

# **Grand River Source Protection Area**

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## **SOURCE PROTECTION PLAN VOLUME II**

### **Chapter 10: Region of Waterloo**

**June 25, 2025**

## TABLE OF CONTENTS

<b>10.0</b>	<b>REGION OF WATERLOO .....</b>	<b>10-1</b>
10.1	Definitions .....	10-1
10.2	Region of Waterloo Source Protection Plan Policies .....	10-2
10.3	Policies Addressing Prescribed Drinking Water Threats.....	10-10
	Threat 1.0 – The Establishment, Operation or Maintenance of a Waste Disposal Site within the meaning of Part V of the Environmental Protection Act .....	10-10
	Threat 2.0 – The Establishment, Operation or Maintenance of a System that Collects, Stores, Transmits, Treats, or Disposes of Sewage .....	10-16
	Threat 3.0 – The Application of Agricultural Source Material (ASM) to Land .....	10-27
	Threat 4.0 – The Storage of Agricultural Source Material (ASM) .....	10-27
	Threat 6.0 – The Application of Non-Agricultural Source Material (NASM) to Land .....	10-32
	Threat 7.0 – The Handling and Storage of Non-Agricultural Source Material (NASM).....	10-32
	Threat 8.0 – The Application of Commercial Fertilizer to Land .....	10-35
	Threat 9.0 – The Handling and Storage of Commercial Fertilizer .....	10-35
	Threat 10.0 – The Application of Pesticide to Land .....	10-37
	Threat 11.0 – The Handling and Storage of Pesticide .....	10-37
	Threat 12.0 – The Application of Road Salt.....	10-39
	Threat 13.0 – The Handling and Storage of Road Salt.....	10-39
	Threat 14.0 – The Storage of Snow .....	10-45
	Threat 15.0 – The Handling and Storage of Fuel.....	10-47
	Threat 16.0 – The Handling and Storage of a Dense Non-Aqueous Phase Liquid (DNAPL).....	10-50
	Threat 17.0 – The Handling and Storage of an Organic Solvent.....	10-52
	Threat 18.0 – The Management of Runoff that Contains Chemicals Used in the De-icing of Aircraft .....	10-53
	Threat 21.0 – The Use of Land as Livestock Grazing or Pasturing Land, an Outdoor Confinement Area or Farm-Animal Yard .....	10-54
	Threat 22.0 – The Establishment and Operation of a Liquid Hydrocarbon Pipeline.....	10-57
	Threat 19.0 – An activity that takes water from an aquifer or a surface water body without returning the water taken to the same aquifer or surface water body .....	10-59
	Threat 20.0 – An activity that reduces the recharge of an aquifer.....	10-59

Appendix A: List of Policies As Per Section 34 Of Regulation 287/07 .....	10-62
Appendix B: Prescribed Instruments and Policy Summary Tables.....	10-64
10.4 Schedule A: Region of Waterloo Groundwater Systems: Index Map .....	10-68
10.5 Schedule B: Region of Waterloo Groundwater Systems: Map A .....	10-69
10.6 Schedule C: Region of Waterloo Groundwater Systems: Map B .....	10-70
10.7 Schedule D: Region of Waterloo Groundwater Systems: Map C .....	10-71
10.8 Schedule E: Region of Waterloo Groundwater Systems: Map D .....	10-72
10.9 Schedule F: Region of Waterloo Groundwater Systems: Map E.....	10-73
10.10 Schedule G: Region of Waterloo Groundwater Systems: Map F .....	10-74
10.11 Schedule H: Region of Waterloo Groundwater Systems: Map G .....	10-75
10.12 Schedule I: Region of Waterloo Groundwater Systems: Map H.....	10-76
10.13 Schedule J: Region of Waterloo Groundwater Systems: Map I .....	10-77
10.14 Schedule K: Region of Waterloo GUDI Systems: Index Map.....	10-78
10.15 Schedule L: Region of Waterloo GUDI Systems: Blair Rd & Willard .....	10-79
10.16 Schedule M: Region of Waterloo GUDI Systems: Greenbrook.....	10-80
10.17 Schedule N: Region of Waterloo GUDI Systems: Waterloo North .....	10-81
10.18 Schedule O: Region of Waterloo Wellhead Protection Area, Water Quantity: Township of Woolwich .....	10-82
10.19 Schedule P: Region of Waterloo Issue Contributing Areas: Index Map .....	10-83
10.20 Schedule Q: Region of Waterloo Issue Contributing Areas: Branchton Meadows	10-84
10.21 Schedule R: Region of Waterloo Issue Contributing Areas: Elgin & Middleton Street 10-85	
10.22 Schedule S: Region of Waterloo Issue Contributing Areas: Greenbrook .....	10-86
10.23 Schedule T: Region of Waterloo Issue Contributing Areas: Hespeler & Pinebush	10-87
10.24 Schedule U: Region of Waterloo Issue Contributing Areas: Mannheim West .....	10-88
10.25 Schedule V: Region of Waterloo Issue Contributing Areas: Parkway .....	10-89
10.26 Schedule W: Region of Waterloo Issue Contributing Areas: Strange & William St	10-90
10.27 Schedule X: Region of Waterloo Issue Contributing Areas: Wilmot Centre .....	10-91
10.28 Schedule Y: Region of Waterloo Surface Water Systems: Index Map .....	10-92
10.29 Schedule Z: Region of Waterloo Surface Water Systems: Map A .....	10-93
10.30 Schedule AA: Region of Waterloo Surface Water Systems: Map B .....	10-94
10.31 Schedule AB: Region of Waterloo Low / Moderate Policy Applicability Area (Liquid Hydrocarbon Pipelines).....	10-95

