



## Message from the Association's Manager



**Rémi Donelle is the Manager of the Shediac Bay Watershed Association since 2013. A board of directors, consisting of 20 citizens from the region, is responsible for administering the organization.**

Our final reports for our 2020-21 programs are submitted to our funders. The Association has had a productive year with the implementation of several environmental improvement projects.

With spring comes new projects. The stormwater management and coastal restoration programs will continue to expand in the communities of Shediac and Pointe-du-Chêne. Our field crew will be in place in May to begin the various works.

This year, we will resume organizing volunteer activities and learning opportunities while following the recommendations of Public Health. Follow our Facebook page and our website for announcements of events starting this spring.

## Eelgrass Monitoring Results

Eelgrass is a marine plant that can grow up to 2 metres in deeper waters. The leaves are supported by a rhizome (underground stem) on the seabed. Eelgrass beds provide critical habitat for a wide variety of species.

Eelgrass is threatened by the arrival of an invasive species, the green crab (*Carcinus maenas*) and the impacts of human activities. A monitoring program on eelgrass health was implemented in 2016. The purpose of this study is to establish baseline data in order to assess the evolution of eelgrass in Shediac Bay.

Four monitoring sites were established in Shediac Bay in the coastal communities of Grande-Digue, Shediac Bridge, Shediac and Pointe-du-Chêne.

A decrease in eelgrass cover was noted in 2020. The probable cause is the impact of hurricane Dorian that hit the coast during the fall of 2019. This hurricane caused a lot of damage to the coastal zone. The eelgrass at the Shediac Bridge site is almost completely gone. The Grande-Digue site on the north shore of the bay was more sheltered from the winds and suffered less damage. Long-term monitoring of the sites will allow us to measure the recovery of these eelgrass beds.

The Shediac Bay Watershed Association is a member of a research consortium of the Gulf of St. Lawrence Coalition. A partnership project has been established with Fisheries and Oceans Canada to map the eelgrass in Shediac Bay in 2021 using a variety of methods (sonar, drone and satellite imagery). This data will allow us to see the evolution of eelgrass beds throughout the bay.







## Water Quality in Shediac Bay - An overview

The preservation of good water quality is paramount to Shediac. The bay is important to the local economy with attractions such as Parlee Beach Provincial Park and the marine fisheries resources. For this reason, several government agencies and organizations regularly monitor the water quality in Shediac Bay and the rivers that flow into it.

Contaminants that affect water quality can come from a variety of sources. Water runoff can pick up a wide range of pollutants from the ground, such as nutrients, pesticides, road salt, petroleum products and animal waste. These pollutants end up in the streams and rivers that flow into Shediac Bay.

Here are some examples of water quality monitoring conducted in the region.

### Shellfish Monitoring

Shellfish such as oysters, quahogs and soft-shell clams filter the water in the bay to feed. Certain types of algae or bacteria can remain in shellfish and cause harmful effects to humans

if consumed. Environment Canada and Fisheries and Oceans Canada are responsible for identifying areas that are closed to shellfish harvesting due to high bacteria levels.

### Parlee Beach Recreational Water Quality Sampling

The presence of large concentrations of bacteria can affect the health of people who come into direct contact with the water. The New Brunswick Department of Health conducts daily bacteria testing at Parlee Beach Provincial Park. Advisories are issued when a threshold level of bacteria presence is exceeded.

### Nutrient Monitoring

The abundance of nutrients such as phosphorus and nitrates in the water are indicators of pollution from human activities. The Shediac Bay Watershed Association monitors the amount of pollutants in streams and rivers to target problem areas that would benefit from restoration projects.

### Water Quality Protection

There are several things you can do to maintain good water, such as:

- Picking up after your pets
- Proper disposal of oil and gas products
- Stop mowing near streams or wetlands
- Limit or eliminate the use of chemical fertilizers and pesticides
- Pick up litter in the environment

Also, natural areas such as marshes and forests help filter pollutants from water before it enters the natural ecosystem. It is important to maintain a vegetated buffer around all water bodies.

## Spring Clean-ups Will Take Place this Year

Plastic in the environment is a growing problem. Every spring several environmental organizations, schools and municipalities organize environmental clean-ups.

There are two events planned around Shediac Bay. The Shediac, Beaubassin East and Cap Pelé Community Clean-up will be organized in conjunction with EcoVision 2025. This clean-up day will focus on roads and trails. The date is May 29th.

The Shediac Bay Watershed Association will resume its Oceans Day Shoreline Cleanup. This activity will take place on June 5th.

