The Corporation of the City of Kawartha Lakes Planning Advisory Committee Report

Report Number PLAN2020-043

November 4, 2020

Meeting Date:

Public Meeting		
Title:	Source Water Protection Official Plan and Zoning By-law Amendments	
Description:	Amendment to the City of Kawartha Lakes Official Plan No. 35 (OPA 35) and Amendment to 14 Zoning By-laws to protect vulnerable areas in accordance with the Clean Water Act	
Ward Number:	All Wards	
Author and Title:	Anna Kalnina, Planner II	
Recommendation(s):		
That Report PLAN2020-043, respecting Source Water Protection Official Plan and Zoning By-law Amendments, be received;		
•	rplement the proposed Official Plan Amendment, substantially d as Appendix A to Report PLAN2020-043, be referred to n;	
That the Zoning By-law Amendment, substantially in the form attached as Appendix B to Report PLAN2020-043, be referred to Council for adoption; and		
That the Mayor and Clerk be authorized to execute any documents required by the approval of these applications.		
Department Head		
Legal/Other:		
Chief Administrative Officer:		

Background:

In 2006, the Clean Water Act established the Source Water Protection Program. The purpose of the Program is to safeguard human health and the environment by protecting existing and future sources of municipal residential drinking water. Protecting water at its source is the first line of defense in a multi-barrier approach that protects drinking water from contamination and overuse.

As part of the Program, multi-stakeholder source protection committees were formed to develop science-based Assessment Reports and Source Protection Plans. Where a Source Protection Plan has taken effect, the Clean Water Act requires that planning matter decisions conform with significant threat policies and have regard to other policies set out in a Source Protection Plan. Furthermore, sections 40(1) and 42 of the Clean Water Act require that municipalities amend their official plans to conform with the applicable Source Protection Plans and modify zoning by-laws as necessary.

The proposed OPA 35 and the proposed amendment to the 14 Zoning By-laws address the requirements of the Clean Water Act.

Rationale:

There are three Source Protection Plans that apply to the geography of the City of Kawartha Lakes: Trent Source Protection Plan, South Georgian Bay Lake Simcoe Source Protection Plan and Ganaraska Source Protection Plan. The Ganaraska Source Protection Plan applies to a small area in the southern part of the City, within which there are no vulnerable areas. Therefore, this report and the proposed amendments consider the two Source Protection Plans that identify and protect vulnerable areas in the City.

Municipalities are required to conform with the requirements in the Source Protection Plans within 5 years of their respective approval dates. The Trent Source Protection Plan was approved on January 1, 2015 and the South Georgian Bay Lake Simcoe Source Protection Plan was approved on July 1, 2015. The City's conformity deadline was January 1, 2020 and July 1, 2020, respectively. With the shifting priorities due to the pandemic, the conformity work associated with the Amendments can now be completed.

Between the two Source Protection Plans, there are 23 key vulnerable areas in the City. The key vulnerable areas have been delineated through the source protection committees' Assessment Reports using technical and scientific information to determine the length of time for specific contaminants to reach a municipal drinking water source if they were released into the environment as a result of a spill or leak. There are two types of key vulnerable areas identified through the proposed amendments: wellhead protection areas (WHPAs) and intake protection zones (IPZs). WHPAs are vulnerable areas delineated around groundwater wells and IPZs are vulnerable areas delineated around surface

water intakes. Additionally, areas in Lindsay and Bobcaygeon are vulnerable to road salt. The proposed amendments identify and protect these areas.

As part of the development of the proposed Amendments, Planning Staff analyzed all of the requirements under the Source Protection Plans identified as a responsibility of a municipality, an approval authority under the Planning Act or various parties. Based on an extensive review of source water protection conformity exercises in adjacent municipalities and discussions with the City's Risk Management Official, Planning Staff tailored the requirements to the City. Applicable requirements were translated into the definitions, policies, zone provisions and schedules proposed for approval (Appendix A and Appendix B).

Provincial Policy Statement, 2020 (PPS)

Section 2.2.1 of the PPS requires that planning authorities protect, improve or restore the quality and quantity of water. One of the ways planning authorities are required to achieve this is through necessary restrictions on development and site alternation to protect all municipal drinking water supplies and designated vulnerable areas. The PPS further requires that planning authorities protect, improve or restore vulnerable surface and ground water, sensitive surface water features and sensitive ground water features, and their hydrologic functions.

In accordance with the Source Protection Plans, the proposed Amendments list and prohibit land use activities that would pose a significant threat to drinking water sources. The draft OPA also recommends best management practices to minimize or eliminate significant drinking water threats.

A Place to Grow: Growth Plan for the Greater Golden Horseshoe, 2019 (APTG)

Policy 4.2.1 in APTG directs the City to identify and protect water resource systems that consist of ground water features and areas, surface water features, and hydrologic functions. The proposed Amendments are limited in scope to vulnerable areas, only. However, the proposed policies would support and augment the existing direction in the Official Plan regarding protection of water resource systems.