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## 10.0 REGION OF WATERLOO

The following Source Protection Plan policies apply to vulnerable areas within the Region of Waterloo, including those originating from neighbouring municipalities.

Policies in this chapter align with the 2017 Technical Rules. Reference to the vulnerable areas has not been included in the sidebar information for the Region of Waterloo Source Protection Plan policies. This information is contained in the respective policies, if applicable.

Reference should be made to the County of Wellington and Perth County Source Protection Plan policies for portions of the water systems and vulnerable areas located within those jurisdictions.

### 10.1 Definitions

General definitions are provided in Volume I of the Source Protection Plan or the *Clean Water Act, 2006*. Defined terms are intended to capture both the singular and plural forms of these terms.

The following definitions apply specifically to the Region of Waterloo Source Protection Plan policies, and are capitalized in the policy text.

Term	Definition
Conditions	Are referred to in section 15(2)(g) of the <i>Clean Water Act, 2006</i> and are identified in the Grand River Source Protection Area Assessment Report as resulting from past activities and that are significant drinking water threats.
Condition Sites	Locations where conditions are present.
Emergency Response Plan	A municipal emergencies plan developed in accordance with the Emergency Management and Civil Protection Act.
Existing	<ul style="list-style-type: none"> <li>a. An activity engaged in at a particular location in a vulnerable area on the effective date of this source protection plan; or</li> <li>b. When an activity was engaged in at a particular location within a vulnerable area at any time within five (5) years prior to the effective date of this Source Protection Plan but not on the day before the effective date of this Source Protection Plan and within 5 years following the effective date of this Source Protection Plan such activity is proposed to be resumed; or</li> <li>c. A replacement facility or structure of similar size and capacity to service an existing activity.</li> </ul>
Future or New	An activity that is not existing as defined within the Region of Waterloo Source Protection Plan policies.
Large Parking Lot	For all surface parking areas on site with a total greater than or equal to eighty (80) parking spaces or with a paved area, including aisles and driveways, measuring greater than or equal to 2000 metres squared.



