

# Lyric gets around Niagara Falls



Drawing courtesy of Wikipedia

To move by water from Toronto to Lake Erie involves a lift of 326' to rise to the top of Niagara Falls. The Welland Canal, built and operated by Canada, solves this for ships and yachts which enter at Port Weller in Lake Ontario and exit at Port Colborne in Lake Erie. Unlike the smaller Erie Canal, the Welland is a workhorse, with locks rising almost 50' each, and there are no amenities for small boats except for two poly lines dropped to the water from above by the lock attendant. Turbulence in the locks is significant when they are filling, and keeping a 44' vessel parallel to the side with 50' drop to the lines is often a problem. Because of this, the rules require a crew of three for an upbound vessel. We had the good fortune to have CCA member

Jock Macrae help us for this and his knowledge and capable line handling were a great benefit.

The Welland Canal handles about 3000 ships each year carrying 40 million tons of cargo. The Welland carries relatively large ships, either "Lakers" – usually bulk carriers most with self unloading gear or "Salties" – moderate sized ocean going vessels. Typical cargoes are bulk products such as building materials, iron ore, oil, and grain. Relatively recent expansion of the city of Toronto has benefitted greatly from the ability to deliver building materials through this waterway.

Ice closes the canal in the winter, usually December-April, but opening and closing dates vary each year.



Jock Macrae with early morning sendoff group



Small poly lines to secure to at the bottom of lock

Yachts pay about \$240 to make the 27 mile passage. When in the canal, both yachts and ships are under the strict control of the dispatcher, who has the power to stop or delay a yacht to fit the schedules of the more profitable ship traffic. In our own case our 11 hour passage included three delays for a total of about five hours.

The first Welland Canal was completed in 1829, not long after the opening of the New York State funded Erie Canal, to allow Canadian participation in the interlake shipping bonanza then building in both the US and Canada. Its small size and the rapid deterioration of its 40 wooden locks created a need for the second and third Welland Canals which followed quickly.



The only other yachts in the canal during our transit

Today’s canal, completed in 1932 has only 8 locks, two of which are stacked together giving the sense of a 100’ lift when you enter the bottom of this giant.

Plans to upgrade to a single “super lock” have been shelved for the moment, but minor upgrades are apparent –take the recently installed “ship suckers” that uses a vacuum system to hold a ship alongside during locking, thereby relieving some paid linehandling lock employees of their duties.

Accidents are rare in the Welland Canal, but not unheard of in other canals serving the Great Lakes. For example, over the years in the Sault Ste Marie Canal, linking Lake Huron with Lake Superior, at least two ships crashed through the lower gates when entering the lock, allowing a deluge of water to pass through with disastrous consequences below to ships, locks, and human life. It may be this history that caused the Welland engineers to design a special “lock saver” cable that is lowered across the lock just ahead of the downstream gate with the goal to stop a ship that moves too far forward.



100’ gates at end of double lock

For Lyric, leaving Lake Ontario and transiting the Welland marked the end of our visit to the eleven CCA stations and opened the last chapter of our cruise through the remaining four Great Lakes.