

The Corporation of the Town of Orangeville

By-law Number_____

A By-law to Adopt Amendment No. 135 to the Official Plan

The Council of the Corporation of The Town of Orangeville, in accordance with the provisions of Section 26 of the Planning Act, R.S.O. 1990, c.P.13 and amendments thereto, hereby enacts as follows:

1. Amendment No. 135 to the Official Plan for The Town of Orangeville, consisting of the attached explanatory text and maps is hereby adopted.

Passed in open Council this 27th day of January, 2025.

Lisa Post, Mayor

Raylene Martell, Clerk

The Official Plan

for the

Town of Orangeville

Amendment No. 135

The attached explanatory text and map, constituting Amendment Number 135 to the Official Plan for the Town of Orangeville, was adopted by the Council of the Corporation of the Town of Orangeville, under the provisions of Section 26 of the Planning Act, R.S.O., 1999, C. P.13 on January 27, 2025.

Lisa Post, Mayor

Raylene Martell, Clerk

The Official Plan for The Town of Orangeville Amendment No. 135

Part A – The Preamble

1. Purpose of the Amendment

The purpose of this Amendment is to add policies and a new schedule to the Town of Orangeville Official Plan to bring it into conformity with the Credit Valley, Toronto and Region, and Central Lake Ontario Source Protection Plan, dated February 29, 2024, and as amended time to time (CTC SPP), and the Credit Valley Assessment Report, Approved: February 29, 2024 in accordance with Sections 40(1) and (42) of the Clean Water Act, 2006.

2. Location

This amendment applies to the entirety of the lands of the Town of Orangeville.

3. Basis of the Amendment

The Clean Water Act, 2006 enabled the establishment of Source Protection Regions and Areas throughout the Province to address significant threats occurring in vulnerable areas around municipal groundwater supplies (drinking water wells) and surface water supplies (drinking water intakes). Source Protection Committees were established for each Source Protection Region and tasked with developing Assessment Reports and Source Protection Plans containing policies to protect existing and future drinking water sources.

The Town of Orangeville is within the Credit Valley Source Protection Area that forms part of the CTC (Credit Valley-Toronto and Region-Central Lake Ontario) Source Protection Region. The CTC Source Protection Plan came into effect in 2015 and was subsequently amended in 2019 and 2022 and 2024. The most recent amendment to the CTC Source Protection Plan was approved on February 29, 2024 and came into effect on March 6, 2024.

The policies in each Source Protection Plan have been written to ensure that activities identified as significant drinking water threats in vulnerable areas around municipal drinking water wells and intakes cease to be, or never become significant drinking water threats. As required under section 40 and 42 of the Clean Water Act, 2006, municipalities are required to amend their Official Plans and zoning by-laws to conform to the applicable Source Protection Plan. The Town's Official Plan must therefore be

amended to conform to the Clean Water Act, 2006 and the policies of the CTC Source Protection Plan.

Part B – The Amendment

The Official Plan for the Town of Orangeville is amended as follows:

- By adding new Schedules F1 to F4 Water Quality Wellhead Protection Areas (WHPA) to illustrate Wellhead Protection Areas A, B, C, D and E,(WHPA-A, WHPA-B, WHPA-C, WHPA-D and WHPA-E) and Issue Contributing Areas (ICA) associated with the protection of water quality at municipal drinking water wells, and Water Quantity Wellhead Protection Areas (WHPA-Q1/Q2) associated with the protection of water quantity at municipal drinking water wells.
- 2. By adding the following as Section E7 of the Town of Orangeville Official Plan and renumbering all affected sections in numerical order:
- E7 SOURCE WATER PROTECTION
- E7.1 Basis
- E7.1.1 The following defines the technical terms used throughout Section E7 of the Official Plan. Interpretation of the policies outlined in Section E7 shall be informed by the definitions outlined below:
- E7.1.2 "<u>Aquifer"</u> means an underground layer of water bearing rock that consists of permeable materials such as sand, gravel or fractured rock. Aquifers are the source of the Town's drinking water and supply municipal wells with groundwater. This groundwater is treated and supplied to residents and businesses for use.
- E7.1.3 "<u>Assessment Report(s)</u>" means science-based reports that identify vulnerable areas mapped around municipal wells and intakes, vulnerable groundwater areas, and groundwater recharge areas. The reports also identify threats to drinking water sources within these areas.
- E7.1.4 "<u>Highly Vulnerable Aquifer</u>" means an aquifer that is particularly susceptible to contamination because of its location near the ground's surface or where the types of materials in the ground around it are highly permeable.
- E7.1.5 "<u>Intake Protection Zone</u>" means the area on the water and land immediately surrounding a municipal water intake in a lake, river or stream

