

CITY OF KAWARTHA LAKES

OFFICIAL PLAN AMENDMENT NO. 35

SOURCE WATER PROTECTION

November 2, 2020 DRAFT



Introduction

The City of Kawartha Lakes Official Plan is proposed to be amended as follows:

1. By adding Environment Goal 3.1.4 and Objective 3.2.j)
2. By deleting Section 3.4 Wellhead Protection Zones in its entirety and replacing it with a new Section 3.4 Source Water Protection
3. By adding new definitions to Section 30 Definitions
4. By replacing Schedules “C-1” to “C-14” Wellhead Protection Zones with new Schedules “C-1” to “C-23” Wellhead Protection Areas and Intake Protection Zones, and updating Section 35.4.2. Section C accordingly.

Background

Section 40(1) and Section 42 of the Clean Water Act, 2006 require that municipalities amend their official plans to conform with the applicable source water protection plans to protect existing and future sources of municipal drinking water, and make necessary amendments to zoning by-laws. There are two source water protection plans that apply in the City of Kawartha Lakes: **Trent Source Protection Plan** and **South Georgian Bay Lake Simcoe Source Protection Plan**. Official Plan Amendment No. 35 implements these plans.

The Amendment impacts the lands within two key vulnerable areas, being Wellhead Protection Areas (WHPAs) and Intake Protection Zones (IPZs). In the City of Kawartha Lakes, there are 23 WHPAs and IPZs, with 2 of these WHPAs belonging to systems outside of the City. Of the 23 vulnerable areas, 3 WHPAs are within the Oak Ridges Moraine Conservation Plan (ORMCP) area. The following text and schedules constitute the proposed Official Plan Amendment No. 35, to be implemented through companion amendments to the 14 affected Zoning By-laws across the City.

All WHPAs are delineated and defined in the proposed Amendment in accordance with the Approved Trent Assessment Report. The vulnerable areas have been delineated through technical studies to identify the length of time for selected contaminants to reach a municipal drinking water source if they were released into the environment. Within vulnerable areas, certain land use activities pose a significant threat to municipal drinking water, human health and the environment. Protecting water at its source is the first line of defense in a multi-barrier approach that protects drinking water from contamination and overuse.

Details of the Amendment

The City of Kawartha Lakes Official Plan, 2012 is hereby amended as follows:

1. Subsection 3.1 Goals is amended by adding goal 3.1.4. as follows:

- 3.1.4. To protect existing and future sources of municipal drinking water in accordance with the applicable source protection plans and implemented through the applicable zoning by-laws.

2. Subsection 3.2 Objectives is amended by adding objective 3.2.j) as follows:

- j) Identify vulnerable areas in accordance with section 3.4.1., and prohibit or mitigate activities within vulnerable areas that pose drinking water threats.

3. Subsection 3.4. Wellhead Protection Zones is deleted in its entirety and replaced with the following:

3.4. SOURCE WATER PROTECTION

- 3.4.1. Vulnerable areas are identified on Schedule “C” Wellhead Protection Areas and Intake Protection Zones, and drinking water systems within the City include:

Wellhead Protection Areas (WHPAs)

- Birch Point Estates (Pigeon Lake), geographic Township of Emily
- Canadiana Shores (Lake Scugog), geographic Township of Mariposa
- Janetville, geographic Township of Manvers
- King’s Bay (Lake Scugog), geographic Township of Mariposa
- Manorview, geographic Township of Manvers
- Mariposa Estates, geographic Township of Mariposa
- Pinewood, geographic Township of Manvers
- Pleasant Point (Lake Scugog) geographic Township of Mariposa
- Sonya, geographic Township of Mariposa
- Victoria Glen / Omemee, geographic Village of Omemee and geographic Township of Emily
- Victoria Place (Pigeon Lake), geographic Township of Verulam
- Western Trent (Canal Lake), geographic Township of Eldon
- Woodfield, geographic Township of Manvers
- Woods of Manilla, geographic Township of Mariposa

- Woodville, geographic Township of Mariposa

Two additional wells are located outside of the City, but their influence areas extend into the City:

- Cannington / Arena, geographic Township Mariposa
- Lansdowne / Fraserville, geographic Township of Emily

Intake Protection Zones (IPZs)

