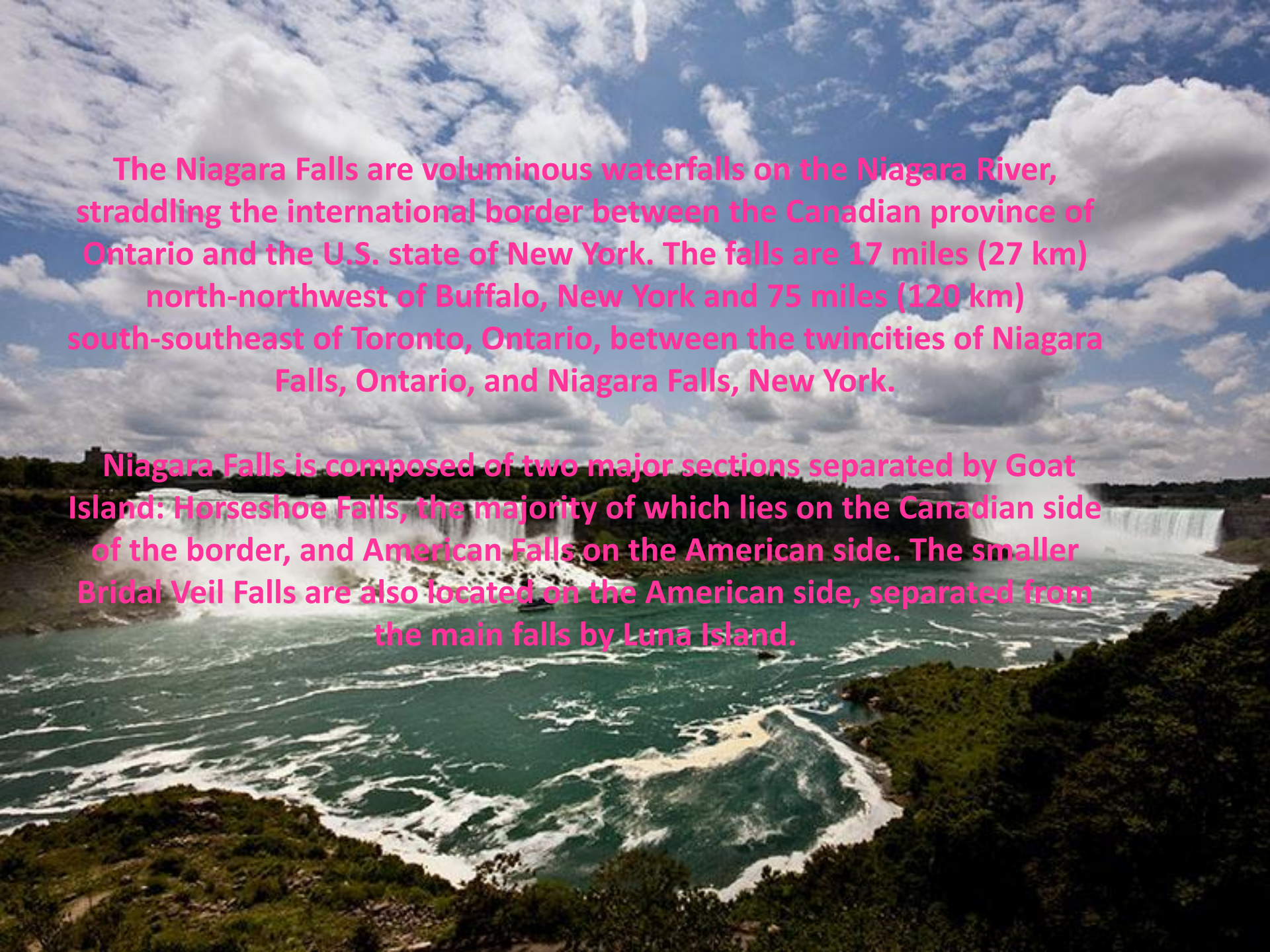
