

Upbound on the Welland Canal

June 16th, 2025

Graham Segger & Bill Schwenger



This presentation was assembled by Bill Schwenger and Graham Segger in August 2025 for delivery to a meeting of the Probus Club of Pelham, Ontario. It documents a trip from Lake Ontario to Lake Erie through the Welland Canal on June 16, 2025 as crew on two sailboats.

The photos displayed were taken by several different individuals including those on the boats and other friends viewing as we passed through the canal. These included:

- the two authors Graham & Bill
- the owners of the two boats – Bernie Coyne and Lynn Squire of Mystic Rose and Ted Waring and Evelyn Michaud of Sensai 1
- On shore observers Michele Schwenger and Ed and Barb Werner

All photos used with permission.



The Pleasure Craft Dock – Tied up and waiting for the 9:00 am start to the Upbound (southward) transit.

Our vessels are Mystic Rose on the left which is a red J/46 owned by Bernie Coyne and Lynn Squire of Maine & Florida and Sensai 1 next to it which is a white Beneteau 43 owned by Ted Waring and Evelyn Michaud of Ottawa.

We had motored in from Dalhousie Yacht Club earlier that morning.

The Pleasure Craft Dock is in Port Weller at the north end of the canal just inside the piers. It is accessed by Seaway Haulage Road. The concrete piers are very rough.



Our involvement with this adventure had its genesis in Punta Gorda, Florida in February 2025 when Bernie Coyne asked Graham if he would help as crew while he took his sailboat through the Welland Canal in June. Later Bernie asked if Graham could find a couple more crew for their friends Ted & Evelyn. Bill Schwenger and Nick Kozaravich were recruited to crew on Sensai and were a great help to Ted.

Bernie and Graham race their sailboats against each other as part of Harbor 20 Fleet 6, an 18 boat one design class in Charlotte Harbor, Florida.

Photo above shows Mystic Blue (Bernie-sail #144) and Spirit (Graham-sail #112) crossing tacks.

The difference of 99.5 m (326.5 feet) between the levels of Lake Ontario and Lake Erie is now overcome with eight locks and 43.4 km (27 miles) of canal. Each of seven lift locks has an average lift of 14.2 m (46.5 feet) while Lock 8 at Lake Erie is a control lock with a shallow lift varying from 0.3 to 1.2 m (1 to 4 feet) to make the final adjustment to the lake level.

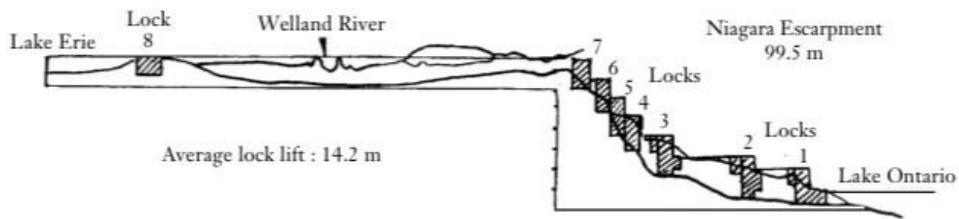
Overall length of canal	43.4 km (27 miles)
Total lift	99.5 m (326.5 feet)
Average lift of locks	14.2 m (46.5 feet)
Size of locks (breast wall to gate fender)	233.5 m (766 feet) long 24.4 m (80 feet) wide
Depth of water (over the sill)	9.1 m (30 feet)
(in channels)	8.2 m (27 feet)

The technical information about the canal on the next three slides was drawn from a March 2003 document titled The Welland Canal Section of the St. Lawrence Seaway published by Information Services, The St. Lawrence Seaway Management Corporation.

The seven lifts are located in the northern 11.6 km (7.2 miles) section of the canal, between Lake Ontario and the top of the Niagara escarpment. A 27.8 km (17.3 miles) man-made channel runs through level ground to the shallow-lift control lock at Lake Erie. Piers projecting into the lakes account for an additional 4.0 km (2.5 miles).