- Bobcaygeon (Sturgeon Lake), geographic Village of Bobcaygeon and geographic Township of Verulam
- Fenelon Falls (Cameron Lake), geographic Village of Fenelon Falls and former Township of Fenelon
- Kinmount (Burnt River), geographic Township of Somerville
- Lindsay (Scugog River), geographic Town of Lindsay and geographic Township of Ops
- Norland (Gull River), geographic Townships of Laxton and Somerville
- Southview Estates (Sturgeon Lake), geographic Township of Fenelon

3.4.2. The following land use activities shall be prohibited in vulnerable areas where they are considered under the Clean Water Act a future significant drinking water threat unless stated otherwise in the applicable Source Protection Plan and with consideration of section 3.4.3:

- a) Waste disposal sites within the meaning of Part V of the Environmental Protection Act (including untreated septage, waste disposal, mine tailings, but excluding storage of wastes described in the Act, or the definition of hazardous waste (O.Reg 347) and storage of hazardous or liquid industrial waste)
- b) On-site sewage systems in excess of 10,000 L as required by the South Georgian Bay Lake Simcoe Source Protection Plan
- c) The application, storage or management of agricultural source material
- d) The application, handling or storage of non-agricultural source material
- e) The application, handling or storage of commercial fertilizer
- f) The application, handling or storage of pesticide
- g) The handling or storage of road salt
- h) The storage of snow
- i) The handling or storage of fuel
- j) The handling or storage of a dense non-aqueous phase liquid (DNAPLs)
- k) The handling or storage of an organic solvent

- l) The use of land as livestock grazing or pasturing land, an outdoor confinement area or a farm-animal yard
- 3.4.2.1. Generally, the land use activities listed in Section 3.4.2 are not intended to prohibit typical household uses or practises.
- 3.4.2.2. For all applicable terms, see Section 30 Definitions. Refer to the applicable Source Protection Plans for all terms not defined in this Plan.
- 3.4.3. Despite the list of prohibited activities in Section 3.4.2, a Risk Management Official may issue a written decision enabling the City to determine that a site-specific land use activity is permitted in accordance with Section 59 of the Clean Water Act based on location, amount and extent of the threat.
- 3.4.4. New land uses, including the creation of lots and new or expanding land use activities, shall not be permitted within vulnerable areas unless it can be demonstrated through appropriate studies, as determined by the approval authority, that they do not pose a significant drinking water threat.
- 3.4.5. A complete Planning Act application proposing development within identified vulnerable areas shall include a Notice issued by a Risk Management Official under Section 59(2) of the Clean Water Act, 2006, as amended.

SEWAGE SYSTEMS AND FACILITIES

- 3.4.6. The applicable Source Protection Plans require new development to be serviced by a municipal sewage collection system where feasible, with consideration of financial and technical constraints, within 18 metres of the lot..
- 3.4.7. Where connection to a municipal sewage collection system is not feasible, new development will be serviced by a sewage system constructed in accordance with Part 8 of the Ontario Building Code to ensure that the activity is not a significant drinking water threat.
- 3.4.8. New sewage systems as defined in the Ontario Building Code shall not be located within a vulnerable area identified on Schedule “C”, unless such system complies with requirements established by the approval authority for such system.
- 3.4.9. Wastewater collection facilities that collect or transmit sewage containing human waste that would be a future significant drinking water threat and require

the approval of the Ministry of Environment, Conservation and Parks are not permitted unless the facility complies with construction standards that will ensure the activity is not a significant drinking water threat.

WASTE DISPOSAL

- 3.4.10. Future waste disposal sites within the meaning of Part V of the Environmental Protection Act that require Ministerial approval are prohibited where they would be a significant drinking water threat, except a PCB waste destruction unit where that unit will be used for the sole purpose of the on-site destruction of PCB waste that originated on that site.

TRANSPORT PATHWAYS

- 3.4.11. All activities that will result in the creation of a new transport pathway are prohibited in areas identified on Schedule “C” as IPZ-1’s and WHPA-A’s in accordance with the City’s Transport Pathway By-law 2016-237, or its successor.
- 3.4.12. The City shall give the appropriate Source Protection Authority and the Source Protection Committee notice of a proposal for a new transport pathway or modification of an existing transport pathway through a development application or any other application that relates to the vulnerable area for the municipal drinking water source.