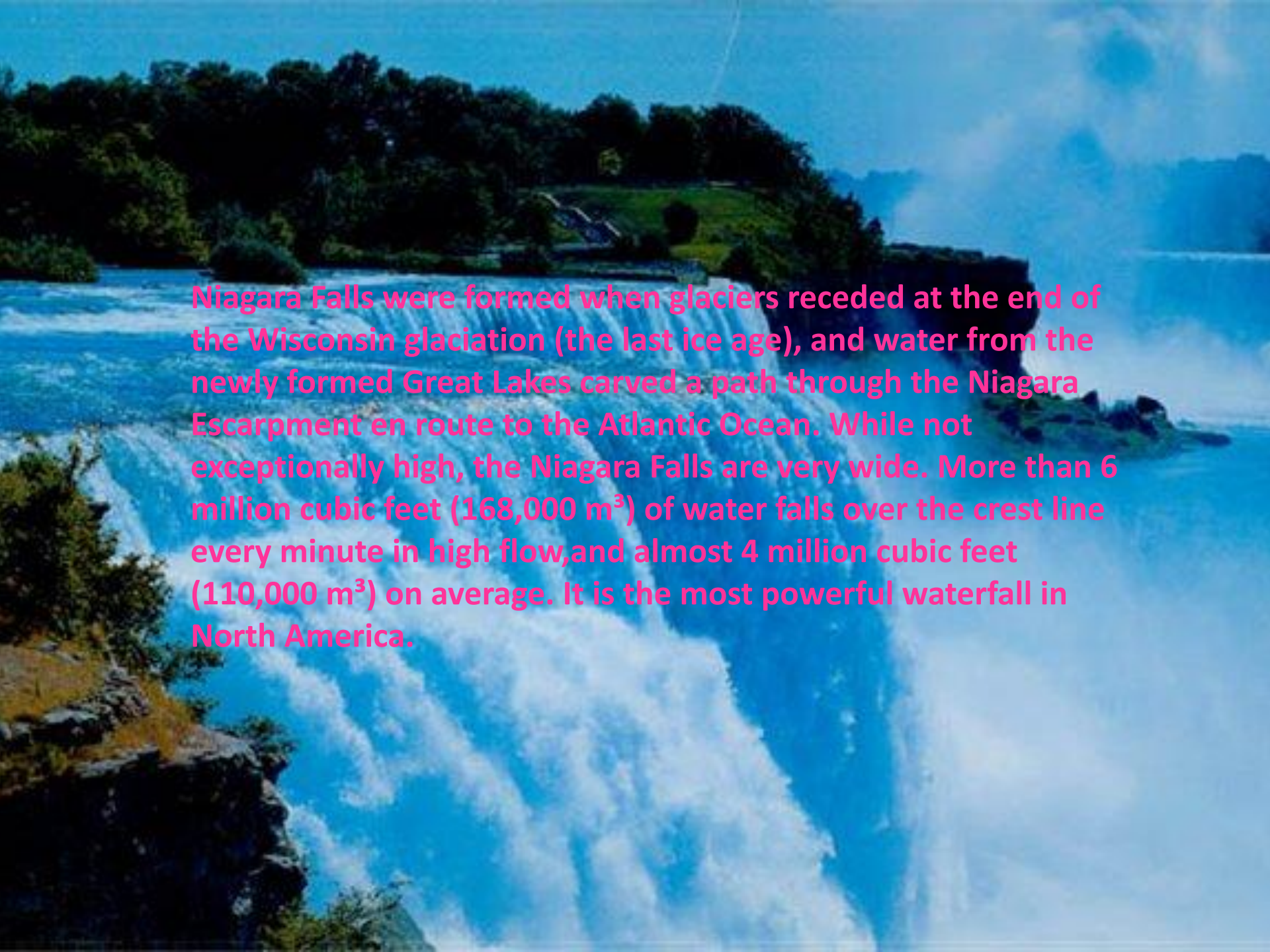

