

System Name: Kimberly-Amik-Talisman Well Supply
Municipality: Grey Highlands
Drinking Water System Category: Large Municipal Residential

The Municipality of Grey Highlands is located in Grey County and its key features include the Beaver Valley, local waterfalls, the Bruce Trail, the Niagara Escarpment, the Osprey Bluffs, and the Saugeen and Beaver Rivers. The Municipality is located within three source protection areas and two source protection regions: portions are in the Grey Sauble SPA and the Saugeen Valley SPA, which are in the Saugeen, Grey Sauble, Northern Bruce Peninsula Source Protection Region; a portion also belongs to the Nottawasaga Valley SPA, which is in the South Georgian Bay Lake Simcoe Source Protection Region. In 2011, the population was 9520, which was an increase of 0.4% from 2006. The main towns are Markdale and Flesherton. Smaller settlement areas include Feversham, Rocklyn, Kimberley, and Eugenia. Agriculture is one of the largest industries in Grey Highlands. Farms range from small and family-owned to large and highly-automated.

The two municipal drinking water systems in Grey Highlands are the Markdale Water Works (Saugeen Valley SPA) and the Kimberly-Amik-Talisman Water Supply (see Assessment Report of Grey Sauble SPA). The Feversham Water system, which serviced the Beaver Heights Subdivision, has been decommissioned. No new drinking water systems are planned.

The Village of Kimberley, Amik Subdivision, and Talisman Mountain Resort are all connected to create what is known as the Kimberley - Amik Talisman Water System. The Water Treatment Facility, which is built at the top of the Amik Subdivision, processes raw water which is collected from two springs along the Niagara Escarpment. The raw water is filtered and chlorinated and stored in a reservoir with a capacity of 878 m³. Treated water is fed through the system by both gravity main and a pressurized pumped main. (Source: Grey Highlands)

Spring No. 1 and No. 2 are from the same groundwater source and are located 330 metres southwest of the water treatment plant. They are influenced by rainfall and snow melt events which increase raw water turbidity and bacteriological levels. Studies have shown that Wodehouse Creek sink holes and bedrock fractures provide silt-laden run-off water with direct access to the aquifer. The area surrounding the sink holes is agricultural (crops and pasture). There are 173 service connections to the system for Town of Kimberly, Amik Subdivision and Talisman resort.

There is a two lagoon system at the base of the Amik Subdivision that treats waste water from both the Subdivision and Talisman Mountain Resort. All sanitary sewage is fed to the lagoon via gravity. There is a seasonal discharge between May 1 and September 31. Lands designated by the Niagara Escarpment Commission (NEC) as Escarpment Natural Areas and Escarpment Protection Areas surround the Kimberly-Amik-Talisman water supply system. The area contains a mixture of land uses, such as recreational, residential, agricultural, and natural forests.

Total Dynamic Head (TDH) is the work done by the pump per unit weight, per unit volume of fluid. This figure is used on Permit to Take Water documents.



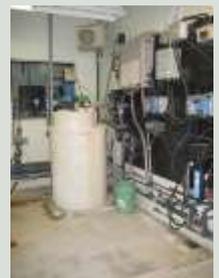
Springs No. 1 and 2



Inside pumphouse



Pumphouse



Inside pumphouse