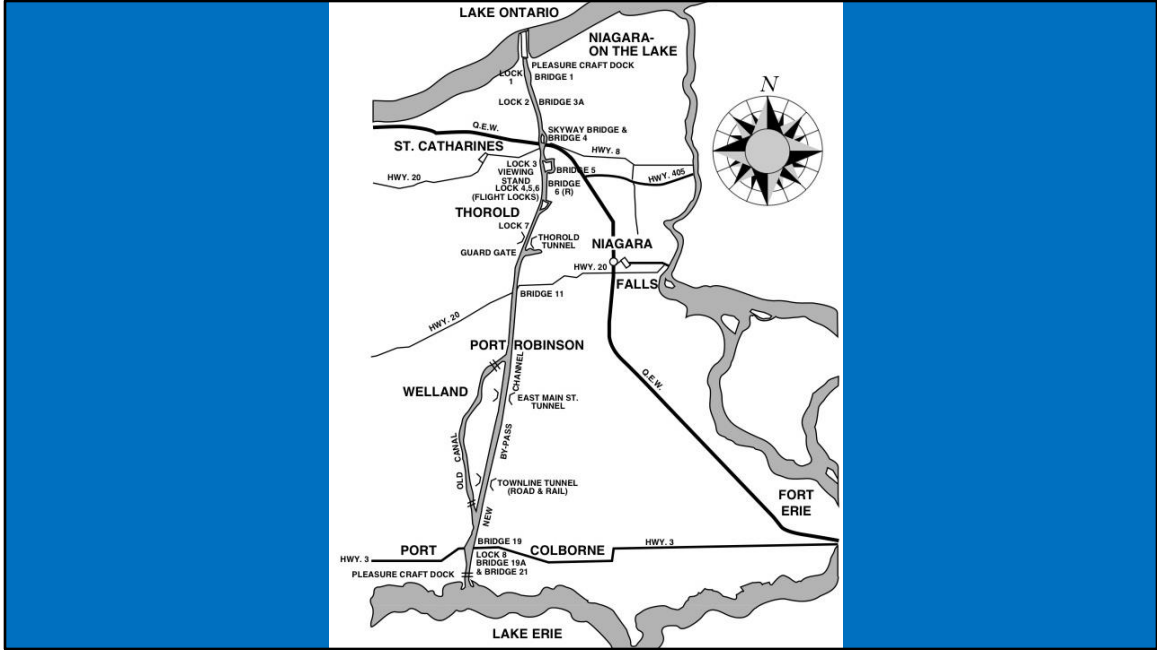
The Welland Canal provides more than half the lift needed between tidewater and the Lakehead.

WELLAND CANAL PROFILE



Notice the slight land elevation in the centre. This is the Deep Cut between Allanburg and Port Robinson which was initially hand dug in the 1820s.

Image is viewing west.



Understanding the workings of the Welland Canal is a Niagara Region core competency - Multiple road bridges and several rail bridges must be opened to allow ship traffic to pass. Fortunately, there are three tunnels for cars who do not want to risk a wait.

Bill and Graham took great satisfaction in cruising under the bridges and watching the cars lined up to wait for us, a delightful role reversal!



Looking north; Lock 7 in foreground, 3 flight locks; Glendale Bridge; Lock 3; Skyway Bridge

Image of an aerial photo owned by Bill Schwenger.