Niagara Falls
View from Prospect Point, Niagara Falls, New York.

Location
Niagara Falls
(Ontario, Canada & New York, USA)
Type
Cataract
Total height
167 ft (52 m)
Number of drops
3; Horseshoe Falls, American Falls & Bridal Veil Falls
Average flow rate
1833 m^3/s (64,750 cu ft/s)
Watercourse
Niagara River

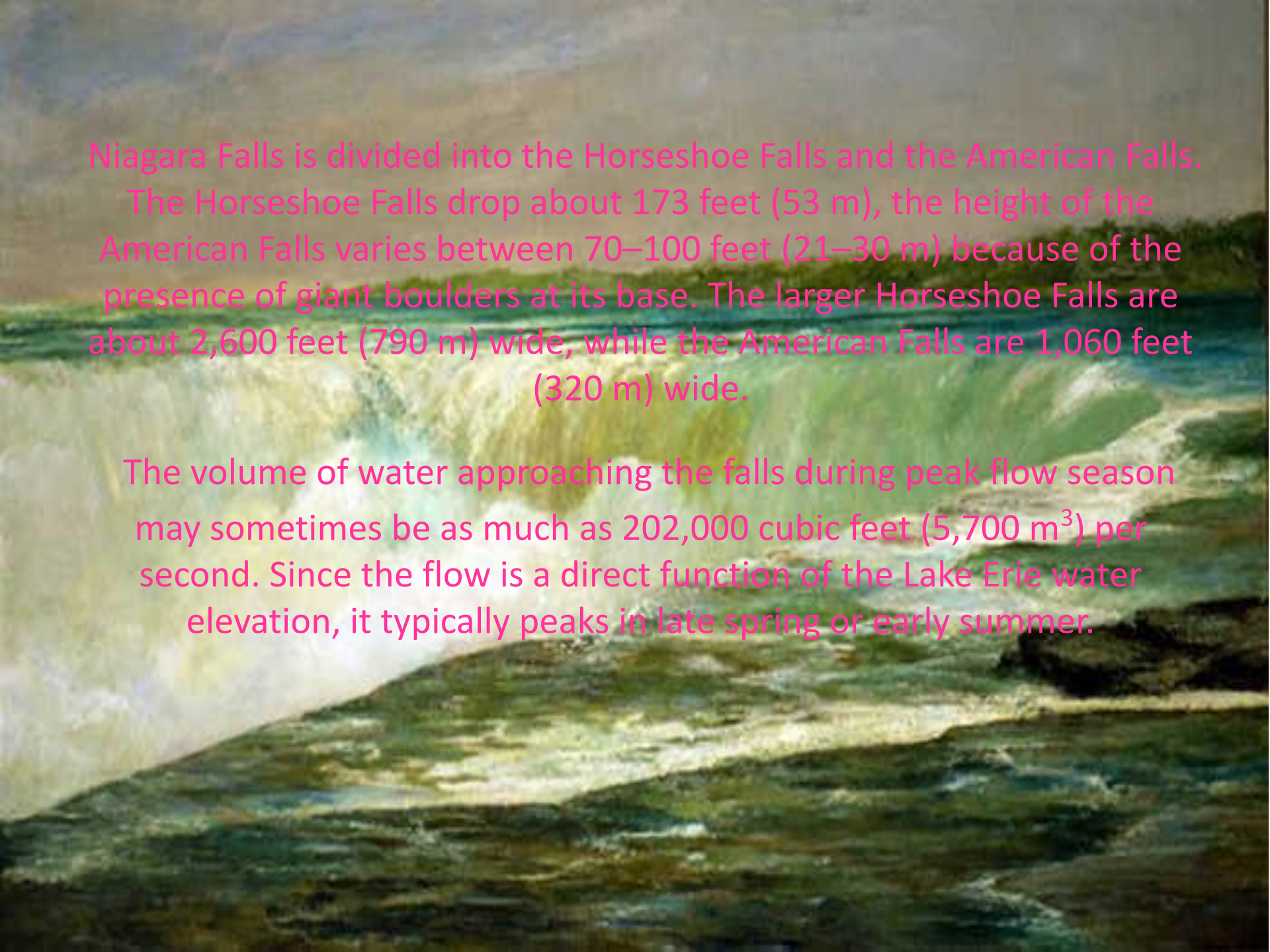


The Niagara Falls are voluminous waterfalls on the Niagara River, straddling the international border between the Canadian province of Ontario and the U.S. state of New York. The falls are 17 miles (27 km) north-northwest of Buffalo, New York and 75 miles (120 km) south-southeast of Toronto, Ontario, between the twincities of Niagara Falls, Ontario, and Niagara Falls, New York.

Niagara Falls is composed of two major sections separated by Goat Island: Horseshoe Falls, the majority of which lies on the Canadian side of the border, and American Falls on the American side. The smaller Bridal Veil Falls are also located on the American side, separated from the main falls by Luna Island.