that may be vulnerable to contamination from land based activities identified as drinking water threats.

- E.7.1.6 "<u>Issue Contributing Area</u>" means areas around a municipal well where activities have contributed, or could contribute to elevated concentrations of particular contaminants in relation to the Ontario Drinking Water Standards.
- E7.1.7 "<u>Risk Management Official (RMO)</u>" refers to the official, appointed under Part IV of the Clean Water Act, 2006, responsible for preparing, negotiating, and establishing risk management plans under Part IV of the Clean Water Act, 2006, and making decisions on development applications in accordance with the requirements under the Clean Water Act, 2006 and Source Protection Plan.
- E7.1.8 "<u>Risk Management Plan</u>" refers to a legal document prepared in accordance with the Clean Water Act, 2006, which sets out a plan to manage a significant threat activity, which may include responsibilities and protocols of the person engaged in the threat activity. Risk Management Plans are intended to be negotiated between a Risk Management Official (RMO) and a person engaging in the significant threat activity.
- E7.1.9 "<u>Significant Groundwater Recharge Area(s)</u>" means an area or areas on the landscape that are characterized by porous soils, such as sand or gravel, which allow water to seep easily into the ground and flow to an aquifer.
- E7.1.10 "<u>Significant Drinking Water Threat Activity</u>" means activities that have the potential to pose risks to the quality or quantity of municipal drinking water sources. Where these activities are identified, they must be managed or prohibited in accordance with the requirements of the Source Protection Plan. The Clean Water Act, 2006 prescribes the types of activities, and circumstances under which a prescribed activity can be deemed a significant threat.
- E7.1.11 "<u>Source Protection Plan (SPP)</u>" means a regional policy document that contains a series of locally developed policies that, as they are implemented, protect existing and future sources of municipal drinking water.
- E7.1.12 "<u>Transport pathways</u>" means anthropogenic features at or below the ground surface that increase the vulnerability of drinking water supply sources. Transport pathways circumvent the natural protection provided by overlying soil and rock confining layers, resulting in a greater risk of contamination to drinking water supply sources.

- E7.1.13 "<u>Vulnerable Area</u>" refers to mapped locations that are sensitive to activities that could affect the quality and quantity of water sources. Vulnerable areas include wellhead protection areas, intake protection zones, significant groundwater recharge areas, and highly vulnerable aquifers.
- E7.1.14 "<u>Vulnerability Score</u>" means the scoring of a designated vulnerable area, such as a wellhead protection area, intake protection zone, significant groundwater recharge area and/or area of high aquifer vulnerability, that reflects its vulnerability to contamination. The detailed delineation of vulnerability scoring is found in Source Protection Plans and their associated Assessment Reports.
- E7.1.15 "<u>Wellhead Protection Area</u>" refers to the surface and subsurface area surrounding a water well or well field that supplies a municipal system, through which contaminants are reasonably likely to move so as to eventually reach the well.
- E7.1.16 The Clean Water Act, 2006 was enacted to protect existing and future sources of municipal drinking water. It requires the development and implementation of Source Protection Plans (SPPs) for Source Protection Regions and Areas throughout Ontario. It also requires the Province, Conservation Authorities and municipalities to implement policies to manage the reduction and/or elimination of threats to sources of municipal drinking water.
- E7.1.17 In accordance with Sections 40(1) and 42 of the Clean Water Act, municipal Official Plans and zoning by-laws are required to conform with significant threat policies as set out in the Source Protection Plan. In addition, Section 39 of the Clean Water Act requires that all decisions under the Planning Act and Condominium Act, made by Council or the municipal planning authority conform to the significant threat policies as set out in the Source Protection Plan.
- E7.1.18 The Town is located within the Credit Valley -Toronto and Region Central Lake Ontario (CTC) Source Protection Region and must conform with the Credit Valley- Toronto and Region- Central Lake Ontario Source Protection Plan (CTC SPP), which came into effect on December 31, 2015. The CTC SPP identifies vulnerable areas (Schedules F1 to F4) where activities occurring on the landscape could impact the quality and quantity of water resources. Vulnerable areas include:
 - a) Wellhead Protection Areas for quality (WHPA) and quantity (WHPA-Q); and Issue Contributing Areas (ICA).
 - b) Significant Groundwater Recharge Areas