Term	Definition
Large Septic System	A single or combination of septic systems regulated under the Ontario Water Resources Act.
Medium Parking Lot	For all surface parking areas on site with a total greater than eight (8) and less than eighty (80) parking spaces or with a paved area including aisles and driveways measuring greater than 200 and less than 2000 metres squared.
Salt	Any solid or liquid chloride-based chemical used to melt ice.
Uncovered Salt Storage	Storage and handling are directly exposed to the elements with the exception of salt stored in sealed bags.
Covered Salt Storage	Storage and handling are not directly exposed to the elements; this includes salt stored in sealed bags.
Small Parking Lot	For all surface parking areas on site with a total of less than or equal to eight (8) parking spaces or with a paved area including aisles and driveways measuring less than or equal to 200 metres squared.
Small Septic System	A septic system regulated under the Ontario Building Code Act.
Stormwater Management Facility	Any stormwater infrastructure for the treatment, retention, infiltration or control of stormwater including but not limited to ponds, unlined trenches, etc. but excluding piped stormwater sewers.
Tier 3 Water Budget	The Centre Wellington Tier 3 Water Budget and Local Area Risk Assessment as required under the <i>Clean Water Act, 2006</i> .
Transport Pathways	A condition of land resulting from human activity that increases the vulnerability of a raw water supply or drinking water system set out in clause 15(2)(e) of the Clean Water Act, 2006. This can include constructed pathways such as, improperly abandoned boreholes, improperly maintained or improperly abandoned wells, pits and quarries, geothermal systems, underground parking lots and excavations. This does not include low-density residential basements or subsurface utility corridors.

## 10.2 Region of Waterloo Source Protection Plan Policies

Policy Number	Implementation and Timing Policies
RW-CW-1.1.1 <i>Implementation &amp; Timing</i>	This source protection plan came into effect on July 1, 2016, the effective date specified in the Notice of Approval posted on the Environmental Bill of Rights Registry. Amendments to the Source Protection Plan are permitted in accordance with the <i>Clean Water Act, 2006</i> , and the General Regulations. The effective date for amended policies, only including but not limited to the addition of new drinking water threats and regulated areas and activities, is the date specified

Policy Number	Implementation and Timing Policies
<p>RW-CW-1.1.2</p> <p><i>Implementation &amp; Timing</i></p>	<p>in the posting of the Notice of Approval of the amendment provisions on the Environmental Bill of Rights Registry</p> <p>Except as set out below and/or where established in individual policies, the policies contained in this Source Protection Plan shall come into effect on the date set out by the Minister:</p> <ul style="list-style-type: none"> <li>a. For Section 57 of the <i>Clean Water Act, 2006</i>, if an activity was engaged in at a particular location before the relevant policies within the Source Protection Plan took effect, policies regarding prohibited activities do not apply to a person who engages in the activity at that location until 180 days from the date the Source Protection Plan takes effect;</li> <li>b. For Section 58 of the <i>Clean Water Act, 2006</i> if: <ul style="list-style-type: none"> <li>i. an activity was engaged in at a particular location immediately before the relevant policies within this Source Protection Plan took effect;</li> <li>ii. the Risk Management Official gives notice to a person who is engaged in the activity at that location that, in the opinion of the Risk Management Official, policies regarding regulated activities should apply to the person who engages in the activity at that location on and after a date specified in the notice that is at least 120 days after the date of the notice.</li> </ul> </li> <li>c. For Section 59 of the <i>Clean Water Act, 2006</i>, policies regarding restricted land uses shall come into effect the same day the relevant policies within the Source Protection Plan takes effect;</li> <li>d. Where the Source Protection Policies require the development and implementation of education and outreach programs under section 22(7) of the <i>Clean Water Act, 2006</i>, and incentive programs and specified action policies for significant drinking water threats, such programs and actions shall be developed and implemented within five (5) years from the date the relevant policies within the Source Protection Plan takes effect.</li> </ul>
<p>RW-MC-1.2</p> <p><i>Implementation &amp; Timing</i></p>	<p>Except as set out below, the policies contained in this Source Protection Plan shall come into effect on the date set out by the Minister:</p> <ul style="list-style-type: none"> <li>a. For Sections 43 of the <i>Clean Water Act, 2006</i>, if an activity was engaged in at a particular location immediately before relevant policies within this Source Protection Plan took effect, amendments to Prescribed Instruments shall be completed within three (3) years from the date the Source Protection Plan takes effect;</li> </ul>

Policy Number	Implementation and Timing Policies
	<p>b. For Sections 40 and 42 of the <i>Clean Water Act, 2006</i>, the Council of the Region of Waterloo and the Area Municipalities shall adopt an Official Plan Amendment to conform with the relevant significant threat policies within five (5) years from the date the relevant policies within the Source Protection Plan comes into effect or the next Official Plan review required under Section 26 of the <i>Planning Act</i> whichever comes first. All Zoning By-law Amendments to conform with the relevant significant threat policies shall be completed within two (2) years from the adoption of the Official Plan conformity amendment.</p>