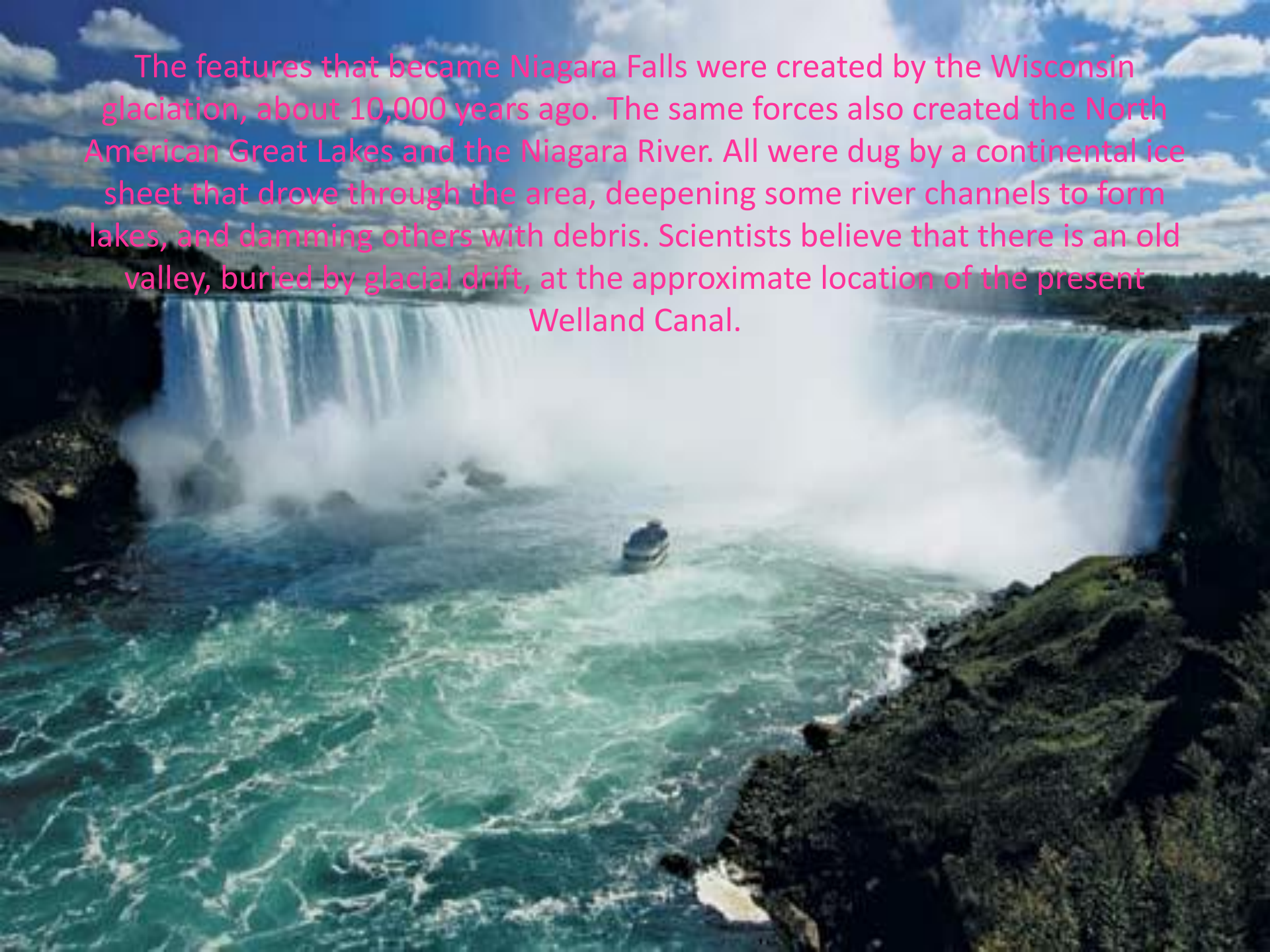


Niagara Falls were formed when glaciers receded at the end of the Wisconsin glaciation (the last ice age), and water from the newly formed Great Lakes carved a path through the Niagara Escarpment en route to the Atlantic Ocean. While not exceptionally high, the Niagara Falls are very wide. More than 6 million cubic feet (168,000 m^3) of water falls over the crest line every minute in high flow,and almost 4 million cubic feet (110,000 m^3) on average. It is the most powerful waterfall in North America.

