

System Name: Lake Rosalind Drinking Water System
Municipality: Municipality of Brockton
Drinking Water System Category: Small Municipal Residential

The Municipality of Brockton is located in Bruce County and is contained entirely within the Saugeen Valley Source Protection Area. The eastern portion of the municipality consists of a series of small recreational lakes and excellent farmland, which comprise the Saugeen Clay Plains in the north and the Horseshoe Moraines around Walkerton. The western portion of the municipality includes the Greenock Swamp, the largest protected Class 1 wetland in Southern Ontario and recognized in Canada for its uniqueness. In 2011, the population of the Municipality was 9432, which was a decrease of 2.2% from 2006 (Census, 2011).

The Lake Rosalind Drinking Water System is located on the west side of Lake Rosalind in the Municipality of Brockton, northwest of the Town of Hanover. The Lake Rosalind Drinking Water System currently consists of two wells. Well No. 1 is a shallow dug well, less than four metres deep, located on the west side of Lake Rosalind. The date of installation is unknown but the well was recently upgraded in 2005. Well No. 3 is an overburden well that was constructed in 1987 to a depth of 22.9 metres.

Both Well Nos. 1 and 3 operate in conjunction to service approximately 58 residential lots (approximately 170 people) with private septic systems. Lake Rosalind Well No. 3 is located 120 metres west of Lake Rosalind with agricultural land to the west. According to the record for Lake Rosalind Well No. 3, there is only 1.5 metres of clay overlying the overburden sand aquifer, which is located at a depth of 13.4 metres. Due to the limited thickness of clay in the overburden, natural protection of the aquifer from surface activities is limited, therefore both wells are confirmed GUDI* (Groundwater Under Direct Influence). Microbiological water quality from Well No. 1 is poor with frequent testing results showing high concentrations of total coliform with the occasional test result detecting E.coli. In comparison, microbiological water quality from Well No. 3 is significantly better than Well No.1, but it is still considered poor. The well is clearly impacted by drought, with shown effects of reduced well yield and low water levels during a lack of precipitation over an extended period of time (seasons) (MOE Inspection Report 2013).

Name of Well	Depth	Pump Rating	Aquifer
Lake Rosalind Well #1	4m	21 L/minute	Overburden
Lake Rosalind Well #3	22.9m	77 L/minute	Overburden

*Well water or groundwater under the direct influence of surface water (GUDI) refers to groundwater supply sources that are hydraulically connected to nearby surface waters, and are thus vulnerable to contamination by pathogens.



Lake Rosalind Well No. 1



Lake Rosalind Well No. 3



Lake Rosalind Well Building