Policy Number	Uses and Areas Designated as Restricted Land Uses Policies
RW-CW-1.3  <i>Part IV- RLU</i>	<p>In accordance with Section 59 of the <i>Clean Water Act, 2006</i>, all land uses identified within the Region of Waterloo Official Plan and the Area Municipal Official Plan and Area Municipal Zoning By-laws are designated as land uses to which the restricted land uses provisions of the <i>Clean Water Act, 2006</i> apply where activities are or would be a significant drinking water threat.</p> <p>Despite the above policy, a Risk Management Official may issue written direction specifying the situations under which a planning authority or building official may be permitted to make the determination that a site specific land use, building or construction is not designated for the purposes of section 59. Where such direction has been issued, a site specific land use, building or construction that is the subject of an application for approval under the Planning Act, Condominium Act or for a permit under the Building Code Act is not designated for the purposes of Section 59, provided that the planning authority or building official, as applicable, is satisfied that:</p> <ol style="list-style-type: none"> <li>The application complies with the written direction issued by the Risk Management Official; and</li> <li>The applicant has demonstrated that a significant drinking water threat activity designated for the purposes of section 57 or 58 will not be engaged in, or will not be affected by the application.</li> </ol>

Policy Number	Official Plan and Zoning By Law Amendment(s) Policies
RW-MC-1.4  <i>Future Land Use Planning</i>	<p>The Region of Waterloo and the Area Municipalities shall amend their Official Plan where necessary to conform with the significant drinking water threat policies, in accordance with Section 40 of the <i>Clean Water Act, 2006</i> to:</p>

Policy Number	Official Plan and Zoning By Law Amendment(s) Policies
	<p>a. Identify the vulnerable areas in which drinking water threats prescribed under the <i>Clean Water Act, 2006</i> are or would be significant;</p> <p>b. Indicate that within the areas identified, any use that is or would be a significant drinking water threat is required to conform with all applicable Source Protection Plan policies and, as such, may be prohibited, restricted or otherwise regulated by those policies;</p> <p>c. Incorporate any other amendments required to conform to the threat specific land use policies contained in this Source Protection Plan.</p>

Policy Number	Education and Outreach Program Policies
RW-CW-1.5  <i>Existing/Future Education &amp; Outreach</i>	To support the significant drinking water threat policies contained within this Source Protection Plan, the Region of Waterloo, in collaboration with other bodies and levels of government where possible including but not limited to Area Municipalities, Grand River Conservation Authority and the provincial and federal agencies and/or organizations, shall develop and implement education and outreach programs. Where an existing education and outreach program appropriately addresses the policies of this plan, the Region of Waterloo may use the existing program to fulfill the policy requirements. Additional information on specific education and outreach programs can be found in the policies in this Source Protection Plan.
RW-CW-1.6  <i>Existing/Future Incentive</i>	To support the significant drinking water threat policies contained within this Source Protection Plan, the Region of Waterloo, in collaboration with other bodies and levels of government, where possible, shall develop and implement incentive programs applied to significant threats as identified in specific policies in this Source Protection Plan in accordance with applicable legislation. Where an existing incentive program appropriately addresses the policies of this plan, the Region of Waterloo may use the existing program to fulfill the policy requirements. Where incentives are available and where Risk Management Plans and/or Prescribed Instruments are identified for an existing activity, the incentives may be used to implement required beneficial management practices in accordance with applicable legislation. Specific incentive policies in this Source Protection Plan are to adhere to the general approach stated in this policy.
RW-NB-1.7  <i>Existing/Future Incentive</i>	The Ministry of the Environment, Conservation and Parks is requested to provide ongoing funding and support for incentive programs under section 22(7) of the <i>Clean Water Act, 2006</i> to protect existing and new drinking water sources and address significant

Policy Number	Education and Outreach Program Policies
	drinking water threats, such as the Ontario Drinking Water Stewardship Program.