- c) Highly Vulnerable Aquifers
- d) Surface Water Intake Protection Zones

As the Town relies exclusively on groundwater to service the community, Surface Water Intake Protection Zones are not found in Orangeville.

- E7.1.19 The exact boundaries of Wellhead Protection Areas and Issue Contributing Areas and their vulnerability scores are found in the Source Protection Plan, which may be updated from time to time. Updates to this Official Plan to reflect changes in Wellhead Protection Area and Issue Contributing Area mapping shall be permitted without an amendment to this Plan.
- E7.1.20 The following policies apply only to those vulnerable areas and issue contributing areas that are identified in the CTC SPP, which are shown on Schedules "F1-F3" to this Plan and function as an overlay on the land use designations of Schedule "A".
- E7.1.21 In the event of a conflict between the policies and schedules of this Official Plan, and those within the CTC Source Protection Plan, the corresponding policies and schedules of the CTC Source Protection Plan shall prevail to the extent of the conflict.
- E7.2 Goals and Objectives
- E7.2.1 The goals of the Source Water Protection policies of this Plan are to carefully manage activities that may impact groundwater resources in order to meet the present and future needs of residents, businesses and visitors. The policies aim to ensure that activities occurring in source protection vulnerable areas do not become a significant threat to municipal drinking water sources.
- E7.2.2 The Town will achieve the Source Water Protection goals of this plan by:
 - a) Ensuring the quality and quantity of municipal drinking water supplies are protected in accordance with the Clean Water Act, 2006 and Source Protection Plan;
 - b) Identifying activities that are, or will be a significant drinking water threat, based on potential risk to drinking water sources, that should be prohibited or managed in source protection vulnerable areas;
 - c) Screening new development applications for potential significant threat activities and requiring development proponents to work with the Risk

Management Official to ensure that any activities identified as potential significant drinking water threat activities are eliminated or managed in accordance with the requirements of the policies outlined in the Source Protection Plan;

- d) Working in partnership with the Province, County of Dufferin, Credit Valley Source Protection Authority and neighbouring municipalities to minimize and prevent negative impacts on groundwater and surface water features from existing and/or proposed land uses and activities.
- E7.3 Wellhead Protection Areas
- E7.3.1 Wellhead Protection Areas (WHPAs) are the surface and subsurface areas surrounding a municipal drinking water supply well that may be vulnerable to water quality and quantity threats and are described as follows:
 - 1. WHPAs for water quality threats: Areas defined around municipal drinking water wells based on the time (measured in years) it would take for groundwater and potential pathogens and chemicals to reach the municipal well, which defines the rate in which a municipal well is vulnerable to water quality threats due to contamination. WHPAs for water quality threats are shown on Schedule "F1" and are defined as follows:
 - a) WHPA-A: 100 m radius surrounding a well;
 - b) WHPA-B: 0 2 year Time of Travel;
 - c) WHPA-C: 2 5 year Time of Travel;
 - d) WHPA-D: 5 –25 year Time of Travel; and,
 - e) WHPA-E: Surface Vulnerability Zone, the vulnerable area for groundwater supplies, which are under the direct influence of surface water. The area is calculated on a two-hour travel time of surface water to the municipal well.