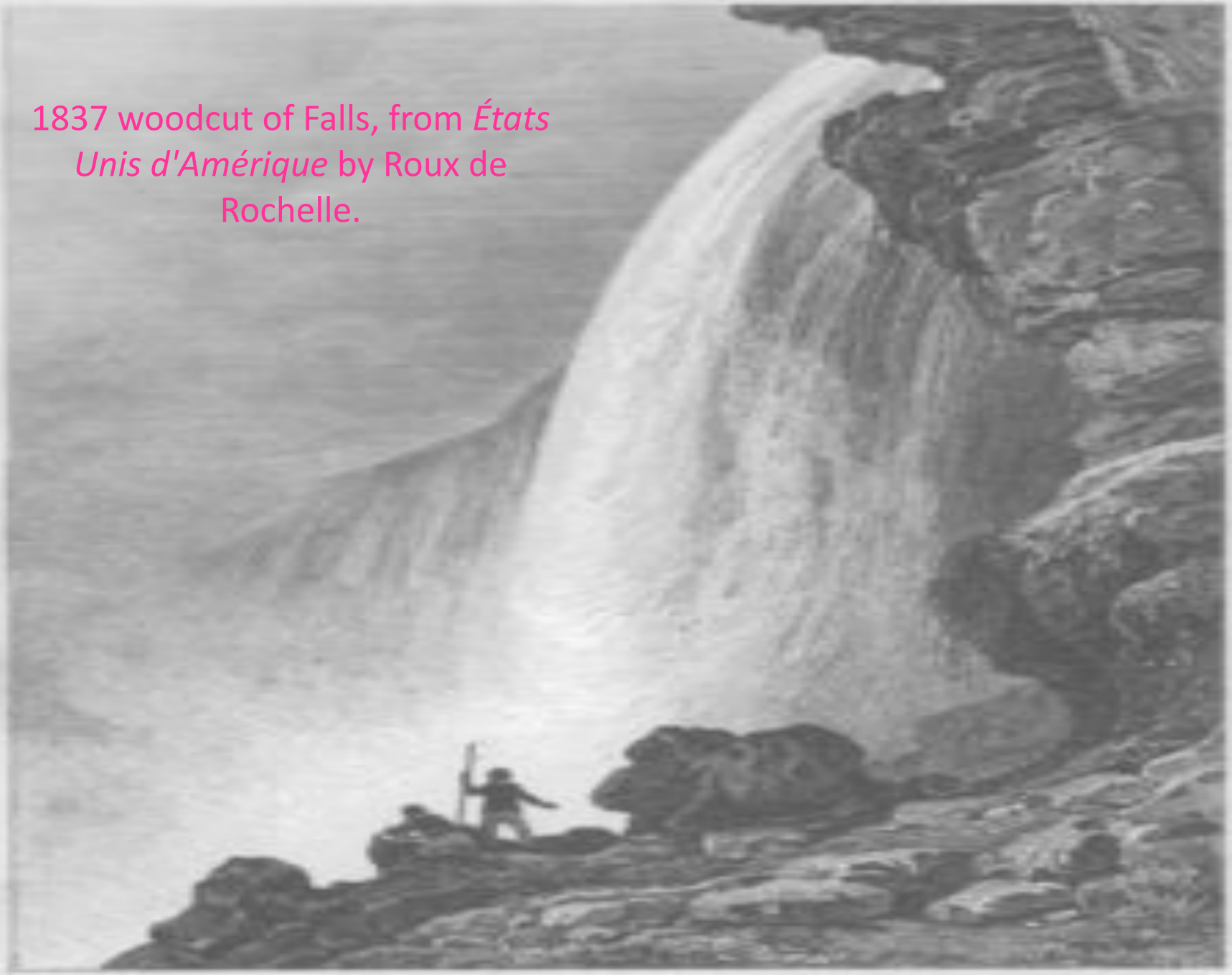


Niagara Falls is divided into the Horseshoe Falls and the American Falls. The Horseshoe Falls drop about 173 feet (53 m), the height of the American Falls varies between 70–100 feet (21–30 m) because of the presence of giant boulders at its base. The larger Horseshoe Falls are about 2,600 feet (790 m) wide, while the American Falls are 1,060 feet (320 m) wide.