Policy Number	Annual Reporting Policies
RW-CW-1.8 <i>Monitoring</i>	The Region of Waterloo and the Area Municipalities shall provide a report to the Source Protection Authority, by February 1 <sup>st</sup> of each year, summarizing the actions taken in accordance with section 46 of the <i>Clean Water Act, 2006</i> to implement the Source Protection Plan policies.
RW-CW-1.9 <i>Monitoring</i>	The Region of Waterloo and Area Municipalities shall provide copies of the notice of adoption to the Source Protection Authority regarding amendments to the Official Plan and Zoning By-laws for conformity with policies in the Plan within thirty (30) days of the adoption of the amendments by their respective Councils.
RW-CW-1.10 <i>Monitoring</i>	The Risk Management Official shall provide a report to the Source Protection Authority, by February 1 <sup>st</sup> of each year, summarizing the actions taken by the Risk Management Official(s) and Inspector(s) in accordance with the <i>Clean Water Act, 2006</i> and associated regulations.
RW-CW-1.12 <i>Monitoring</i>	Where the Source Protection Plan policies require a Provincial Ministry to undertake an activity under the Environmental Compliance Approval process or review, issue or amend a Prescribed Instrument, the applicable Provincial Ministry should: <ul style="list-style-type: none"> <li>a. Provide a copy of the Prescribed Instruments to the Region of Waterloo;</li> <li>b. Provide a written report to the Region of Waterloo and the Source Protection Authority summarizing where Prescribed Instruments have been issued and/or amended and for each instrument a summary of the conditions included for source protection purposes.</li> </ul>

Policy Number	Transition Policies
RW-MC-1.13 <i>Transition</i>	For the purposes of the Region of Waterloo Source Protection Plan policies, where one or more of the following has been received prior to the Source Protection Plan coming into effect: <ul style="list-style-type: none"> <li>a. A complete application for site plan approval under the <i>Planning Act</i>;</li> <li>b. A complete application for Environmental Compliance Approval;</li> <li>c. A complete application for a Building Permit.</li> </ul> <p>A related significant threat activity shall be permitted subject to the policies pertaining to existing significant threat activity as well as any further development applications and approvals required under the</p>

Policy Number	Transition Policies
	<p><i>Planning Act, Condominium Act</i>, Building Permit or Prescribed Instruments required to implement the development proposal associated with this significant threat activity.</p> <p>Where the above noted applications have lapsed or been withdrawn, this policy will no longer apply.</p>

Policy Number	Interpretation Policies
RW-CW-1.14  <i>Interpretation of Source Protection Plan</i>	<p>The Source Protection Plan provides policies to meet the objectives of the <i>Clean Water Act, 2006</i>. The Source Protection Plan consists of the written policy text and Schedules.</p> <p>a. The Schedules in the Source Protection Plan identify the areas where the policies of the Source Protection Plan apply. The boundaries for the Specific Circumstances shown on the Plan Schedules are general. More detailed interpretation of the boundaries relies on the mapping in the approved Assessment Report and the Specific Circumstances found in the Tables of Drinking Water Threats, <i>Clean Water Act, 2006</i>;</p> <p>b. Where any Act or portion of an Act, regulation, policy statement or guideline (collectively “Act”) of the Ontario Government or Canadian Government is referenced in this Plan, such reference shall be interpreted to refer to any subsequent re-naming of sections in the Act, amendments to the Act, or successor thereof. No provision of this Plan shall be interpreted to derogate from any applicable law.</p>

Policy Number	Conditions Policies
RW-MC-1.16  <i>Existing Prescribed Instr. Conditions</i>	<p>To address conditions resulting from past activities that are significant drinking water threats, the Ministry of the Environment, Conservation and Parks shall:</p> <p>a. Ensure that all Prescribed Instruments issued for Condition Sites include terms and conditions, as appropriate, to ensure that the risk to drinking water sources is managed. Appropriate conditions may include requirements for source control, remediation to provincial standards, monitoring and Contaminant Management Plans;</p> <p>b. Ensure that Prescribed Instruments include a condition requiring the instrument holder to report on the actions taken and the status of the site to the Ministry of the Environment, Conservation and Parks Source Protection Authority and the municipality on an annual basis;</p> <p>c. Provide to The Region of Waterloo a copy of the new or revised Prescribed Instrument.</p>



