

CHAPTER 3 - SUSTAINABLE REGION

Section 3.3 Source Water Protection

The Source Protection Plan for the Niagara Peninsula Source Protection Area (SPP) protects existing and future sources of drinking water in Niagara by ensuring activities identified as drinking water threats under the *Clean Water Act* and associated regulations either never become a *significant threat*, or cease to be a *significant threat* to drinking water. The *Source Protection Plan* evaluated six water treatment plants and determined there are *significant threats* related to land uses associated with the DeCew Falls water treatment plant in the City of Thorold, Port Colborne water treatment plant in the City of Port Colborne, and the Niagara Falls water treatment plant in the City of Niagara Falls. The following *source water* protection policies are organized according to the water treatment plant *intake protection zones* for which *significant drinking water threats* have been identified in the *Source Protection Plan*. These water treatment plants and associated *intake protection zones* are identified as an overlay on Schedule D to this Plan. The underlying land use designations on Schedule D continue to apply.

The policies of Section 3.3 must be read with the Niagara Official Plan in its entirety and in conjunction with the Niagara Peninsula *Source Protection Plan*, the Assessment Report and the Explanatory Document which provides the context and rationale for the land use policies and in identifying *significant threats* and eliminating these drinking water threats for the DeCew Falls, Port Colborne and Niagara Falls water treatment plant *intake protection zones*. The policies of Section 3.3 must also be read in conjunction with other applicable plans and legislation.

Update to the Source Protection Plan for the Niagara Peninsula Source Protection Area

The SPP was approved by the Ministry of the Environment, Conservation and Parks and is effective as of October 1, 2014.

Under the Clean Water Act, municipal official plans must be amended to conform to the *significant threat* policies within the SPP.

The Source Protection Authority is currently updating the Assessment Report and the SPP for the Niagara Peninsula Source Protection Area. The SPP is anticipated to be completed in 2023, subject to Ministry approval. Once approved, the Niagara Official Plan, Local Official Plans, and Local Zoning By-laws will require an amendment to conform to the policies of the new SPP.

3.3.1 To protect the water source for the DeCew Falls Water Treatment Plant to ensure activities identified as significant threats cease to be significant threats.

3.3.1.1 The placement of untreated septage to land is considered a *significant drinking water threat* in the DeCew Falls *Intake Protection Zone 1*. New *waste disposal sites* for the application of untreated septage to land shall not be permitted within the DeCew Falls *Intake Protection Zone 1*.

3.3.1.2 The discharge from new *stormwater management facilities* is considered a *significant threat* where the storm sewer drainage area is at least 100 ha in size with the predominant land use being commercial or industrial. New *stormwater management facilities*, which meet these criteria, are not permitted to discharge within the DeCew Falls *Intake Protection Zone 1*. New industrial or commercial land uses which meet the 100 ha storm sewer drainage criteria are not permitted within the DeCew Falls *Intake Protection Zone 1*. For the purposes of this policy, new industrial or commercial land uses include industrial or commercial uses which are not currently designated as such in the local municipal Official Plan.

Untreated septage

Properties where untreated septage is applied to land are considered *waste disposal sites* under Part V of the Environmental Protection Act (EPA). Untreated septage is typically produced from the clean-out of residential septic system tanks.

3.3.1.3 The discharge from *wastewater treatment plants* or combined sewer overflows, or discharge of industrial effluent is considered a *significant threat* as defined under the applicable circumstances as outlined by the Ministry of Environment in Table 22 and Table 48 in Appendix C of the Assessment Report (2013). New *combined sewers, wastewater treatment facilities, and industrial effluent systems* are not permitted where they would be a *significant threat* within the DeCew Falls *Intake Protection Zone 1*.

Niagara Peninsula Source Protection Plan
[The Niagara Peninsula Source Protection Plan, Assessment Report and Explanatory Document](#) are available at: (<http://www.sourceprotection-niagara.ca/>)

3.3.1.4 Any planning or building application made for a land use other than Residential in the DeCew Falls *Intake Protection Zone 1* may require a Section 59 notice from the *Risk Management Official*. The requirements of the notice will be determined through the application screening process.

Application Screening Process for Section 59 Notice from Risk Management Official
The application screening process will look at whether an application may relate to the application of agriculture source material, the storage of *agriculture source material*, livestock grazing/pasturing and farm animal outdoor confinement areas in DeCew Falls *IPZ 1* or; the storage of pesticides in Port Colborne *IPZ 1* or for the application of pesticides in the Port Colborne *IPZ 1* and *IPZ 2*.

3.3.2 To protect the water source for the Port Colborne Water Treatment Plant to ensure activities identified as significant threats cease to be significant threats.

3.3.2.1 The placement of untreated septage to land is considered a *significant drinking water threat* in the Port Colborne *Intake Protection Zone 1* and *Intake Protection Zone 2*. New *waste disposal sites* for the application of untreated septage to land shall not be permitted within the Port Colborne *Intake Protection Zone 1* and *Intake Protection Zone 2*.

3.3.2.2 Any planning or building application made for a land use other than Residential in the Port Colborne *Intake Protection Zone 1* and *2* may require a Section 59 notice from the *Risk Management Official*. The requirements of the notice will be determined through the application screening process.

