



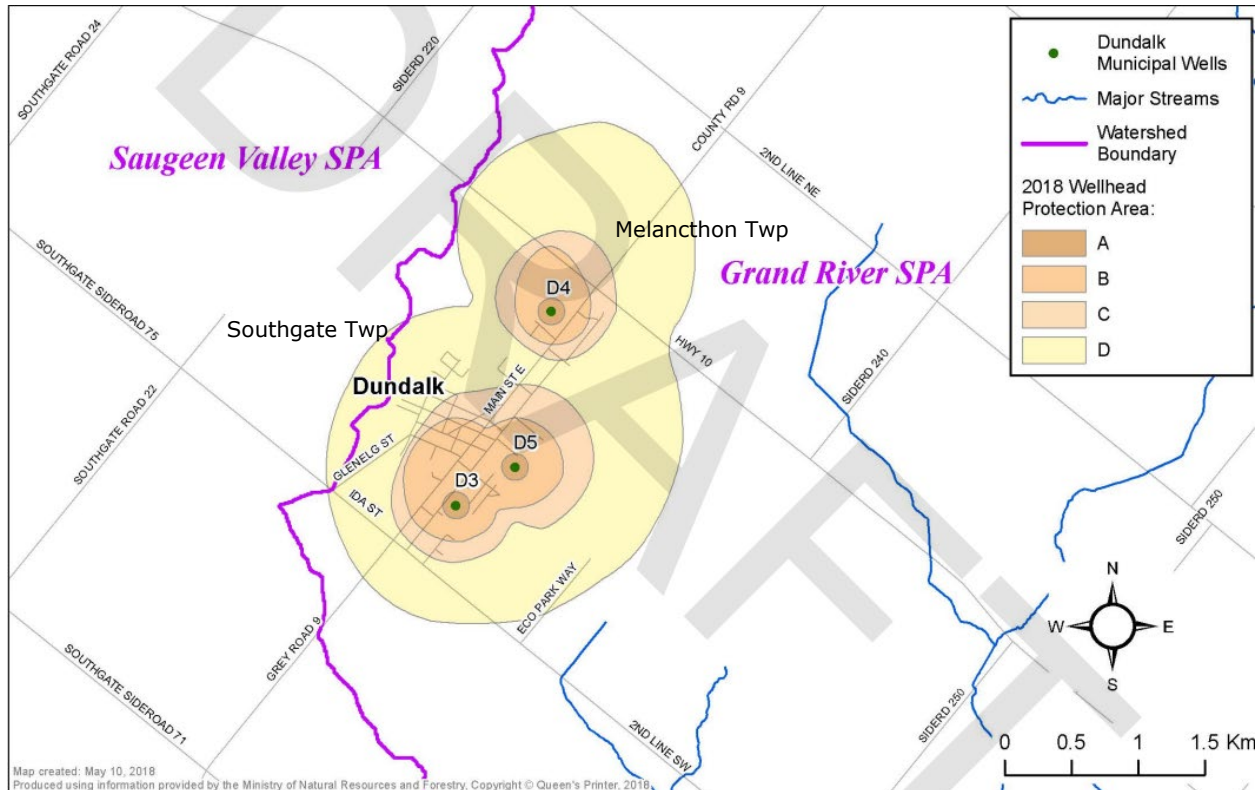
## Staff Report PL2024-005

**Title of Report:** Rezoning, Source Water Protection  
**Department:** Clerks  
**Branch:** Planning Services  
**Council Date:** February 7, 2024

### Recommendation:

**Be it resolved that** Council receive Staff Report PL2024-005 on the proposed rezoning to implement Official Plan Amendment 21 regarding Source Water Protection provisions and that a public meeting be scheduled at the earliest opportunity in accordance with the Ontario Planning Act.

**Location:** Dundalk 2018 Wellhead Protection Area **Subject Lands:** See sketch.



**The Proposal:** To rezone the wellhead protection area around Dundalk water sources to regulate land use in accordance with Official Plan Amendment 21. As shown in the map above, some of the Dundalk urban area associated with the water supply wells have a high vulnerability score (A darkest orange) while most of the area has a low vulnerability score (D yellow). Some of the wellhead protection area associated with well D4 is across Highway 10 in Melancthon Township. The Dundalk groundwater

wells are located in the Lake Erie Source Protection Region, Grand River Source Protection Plan.

Within these areas the zoning by-law should be amended will restrict certain activities to minimize threats to the water system. Staff does not expect that the zoning by-law will be overly restrict residential development, especially in areas where full municipal services are available.

Although specifics of the amendment will be finalized after the public meeting the following wording sampled from other municipalities describes the general intent:

1. Add new **Schedule 49** to the Zoning By-law identifying 2018 Wellhead Protection areas (map on Page 1).
2. Add the following text to the Zoning By-law
  - a. New definitions in **Section 3** for:

**SIGNIFICANT DRINKING WATER THREAT** means an activity that poses or has the potential to pose a significant risk to any source of a municipal drinking water system.

**SOURCE PROTECTION PLAN** means a drinking water source protection plan prepared under the Clean Water Act (Clean Water Act).