Policy Number	Conditions Policies
RW-NB-1.17  <i>Existing Specify Action Conditions</i>	To address Conditions resulting from past activities that are significant drinking water threats, the Ministry of the Environment, Conservation and Parks should prioritize abatement activities on Conditions Sites located within the Wellhead Protection Area A, Wellhead Protection Area B and Issues Contributing Areas.
RW-MC-1.18  <i>Land Use Planning Conditions</i>	To address known Condition Sites that are significant drinking water threats resulting from past activities, the Region of Waterloo and Area Municipalities shall require, as a component of a complete application under the <i>Planning Act</i> , the completion of an environmental screening process using a contaminated sites protocol. The contaminated sites protocol will outline the criteria when a Record of Site Condition (RSC) or other conditions will be required as part of the <i>Planning Act</i> application and shall be consistent with the Region of Waterloo contaminated sites protocol. The contaminated sites protocol will decrease the opportunity for contamination to leave the site and remove the property from the list of significant conditions over time.
RW-CW-1.19 Removed	Intentionally deleted to preserve numbering.
RW-CW-1.20  <i>Existing Specify Action Conditions</i>	The Area Municipality shall provide to the Region of Waterloo any documents or records in possession or control of the municipality relating to soil and groundwater contamination on Condition Sites for the following areas: <ul style="list-style-type: none"> <li>i. In Wellhead Protection Areas A and B where the vulnerability equals or is greater than eight (8); or</li> <li>ii. Where there is a Trichloroethylene (TCE) Issue, in all Wellhead Protection Areas where the vulnerability is greater than or equal to six (6).</li> </ul>
RW-NB-1.21  <i>Existing Specify Action Conditions</i>	To address conditions resulting from past activities that are significant drinking water threats the Ministry of the Environment, Conservation and Parks and the Region of Waterloo: <ul style="list-style-type: none"> <li>a. Shall meet at a minimum frequency of every six months for the purpose of mutually sharing information on Condition sites;</li> <li>b. Should mutually share information related, as appropriate, to technical investigations or remediation, technical data, actions taken by Ministry of the Environment, Conservation and Parks or by The Region of Waterloo, inspections, other relevant information; and</li> <li>c. Should develop an Information-Sharing Process document including requirements, if any, for meeting agendas, participants, the nature and format for the types of information to be mutually shared, and the Information-Sharing Process document should be developed within six months from the date the Source Protection Plan takes effect.</li> </ul>

Policy Number	Strategic Action Policies: Spill Prevention, Spill Contingency or Emergency Response Plans
RW-NB-1.22  <i>Existing/Future Specify Action</i>	<p>To ensure Emergency Response Plans are updated for the purpose of protecting drinking water sources with respect to spills that occur within a Wellhead Protection Area or Intake Protection Zone along highways under the <i>Highway Traffic Act</i> and/or railway lines, the following policies apply:</p> <ul style="list-style-type: none"> <li>a. Within one (1) year of the Source Protection Plan coming into effect, the Region of Waterloo and Area Municipalities are requested to incorporate the location of Wellhead Protection Areas and Intake Protection Zones into the Emergency Response Plan to protect drinking water sources when a spill occurs along highways and/or railway;</li> <li>b. Within six (6) months of the Source Protection Plan coming into effect, the Source Protection Authority in collaboration with the Ministry of the Environment, Conservation and Parks is requested to provide mapping of vulnerable areas to assist the Spills Action Centre in responding to reported spills along highways and/or rail lines.</li> </ul>

Policy Number	Strategic Action Policies: Transport Pathways
RW-NB-1.23  <i>Future Specify Action</i>	<p>The Region of Waterloo and Area Municipalities should amend their Official Plans to require the assessment and mitigation of impacts of the establishment of transport pathways associated with <i>Planning Act</i> applications in Wellhead Protection Areas A and B where the vulnerability is equal to ten (10), in accordance with the Regional Implementation Guideline for Source Water Protection Studies to the satisfaction of the Region of Waterloo.</p>
RW-NB-1.24  <i>Future Specify Action</i>	<p>The Area Municipalities are requested to circulate to the Region of Waterloo all development applications including site plan approval, proposing to create a transport pathway in Wellhead Protection Areas A, B and C and in their decision to approval such applications consider the comments relative to Source Protection from the Region of Waterloo.</p>
RW-NB-1.25  <i>Existing/Future Specify Action</i>	<p>The Region of Waterloo and Area Municipalities are requested to update their Region of Waterloo and Area Municipalities Design Guidelines and Supplemental Specifications for Municipal Services document within two (2) years from the date the Source Protection Plan takes effect to consider Source Protection and to provide enhanced construction standards for transport pathways within Wellhead Protection Areas A and B to ensure that they do not contribute to the creation of significant drinking water threats.</p>