The events will be organized with the following public health protection measures for Covid-19:

- Groups will be composed of people who are part of your bubble
- Maintaining a physical distance of at least two metres from others during registration and clean-up
- Wearing gloves and a mask

More details about these events will be posted on our Facebook page.





## Looking for Participants for the Development of Residential Rain Gardens

**Have you experienced standing water issues in your yard or spots that remains wet for a long period of time? Planting a rain garden can help!**

A rain garden is a functional piece of landscaping that benefits pollinators, the environment and your property. It is typically a shallow bowl-shaped depression that is planted with native, hardy and low maintenance plants. A rain garden is designed to catch rainwater runoff in your yard.

Rain gardens absorb about 30% more water than a typical lawn. This contributes to groundwater recharge and reduces the risk of flooding. By choosing native species, a rain garden provides habitat and food for wildlife and benefits pollinators.

Rain gardens are a sustainable way for homeowners to help manage surface

water runoff to improve their communities' water quality. In a process known as bioretention, pollutants found in stormwater runoff can be filtered through the actions of plants, micro-organisms and soil.

As part of our Stormwater Management project, the Shediac Bay Watershed Association is looking to recruit 3 landowners who are interested in participating in our project to create residential rain gardens. By working with the Association, the costs of your rain garden will be covered, thanks to funding from the New Brunswick Environmental Trust Fund.

**To be an eligible participant in our project, you must:**

1- Be a homeowner in the Town of Shediac or Pointe-du-Chêne (renters not eligible);

2- Want a rain garden to manage stormwater from property;

3- Agree to maintain the rain garden;

4- Agree that the Association takes photos and videos of the project for educational and awareness purposes, including social media.

To apply, you can register by following this <https://bit.ly/31CzGmS>

**Registration ends June 30, 2021.**

## Presentation Series - Polyvalente Louis-J.-Robichaud

The SBWA's Education Program coordinator assisted a teacher at the local high school with a project on biodiversity and degraded habitat restoration for the 10th grade biology students.

The students chose a case study of a local habitat that was degraded by either human

or natural impacts. Their project was to describe at least 3 food chains within their habitat type, and to describe how the food network could be impacted by the loss of that habitat. The second part of the project was to learn how to restore the degraded habitat to protect biodiversity.

Offering this expertise to teachers is a valuable partnership that helps students learn about issues that impact their local environment.



## Enter our Contest - Distribution of Free Rain Barrels to Watershed Residents

As part of our Water Conservation and Stormwater Management program, the SBWA aims to encourage the use of rainwater as a resource, by installing rain barrels below downspouts to capture water from rooftops.

These barrels help to conserve drinking water by using rainwater for gardening and for other purposes, reducing the usage of drinking water. In addition to water conservation, another benefit of a rain barrel is that it helps reduce surface water runoff that originates from the rooftop.

For a chance to WIN A FREE RAIN BARREL, follow our Facebook page for the upcoming 2021 contest!




### Contact Info

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

 [www.facebook.com/shediabaywatershedassociation](https://www.facebook.com/shediabaywatershedassociation)

### Current News

#### Contributors:

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## Featured Species - Brook Floater



The Brook Floater (*Alasmidonta varicosa*) is an endangered freshwater mussel. In 2013, it was added to the Species at Risk Act, Schedule 1 (SARA).

This freshwater mussel inhabits mainly shallow rivers or streams. The Brook floater is medium in size (about 50 to 65 mm long). Its shell is kidney-shaped and is greenish, brownish or yellowish to black, with dark rays running from top to bottom.

This species is distributed in some areas of New Brunswick, Nova Scotia and parts of the eastern seaboard of the United States. A 2005 study reported finding 122 individuals in the Shediac Bay watershed. In 2014, a program was put in place to find this species. The objectives of the project were to confirm the presence of the Brook Floater in the watershed, assess the health of the

surrounding habitat, and work with land-owners to create a plan to protect the habitat of this endangered species.

Unfortunately, after 6 years of meticulous research, the Brook Floater was never found in our rivers. The association still put in place habitat improvement work for freshwater mussels such as reforestation of the riparian zone and mitigation of ATV crossings impacting the rivers.

**Class:** *Bivalvia*

**Order:** *Unionoida*

**Family:** *Unionidae*

**Genus:** *Alasmidonta*

**Species:** *Alasmidonta varicosa*



This project was undertaken with the financial support of:  
Ce projet a été réalisé avec l'appui financier de :



Environment and  
Climate Change Canada

Environnement et  
Changement climatique Canada