Approach to Lock 1 – Evelyn on the foredeck of Sensai

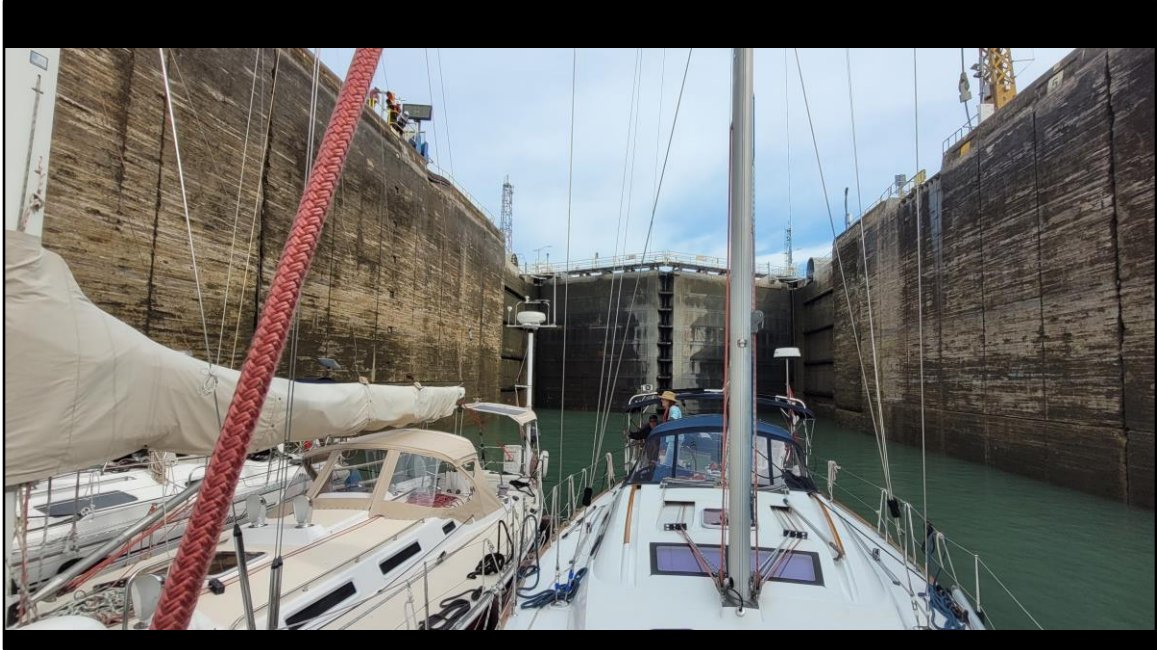


Lock 1 – Bill taking photos

Ted and Evelyn are at the helm on Sensai



Inside Lock 1 – the Photo which Bill was taking



Lock 1 tied to the right side. Locks 3 to 7 have left side tie ups.



Graham takes a photo of Bill cruising by on Sensai 1



Diane Segger with skipper Bernie Coyne on left and Graham on right, both helping out on Mystic Rose



Off to Lock 2



There were nine boats in our Pleasure Craft flotilla. We were rafted three deep in three tiers.

