# Brudenell River and Area Watershed





#### Simple diagram explaining how a watershed works.

A watershed is an area of land that drains into a particular river, lake or other body of water. In the Southeast Environmental Association (SEA) region there are six main watershed areas, made up of 26 sub-watersheds, covering 731.6km². The smallest of these watershed areas is the Brudenell River watershed. It is made up of two subwatersheds.

## **Brudenell River Watershed**

#### **Sub-watersheds:**

**Brudenell River** 

Georgetown

Total length of streams: 45.8 km

Total area: 6073.4ha (60.7km²)

Basin name: Georgetown Harbour

Largest land use: Agriculture (40.3%)

**Headwaters:** 

Greenfield

**New Perth** 

## Location

The Brudenell and Area watershed is located in eastern Kings County. It includes all areas that drain directly into the Brudenell River and Georgetown Harbour.

Brudenell New Perth
Georgetown Royalty Union Road
Greenfield



Map of Prince Edward Island with the Brudenell River and Area watershed highlighted in pink.

## **Physical Description**

**Brudenell River watershed** covers an area of 55.6km<sup>2</sup>. All streams and tributaries of this watershed drain into the Brudenell River. This water passes through the Georgetown Harbour and Cardigan Bay before reaching the Northumberland Strait.

**Georgetown watershed** drains into two small tributaries measuring 1.05km . The tributaries flow directly into the Georgetown Harbour. This watershed covers an area of 5.1km², this includes the Town of

Georgetown.

GEORGETOWN

Brudenell and Area watershed map showing the two watersheds.
The total area is 60.7km² with 45.8km of stream.



#### Watershed and Area Land Use

Based on land use data from 2010, agricultural land makes up 40.3% of total land use in the Brudenell area. Forested land accounts for 38.2%, while developed land: commercial, industrial, institutional, recreational, residential, transportation and urban accounts for 13.6% followed by wetlands at 3.4%.

Land Use	Brudenell River	Georgetown	Total Area (Hectares)	%
Agriculture	2302.0	142.5	2444.5	40.3%
Developed	660.3	172.7	833.0	13.6%
Forest	2167.2	150.6	2317.8	38.2%
Wetland	189.2	18.0	207.2	3.4%
Non-evident	242.3	28.3	270.6	4.5%

Breakdown of land use for the two sub-watersheds in the Brudenell River area.



The Brudenell River is part of the Canadian Heritage Rivers that makes up The Three Rivers system. Being located so near the coast, Brudenell Point was important for early settlers. In fact, the Jean Pierre Roma Settlement, which existed from 1732-1845, is now a popular historical attraction. Father of Confederation, Andrew A. MacDonald was born on February 14, 1829 at Brudenell Point. Shipbuilding in the Georgetown Harbour was very popular from 1840-1889 and the harbour played a significant role in the illegal import of alcohol during the prohibition. Today, the harbour continues to boost the economy in the area with shipbuilding, transport of resources, fishing and fish processing.



A riparian assessment of the Brudenell River was conducted during summer of 2013. The following summer, small tributaries of the river were visited and a total of 18.4km of streams were surveyed. It was determined that the majority of the tributaries assessed appeared healthy but needed work to restore them to full function. Some of

Natural blockages

these issues include:

- Runoff
- Garbage
- Poor or damaged crossings
- Siltation
- Poor vegetation cover

These issues are a concern because they can lead to :

- Anoxic events/eutrophication
- Fish kills/population loss
- Fish passage impediment
- Loss of habitat



Old guard rails and posts dumped in the Brudenell River near Collins Road.

Groundwater is the only source of drinking water in PEI. It is important that residents take stewardship and protect the environment which provides it.

#### Get Involved!

A management plan for the Brudenell River and



Area watershed needs to be developed. SEA requires public support and input for this to be successful. We urge you to get involved. Please contact us if you are interested in improving the watershed you live in.

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