ONTARIO NATIVESCAPE

RIPARIAN BUFFER PROGRAM

ESTABLISHING TALLGRASS PRAIRIE ALONG WATERWAYS TO PROTECT WATER QUALITY

WHAT IS A RIPARIAN BUFFER?

A riparian buffer is a strip of vegetation – usually a mix of grasses, wildflowers, shrubs and trees – planted along waterways like streams, creeks, drains and wetlands.

This program provides assistance for establishing native tallgrass prairie in riparian areas such as along streams, drains, ditches and wetlands to buffer adjacent land activities from waterways, protecting and improving water quality.

WHY TALLGRASS PRAIRIE?

Prairie is the French word for meadow and includes a mixture of grasses and wildflowers. It is native to Ontario and therefore well adapted to climate and soil conditions. The grasses have extensive root systems (2.5 metres) which help them survive drought conditions, outcompete other unwanted vegetation and hold soil in place. The wildflowers have a long blooming period (May to September) providing excellent habitat for pollinators. Used as a buffer, it not only provides superior erosion control protecting soil and water resources, but excellent wildlife habitat.

Native tallgrass prairie buffers are easy to maintain, once established they require little maintenance or inputs such as mowing or spraying to control unwanted vegetation. They can complement many rural and industrial land use activities including many agricultural practices such as creating a harvest area of increased high quality forage for livestock, attracting beneficial pollinator insects and for manoeuvering agricultural equipment.

WHY BUFFER? THE BENEFITS OF CREATING A BUFFER STRIP

Leaving or creating a riparian buffer along waterways can improve the water quality adjacent to your property by over 30%. It removes sediment and pollution such as chemicals, fertilizers, pesticides, bacteria and even road salt before they reach surface water. In addition, they provide other benefits such as:

· **Soil Health Improvement**- Soil health on your property will be improved as buffer strips will increase soil stability. The extensive root systems of native grasses and wildflowers and above ground growth will hold soil in place, reducing the impacts of soil and wind erosion. The increased organics and soil organisms will also contribute to overall soil health.

· **Stream Banks Stabilization**- Native grasses have extensive roots systems up to 2.5 meters in length holding soil in place preventing soil deposition into waterways. Stabilizing stream banks will not only protect water quality but prevent costly long-term drain maintenance costs.

· **Fish and Wildlife Habitat Creation** – A diversity of species depend on riparian habitat. The abundance of wildflowers provide critical nectaring and breeding habitat for many pollinators. While the improved water clarity and increased native vegetation provide excellent habitat for fish and other wildlife such as turtles and frogs.

· **Upland Habitat Creation** – Wildlife populations thrive in patches of tallgrass prairie because they provide quality nesting and rearing cover, winter survival cover and food. More native habitat creation on your property will translate into more wildlife.

BUFFER BMPS – BEST MANAGEMENT PRACTICES

Riparian buffers can range in width and be a mixture of vegetation types. However, research has indicated the following characteristics will be the most effective in benefiting your property.

The Wider the Better. Environment Canada recommends a 30 meter buffer. However, not all circumstances will allow a riparian buffer of this width. A minimum of 5 metres (16 ft.) will create a suitable buffer from adjacent land activities.

Pollinator Plus. Using a mixture of native wildflowers with grasses will not only improve aesthetics, it will attract more wildlife including beneficial insects such as bees and butterflies, important pollinators.

Both Sides Buffered. Ideally both sides of the watercourse should be buffered. Partnerships can be made with adjacent landowners if you do not own both sides.

Use Native Plants. Native grasses and wildflowers are adapted to local climate and environmental conditions allowing them to withstand drought conditions and pest infestations. Their extensive root systems hold soil and filter runoff before it enters a watercourse. Using native plants will protect adjacent crop lands from invasive non-native species from encroaching.

Leave it Be. Leave natural vegetation, rocks and gravel along shorelines. A diverse aquatic community helps improve water quality. Roots from plants help prevent streambank erosion and siltation. Overhanging vegetation provides food, shelter and shade for aquatic life. Rocks and gravel provide hiding places for organisms and provide spawning beds for fish.

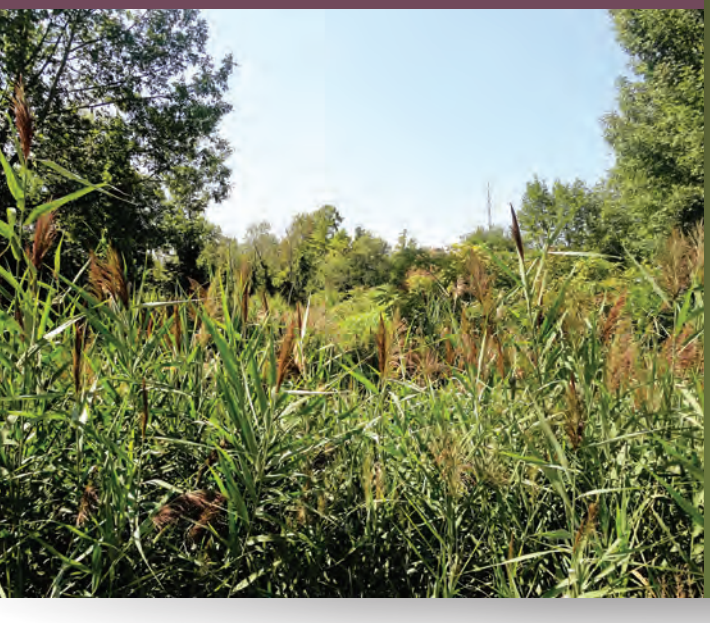
Be Biodiverse. Having a diversity of grasses and wildflowers native to your area will attract more wildlife. If you have the space, adding shrubs and trees will increase the benefits of your buffer for soil health and water quality.

Let it Grow. Stop Mowing – Once established, tallgrass prairie requires little maintenance. You can reduce your mowing and spraying costs by creating native vegetation buffers.

PHRAGMITES AUSTRALIS – AN INVASIVE SPECIES

Phragmites australis is a non-native, aggressive plant that invades areas of low water areas such as along drains and creeks and within wetlands. Phragmites australis not only degrades the quality of fish and wildlife habitat, it impedes the natural hydrological functions of waterways and wetlands. Once established it can be difficult to control and quickly invades other low lying areas.

Once Phragmites australis is under control, we can stabilize slopes quickly using specialized hydro seeding methods in these highly erodible areas.



SIGN ME UP!

HOW CAN I GET STARTED?

☐ **Are you a drain manager?** ☐ **Private landowner?**

☐ **Industrial landowner?**

Do you have a drain, creek, stream, river or any other type of surface water on your property?

WE CAN HELP BY:

- Creating a riparian buffer between land activities and a waterway
- Assisting in streambank stabilization projects after drain cleanouts or stream alterations
- Controlling invasive species such as Phragmites australis
- Funding and project management advice and experience for your project

Re-introduction of native plants back onto rural landscapes has to the potential to support multiple conservation goals. It starts with YOU! Start by contacting Ontario NativeScape to get more information. You may qualify for one of our voluntary grant programs!

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ONTARIO NATIVESCAPE

Ontario NativeScape is a not-for-profit organization that specializes in managing and completing habitat restoration projects that achieve and maintain a healthy and sustainable environment. Focused on restoring and safeguarding Ontario`s native ecosystems and biodiversity, we have 20 years of experience planning, implementing and managing habitat and water quality restoration projects. As leaders in tallgrass prairie restoration to date we have managed and restored over 1400 hectares of tallgrass prairie habitat in Ontario.