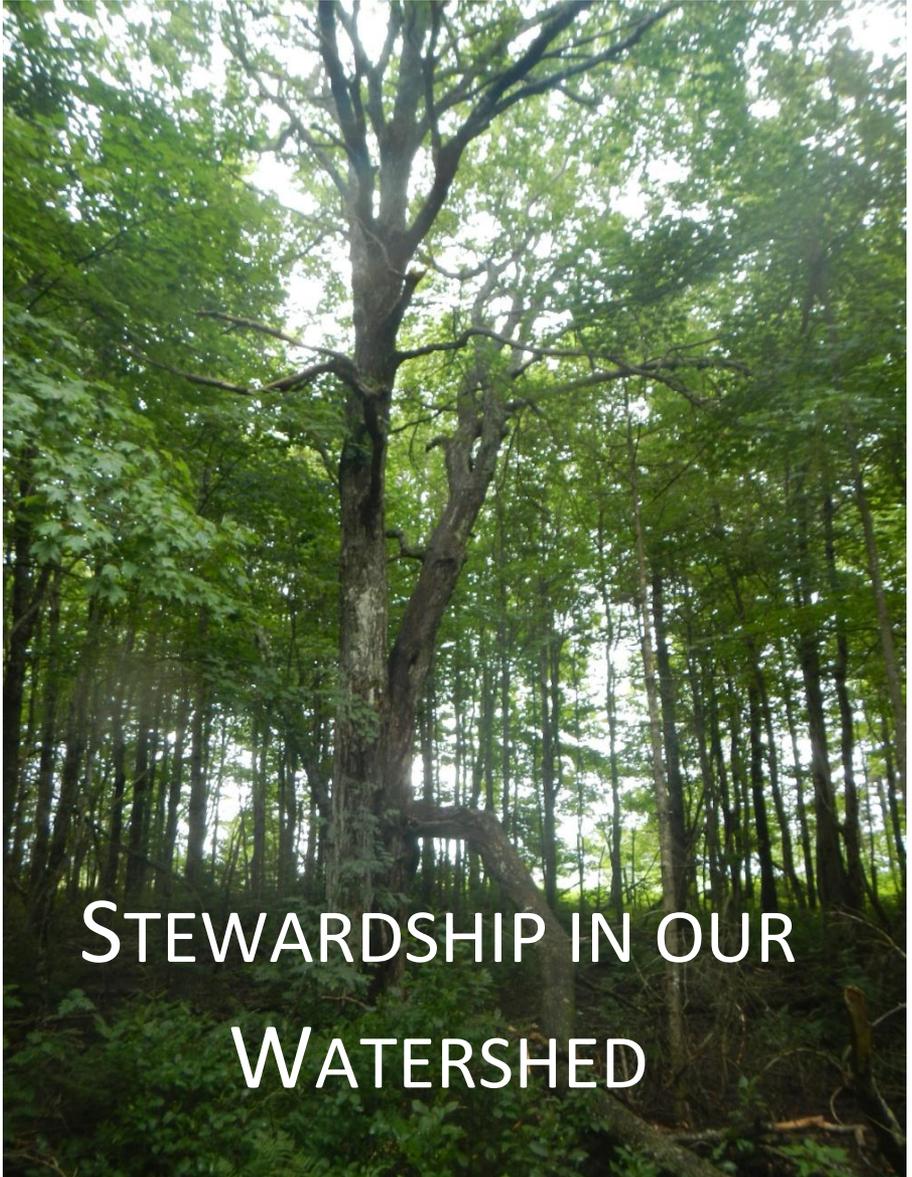


Wheatley River Improvement Group



STEWARDSHIP IN OUR
WATERSHED

WRIG - WHO WE ARE

The Wheatley River Improvement Group (WRIG) is an environmental organization located in Queens County, Prince Edward Island. The primary purpose of our group is to restore and protect the environmental quality of the Wheatley River and its tributaries. WRIG's vision is one of a healthy watershed with a rich diversity of aquatic and terrestrial plant and animal life.

Our History

WRIG was formed in the late 1990's by residents of the Wheatley River area who were concerned about the health of their watershed. Since the early years, we have recognized the need to engage all community members, to encourage our sense of being connected and our shared responsibility for maintaining and enhancing the health of the watershed. The group became incorporated in 2004, and we continue to actively work towards sustainable watershed restoration and habitat enhancement.