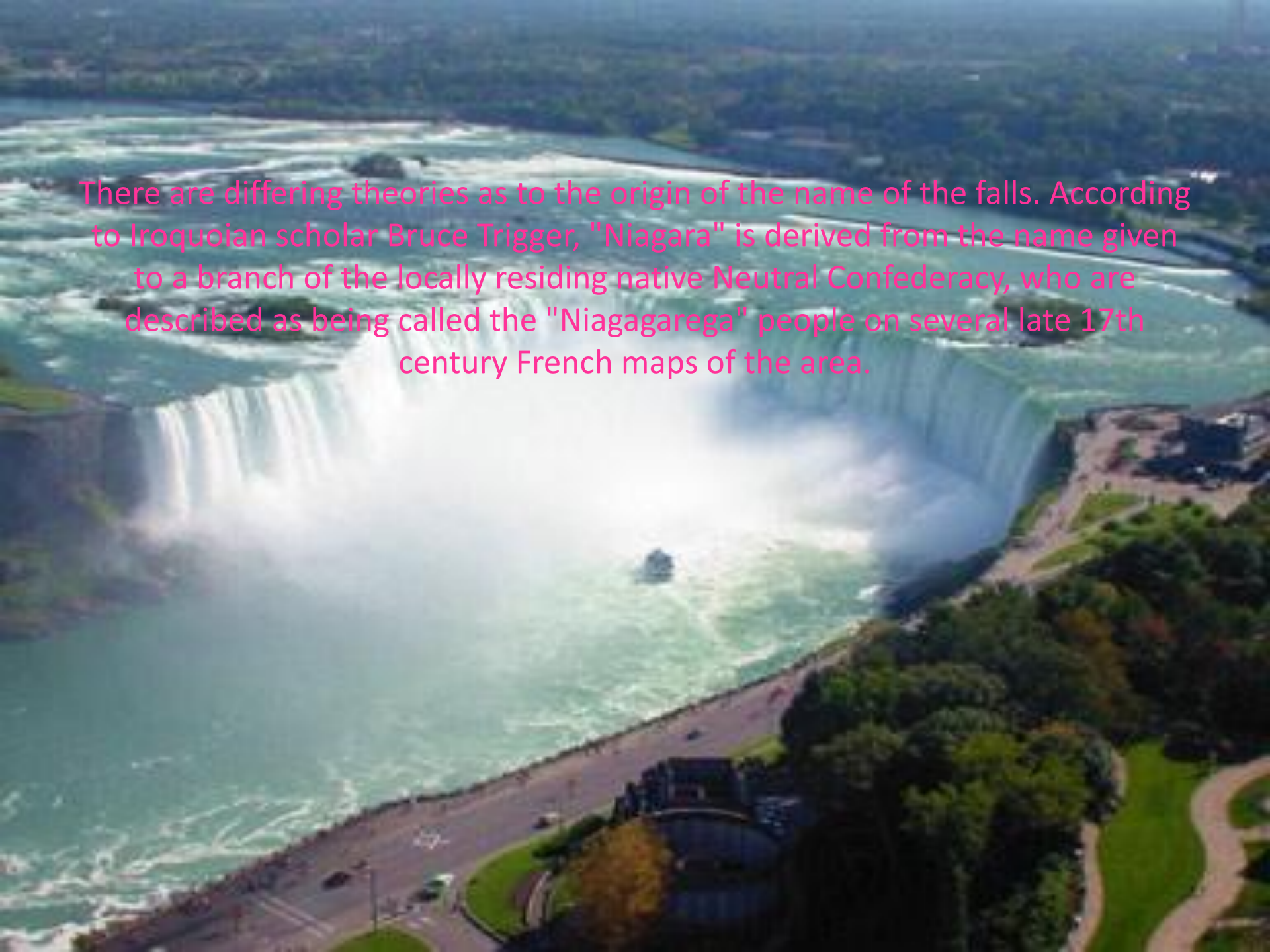
The volume of water approaching the falls during peak flow season may sometimes be as much as 202,000 cubic feet (5,700 m^3) per second. Since the flow is a direct function of the Lake Erie water elevation, it typically peaks in late spring or early summer.



The features that became Niagara Falls were created by the Wisconsin glaciation, about 10,000 years ago. The same forces also created the North American Great Lakes and the Niagara River. All were dug by a continental ice sheet that drove through the area, deepening some river channels to form lakes, and damming others with debris. Scientists believe that there is an old valley, buried by glacial drift, at the approximate location of the present Welland Canal.