When informing the Source Protection Authority and the Source Protection Committee about a proposed new or modified transport pathway, notice must include:

- a) A description of the proposal;
- b) The contact information of the person responsible for the proposal; and,
- c) A description of the approvals the person requires to engage in the proposed activity.

ROAD SALT

- 3.4.13. The application of road salt is a significant drinking water threat within Lindsay and Bobcaygeon, as shown on Schedules “C-2” and “C-10”.
- 3.4.14. During review of development applications, consideration shall be given to the City’s design standards and alternative surfacing materials that minimize the

amount of new impervious land surfaces constructed in vulnerable areas for vehicular traffic and parking, and pedestrian paths.

- 3.4.15. Grading, maintenance activities and drainage designs that reduce ponding and direct any run-off outside the vulnerable areas shall be encouraged.

STORMWATER MANAGEMENT FACILITIES

- 3.4.16. New stormwater management facilities shall be designed to reduce the risk of contaminating drinking water, and where possible direct the discharge of stormwater outside of vulnerable areas. A Functional Servicing Report may be required as part of a complete Planning Act application that demonstrates no threats will be located in vulnerable areas in association with new stormwater management facilities.
- 3.4.17. Stormwater management facilities are encouraged to locate outside vulnerable areas identified on Schedule "C".

STEWARDSHIP

- 3.4.18. The City may consider the use of alternative protection measures within the most vulnerable areas, which may include land acquisition, land management and/or entering into conservation easements, agreements and development of stakeholder partnership programs to minimize or eliminate significant drinking water threats.
- 3.4.19. The City shall encourage the use of haulage routes for transportation of chemicals and volatile materials that avoid WHPAs and areas of high aquifer vulnerability within the Oak Ridges Moraine Policy Area as identified on Schedule 8 within Schedule "G" Oak Ridges Moraine Plan Amendment to this Plan.
- 3.4.20. Best management practices are encouraged for all development proposals in vulnerable areas. Development proponents are encouraged to contact the Kawartha Region Conservation Authority to determine appropriate best management practices prior to making an application.

MONITORING

- 3.4.21. The City shall report annually by February 1 of each year to the Source Protection Authority on the implementation progress of the applicable Source Protection Plans.

4. **Section 30. Definitions is amended by adding the following definitions in alphabetical order:**

30. DEFINITIONS

Anaerobic Digestion

A process used to decompose organic matter by bacteria in an oxygen-limited environment.

Dense Non-Aqueous Phase Liquid

Chemicals that are both denser than water and do not dissolve readily in water. Because of these traits, DNAPLs tend to sink below the water table and only stop when they reach impenetrable bedrock, making them difficult to locate and cleanup. Commonly used DNAPLS include, but are not limited to, paint strippers, varnishes, aerosols, and pharmaceuticals.

Drinking Water Threat

An activity or condition that adversely affects or has the potential to adversely affect the quality or quantity of any water that is or may be used as a source of drinking water, and includes an activity or condition that is prescribed by the regulations as a drinking water threat. Refer to the Clean Water Act for the prescribed drinking water threats.

Intake Protection Zone

The vulnerable area delineated around surface water intakes for municipal drinking water systems and is comprised of subzones:

- IPZ-1: The area immediately adjacent to the intake and is considered the most vulnerable area due to its proximity to the intake. IPZ-1 is the area within a 1,000m radius when centered on the intake, and where IPZ-1 extends onto or touches land, land within a 120m setback of the high water mark.
- IPZ-2: A secondary protection area that is located upstream of the IPZ-1 and represents the extent to which a contaminant could travel to the municipal intake within 2 hours of its release into the environment (due to a spill or leak).

Municipal Drinking Water System

A drinking water system or part of a drinking water system,

- a) That is owned by a municipality or by a municipal service board established under the Municipal Act, 2001;
- b) That is owned by a corporation established under Sections 9, 10, and 11 of the Municipal Act, 2001 in accordance with Section 203 of the Act;
- c) From which a municipality obtains or will obtain water under the terms of a contract between the municipality and the owner of the system; or,
- d) That is in a prescribed class.

Risk Management Official

The person appointed under Part IV of the Clean Water Act, 2006 and the person who is responsible for making decisions about risk management plans and risk assessments and must meet the prescribed criteria in the regulations under the Clean Water Act, 2006.