Becoming a WRIG member

If you are interested in supporting the efforts to restore and protect our watershed, please consider becoming a WRIG member. All members receive newsletters and personal invitations throughout the year to participate in workshops, meetings and nature related activities such as our annual Day on Our River Festival.

Individual or Family Memberships \$ 10.00

Corporate Memberships \$50.00 (*Corporate members will be promoted as supporters at our public events and communications.*)

Memberships can be obtained by contacting the WRIG office, or accessing a membership form online, and mailing the form and fee to:

*The Wheatley River Improvement Group
#2184 Church Road, RR#3
Hunter River, PE
COA 1N0*

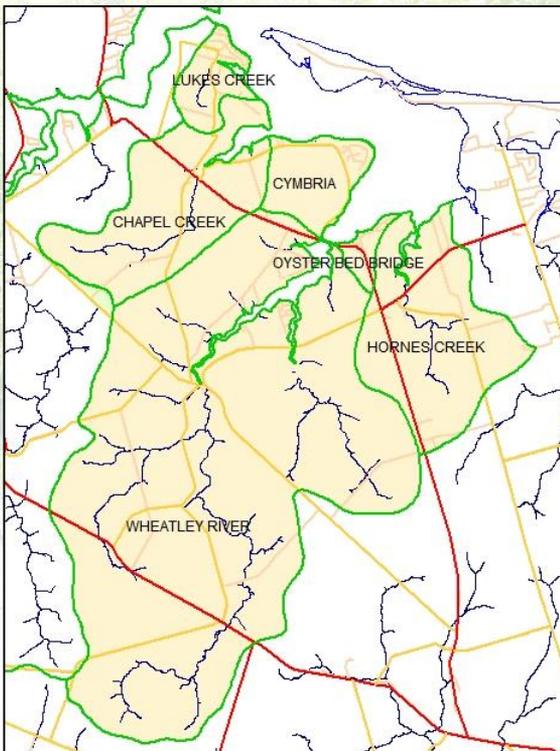
www.wheatleyriver.ca/welcome/membership/

YOU ARE AN ENVIRONMENTAL STEWARD

Good Environmental Stewardship means recognizing and being responsible for the impact your actions and activities have on your natural surroundings. By sustainably managing your land, you will reap benefits and joy for years.

PURPOSE OF THIS BOOKLET

One of WRIGs main goals is to encourage landowners to actively participate in the environmental stewardship of their properties, contributing positively to the overall health of our watershed.



This booklet will present options and strategies for managing or developing your property or woodlot. It will answer some commonly asked questions, describe methods to encourage the presence of wildlife, and describe what regulations exist around tree removal and planting (near roads and watercourses).

Disclaimer: Several local and provincial resources were

consulted to provide up to date information contained in this booklet. Please refer to the last page for reference details. To obtain additional information about your particular property or situation, we recommend consulting a professional. If you would like assistance finding appropriate professional services, please contact WRIG, or the [PEI Department of Forestry and Agriculture](#) for more information.

STARTING POINT: ASSESS YOUR NATURAL AREA

When developing a master plan for your land (or a shift of land management), you should first evaluate the existing natural areas. Each ecosystem is unique, and each species in it occupies a niche that co-exists with other plants and animals rather than existing as a single tree or individual animal. To wildlife, a woodlot is not qualified by a number of trees or acreage, but in the quality of habitat and food resources available.

Some questions to consider:

- Are your trees all fully mature, at different stages, or are they old and at risk of blowing over in a bad storm?
- Do you have a retired field that has been taken over by wildflowers and shrubby trees?
- What is the soil type of your property; will that affect the types of trees you want to plant?
- Do you have a stream or marshy area surrounded by trees that serves as an oasis for local wildlife?
- What types of birds and other animals have you seen and heard?
- Are you interested in protecting a certain type of natural area?
- Are there wildlife visitors you would like to encourage or discourage?
- What kinds of activities would you like to carry out on your property?
- Is there sensitive habitat on your land?

Exploring and understanding the types of life supported on your property can help you formulate a vision and direct your management strategy.



WHY MANAGE NATURE?

Nature isn't broken; we don't need to fix it. It can, however, occasionally use a careful helping hand when it has been disturbed. A common example on PEI is a retired field, once forest, which has started to grow up with young trees (usually white spruce). Left alone, these young trees will mature and the forest will gradually evolve and diversify as the conditions become suitable to different types of trees and plants (e.g. some trees grow better in the shade).

