WATER FRONT PROPERTIES

GUIDE FOR ACHIEVING A LIVING SHORELINE

A STEWARDSHIP GUIDE

BUFFALO NIAGARA RIVERKEEPER®
Our strong cultural convention for what justifies natural beauty has produced a monolithic landscape of turf lawn that exists unbroken and all-encompassing across our country. This cultural convention is well-developed and resistant to change, making this guide and your cooperation a necessary catalyst for developing a new set of aesthetic expectations for waterfront landscapes. Our goal is to make healthy landscapes recognizable and highly visible in order to cause widespread change, and it starts in your backyard.

The current convention for waterfront properties utilizes hardened structures such as bulkhead retaining walls and moving-to-the-edge practices. These conventions decrease the overall stability of the shoreline and increase the rate of erosion, resulting in the loss of highly valuable fish and wildlife habitat. These conventional waterfront landscapes are often laden with good intentions, social meaning, and personal pride, but our perceived good intentions have resulted in unforeseen and unintended harm to the very landscape we take pride in.

It is essential that we start to shift our perspectives on what justifies a beautiful landscape in order to restore harmony to the larger ecological system. The ecological future of our water systems cannot solely rely on large swaths of public land being maintained by professionals, but rather, must rely upon the individual stewardship and efforts undertaken in the backyards of every private landowner along the water's edge.
LIVING SHORELINES

WHAT ARE THEY?

When using the term “living shoreline” we are actually referring to a combination of different natural ecosystems such as meadows, woodlands, wetlands, and aquatic habitats which create a seamless transition from land to water. These incredibly productive shoreline landscapes provide a wide range of benefits including improvements to runoff filtration, habitat diversity, visual character of the shoreline, flood mitigation, and erosion resistance along the edge.

THE BIG PICTURE

- 41,971

Multiply the benefits of a living shoreline by the amount of households that abut a river or lake system in the Niagara River watershed and we will see substantial improvements to the health of our waterways.

MEASURABLE BENEFITS

- 18 X POLLUTANTS
- 13 % PROPERTY VALUE
- 48 % MAINTENANCE COSTS
- 500 % BIODIVERSITY
- 50 - 100 % FILTERED SEDIMENT

The fine textures of grasses and shrubs typical of meadow and woodland-edge ecologies act as coarse filters that strain stormwater runoff, removing sediments and contaminants in water drums downhill towards the waterbody. Deep root zones add stability to the shoreline and soak up excessive nutrients carried in stormwater runoff before it enters a waterbody.

MEADOW

WOODLAND EDGE

Large trees such as cottonwoods and willows slow energy and water and provide the shallow spreading roots of upland tree species. Placement and species help to stabilize, improving shoreline resilience to erosion. The large canopies of these trees provide habitat for birds and the shade they cast onto the water is ideal for fish and amphibian wildlife, such as turtles and frogs.

WETLANDS

AQUATIC HABITAT

Wetland ecologies absorb flood waters and regulate stream fluctuations, further improving shoreline stability. Aquatic vegetation grows here which provides food for fish, and the fallen woody debris that settles along the edge offers juvenile fish protection from predators and dissipates wave energy, protecting the fragile ecosystems located closer to the shore.
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