Lands within a Wellhead Protection Area are assigned a vulnerability score to denote the vulnerability of the drinking water source to potential pollution at a specific location. The vulnerability scoring is based on how quickly waters moves horizontally through the aquifer to the well, and how quickly water moves vertically from the surface down to the aquifer. Vulnerability scoring for the WHPAs in Orangeville is presented in Schedule "F3".

- 2. WHPA for Water Quantity due to Water-Taking (WHPA-Q1): is an area around a municipal well where activities that take water without returning it to the same water source pose a threat to the quantity of the groundwater supply. Refer to Schedule "F2".
- 3. WHPA for Water Quantity due to Recharge Reduction (WHPA-Q2): is an area delineated through a Tier 3 Water Budget and Water Quantity Risk Assessment as being an area that includes a WHPA-Q1 and an area where a reduction in infiltration or groundwater recharge to the source aquifer would pose a threat to the quantity of groundwater supply. Refer to Schedule "F2". In Orangeville the WHPA-Q2 is delineated to be the same extent as the WHPA-Q1.
- 4. **Issue Contributing Areas (ICA):** are areas around a municipal well where activities have contributed, or could contribute to elevated concentrations of particular contaminants in relation to the Ontario Drinking Water Standards. Refer to Schedule "F1" and "F3".
- E7.4 Prohibited / Restricted Activities in Wellhead Protection Areas
- E7.4.1 Land uses which include one or more of the prescribed drinking water threat activities identified in Ontario Regulation 287/07, may be prohibited, or restricted and require a risk management plan in accordance with Section 57, 58 and 59 of the Clean Water Act in any WHPAs or Issue Contributing Areas (ICAs) identified on Schedules "F1 and F3" respectively, where they are, or would be a significant drinking water threat as determined by the Risk Management Official (RMO); activities include but are not limited to:
 - The establishment, operation, or maintenance of a waste disposal site within the meaning of Part V of the Environmental Protection Act;
 - 2. The establishment, operation or maintenance of an on-site system that collects, stores, transmits or disposes of sewage and wastewater; including stormwater management facilities
 - 3. The application and storage of Agricultural source material (ASM) to land
 - 4. The application, storage, and handling of Non-agricultural source material (NASM)
 - 5. The application, handling, and storage of Commercial fertilizer;
 - 6. The application, handling, and storage of Pesticides;

- 7. Road salt handling, application and storage;
- 8. The storage of snow;
- 9. The handling and storage of fuel;
- 10. The handling and storage of a dense non-aqueous phase liquid (DNAPLs);
- 11. The handling and storage of an organic solvent(s);
- 12. The management of runoff that contains chemicals used in the deicing of aircraft;
- 13. The use of land as livestock grazing or pasturing land
- 14. An outdoor confinement area, or a farm animal yard
- 15. The establishment and operation of a liquid hydrocarbon pipeline
- E7.4.2 In any WHPAs identified on Schedule "F2", land uses which include:
 - an activity that takes water from an aquifer or surface water body without returning the water taken to the same aquifer or surface water body; and/or,
 - ii) an activity that reduces the recharge of an aquifer;

where they are, or would be a significant drinking water threat, may be restricted in accordance with the policies of this Plan and the policies of the CTC Source protection Plan.