The transition to a more diverse forest can be gently guided by introducing some tree or plant species that would otherwise take many generations to become re-established.

Why is diversity important?

Supporting a wide variety of plant species is important to support the resilience of both the plants and wildlife on your property. A monoculture of softwood trees of the same age planted in straight lines may hold value as timber product, but this type of forest does not provide the diversity of food sources and shelter necessary for wildlife to thrive and is also very susceptible to disease.

One of WRIG's field crew planting a native shrub species in an old farm field, helping to improve biodiversity and enhance habitat for local wildlife.



What Trees and Shrubs can do for you:

ADDING VALUE TO YOUR NATURAL AREA

Trees and shrubs aren't just for wildlife! They can:

- Make your yard an inviting extension of your home for you and your family to enjoy! A mature maple or oak tree will provide a lovely shade from the summer sun and a row of spruce can act as a windbreak and snow fence in the winter. Prune some branches to improve your view.
- Protect your property from erosion (a long lasting and affordable solution). The root systems of trees and shrubs provide natural protection to erosion, by anchoring soil in place. They don't require permits and heavy equipment to install either!
- Provide yummy goodies! Plant native wild raspberries, strawberries, apples, serviceberry and beaked hazelnut tree and harvest right from your own backyard. Overwintering wildlife appreciate the leftover fruits and berries too.
- Support your own personal aviary! A range of feathered friends can be enticed by planting a variety of natural birdfeeders and nesting spots like Red Osier Dogwood, Service Berry, and Bayberry.
- Attract pollinators. Many plant species (including your favorite fruit and berry trees and shrubs) cannot reproduce without assistance from butterflies, bees and other insects. A variety of flowering shrubs, trees and wildflowers that flower at different times of year will encourage these pollinators to visit your natural area and stay! More tips can be found on the Bedeque Bay Environmental Associations website:

www.bbema.ca/pollinator-habitat-reserves/



The Monarch butterfly is a beautiful local pollinator that benefits from thoughtful planting of pollen rich plants. This one has been tagged for research purposes.

WHAT TREES, SHRUBS AND FOREST TYPES ARE NATIVE TO WHEATLEY RIVER?

Acadian forest covers all of PEI (including Wheatley River). Acadian forest species are adapted to our climate and soil types.

Forest communities in Wheatley River range from **deciduous woodlands** (hardwoods including red oak, sugar maples, yellow and white birch, beech and mountain ash), **coniferous woodlands** (softwoods including white and red pine, white and black spruce, cedar, hemlock) and **wet woodlands** and **marshes** (alders, winterberry, sphagnum moss, larch, balsam fir, wild rose, willow, cattails).

Some species are better adapted to wetter soils and open light, while others grow better in the shade of other trees and drier soils. An excellent and detailed resource describing native plant species and where to plant them is available through the Macphail Woods Ecological Forestry Project: www.macphailwoods.org, The Island Nature Trust: www.islandnaturetrust.ca, and Nature PEI: naturepei.ca. Use this information as your guide when choosing plants for your property.

What programs are available to get more trees on my property?

The Department of Forestry has several tree planting programs: Forest Enhancement, Hedgerow & Buffer Zone Planting Programs. Watershed organizations (including WRIG) also offer opportunities for property owners to have trees and shrubs planted. Program details can be found at: www.gov.pe.ca/forestry/trees

Are there any species of trees or plants that I can't plant on my property? No. However, we encourage property owners to plant species that are native to PEI and suited to the site conditions. If the plant is not suited to the site, the plant may not grow as quickly, survive as long, or be as resistant to stressors like winter, insects and diseases.

How close to the road can I plant my trees?

Be aware of any applicable easements and municipal bylaws which may outline tree planting distances. Be aware of any underground utilities or access to utilities that may be affected by trees. Consulting with next door neighbors about your plans is also good practice. (Certain bylaws may permit removing branches that extend over the property boundaries.)

Is there any mandatory reporting of new tree pests or diseases (as is the case for blight)?

Reporting is not required, although it would prove helpful to report. Early identification of new pests and diseases makes it easier for agencies to eradicate or slow the spread of pests. If you would like to find more information about local tree pests and diseases or if you see something you are concerned by and want to make a report, details on pest sample submission can be found at the following website: <http://www.gov.pe.ca/forestry/plantpests>



A mature osprey using the top of a white spruce as a lookout near its nesting platform. Bordered by agricultural fields, residential land, and a pond, this stand of trees has been left to mature as part of a hedgerow and riparian zone, providing excellent habitat for local wildlife.