- 3.3.2.3 The storage of road salt is considered a *significant threat* in the Port Colborne *Intake Protection Zone 1*, if stored outside with no cover, in amounts greater than 5,000 tonnes. Future open storage of road salt greater than 5,000 tonnes is not permitted within the Port Colborne *Intake Protection Zone 1*.
- 3.3.2.4 The storage of snow, and the contaminants associated with it, is considered a *significant threat* in the Port Colborne *Intake Protection Zone 1* if stored in quantities greater than 1 hectare in area. Future storage of snow greater than 1 hectare in area is not permitted within the Port Colborne *Intake Protection Zone 1*.
- 3.3.2.5 The discharge from *wastewater treatment plants* or combined sewer overflows, or discharge of industrial effluent is considered a *significant threat* as defined under the applicable circumstances as outlined by the Ministry of Environment in Table 20, Table 21, Table 46, and in Table 47 in Appendix C of the Assessment Report (2013). New *combined sewers, wastewater treatment facilities, and industrial effluent systems* are not permitted where they would be a *significant threat* within the Port Colborne *Intake Protection Zone 1* and *Intake Protection Zone 2*.
- 3.3.2.6 The discharge from *stormwater management facilities* is a *significant threat* where the storm sewer drainage area is at least 10 ha in size with the predominant land use being commercial or industrial. An application for commercial or industrial *development* or the expansion, extension, or alteration of existing *stormwater management facilities* or the expansion of an existing commercial or industrial *development*, in instances where the *Risk Management Official* and the Region's Chief Planning Official deem such an expansion may pose a *significant threat* to municipal drinking water, within the Port Colborne *Intake Protection Zone 1* and *Intake Protection Zone 2*, shall be accompanied by a stormwater management plan that demonstrates and implements best management practices related to managing stormwater runoff to the satisfaction of the Region's Chief Planning Official and City of Port Colborne, in consultation with the *Risk Management Official*, such that the development does not pose a *significant threat* to municipal drinking water.

3.3.2.7 The storage, and application to land of *agricultural source material*, and the lands used for livestock grazing/pasturing, farm animal yards and outdoor confinement areas, are considered *significant threats* in the Port Colborne *Intake Protection Zone 1 and Intake Protection Zone 2*. New agricultural land uses are not permitted within the Port Colborne *Intake Protection Zone 1 and Intake Protection Zone 2*.

3.3.3 To protect the water source for the Niagara Falls Water Treatment Plant to ensure activities identified as significant threats cease to be significant threats.

3.3.3.1 The application of untreated septage to land is considered a *significant drinking water threat* in the Niagara Falls *Intake Protection Zone 1*. New *waste disposal sites* for the application of untreated septage to land shall not be permitted within the Niagara Falls *Intake Protection Zone 1*.

- 3.3.3.2 The discharge from new *stormwater management facilities* is considered a *significant threat* where the storm sewer drainage area is at least 100 ha in size with the predominant land use being commercial or industrial. New *stormwater management facilities*, which meet these criteria, are not permitted to discharge within the Niagara Falls *Intake Protection Zone 1*. New industrial or commercial land uses which meet the 100 ha storm sewer drainage criteria are not permitted within the Niagara Falls *Intake Protection Zone 1*. For the purposes of this policy, new industrial or commercial land uses only includes industrial or commercial uses which are not currently designated as such in the local municipal Official Plan.
- 3.3.3.3 The discharge from wastewater treatment plants or combined sewer overflows, or discharge of industrial effluent is considered a *significant threat* as defined under the applicable circumstances as outlined by the Ministry of Environment in Table 22 and Table 48 in Appendix C of the Assessment Report (2013). New combined sewers, *wastewater treatment facilities*, and *industrial effluent systems* are not permitted where they would be a *significant threat* within the Niagara Falls *Intake Protection Zone 1*.
- 3.3.3.4 The storage, handling, and application to land of *agricultural source material*, and the lands used for livestock grazing/pasturing, farm animal yards and outdoor confinement areas, are considered *significant threats* in the Niagara Falls *Intake Protection Zone 1*. New agricultural land uses are not permitted within the Niagara Falls *Intake Protection Zone 1*.
- 3.3.4 To provide direction to local municipalities and monitor significant threats**
- 3.3.4.1 Local municipal Official Plans and Zoning By-laws shall conform to the policies of Section 3.3 of this Plan in accordance with the Niagara Peninsula *Source Protection Plan*.
- 3.3.4.2 The Region will monitor and report on the measures taken to implement the significant threat policies annually in accordance with the Niagara Peninsula *Source Protection Plan*, which shall address the following:

- a) Total number and type of *development* applications in *Intake Protection Zones*;
- b) Pre-consultation meetings related to the Niagara Peninsula *Source Protection Plan*;
- c) Number of *Risk Management Plans* reviewed and approved;
- d) The number and type of development applications in *Intake Protection Zones* with the potential for the creation or modification of a *transport pathway*; and
- e) Steps taken to improve education and research.

Monitoring development applications with potential for creation or modification of a transport pathway

Transport pathways are a change in land caused by human activity that increases the vulnerability of a drinking water source.

Examples include storm sewers, discharge pipes, utility trenches, ditches, swales, drainage works or any other types of drain.

Transport pathways are captured in the delineation of *IPZs*, however if any have been added to areas around *IPZs*, there is the possibility of contamination to the intake.