**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.

**WELLHEAD PROTECTION AREA (WHPA)** means a vulnerable area delineated around groundwater wells which helps to identify the length of time it would take for most contaminants to travel from the location of a spill or leak to the associated well. The WHPA identified on Schedule \_ to the zoning bylaw are identified as follows:

- 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.

- b. Add general provisions to the end of **Section 5** to restrict certain land uses in wellhead protection areas A, B, C, and D as follows:

**5.28 GRAND RIVER WELLHEAD PROTECTION AREA OVERLAY:**

- a) Within the Grand River Wellhead Source Protection Plan as amended from time to time and approved under the Clean Water Act.
- b) For all applicable terms refer to the Definitions in Section 2 of the zoning bylaw and the applicable Source Protection Plan for terms not defined herein.
- c) No development within the Grand River Protection Area Overlay shown on Schedule \_\_\_ shall be permitted that is, or would be, a significant drinking water threat unless the use conforms with all applicable Grand River Source Protection Plan policies.
- d) Without limiting the generality of part c) the following land use activities shall be prohibited in the vulnerable areas identified on Schedule \_\_\_ where they would constitute a future significant drinking water threat under the Clean Water Act:
  - (i) Waste disposal sites, transfer station or separation station
  - (ii) On-site sewage systems in excess of 10,000 L
  - (iii) The application, handling or storage of non-agricultural source material, commercial fertilizer, or pesticides
  - (iv) The handling or storage of road salt, fuel, dense non aqueous phase liquid or an organic solvent
  - (v) Land disposal of Petroleum refining waste, Hazardous waste, liquid industrial waste or processed liquid industrial waste, Liquid industrial waste, Industrial waste or commercial waste or Municipal waste;
- e) Notwithstanding prohibited uses listed in 5.28 (c) or (d) a Risk Management Official may issue a written decision enabling the Township to determine a site-specific land use activity is permitted in accordance with PART IV Regulation of Drinking Water Threats, Section 59 of the Clean Water Act.

**Background:** The public inquiry into the [Walkerton Water Tragedy](#) (May 2000) identified failures in water system monitoring and control that caused death and serious illness. The Province then passed the Clean Water Act 2006 to ensure the quality and quantity of municipal drinking water supplies are protected. The approach to protection water systems took two forms:

1. Drinking Water Quality Management System (DWQMS) to improve water system maintenance procedures implemented by Jim Ellis Overall Responsible Operator reporting annually to Council.
2. The Township of Southgate appointed Jim Ellis as the Risk Management Official/Inspector in August 2014.
3. Source Water Protection Plans ([Grand River Source Protection Plan](#) in Southgate) to enhance land use control around water system supply wells.

Municipalities are required to update official plan policies and zoning requirements to protect vulnerable areas around water sources identified in the source protection plan. Township policies around the Dundalk wellhead protection were addressed in [Southgate Official Plan Amendment 21](#). The required zoning bylaw amendment will be initiated through this report.

The Public Works Department already provides comments on planning applications to protect the wellhead areas for the Dundalk Water System. Below is an excerpt from the Public Works Manager comments on files B14, B15, B16/23 and C17-23.

**Risk Management Office**

Property is located in a Well Head Protection Area:

- WHPA "A"
- WHPA "B"
- WHPA "C"
- WHPA "D"
- Not Applicable

Comments: \_\_\_\_\_

Well Head Protection Area "B" - Applicable to Dense Non- Aqueous Phase Liquid (DNAPL's) products managed by education and outreach programs.

The Gold Steet northwest corner frontage portion has a small sliver of lands in WHPA "A".

Signed: \_\_\_\_\_

Jim Ellis, Public Works Manager / Risk Management Official

Council will recall an official plan is the main guiding document to implement Provincial Land Use Policy. The County has an official plan with broader land use policies that work along with the Southgate official plan that provides more detailed land use controls in the Township.

Subsection 9 (1.1) of the Planning Act requires Official Plans be consistent with provincial land use and development policies. Based on staff recommendations, Council must ensure local by-laws and strategies comply with the policies set out in the Official Plan. [Council also has oversight responsibility](#) on its water system to ensure it is safely operated by responsible officials and staff.

**Provincial Policy Statement:** Water 2.2 f) implementing necessary restrictions on development and site alteration to:

1. protect all municipal drinking water supplies and designated vulnerable areas; and
2. protect, improve, or restore vulnerable surface and ground water, sensitive surface water features and sensitive ground water features, and their hydrologic functions.

**Township Official Plan:** [Southgate Official Plan Amendment 21](#).

**Zoning By-law:** Proposed Wellhead protection Area changes to Schedules and Section 5.

**Concluding Comments:** Staff recommend Council direct staff to circulate the proposed amendment to appropriate Source Water Officials and issue notice of public meeting indicating Township's intent to update the zoning by-law to implement source water protection land use controls as generally outlined in the February 7, 2024, staff report to implement policies set in Southgate Official Plan Amendment 21.

Respectfully submitted,

**Triton Engineering  
Services Senior Planner:**

***Original Signed By***

Bill White, MCIP RPP

**Risk Management Official Approval:**

***Original Signed By***

Jim Ellis, RMO

**CAO Approval:**

***Original Signed By***

Dina Lundy, CAO

**Attachments: None.**