UNDERSTANDING BUFFER ZONE AND WATERWAY PROTECTION: WHAT IS SENSITIVE HABITAT?

A sensitive habitat is a natural area particularly vulnerable to the negative impacts of human activities or extreme weather fluctuations. They are often highly valued by both humans and wildlife.

Riparian zones: These locations mark the boundary of where land meets any river, stream, or estuary. They're characterized by plant species that thrive in the wet conditions on stream banks. The land can be in tall grass, trees or shrubs.

Why are riparian zones valuable? These "green belts" filter water flowing overland into a watercourse, preventing soil and other contaminants from entering streams and rivers, where they could degrade water quality and destroy wildlife habitat. Riparian zones serve as wildlife habitat and corridors, and are important regulators for stream conditions and aquatic life. Riparian zones are also valued simply for their aesthetic value.

Ephemeral Stream: The term *ephemeral* refers to a stream where the flow is temporary, the source water coming from storm precipitation or snow melt, emptying into a larger stream or body of water. Unlike spring fed streams, these locations can become swampy or dry up completely during the dry seasons, and therefore are an unlikely place to find fish year round. These areas are not included in Riparian zone regulations.

Why are ephemeral streams of value? Trees like alder, birch and red osier dogwood like to soak up the water that occasionally collects in the low lying areas, supporting amphibian and bird life.

Brackish water and estuaries: When overland fresh water rivers flow into a salty tidal inlet, the mixing of salt water and fresh water creates a nutrient rich and dynamic environment.

Why are brackish water and estuaries important? Many specialized animals live, feed, or migrate through estuaries. The Rustico Bay is an ideal example of this, with the fresh water of the Wheatley River flowing downstream and mixing with tidal waters all the way up to the Wheatley River Bridge. Shellfish such as oysters and mussels filter phytoplankton from the water column, and feed crustaceans and fish, which are in turn eaten by ducks, herons, and birds of prey.

REGULATIONS PROTECTING SENSITIVE HABITAT



A still standing dead tree with a cavity can be used as nesting habitat by many animals.

In 1999, the province of Prince Edward Island took measures to help protect sensitive habitats from human activities, regulating activities in proximity to streams and wetlands.

Provincial legislation aims to protect all **watercourses** (streams, rivers, creeks, and estuaries) and **wetlands** (including marshes, swamps, and other low lying wet lands). These rules also take into consideration **buffer zones** extending **15 metres** from the sediment bed in streams, the top of the bank in tidal areas, and from the edge of wetland vegetation.

Before you cut down trees or remove shrubs from your property, **it is your responsibility to make sure you are not working in a protected area**, or you may face fines or penalties, and damage a sensitive environment.

No agricultural activities, pesticides, development and tree and shrub removal are permitted within the 15 metre buffer zones surrounding all PEI watercourses without a special permit.

In watercourses, special permits must be obtained from the provincial government before performing any alterations to the soil or stream, including operating a vehicle or removing blockages and vegetation. There are also detailed regulations on what farming, agricultural or livestock related activities can take place near streams and wetlands.

Did you know: Watershed groups (like WRIG) also have to obtain a watercourse alteration permit before planting trees in a buffer zone and cleaning up stream blockages to allow fish passage, before the work starts.

For more information on Watercourse and Buffer Zone regulations, or to apply for a permit, contact the PEI Department of Environment, Labour and Justice: www.gov.pe.ca/environment/buffer-zones.

LOCAL WILDLIFE

Wheatley River is home to a vibrant array of birds and other wildlife. There are migratory songbirds, waterfowl, blue herons, owls and eagles that fill our skies; and foxes, rabbits, raccoons and mink that prowl the ground. We have eels and brook trout in our streams and spring peepers in our wetlands. Beavers dam our brooks and red squirrels chatter at us from tree branches. You have the power to both enhance and protect their habitat (or destroy it).

Two species that live in woodlands in Wheatley River that you may not be aware of are the wood duck and the wood frog.