Oak Ridges Moraine Conservation Plan, 2017 (ORMCP)

Of the 23 vulnerable areas in the City, 3 are within the ORMCP. Section 42 of the ORMCP requires that the Official Plan contain policies that establish WHPAs. There are differences in how WHPAs are described and delineated in the Trent Assessment Reports from the ORMCP requirements in policy 42.(2).

Section 39(4) of the Clean Water Act, provides that where there is a conflict between a provision in the source protection plan and a provision in a plan or policy, including the ORMCP, the provision that provides the greatest protection to the drinking water source prevails. In this case, both, the Trent Assessment

Report and ORMCP identify a zone of contribution up to 25 years to protect these areas from significant threat to the municipal drinking water, human health and the environment.

The proposed Amendments apply the methodology from the Trent Assessment Report to all vulnerable areas in the City to ensure consistency in definitions and approach across the City. Staff are of the opinion that the Trent Assessment Report maintains the intent of the ORMCP, and relies on the most recent, scientific information available to the City.

City of Kawartha Lakes Official Plan, 2012 (OP)

The OP currently has policies in section 3.4 referred to as Wellhead Protection Zones. The Schedule "C" delineates Wellhead Protections Zones in accordance with the best available data in 2004. The existing policies and mapping with respect to vulnerable areas are incomplete and outdated, and are proposed to be deleted and replaced with new objectives, goals and current policy and mapping as described in Appendix A. The policies are categorized into prohibited uses and exemptions, sewage sytems and facilities, waste disposal, transport pathways, road salt, stormwater management facilities, stewardship, monitoring, and definitions.

Zoning By-laws

The vulnerable areas in the City fall within 14 of the City's 19 Zoning By-laws. The proposed Amendment is intended to implement the companion OPA 35, and includes new definitions, general provisions and the addition of an overlay on the Schedules that identifies vulnerable areas in the corresponding Zoning By-laws. The area within the overlay would be prohibited from establishing land uses and activities that are considered a future significant drinking water threat in accordance with the Source Protection Plans, unless a Risk Management Official determines otherwise in accordance with Section 59 of the Clean Water Act. The proposed overlay does not change the underlying existing Zoning and is not intended to prohibit standard volumes of dense non aqueous phase liquids (i.e. paint stripper, varnish, aerosols, pharmaceuticals, etc.) used for personal or domestic activities.

Other Alternatives Considered:

In addition to the proposed Amendments, there are additional planning tools that could further support the objectives of the Source Protection Plans:

- Through Site Plan Approval process, the City could require management of impervious surfaces and landscaping; and
- Place a Holding Provision on properties in vulnerable areas.

Financial/Operation Impacts:

There are no financial/operational considerations unless Council's decision is appealed to the Local Planning Appeal Tribunal. In the event of an appeal, there would be costs. However, in accordance with the Planning Act s.17(36.4), there are appeal limitations to a part of an official plan that identifies an area as being within the boundary of a vulnerable area.

Relationship of Recommendation(s) to the 2020-2023 Strategic Plan:

The Council Adopted Strategic Plan identifies four Strategic Priorities:

- A Vibrant and Growing Economy
- An Exceptional Quality of Life
- A Healthy Environment
- Good Government

The proposed Amendments directly align with a healthy environment, as they meet the goal of protecting and enhancing water quality by creating policy and by-law framework for continued protection of municipal drinking water sources.

The proposed Amendments also align with a good government, as they meet the goal of increasing efficiency and effectiveness of service delivery by incorporating and streamlining applicable requirements into the City's policies and by-laws.

Consultations:

City Staff collaborated with the Risk Management Official at Kawartha Conservation in developing the proposed Amendments.

The proposed Amendments were circulated for comments to the City's Environmental Services, Engineering, Public Works, Building Division, Economic Development, Municipal Law Enforcement, all Conservation Authorities with jurisdiction in the City, and the Ministry of Municipal Affairs and Housing.

Public Notice was issued in regional Newspaper publications and the draft Amendments are available on the Planning page of the City's website for broader consultation.

All comments received have been considered and incorporated into the draft Amendments as appropriate.

Attachments:

Appendix A – Proposed Official Plan Amendment No. 35



Appendix B – Proposed Zoning By-law Amendment



Department Head E-Mail: cmarshall@kawarthalakes.ca

Department Head: Chris Marshall, Director of Development Services

Department File: D00-99-003

CITY OF KAWARTHA LAKES

ZONING BY-LAW AMENDMENT NO. 2020-XX

SOURCE WATER PROTECTION

November 2, 2020 DRAFT



The Corporation of the City of Kawartha Lakes

By-Law No. 2020-XX

A By-law to amend multiple Zoning By-laws in accordance with Source Water Protection Official Plan Amendment No. 35

Affected By-laws:

