A Practical Guide to the Importance of New Brunswick's Wellands

Who is this guide for?

his guide has been prepared for New Brunswick landowners and residents whose property contains or borders wetlands and for those people who are interested in learning more about wetlands and what they can do to help conserve them.

What is a wetland?

wetland is often defined as an area that is seasonally covered or saturated by water, creating soil conditions that promote the growth of water-tolerant vegetation. Their distinctive plant communities provide habitat for many animal species during at least one part of their life cycles.

Why are wetlands important?

hey are among the most productive environments in the World. Wetlands act as nature's water filtration and purification system. Wetlands are capable of filtering pollutants from waters destined for our lakes, rivers and drinking water. They also stabilize the shorelines of our rivers and coasts.

Wetlands are also very important for the survival of many wildlife including waterfowl, songbirds, fish, game and non-game mammals, and plants.



What types of wetlands are found in New Brunswick?

ew Brunswick's wetlands can be broken down into two categories: inland and coastal wetlands. Within these two categories these are some of the main types.

Inland Wetlands account for most wetlands found throughout the Province's interior that are not directly affected by the tides. Peatlands are inland wetlands containing thick layers of slowly decaying plant material called peat or peat moss. Bogs and fens are two examples of peatlands.

Bogs are prehistoric lakes that have slowly been filled in by plant debris. They are nutrient-poor wetlands that receive their nutrition from rainwater. Vegetation found in bogs is predominantly sphagnum moss, some shrubs, as well as two insect-eating plants: the pitcher plant and the sundew.



The Wood Duck can often be seen along the Saint John River floodplains.

Fens are 'young bogs' that are slowly being filled in by the surrounding vegetation. Fens are nutrient-rich wetlands because they receive their nutrition, not only from rainwater but also from groundwater that seeps through the soil from the surrounding uplands. The vegetation found in fens consists of many grass and sedge species as well as several orchid species that are uncommon to rare in the Province.



The pitcher plant and cotton-grass are two plant species often found in New Brunswick bogs.

Marshes, also known as emergent wetlands, have developed where rich soils have accumulated over thousands of years. They may be periodically or permanently flooded with water. They are very diverse and productive ecosystems that are extremely efficient at supplying water and nutrients to the surrounding vegetation. They include a variety of plants such as grasses, rushes, cattails and water lilies.

Forested wetlands, also known as swamps, are wooded wetlands that are periodically or permanently flooded. They have organically rich mineral soils. Trees and shrubs often found in swamps are: cedar, tamarack, black spruce, maples, willow, dogwood and alder.

Coastal Wetlands, typically called salt marshes, are found along New Brunswick's coastline. Coastal wetlands develop near the mouths of rivers, in bays, and other areas affected by the tide but are protected from the full force of the surf. Salt marshes are typically vegetated by grasses and other plants that can tolerate the salt water that occasionally covers them.

What are some of the functions and values of wetlands?

- Purify water by filtering out sediments and absorbing many pollutants from surface waters.
- Protect shorelines from erosion by flowing water and waves.
- · Help to control flooding and reduce flood damage.
- Provide habitat for many mammals, birds, reptiles and amphibians that are uniquely adapted to wet environments.
- Provide food, cover, spawning and nursery grounds for fish.

DID YOU KNOW...

- Wetlands are among the most threatened habitats in the world due to drainage, pollution and urbanization?
- Wetlands are the most productive of any natural ecosystem in Canada?
- Wetlands provide important habitat for an abundance of wildlife?
- Wetlands act as nature's sponge, soaking up rainwater and slowly releasing it to surrounding forests and aquifers that eventually feed our drinking wells?
- Wetlands were considered 'wastelands' in the past with many being converted for other uses?
- 25% of the world's wetlands are found in Canada, 10% of which are located in Eastern Canada?
- A wetland that is 1 hectare (2.5 acres) in size with 30 cm (one foot) of water would hold approximately 3 million litres (600,000 gallons) of water?

- Protect upland properties from the force of major coastal storms and sea level fluctuations.
- · Renew groundwater supplies.
- Contain a wide range of plants and animals that provide opportunities for sightseeing, hiking, fishing, hunting, boating, bird watching and photography.
- Provide opportunities for environmental education and public awareness programs.
- Store surplus water during periods when it is abundant, and then release it to plants and animals during dry periods.



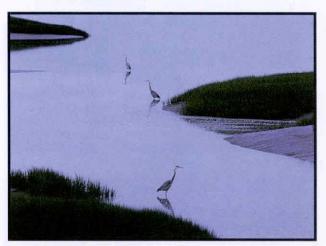
Bullrushes are a typical plant found along the banks of wetlands.

How can I help?

- here are a number of ways you can help to maintain or enhance wetland productivity if you have wetlands on your property.
- Maintain a buffer strip (minimum of 30 metres or 100 feet) that consists of trees, shrubs, and plants around the wetland. This provides travel corridors, feeding and nesting areas for wildlife. It also helps to trap sediments from adjacent uplands from entering the water.
- Restrain the activity of household pets in and around wetlands. They can wreak havoc on our wildlife.
- Install a fence that is effective in preventing livestock from entering the water or trampling the shoreline vegetation.
- Leave dying and dead trees (snags) along the edges of the wetland and throughout your buffer. They are often used as nesting areas and provide cover for small animals from predators.
- Set up nest boxes to provide shelter for birds and other animals when snags are absent.
- Familiarize yourself with the requirements of the Watercourse Alteration Regulation (Clean Water Act) and the Environmental Impact Assessment Regulation (Clean Environment Act). For more information contact the Department of Environment and Local Government or find these documents on the web at www.gnb.ca/justic/asrlste.htm.

Interested in More Information?

re you interested in finding out more on how you may be able to protect the wetland found on your property? Would you like to participate in a wetland stewardship project? Are you interested in finding out more about the conservation options available to you? Would you like someone to visit you and discuss ideas that interest you specifically?



Great Blue Heron can be found throughout coastal areas in New Brunswick.

If you have answered yes to any of these questions, please contact:

Department of Natural Resources and Energy Wetlands and Coastal Habitat Program Fish & Wildlife Branch Stewardship Coordinator PO Box 6000, Fredericton, NB, E3B 5H1

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