WOOD DUCK

The Wood Duck, (*Aix sponsa*) is one of the most beautiful waterfowl that migrates to PEI. Wood Ducks migrate to our region during the early spring, and nest with their mates in the hollow cavities of trees in wet, wooded areas. A relatively small body size with claws on their webbed feet, this unique bird is adept at flying around trees and climbing in and out of their nests. When tree cavities are not readily available, wood ducks happily make use of constructed nest boxes to lay their clutches of 8-12 eggs. When the ducklings hatch and are 24 hours old, they climb up and leap out of their nest cavity, following the call of their nearby mother, leading them towards water.

Migratory ducks aren't just valued by human hunters, they are essential to the local ecology as a food source for predators including bald eagles, owls, foxes and raccoons. To quote local hunter and wildlife enthusiast Terry Godfrey: *"Everything feeds something else"*.



A newly hatched Wood Duck leaps from its nest box. After the duckling reaches the ground, it will follow its mother to water.

What can you do to attract wood ducks to your property?

- (1) Leave “snag trees” or standing dead trees on your property. Snag trees are perfect for birds like the Wood Duck to build nests in! Also, insects and other detritivores break down the dead trees into nutrients for new plant life.
- (2) Set up a Wood Duck nest box. If you have ideal Wood Duck habitat, please contact WRIG and our field crew can install a nest box for you.

WOOD FROG



Wood Frogs (*Lithobates sylvaticus*) are found in wet woodlands and freshwater marshes across PEI. They breed early in the spring, often before all the snow has melted, and can be distinguished by their dark markings; they look like they are wearing a dark mask and have prominent

dorsal ridges. Many meat-eating animals depend on adult wood frogs and their tadpoles as a food source. Their croaking “quack” call can be heard around woods and wet areas. Listen to the Wood Frog call here:

www.naturewatch.ca/frogwatch/wood-frogA

Are wood frogs frequent visitors to your property? If yes, that is a good sign! Wood frogs are an indicator of a healthy environment. If they are present in good numbers, it is a sign of a stable and productive habitat. If the populations are low or non-existent, it is a sign something is not right.

You can encourage the presence of wood frogs by:

- leaving wet wooded areas untouched, as leaf litter and fallen tree trunks are excellent spots for frogs to hibernate in for winter.
- letting those annoying patches on your lawn that are often too wet to mow grow in and form perfect wood frog habitat!

If you have a healthy population of wood frogs on your property, WRIG would love to know! Give us a call or send us an email!

MORE REAL QUESTIONS AND ANSWERS:

To help understand how the provincial rules and regulations affect individual landowners, some frequently asked questions are answered below:

Buffer and riparian zones:

Can I prune or trim trees in the buffer zone?

Yes, limbs can be removed from the sides of a tree without a permit; the main stem may not be cut.

There is grass beside the stream on my property. Can I mow it?

Yes, grass can be mowed in the buffer zone without a permit as long as trees and shrubs (including seedlings) will not be disturbed by the mowing.

Are areas bordering estuaries treated differently than stream buffer zones?

No. Buffer zones apply to all watercourses and wetlands in PEI, including estuaries and the exterior coastline.

Is there anything that I can do on exposed and eroding banks to cut down on or prevent erosion?

Yes, anchoring material can be placed at the toe of the bank to help stabilize the slope. A Watercourse, Wetland and Buffer Zone (WWBZ) Activity Permit is required. To find out more or apply for a Watercourse Wetland and Buffer Zone Activity Permit, contact the PEI Department of Environment, Labour and Justice or go to

www.gov.pe.ca/photos/original/buffer-fact.pdf. More about coastal erosion prevention can be found here:

www.ecologyaction.ca/CoastalErosionResources.pdf

There are fallen trees in the wooded area next to the creek that runs through my property. Can I take them out?

A WWBZ Activity Permit is not required for cutting of dead or downed trees in the buffer zone if the work is done using hand tools and/or equipment (a tractor for example) positioned outside the buffer zone.

Wildlife:

There is a beaver dam on the creek - can I destroy it?

All watercourses and wetlands, which include beaver dams, are protected under the Environmental Protection Act. A license or a WWBZ activity permit, issued by the Water Management Division of the Department of Environment is required in order to remove active and abandoned beaver dams. The Prince Edward Island Watercourse or Wetland Alteration Guidelines outline the approved procedure for the legal removal of beaver dams.

www.gov.pe.ca/photos/original/FWbeaverPOL11.pdf

A fox is eating my laying hens. Can I shoot or trap it? If you have a valid hunting or trapping license, you may shoot or trap foxes during the designated hunting open season. If it is out of season for hunting/trapping foxes, you may apply for a nuisance permit through the department of Forestry's, Fish and Wildlife division. Refer to:

www.gov.pe.ca/2014huntsmary

What can I do to encourage birds such as bobolinks, various types of swallows, bats and other species to use my property? Many different bird species require different kinds of nests and habitats in order to thrive. Specific information has been published in recent years by the Island Nature Trust www.islandnaturetrust.ca/resources/publications and MacPhail Woods Ecological Project: macphailwoods.org/nature-guides/birds/

Land use:

What takes priority in cottage subdivisions: local covenants which precede provincial regulations, or provincial regulations?