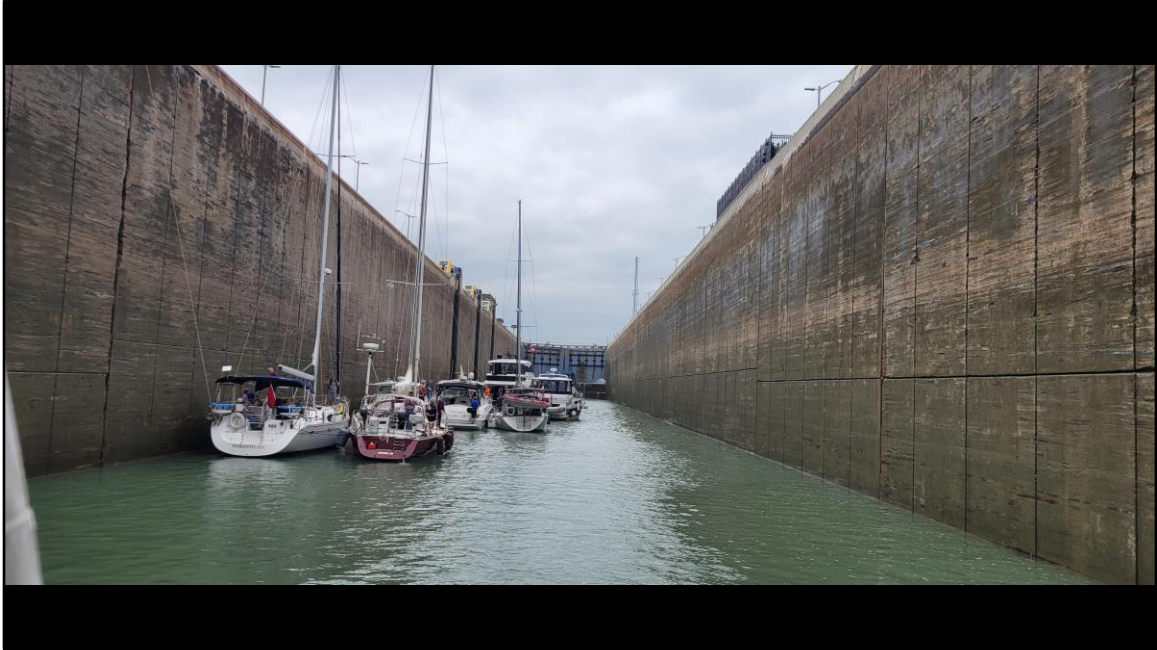
Pleasure craft can only go up the canal on three specific days per week and come down on three other days. Reservations must be made in advance and the fee is currently \$320 each way.



Lock 2 looking back after the lock has been filled.



Entering Lock 3 – the St. Catharines Museum at Lock 3 with its Viewing Platform is a wonderful Niagara resource and well worth a visit



Entering Lock 3 - The ropes which hang down from the top of the lock are used to secure the inside boat. They need to be looped around a cleat but not secured as the slack must be taken up as the water rises in the lock. The two outside boats are secured with lines and fenders to the inside boat.



View from the Lock 3 Viewing Platform

Water entering the lock can be very turbulent requiring the crew on the inside boat to use poles to fend the boat off the rough concrete walls. This can be quite strenuous work, in our case requiring five men drawn from all three boats to protect the inside boat. This was in addition to the two men on the ropes and one at the helm of each boat.



Lock 3 Viewing Platform



Lock 3 Viewing Platform – Friends and fellow Harbor 20 Fleet 6 sailboat racers Ed and Barb Werner took the photos on the two previous slides. Looks like they are incarcerated up there!



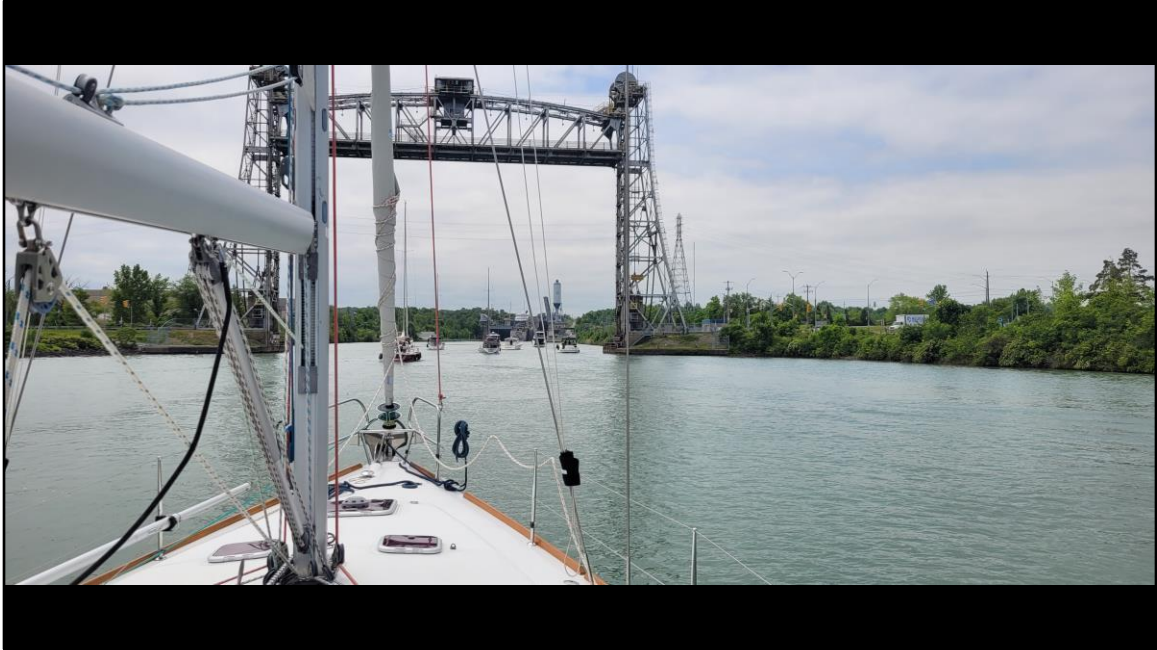
Lock 3 looking back at Queenston Road Bridge and the QEW Garden City Skyway