- E7.4.3 In accordance with the prescribed criteria in the Clean Water Act, 2006 and its regulations, the Risk Management Official (RMO) shall determine whether the activities listed in Policies E7.4.1 and E7.4.2 are significant threats to drinking water sources based on the level of risk they pose, their location relative to the municipal water wells, and the vulnerability score at the location where the activity is to occur (Schedule "F3"). The policies of the CTC Source Protection Plan set out whether a significant drinking water threat is to be prohibited or otherwise regulated in accordance with Sections 57, 58, and 59 of the Clean Water Act, 2006.
- E7.4.4 Where a new development is to be located in a WHPA or WHPA-Q1/Q2, the proponent shall obtain a Notice to Proceed from the Risk Management Official (RMO), under Section 59 of the Clean Water Act. Development proponents shall be required to disclose the activities that will be taking place on the proposed development lands and work with the Risk Management Official (RMO) to ensure that any activities identified as potential significant drinking water threat activities are eliminated or managed in accordance with the requirements of the policies outlined in the Source Protection Plan. The RMO will issue a Notice to Proceed only

once all potential significant drinking water threats and source protection plan policy requirements have been addressed.

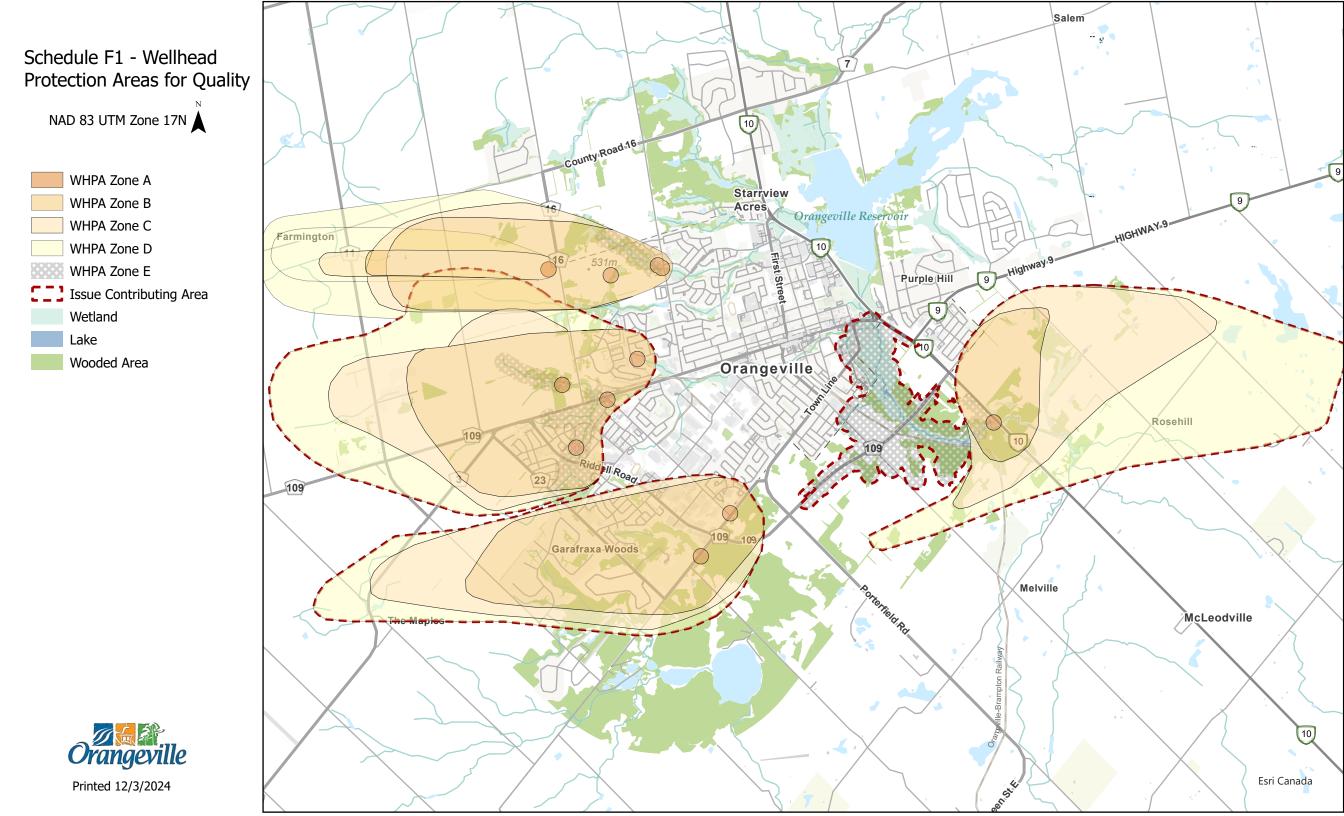
- E7.4.5 Where an existing or proposed (future) significant drinking water threat activity has been identified and confirmed by the Risk Management Official (RMO), or another person duly qualified under the Clean Water Act, the significant drinking water threat activity must be eliminated, managed through a Risk Management Plan, or otherwise managed through another prescribed tool, as required by the Source Protection Plan.
