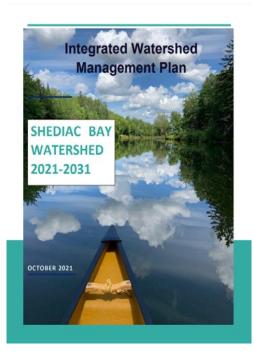


## An Integrated Watershed Management Plan for Shediac Bay will be Implemented



In 2019, a working group was formed by the Department of Environment and Local Government of New Brunswick to develop a watershed management plan for the Shediac Bay watershed. The Working Group met regularly over a 2-year period and held public consultation events. The plan was finally published in both official languages on October 22, 2021.

The main purpose of the Shediac Bay Integrated Watershed Management Plan (IWMP) is to address water quality issues in the watershed, namely, from anthropogenic sources of nutrients and bacteria. This will in turn, help protect and improve water quality at Parlee Beach.

The Shediac Bay IWMP is not regulatory in nature. The use of a partnershipbased approach will therefore be critical for the successful implementation of the

plan as it will encourage local ownership and participation. Therefore, the plan will apply an "Adaptive Management Approach", through the creation of an implementation committee.

With the help of the DELG, recruitment of representatives from various governmental agencies (municipal, provincial and federal), from First Nations groups, from stakeholders and from the general public took place in November and December. The first meeting was held virtually on January 31st, 2022, and the second meeting will take place in March.

The Integrated Watershed Management Plan can be viewed here:

https://www2.gnb.ca/content/dam/gnb/Departments/eco-bce/Promo/Parlee\_Beach/pdfs/ shediac-bay-watershed-management-plan.pdf

#### Message from the Executive Manager



Jolyne Hébert is the Executive Manager of the Shediac Bay Watershed Association. A board of directors, consisting of 18 citizens from the region, is responsible for administering the organization.

In the summer of 2021, I was asked to step in as manager of the SBWA, following the departure of our former manager Rémi Donelle. Mr. Donelle and I had been working together for seven years, and I would like to thank him for his mentorship that has prepared me for this advancement in my role within this organization.

I am very pleased to announce the hiring of two new environmental field technicians, Bryan Gallant and Simon LeBlanc.

I would like to sincerely thank the SBWA's Board of Directors for their support throughout the transition process, especially our President Ms. Helen Hall, whose oversight and mentorship on the financial side of management has been critical. She has dedicated countless volunteer hours to ensure that our Association remained on stable footing.

A new round of funding proposals has been submitted for 2022-2023. The SBWA will continue to work towards the environmental protection of the Shediac Bay.



Education and Awareness Quality Protection and Restoration

### **Environmental Cleanup Along a Brook in the Town of Shediac**

An urban stream in the Town of Shediac was found to be regularly littered with garbage from nearby roadsides and public spaces. In addition, a former dump site was discovered on a private property along the brook.

In partnership with the Town of Shediac, the Shediac Bay Watershed Association conducted an environmental cleanup last summer. Several sections of the stream were cleaned, resulting in the collection of 18 garbage bags along approximately 500 m of the watercourse.

The dump site underwent a first phase cleanup, where the SBWA's staff and volunteers collected over 14 heavy-duty garbage bags and various debris. The Town of Shediac disposed of two truck loads of trash from this cleanup. The next phase of this cleanup will require heavy equipment to retrieve the larger items, and is scheduled for the spring of 2022.

This project was made possible thanks to the collaboration between the new homeowners, the Shediac Bay Watershed Association, the New Brunswick Environmental Trust Fund, and the Town of Shediac.





### Scoudouc Farm Stream Restoration Project

Last fall, the Association has been working on planting over 300 trees along a 400-meter stretch of an unnamed brook running through a cattle pasture. The trees were planted roughly 1-2 meters from the stream. In total, 315 spruce trees were donated by Irving along with 18 trees of other species from our nursery including willows, birches, tamaracks, firs, white pines, maples, and oaks.

The trees will benefit the stream by eliminating some of the cow crossing points and hopefully allowing for vegetation to naturally stabilize the banks. They will also create shade, making the stream cooler and healthier.

## A Bioswale to Collect Stormwater Runoff from Parking lot and Roofs

In partnership with the Anglican Parish of Shediac and Maximum Signs & Time2Shine, our first commercial bioswale, or bioretention system, was built in the fall of 2021. This new green infrastructure project is located between the two parking lots of the buildings at 612 and 620 Main Street Shediac. The bioswale will collect most of the stormwater runoff from the parking lot to the east, and part of the rooftop runoff from both buildings, which is about 920 m<sup>2</sup> of impervious surfaces. A variety of perennial flowers and grasses were planted and river rocks were installed to control soil erosion and improve the look. An interpretive sign will be installed in the spring to explain the role of this project in water quality protection. <u>Click to view</u>





#### Rain Garden at LJR School will Help Absorb and Filter Stormwater Runoff

As a continuation of the Stormwater Management project, the Shediac Bay Watershed Association partnered with a Shediac high school. This past October, a rain garden was built at Polyvalente Louis-J.-Robichaud, with the help of Robert Bourque's Environmental Science class.