Sensai off to Lock 4 and under the Glendale Bridge – photo by Michele



Waiting for the Glendale Bridge to open. The cruise ship Viking Octantis has just entered Lock 4 downward bound



Glendale Bridge is now up to allow our nine-boat flotilla to pass under.



Made it under the Glendale Road Bridge between Locks 3 & 4. Lead boat here is Vitae.



Mystic Rose approaches Lock 4 – Graham & Diane on the bow. The "water tower" at Lock 4 is actually a differential surge tank for the Lock 4 Powerhouse, a hydroelectric generating station that provides power for the canal's operations.



Approaching Lock 4. Both sides of the railway bridge are now raised. These are the tracks of the Grimsby Subdivision of CN Rail which carries the Go Trains and Amtrak between St. Catharines and Niagara Falls.



Entering Lock 4 with its double high gates



Graham and Bill in the Flight Locks (4, 5 & 6). Lock doors are double height because the locks are back-to-back. These three locks are also twinned meaning there are parallel locks and boats can pass going up and down the canal.



Lock 4 double doors – this is the photo which Bill was framing on the last slide



The doors between Lock 4 and Lock 5 swing open once the water levels are equalized.



This is a 2013 photo of Lock 7 showing the Unicorn and the Pride of Baltimore II with their yard arms secured fore and aft to prevent damage from the lock walls.

Graham was on Ceiba, a Catalina 36, in foreground – photo by Diane (she had to climb for this one)



Inside Lock 7 looking back at Lock 6 (the top of the Flight locks and the Niagara Escarpment)



Remember the cruise ship we passed in Lock 4. This screenshot was captured from a video taken at the south entrance to Lock 6 less than two hours before we passed this spot. It is from the video posted on the RightInNiagara YouTube page which is publicly accessible and best viewed at 3x or 4x playback speed - <https://youtu.be/Oo7UE5WV6c8?si=eqSITHgoGa5tVRT3>



Leaving lock 7 in Thorold and heading toward Allanburg



Bernie and Lynn on Mystic Rose leaving Lock 7



Guess who has the right of way? Waiting for commercial traffic meant that we had to pull over and tie up at the side of the canal several times.



More traffic. Note the bashed in bow. Waiting for commercial traffic to go through is why it often takes 12 hours to get through the canal. We made it in 11 hours.



Port Colborne lift bridge. The final Lock 8 is a regulator which adjusts for changes in Lake Erie water levels – 1 to 4 feet.

From here we motored around to Sugarloaf Marina where the boats tied up for the evening. We had previously dropped a car at Port Colborne so that Graham and Diane could drive the Niagara crew back to their homes and pick up our other car at Port Dalhousie.

All and all a long but very rewarding day on the water.