- E7.4.6 Where the Source Protection Plan identifies that any proposed development or land use activities are to be managed through a Risk Management Plan in accordance with Section 58 of the Clean Water Act, the proponent shall work with the RMO to negotiate and establish the Risk Management Plan to the RMO's satisfaction.
- E7.4.7 Where the Source Protection Plan prohibits a proposed development or land use activity in accordance with Section 57 of the Clean Water Act, the RMO will advise the development proponent that the proposed development is prohibited, and the development proponent shall revise the proposed development application so that the activity identified as a significant drinking water threat is eliminated, or their planning application will be refused.
- E.7.4.8 In accordance with policies in the Source Protection Plan, significant drinking water threat activities may be addressed through other tools such as technical studies, reports, or plans to be prepared by a Qualified Person (QP) to assess and mitigate the potential impacts of a proposed development within the Town's wellhead protection areas. These studies may include but are not limited to detailed Hydrogeological Studies, Water Balance Assessments, Environmental Screening for contaminated sites, Salt Management Plans, Environmental Assessment studies, Spill Prevention and Contingency Plans, Low Impact Development Plans, Dewatering Plans, and Environmental Compliance Assessments. Where a significant drinking water threat is to be addressed through a technical study or plan, as listed above, the study/plan shall be prepared to the RMO's satisfaction, or to the satisfaction of another person identified as an appropriate Qualified Professional (QP).