With the help of over a dozen L.-J.-R. students, the rain garden was built along a drainage path separating the running track and soccer fields. This rain garden will help absorb and filter water runoff from these large open areas.

The rain garden covers an area of 60 square metres and contains over 100 plants. A mixture of flood tolerant grasses and flowers for pollinators were used in this project:

Karl Foerster grass (Calamagrotis acutiflora)

- Swamp Milkweed (Asclepias incarnata.)
- Black Eyed Susan (Rudebeckia hirta)
- Joe Pye Weed (Eupatorium maculatum)
- Blue Flag Iris (Iris versicolor)
- Ostrich Fern (Matteuccia struthiopteris)

These plants will increase the infiltration of rainwater into the soil, allowing for pollutants to be retained and filtered. Other pollutants are taken up by the plants or the microbial communities in the soil.

By absorbing and filtering the stormwater runoff from the surrounding fields, the rain garden decreases the number of pollutants that could reach the Shediac Bay.

#### **Cornwall Brook Restoration Continues**

Following the construction of the Shediac traffic circle, the Cornwall Brook was altered. Armour stone was placed on the stream banks and the natural vegetation was removed. With the permission of the Department of Transportation and Infrastructure of NB, the Shediac Bay Watershed Association revegetated the stream banks by planting 60 native trees during the first year.

The tree planting at Cornwall Brook has been successful. Although most of the broad leaf trees

have died, the coniferous trees have established themselves with great success. In the future, these trees might grow to heights of 20 metres and will provide the brook with many benefits. This will include stabilizing the banks, cooling the temperature of the water by providing shade, filtering pollutants, and providing fish with food sources such as insects.

This fall, a total of 43 additional native trees have been planted along the brook. Due to the presence of beaver dams both up and downstream, the tree species were selected accordingly. The majority of species planted this year were conifers. This is due to both their success in last year's planting and beavers dislike for conifers. The Association wants to work with landowners who own land along a degraded watercourse to restore it to a healthy ecosystem. If you own a property along a watercourse in need of reforestation, please contact us to find out how we can help!





### New Residential Rain Garden

A residential rain garden was constructed and planted on the front lawn of a Shediac citizen as part of our Stormwater Management project. This garden was very unique as it had an interesting shape... A heart! In total, 34 plants were planted within the rain garden.

Rain garden plants are chosen for their ability to withstand both wet and dry conditions. They also have deep root systems that are capable of removing some contaminants from stormwater before it reaches the municipal storm drains. The plants include:

- Karl Foerster grass (Calamagrostis acutiflora)
- Flame grass (Miscanthus purpurascens)
- Black Eyed Susan (Rudbeckia hirta)
- Joe Pye weed (Eupatorium maculatum)
- Swamp Milkweed (Asclepias incarnata)
- Blue flag Iris (Iris versicolor)
- Ostrich fern (Matteuccia struthiopteris)

This was the Shediac Bay Watershed Association's 10th stormwater management project to date.





### **Contact Info**

Shediac Bay Watershed Association

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For more information please visit our website or follow our Facebook page:

www.shediacbayassociation.org

www.facebook.com/ shediacbaywatershedassociation

#### **Current News**

**Contributors:** Jolyne Hébert Simon LeBlanc Bryan Gallant

Charles LeGresley



# **Featured Species - Great Blue Heron**



The Great Blue Heron (*Ardea Herodias*) is the largest of the American herons. It can be found in North and South America depending on the season. They nest on islands or wooded swamps to reduce the presence of predators.

It can be seen feeding in coastal marine environments and freshwater habitats, but it feeds mainly in freshwater streams. Its diet consists particularly of fish, but it is not limited to that. They also eat mollusks, crustaceans, insects, rodents, amphibians, reptiles and small birds.

When local streams thaw, males and females arrive at nesting sites at about the same time. Their nest is usually located a few kilometres from the feeding area. This nest is normally inaccessible to humans and predators. The male chooses the location of the nest. They can either repair an existing nest or build a new one. To attract females, he parades and makes high-pitched, intense calls when a female approaches the nest. The incubation period begins as soon as the first or second egg is laid and lasts about 28 days. The male covers the eggs during the day and the female covers them at night.

An interesting fact about the blue heron is that it extends its neck and tilts its head to the left and right so that it can look up. This behaviour is usually observed when a predator or another heron is flying over the feeding area.

Class: Aves

Order: *Pelecaniformes* Family: *Ardeidae* 

Genus: Ardea

Species: Ardea Herodias



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