

# Clarington Transformer Station

## Permit to Take Water Fact Sheet

### What is a Permit to Take Water?

Recently, Hydro One applied for a Permit to Take Water. This permit is required under *O. Reg. 38/04* of the *Ontario Water Resources Act*. Hydro One expects it will need to take over 50,000 litres of water per day of groundwater seepage as a result of initial construction associated with the cut slope on the eastern portion of the station area. 50,000 litres of water is comparable to watering your lawn for 24 hours with a garden hose.

The purpose of the Permit to Take Water program is to ensure the conservation, wise use and management of Ontario's water resources. The Clarington Transformer Station is located in the Harmony Creek sub-watershed and water managed within the permit will be returned to the natural environment and kept within this sub-watershed. The Farewell Creek is in a different sub-watershed and will be unaffected by site grading activities.

### Why has Hydro One applied for a Permit to Take Water?

Based on the data recently collected from the Groundwater and Surface Water Monitoring Program we are projecting that the grading activities on site will require the removal of more than 50,000 of litres of water per day.

### How long do you need the permit?

The permit will be valid for an 11 month period.

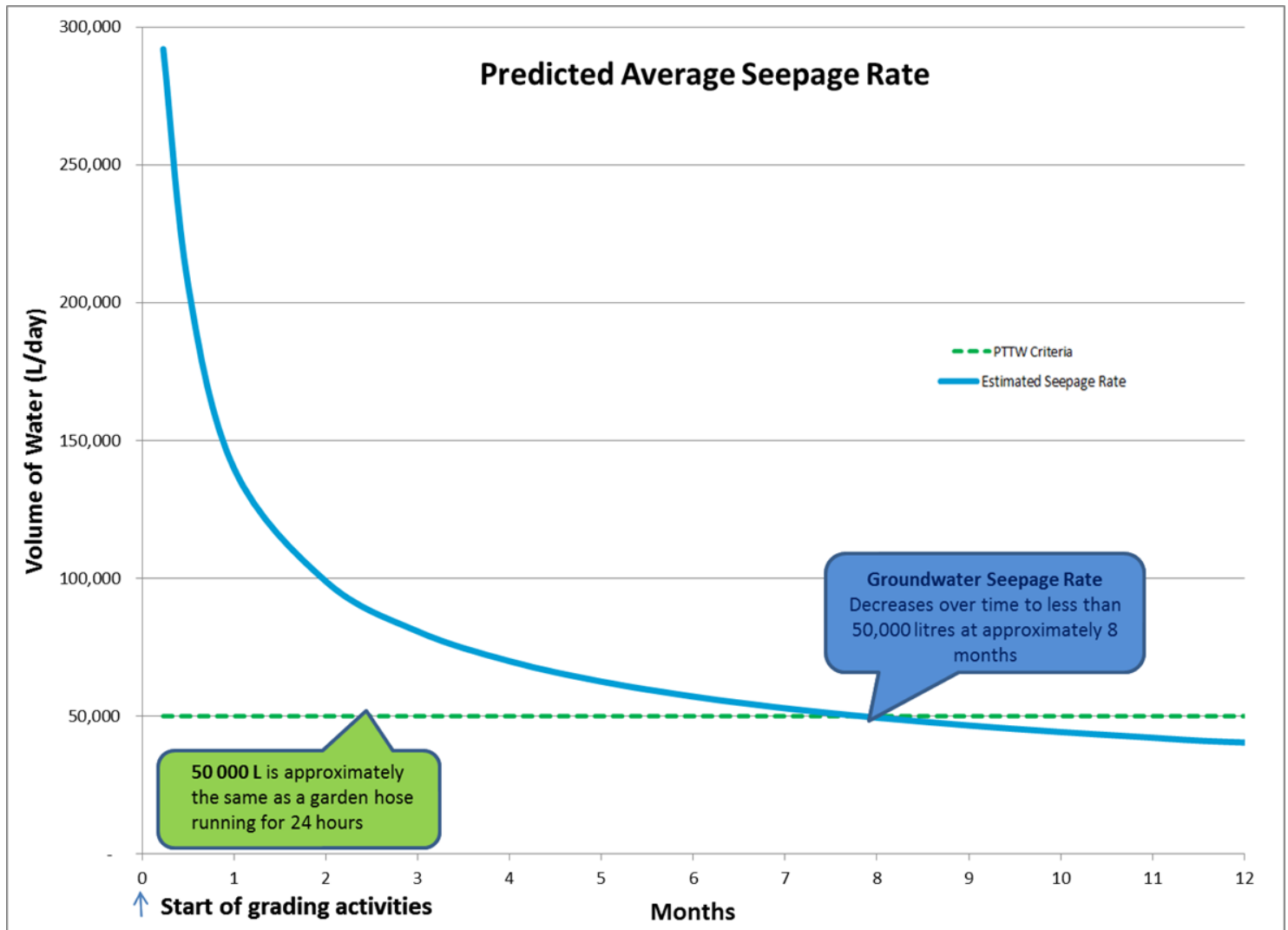
### Will the activities associated with the Permit to Take Water affect local wells?

No. Part of the criteria required for a Permit to Take Water is the ability to demonstrate that there will be no adverse impacts to the natural environment and to local groundwater users. Calculations based on the data collected on site show that over the long term the amount of drawdown, which is the lowering of the shallow water table, is negligible. As such, shallow well owners will not be affected.

Private wells that draw their water from deep aquifers do not rely on the shallow water table for their supply. Therefore, deep wells are not impacted by the grading activities associated with this permit.

## How much water needs to be managed?

The estimated daily volume of groundwater seepage from the newly graded slope will vary based on several factors including grading, measured properties of the native soil, seasonal groundwater fluctuations and rainfall. The graph below illustrates the expected average volumes of groundwater seepage to be managed for the permit period.



## How will the water be managed?

The volume of water managed on-site will be recorded daily and reported to the Ministry of the Environment and Climate Change (MOECC). Water collected within the grading area will be directed into settling areas onsite, which will be lined with an impermeable fabric and contained within a berm. The water will then be directed to sediment settling containers

where it will be tested against Provincial Water Quality Objective standards. The water will then be filtered and discharged back in to its original sub-watershed.

If you have any questions about the Permit to Take Water application or the Clarington Transformer Station project, Hydro One's community relations department can be reached at 1-877-345-6799 or [community.relations@HydroOne.com](mailto:community.relations@HydroOne.com)