Village of Bobcaygeon Zoning By-Law No. 16-78
Township of Eldon Zoning By-Law No. 94-14
Township of Emily Zoning By-Law No. 1996-30
Township of Fenelon Zoning By-Law No. 12-95
Village of Fenelon Falls Zoning By-Law No. 89-25
Townships of Laxton, Digby, Longford Zoning By-Law No. 32-83
Town of Lindsay Zoning By-Law No. 2000-75
Township of Manvers Zoning By-Law No. 87-06
Township of Mariposa Zoning By-Law No. 94-07
Oak Ridges Moraine Zoning By-Law No. 2005-133
Village of Omemee Zoning By-law No. 1993-15
Township of Ops Zoning By-Law No. 93-30
Township of Somerville Zoning By-Law No. 78-45
Township of Verulam Zoning By-law No. 6-87

This By-law enacts new Definitions, General Provisions and Schedules in accordance with Section 34 of the Planning Act and Section 42 of the Clean Water Act

1.0 DEFINITIONS:

ANAEROBIC DIGESTION shall mean a process used to decompose organic matter by bacteria in an oxygen-limited environment.

DENSE NON AQUEOUS PHASE LIQUID shall mean 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. This makes them difficult to locate and cleanup. Commonly used DNAPLS include, but are not limited to paint strippers, varnishes, aerosols, and pharmaceuticals.

DRINKING WATER THREAT shall mean 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 22 drinking water threats.

INCIDENTAL VOLUME means standard size containers that are used for personal or domestic activities. This excludes larger volumes used in activities, such as hobbies and home businesses.

INTAKE PROTECTION ZONE shall mean 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 shall mean 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 shall refer to the person appointed under Part IV of the Clean Water Act, 2006 and 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 shall mean 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 shall mean a significant drinking water threat where an activity that has been engaged in prior to the date that the Source Protection Plan took effect and continues to occur; 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; 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 an activity that is related to an application made for the issuance or amendment of a prescribed instrument on a day before the source protection plan takes effect.

SIGNIFICANT DRINKING WATER THREAT, EXPANSION shall mean 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 shall mean an activity that is considered a significant drinking water threat that is proposed to commence after the date the applicable Source Protection Plan takes effect and is not an existing activity.

SOURCE MATERIAL, AGRICULTURAL shall mean 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; and
- Regulated compost that is derived from compost containing dead farm animals.

SOURCE MATERIAL, NON-AGRICULTURAL shall mean 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 biosoilds;
- Anaerobic digestion output where less than 50% of the total material is on-farm anaerobic digestion materials; and
- Any other material that is not from an agricultural source (i.e. materials from dairy product or animal food manufacturing).

VULNERABLE AREA shall mean 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 shall mean:

- 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 shall mean 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

2.0 GENERAL PROVISIONS FOR SOURCE WATER PROTECTION:

- 2.1 All development will comply with the Clean Water Act through the applicable Source Protection Plans, as amended from time to time.
- 2.2 For all applicable terms, refer to the Definitions Section of this By-law. Refer to the applicable Source Protection Plans for terms not defined herein.
- 2.3 Wellhead Protection Areas (WHPAs) and Intake Protection Zones (IPZs) are identified as an overlay layer on Schedule "A" and include all levels of vulnerability for municipal water sources serving the City.
 - a) In the case of WHPAs the extent of the vulnerable area encompasses WHPA-A through WHPA-E.

- b) In the case of IPZs the extent of the vulnerable area encompasses subzones IPZ-1 and IPZ-2.
- 2.4 Notwithstanding the uses permitted by the underlying zone category in this Bylaw, the following land use activities shall be prohibited in the vulnerable areas identified on Schedule 'A' to this By-law where they would constitute a future significant drinking water threat under the Clean Water Act, unless stated otherwise in the applicable Source Protection Plans:
 - a) Waste disposal sites
 - b) On-site sewage systems (in excess of 10,000 L)
 - 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
 - k) The handling or storage of an organic solvent
 - The use of land as livestock grazing or pasturing land, an outdoor confinement area or a farm-animal yard
- 2.5 Notwithstanding the list of prohibited land use activities in Section 2.4, 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 58 and Section 59 of the Clean Water Act based on location, amount and extent of the threat.
- 2.6 Within the vulnerable area illustrated on Schedule 'A', as it applies to dense non aqueous phase liquids, Section 2.4 shall not apply to incidental volumes used as part of a residential use.
- 2.7 Where a conflict may arise between Source Water Protection provisions in this By-law and any other provisions herein, the provision(s) that afford the greatest protection to surface and groundwater shall prevail to the extent necessary to resolve the conflict.

3.0 SCHEDULES:

The applicable vulnerable area has been added as an overlay to Schedule 'A' of each Zoning By-law identified above.

By-law read a first, second and third time, and finally passed, this day of, 2020.		
Andy Letham, Mayor	Cathie Ritchie, City Clerk	

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 fomer 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

- I) 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 biosoilds
- 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.