



Coastal Resilience: Navigating Storms and Winters through Property Assessment and Monitoring

ABOUT HELPING NATURE HEAL

Helping Nature Heal Inc. was founded in 2001 by Rosmarie Lohnes and is located in Bridgewater, Nova Scotia. Helping Nature Heal Inc. specializes in ecological landscaping which combines the science of ecology with the principles of landscape design to create beautiful and ecologically functional landscapes. These are designed to reconnect people with the land they live on and encourage responsible stewardship. Helping Nature Heal Inc. also provides consultation services for many aspects of landscaping and gardening, including forest stewardship, erosion management, habitat creation, and edible landscaping.

THE IMPORTANCE OF RIPARIAN AND COASTAL ZONES

Riparian zones and coastal zones are areas between the upland zone and the shoreline. They form a corridor between land and water, allowing animals to travel between different biomes. Lining the border of the water, they provide distinct, rich, moist soils in which diverse plant communities can grow. Healthy riparian and coastal zones contain diverse plant species and aquatic and terrestrial wildlife. They help to maintain water levels, provide habitat, and prevent erosion.

How to foster a healthy riparian or coastal zone on your property

- Increase your shoreline buffer by adding native plants.
- Create a 'no mow zone'. Allow your shoreline to become more naturalized by not mowing your lawn close to the shoreline.
- Leave woody debris, leaf litter, and other biomass in your yard.
- Create an s-curve path down to the water to reduce overland runoff.



Photos: Watersheds Canada

STORM RESILIENCE

Healthy ecosystems are more resilient to storms. Just like you would make sure your family is prepared for a storm, the same principles apply to your shoreline and property. Improve resilience on your property by creating a shoreline buffer, using winter protection strategies, and continually monitoring changes.

ACTIONS YOU CAN TAKE TO PROMOTE STORM RESILIENCE ON YOUR PROPERTY

Shoreline buffers and erosion prevention

- Erosion is a natural process. It is exacerbated by factors such as sea level rise, increased storm surge, removal of shoreline vegetation, land development, and warming due to climate change.
- Adding native plants to shorelines creates a buffer that helps improve resilience and reduces the impact of storms.
- By planting a variety of native trees, shrubs, and wildflowers, the different root structures work to hold the shoreline together and reduce erosion.
- Apply a layer of mulch around the base of trees and shrubs to help stabilize soil and reduce erosion from rain and overland flow.



Photo: Helping Nature Heal



Photo: Watersheds Canada

Winter protection

- Winter protection can stop freeze-thaw cycling. It protects the feeding roots of plants and prevents frost heave.
- Use materials, such as hay dry or brush, to improve insulation and help to keep the ground frozen.

Monitoring

- Put systems in place to perform repeatable procedures.
- Measure at least 3 transects per 100 feet (the more transects the better).
- A drone can be helpful for large areas and it presents the opportunity to use map overlays to measure coastal changes.
- Data helps identify what changes are occurring on coastlines and shoreline properties over time.

ADDITIONAL RESOURCES

- Learn more about Helping Nature Heal Inc.'s [ecological restoration services](#), [living shorelines](#), [educational services](#), [Nature's Store](#), [workshops](#), and [courses](#).
- Interested in naturalizing your shoreline? Learn about the [Natural Edge](#) shoreline naturalization program.
- Explore the Natural Edge Program's free, Canada-wide [Native Plant Database](#).
- Discover [free resources](#) for waterfront property owners, such as the "Guide to Preparing a Shoreline Naturalization Planting Plan", "Shoreline Habitat Creation Manual", "A Regulatory Guide to Achieving Environmental Net Gain at the Waterfront", and "The Science Behind Vegetated Shoreland Buffers: Why the Ribbon of Life Matters".
- Learn more about shoreland protection through the Freshwater Stewardship Community's archive of [resources and webinars](#).