

System Name: Teeswater Well Supply
Municipality: Municipality of South Bruce
Drinking Water System Category: Large Municipal Residential

The Municipality of South Bruce is located in the southern portion of Bruce County in the Saugeen Valley Source Protection Area. The Municipality of South Bruce has a strong agricultural sector due to its fertile soil. Livestock husbandry and crop production are the main farming activities within the Municipality. South Bruce has a thriving aggregate industry with quality gravel deposits throughout the Municipality. In 2011, the population was 5685, which was a decrease of 4.3% from 2006. The main towns are Mildmay (population 1183) and Teeswater (population 1109). Smaller villages include Formosa, Karlsruhe and Deemerton.

The Municipality of South Bruce has two municipal water supply systems, one servicing the former Village of Teeswater and a second servicing the former Village of Mildmay and adjacent development. These municipal water supply systems utilize groundwater wells drilled into the bedrock aquifer. No new drinking water systems are planned.

The Teeswater Well Supply is comprised of an artesian bedrock well, Well No. 3, located in close proximity to the Teeswater River. It serves the village and some adjacent developments with a total population of approximately 1000. The Teeswater system is centrally located near the intersection of Clinton Street North (Bruce Road 4) and Hillcrest Street East (Bruce Road 6) in Teeswater. The well is located 20-30m south of the Teeswater River. It is located beyond the 1:100-year floodplain of the River but within the regional storm flood line according to Conservation Authority mapping.

The Teeswater well was drilled in 1996 and has a depth of 85.3m with the casing extending 25.9m. The well is artesian and naturally produces an unrestricted flow of approximately 76L/s under a pressure of approximately 11 pounds per square inch (psi) and a head of approximately eight metres. The wellhead is located in close proximity to the pump house and extends approximately 0.5m above ground level. A hydrogeological assessment is provided (Engineer's Report, R. J. Burnside & Associates Limited, May 28, 2001). The well is considered non-GUDI* based on artesian conditions and water quality analysis. The aquifer source is called Detroit River Group limestone.

Well Name	Teeswater 3
Number of Users Served	1000 persons
Design Capacity	1600m ³ /day
Permitted Rate	1600m ³ /day
Average Annual Usage	455.0m ³ /day
Modelled Pumping Rate	488.0m ³ /day
Water Treatment	Sodium hypochlorite disinfection

*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.



Inside Pumphouse



Teeswater monitoring station



Pumphouse for well

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