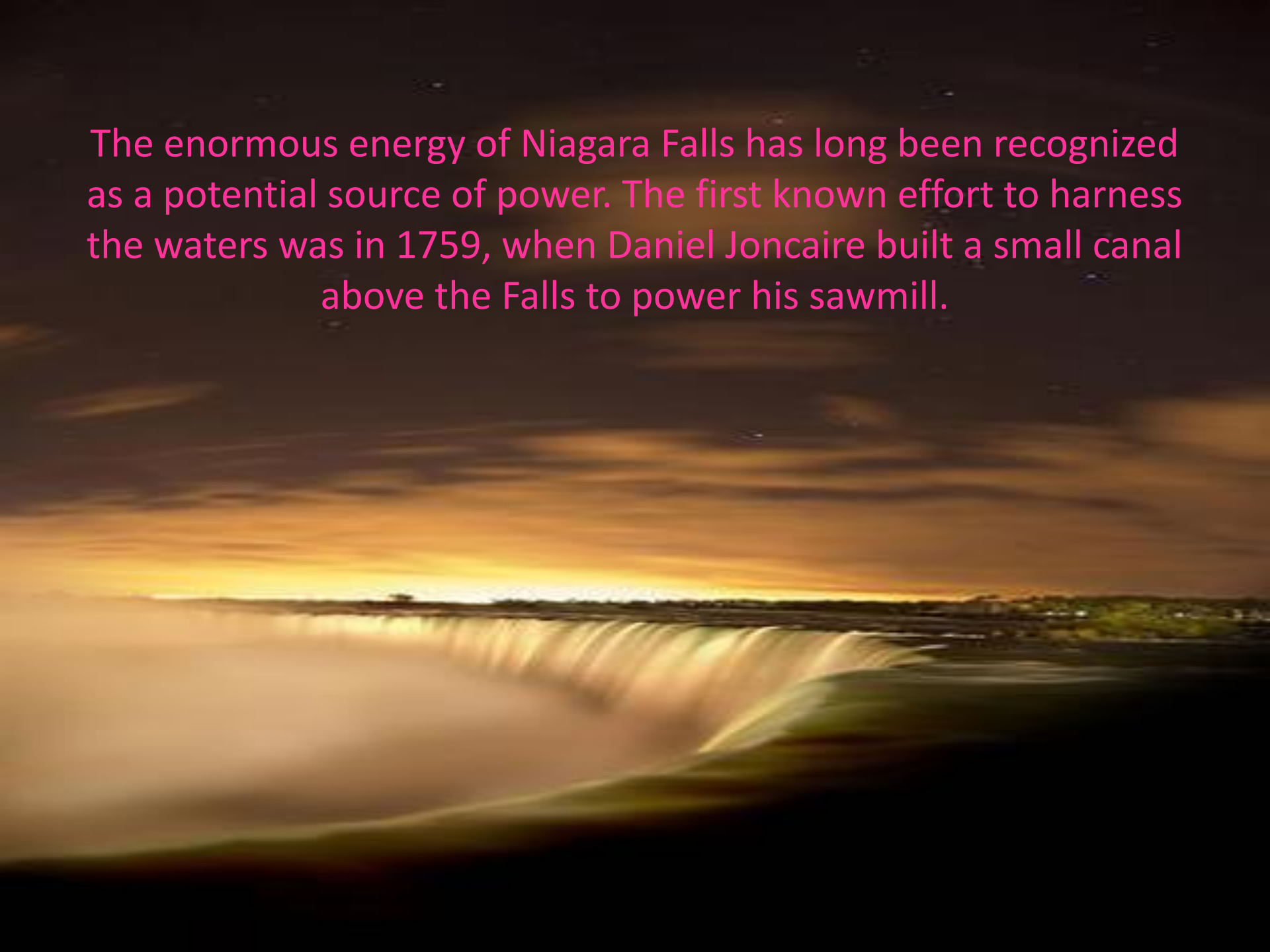


1837 woodcut of Falls, from *États Unis d'Amérique* by Roux de Rochelle.


There are differing theories as to the origin of the name of the falls. According to Iroquoian scholar Bruce Trigger, "Niagara" is derived from the name given to a branch of the locally residing native Neutral Confederacy, who are described as being called the "Niagagarega" people on several late 17th century French maps of the area.


Man and woman on Canadian side of Niagara Falls, circa 1858

Maria Spelterini crossing the Niagara gorge on a tightrope on July 4, 1876



The enormous energy of Niagara Falls has long been recognized as a potential source of power. The first known effort to harness the waters was in 1759, when Daniel Joncaire built a small canal above the Falls to power his sawmill.


American Falls (large waterfall on the left) and
Bridal Veil Falls (smaller waterfall on the right)


Canadian Horseshoe falls as viewed from Skylon Tower.

Niagara Falls at night

The main source: http://en.wikipedia.org/wiki/Niagara_Falls