

**System Name: Chatsworth Drinking Water System**  
**Municipality: Township of Chatsworth**  
**Drinking Water System Category: Large Municipal Residential**

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The Township of Chatsworth is located in the heart of Grey County. It is partially within the Grey Sauble Source Protection Area and partially within the Saugeen Valley Source Protection Area. In 2011, the population was 6,437, which was an increase of 0.7% from 2006. Essentially a rural community, the Township of Chatsworth gets its character from the farmlands and forests surrounding it. Agriculture is the most predominant industry in the Township. There are numerous sawmills in the Township, some operated by the Amish community. The main towns are Chatsworth (population 513) and Desboro (population 200). Smaller villages include Massie, Holland Centre, Berkeley, Walters Falls, and Mooresburg. One residential municipal groundwater system serves the village of Chatsworth and one residential municipal groundwater system serves the village of Walters Falls. No new drinking water systems are planned.

The Chatsworth Drinking Water System services approximately 567 people with 189 connections. The town is currently served by two drilled wells, identified as Well No. 1 and Well No. 2. The wells are approximately six metres apart and are currently located within a single pump house and water treatment building. The wells are located on the southeast side of the village, approximately 250 metres east of Highway 10 and 140 metres east of the Spey River. The associated water supply system is classified as a large municipal residential system. Both wells were installed in 1983 on behalf of the village of Chatsworth. Below the casings, the wells were completed as nominal 200 millimetre (8-inch) diameter open holes in the bedrock, with Well No. 1 extending to a depth of approximately 31.7 metres and Well No. 2 extending to a depth of approximately 19.2 metres (Genivar 2009). Approximately 2.7 to 2.9 metres of predominantly clayey soil reportedly overlays the bedrock at the well locations. Bedrock geology mapping indicates that the upper bedrock in the vicinity of the Chatsworth wells consists of Guelph Formation dolostone and the Chatsworth municipal wells penetrate the Guelph, Amabel and Fossil Hill formations (see Genivar 2009).

Each well is equipped with pumping equipment capable of pumping at 529.8 L/min. Well No.1 and Well No.2 are equally rated at 569L/min and are not meant to run simultaneously. The pump house that houses the wells is located on Part Lot 5, Concession 1 East, East Garafraxa Road in the former Township of Holland (MOE Inspection Report 2009).

The Chatsworth Drinking Water System has been categorized as GUDI due to episodic bacterial contamination and the relatively thin layer of protective overburden in the area. In their engineering report, Henderson, Paddon & Associates Ltd. (2000) determined some influence of surface water on groundwater, arguing with the vicinity to Spey River and the total lack of overburden protection along this river. Sampling confirmed this conclusion, with occasional counts of *E. coli*. However, adequate treatment systems are installed. The water is first disinfected with ultraviolet and then treated with sodium hypochlorite (MOE Inspection Report 2009).

\*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.



*Chatsworth well*

## **Chatsworth**

*A stop-over point for early travellers, Chatsworth is located at the joining of Highways 6 and 10. Essentially a rural community, it takes its flavour from the farmlands and forests surrounding it, and welcomes visitors to stop awhile as they drive through central Grey.*

## **Historical Facts**

*First named Johnstown*

*A trading centre for Holland and Sullivan townships*

*The Toronto-Sydenham Colonization Road is marked with a plaque*