess nutrients are washed into the water, fish spawning beds can be destroyed, dissolved oxygen is depleted and the growth of algae and aquatic plants is encouraged. Shoreline vegetation also improves water quality by shading and cooling shallow water. All of these changes in water quality can lead to rapid eutrophication - the aging of a lake. Eutrophication of a lake ultimately changes the kinds and numbers of species that can live there.

Best Practice A healthy buffer zone, or the ribbon of life as it is called, is potentially the most important factor in protecting the quality of water of our lakes 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 focusing all cottage activities, structures and viewing corridors on the remaining 25%.