Provincial regulations trump subdivision covenants, unless the covenant is stricter than the provincial regulations. To find out more about provincial land use policies, refer here: www.islandnaturetrust.ca/get-involved/protect-your-land

I purchased a wooded residential lot from a farmer. There is a covenant included in the deed stating "the lands surrounding your residential lot are used for agriculture, and therefore are regulated by the PEI Farm Practices Act". How does this affect my property and what I can do on it? In this example, the covenant would not affect the purchaser's lot or how he/she would use it. Such covenants are often used to ensure that landowners are fully aware that farming activities are occurring on neighbouring properties. The provincial regulations that apply to new buildings, including residential, can be found here: www.gov.pe.ca/environment

What is a Forestry Management Plan, and do I need one?

Developing a forestry management plan is a useful tool for landowners with large woodlots to set goals and decide on management practices best suited to achieving those goals. Forestry consultants can help. Funding assistance may be available through the PEI Department of Forestry and Agriculture. Another resource is Macphail Woods Ecological Project: macphailwoods.org/forestry/public-land-management/

REFERENCE MATERIALS AND OTHER INFORMATION RESOURCES

Wheatley River Stewardship Enhancement Plan:

www.wheatleyriver.ca/WheatleyRiverStewardshipPlan.pdf

Best Management Practices Manual (March 2012). Nova Scotia: Nova Forest Alliance.

Frog Watch (2015, February) *Wood Frog Information (photo)*. Retrieved from www.naturewatch.ca/frogwatch/wood-frog

Island Nature Trust, various publications: www.islandnaturetrust.ca

MacPhail Woods Ecological Forestry Project

Plants:

macphailwoods.org/wp-content/uploads/2013/02/plants-for-wildlife.pdf

macphailwoods.org/wp-content/uploads/2013/02/Native-Trees-Shrubs-Pub.pdf

Birds:

macphailwoods.org/nature-guides/birds/

macphailwoods.org/wp-content/uploads/2013/02/Attracting-Wildlife-to-your-Backyard.pdf

Managing the Natural Forest [Pamphlet]. (2010). Association for Sustainable Forestry (Uneven-Aged Management Outreach Project), Nova Scotia: Nova Scotia Department of Natural Resources.

The Wood Duck Society: woodducksociety.com

PEI Department of Environment, Labour and Justice: www.gov.pe.ca/jps/

PEI Department of Agriculture and Forestry: www.gov.pe.ca/forestry/

Resources available to Landowners:

-Forest Enhancement Program: many programs available aiming to help landowners who want to manage their forests (>2.5acres of forest, and require a forestry management Plan).

-Contact a local Forest Consultant who can help you develop a plan for your wooded land, tailored to your needs and goals. Consultants should follow Ecosystem-based Forest Management Standards, which can be obtained from the PEI Department of Agriculture and Forestry.

GET INVOLVED IN YOUR WATERSHED!

Become a Member, or Volunteer: You can volunteer directly with WRIG. Our newsletters and website are updated regularly, so subscribe to our e-mail list and watch for public events, special tree plantings, meetings and workshops.

If you are unsure which group is active in your area, you can find out using the PEI Department of Environment, Labour and Justice on-line tool: [Find my Watershed Group](#)

Have WRIG plant trees in your Riparian Zone: Contact WRIG about PEI native tree and shrub planting on your property, bordering streams and low lying wet areas that flood seasonally, or in upland areas such as hedgerows or retired farmland. Our summer Field Crew Technicians can plant trees and shrubs for you, on your land, at no cost.

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WRIG INDIVIDUAL, FAMILY,
AND CORPORATE MEMBERS

PEI WATERSHED MANAGEMENT FUND

PEI WILDLIFE CONSERVATION FUND

Wildlife
Conservation
Fund



PLAN
DE CONSERVATION
NATIONAL

Canada 

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