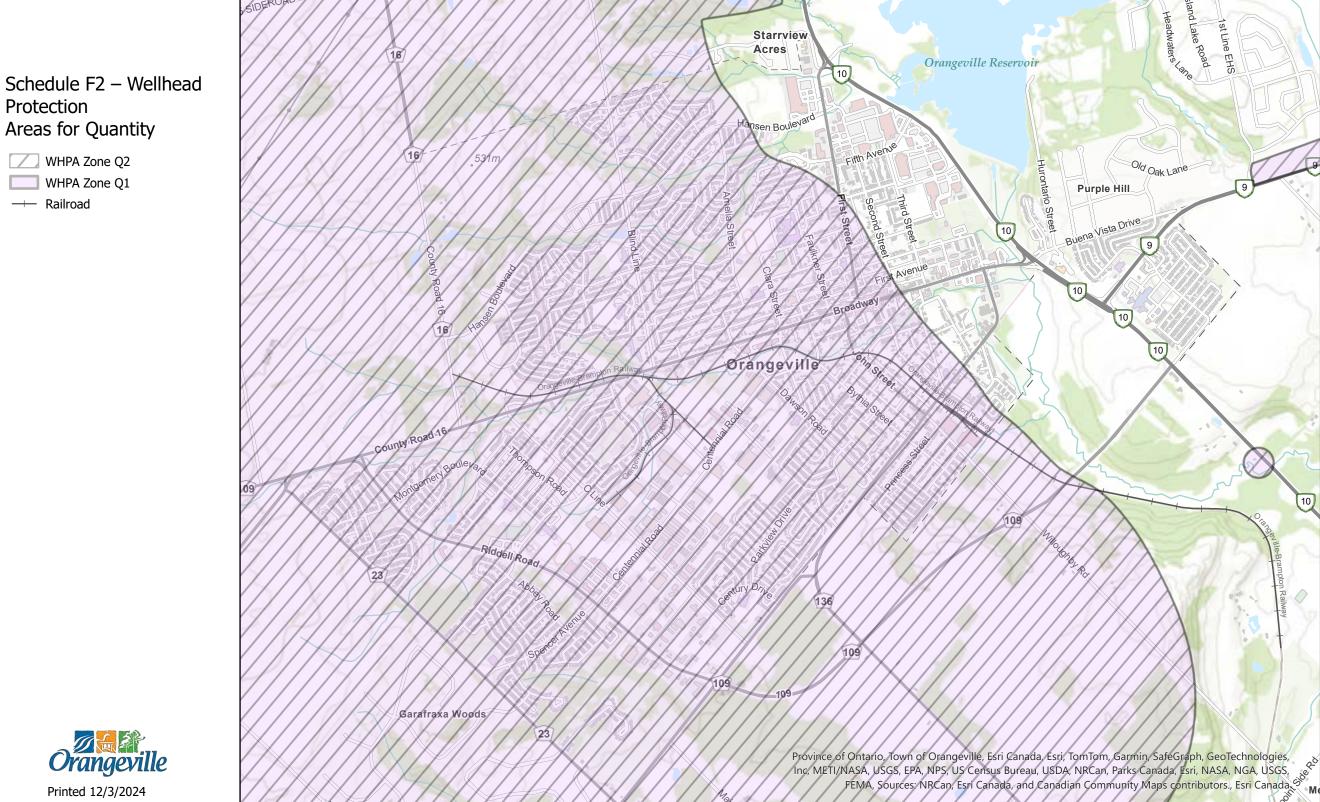
- E7.4.9 In Wellhead Protection Areas for quality, land uses which propose the establishment of transport pathways, as identified and confirmed by the Risk Management Official (RMO), may be subject to further technical assessment and mitigation requirements. The Town may request that transport pathways be assessed through technical studies prepared by a Qualified Person (QP), and that the potential impacts of a transport pathway on the Town's municipal supply aquifers be mitigated.
- E7.4.10 Where a transport pathway is proposed, as identified by the RMO, a Confirmation Statement from a Qualified Person (QP) confirming that the proposed transport pathway will not increase the risk of the municipal water source to being contaminated by land-based activities will be required. Any proposed mitigation measures shall be implemented to the Town's satisfaction. Where the proposed transport pathway is located within 100m of a municipal well, the Town may prohibit the establishment of the transport pathway.
- E7.4.11 Dewatering activities proposed in a Wellhead Protection Area for water quantity (WHPA-Q1) are identified as a significant threat activity and must be assessed through a hydrogeological study completed by a Qualified Person (QP). Dewatering shall only be permitted where it can be demonstrated through a hydrogeological assessment that the water taking will:
 - Not impact municipal supply aquifers
 - Not impact the ability of the aquifer to meet municipal water supply requirements for the current and planned service capacity and;
 - Ensure the hydrogeological integrity of municipal wells will be maintained.

The Town may set out the minimum requirements to be addressed in the hydrogeological assessment. Requirements may include, but are not limited to:

- hydrogeological modelling to evaluate the impact of dewatering on aquifers;
- monitoring and sampling plans;
- pumping test requirements;
- mitigation and contingency plans;
- dewatering design strategy
- E7.4.12 Within a Wellhead Protection Area where excess soil is to be imported in support of a proposed land use, the proponent shall, at a minimum,

demonstrate adherence to provincial excess soil regulation O.Reg 406/19, as amended. The Town may request that a Fill Management and Monitoring Plan be provided as part of a complete application submission, and set out the requirements to be addressed. The Fill Management Plan may include, but is not limited to monitoring, sampling, contingency, mitigation and information sharing requirements. The Fill Management Plan shall be prepared by a by Qualified Person (QP) and implemented to the satisfaction of the Town. Where the proposed importation of excess soil is to be located within 100m of a municipal well, the Town may prohibit the placement of excess soil.





Schedule F3 - Vulnerability Scoring in Wellhead Protection Areas for Quality

Groundwater Vulnerability Score