Significant Drinking Water Threat

An activity which poses or has the potential to pose a significant risk to the source of a municipal drinking water system.

Significant Drinking Water Threat, Existing

A significant drinking water threat where:

- a) An activity that has been engaged in prior to the date that the Source Protection Plan takes effect and continues to occur;
- b) An agricultural activity that has been engaged in at sometime within the 10-year period prior to the date that the Source Protection Plan takes effect;
- c) An activity that is related to a development proposal where an application was made under the Planning Act, Condominium Act, or Building Code Act on a day before the Source Protection Plan takes effect; or,
- d) An activity that is related to an application made for the issuance or amendment of a prescribed instrument, as defined by the applicable Source Protection Plan, on a day before the Source Protection Plan takes effect.

Significant Drinking Water Threat, Expansion

An increase in the scale of an activity that is considered a significant drinking water threat already taking place on a property. The increase in scale may include, but is not limited to:

- a) Increasing the area of land where an activity is taking place;
- b) Increasing the amount of effluent or discharge from an activity;
- c) Increasing the quantity of chemical or pathogen-containing material handled or stored; or,
- d) Increasing the quantity of chemical or pathogen containing material applied.

Significant Drinking Water Threat, Future

An activity that is considered a significant drinking water threat that is proposed or intended to commence after the date the applicable Source Protection Plan takes effect and is not an existing activity.

Significant Groundwater Recharge Areas

Areas that are characterized by porous soils and that help maintain the water level in an aquifer.

Source Material, Agricultural

A variety of materials that may be sources of nutrients or pathogens, such as:

- Manure produced by farm animals, including bedding materials
- Runoff from farm-animal yards and manure storages
- Wash water that has not been mixed with human body waste
- Organic materials produced by intermediate operations that process the above materials (e.g., mushroom compost)
- Anaerobic digestion output that does not include sewage biosolids or human body waste
- Regulated compost that is derived from compost containing dead farm animals

Source Material, Non-Agricultural

A variety of materials that may be sources of nutrients or pathogens and are intended to be applied to land as nutrients, but are not necessarily produced on a farm, such as:

- Pulp and paper biosolids
- Sewage biosolids
- Anaerobic digestion output where less than 50% of the total material is on-farm anaerobic digestion materials
- Any other material that is not from an agricultural source (i.e. materials from dairy product or animal food manufacturing)

Transport pathway

A condition of land resulting from human activity that increases the vulnerability of a raw water supply of a drinking water system contained in the Trent Source Protection Plan. Transport pathways may include, but are not limited to, the following:

- For groundwater systems: wells or boreholes, unused or abandoned wells, pits and quarries, mines, construction activities involving deep excavations (such as building foundations, basements, parking garages), underground storm sewer, and sanitary sewer and water distribution system infrastructure
- For surface water systems: storm drainage infrastructure (e.g. storm sewer lines, culverts, ditches), and tile drains

Vulnerable Area

Wellhead Protection Areas and Intake Protection Zones around municipal drinking water sources where activities may be a significant drinking water threat now or in the future.

Waste Disposal Site

Within the meaning of Part V of the Environmental Protection Act includes:

- a) any land upon, into, in or through which, or building or structure in which, waste is deposited, disposed of, handled, stored, transferred, treated or processed, and
- b) any operation carried out or machinery or equipment used in connection with the depositing, disposal, handling, storage, transfer, treatment or processing referred to in clause a).

Wellhead Protection Area

The vulnerable area delineated around groundwater wells. The delineation helps to identify the length of time it would take most contaminants to travel from the location of a spill or leak to the associated well.

- WHPA-A: The area within a 100m radius from a wellhead, considered the most vulnerable area for groundwater intakes
- WHPA-B: The area within which the time to travel to the well (within the aquifer) is up to and including 2 years
- WHPA-C: The area within which the time to travel to the well (within the aquifer) is up to and including 5 years

- WHPA-D: The area within which the time to travel to the well (within the aquifer) is up to and including 25 years
- WHPA-E: A well that is influenced by surface water and is referred to as groundwater under direct influence of surface water

5. Schedules “C-1” to “C-14” Wellhead Protection Zones are deleted in their entirety and replaced with the following Schedules “C-1” to “C-23” Wellhead Protection Areas and Intake Protection Zones.