

System Name: Neustadt Well Supply
Municipality: Municipality of West Grey
Drinking Water System Category: Large Municipal Residential

The Municipality of West Grey is located in Grey County in the Saugeen Valley Source Protection Area. Three branches of the Saugeen River pass through the municipality en route to Lake Huron. In 2011, the population was 12,286, which was an increase of 2.7% from 2006. The main towns are Durham (population 2,647) and Neustadt (population 562). Smaller villages include Ayton, Elmwood, Crawford, and Allan Park.

The Municipality of West Grey has five groundwater municipal residential drinking water supply wells: two servicing Durham (Durham Well 1B and Durham Well 2) and three servicing Neustadt (Neustadt Well 1 and Neustadt Wells 2/3).

The water supply system for Neustadt is comprised of three bedrock supply wells (Neustadt Wells 1, 2 and 3) servicing approximately 540 people. The wells are located in an agricultural setting south of Neustadt. Until the installation of these wells, Neustadt relied on private shallow dug wells for water service (Henderson and Paddon, 2002). Wells 1 and 3 are considered the main pumping wells, and Well 2 acts as a standby. Water from all three wells is treated at a single treatment facility.

Well records indicate that Well 1 has a depth of 38.1m and was drilled in 1990. A steel casing was installed to a depth of 20.7m, with an additional 1.4m capped and bolted section extending above ground. Well 2 has a depth of 29.6m and was drilled in 1992. A steel casing was installed to a depth of 12.5m, with cement grouting along the entire casing length and an additional 1.3 m capped, bolted and padlocked section extending above-ground (Montgomery, 2001).

GUDI* status was confirmed by studies from Henderson, Paddon & Associates Ltd. in 2002. For well No. 1, there is a potential influence due to a relatively thin and permeable overburden in the area of this well.



Well No. 1 pumphouse



Well No. 1



Well No. 2/3 building



Neustadt standpipe

*GUDI - 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.