Policy Number	Prescribed Instrument Policies
RW-NB-1.26  <i>Existing/Future Prescribed Instr.</i>	The Ministry of Environment, Conservation and Parks the Ministry of Agriculture, Food and Rural Affairs and the Ministry of Northern Development, Mines, Natural Resources and Forestry for Prescribed Instruments for significant drinking water threats within vulnerable areas and/or for locations where a Condition is identified, should advise the Region of Waterloo regarding applications under review and provide the Region of Waterloo an opportunity to comment on these applications. The relevant Ministry should consider the comments submitted by the Region of Waterloo.
RW-MC-1.27  <i>Existing/Future Prescribed Instr.</i>	Any Prescribed Instrument issued under the <i>Nutrient Management Act</i> that is created or amended or is used for the purposes of obtaining an exemption from a Risk Management Plan under Section 61 of O. Reg. 287/07 shall incorporate terms and conditions that, when implemented, manage the activities they regulate such that those activities cease to be or never become a significant drinking water threat. The Ministry of Agriculture, Food and Rural Affairs is expected to review all Prescribed Instruments issued under the <i>Nutrient Management Act</i> in areas where the activities they regulate are or would be significant drinking water threats to ensure the Prescribed Instruments contain such terms and conditions including the Prescribed Instruments that are not directly created or issued by the Ministry of Agriculture, Food and Rural Affairs such as Nutrient Management Plans.

### 10.3 Policies Addressing Prescribed Drinking Water Threats

#### Threat 1.0 – The Establishment, Operation or Maintenance of a Waste Disposal Site within the meaning of Part V of the Environmental Protection Act

Policy Number	
RW-MC-2  <i>Existing/Future Prescribed Instr.</i>	<p>For existing and/or future waste disposal sites within the meaning of Part V of the <i>Environmental Protection Act</i> within vulnerable areas where this activity is or would be a significant drinking water threat:</p> <ol style="list-style-type: none"> <li>a. The Ministry of the Environment, Conservation and Parks shall prohibit, within the Environmental Compliance Approvals process, the establishment of a new waste disposal site in the following vulnerable areas: <ol style="list-style-type: none"> <li>i. In Wellhead Protection Areas A and B where the vulnerability is equal to ten (10) for the application of hauled sewage to land, land farming of petroleum waste, landfilling of hazardous waste, and storage of hazardous or Polychlorinated Biphenyl (PCB) waste at landfills or transfer stations;</li> </ol> </li> </ol>

Policy Number	
	<ul style="list-style-type: none"> <li>ii. In Wellhead Protection Areas A, B and C where the vulnerability is greater than or equal to eight (8) for the injection of liquid industrial waste, landfilling of municipal waste and/or solid non-hazardous waste;</li> <li>iii. In Intake Protection Zone One (1) for the application of hauled sewage to land, land-farming of petroleum waste, or landfilling of municipal waste, solid non-hazardous waste, and/or hazardous waste, and storage of hazardous, or PCB waste at landfills or transfer stations;</li> <li>iv. In Intake Protection Zones Two (2) and Three (3) where the vulnerability is equal to nine (9) for the application of hauled sewage to land, land-farming of petroleum waste, or landfilling of municipal waste, solid non-hazardous waste, and/or hazardous waste, and storage of hazardous waste at landfills or transfer stations;</li> <li>v. In Wellhead Protection Area E where the vulnerability is greater than nine (9) for the application of hauled sewage to land, land-farming of petroleum waste, or landfilling of municipal waste, solid non-hazardous waste, and/or hazardous waste, and storage of hazardous waste at landfills or transfer stations ;</li> <li>vi. Where a Nitrate Issue has been identified, in all Issue Contributing Areas for landfilling of municipal waste and/or solid non-hazardous waste;</li> <li>vii. Where a Nitrate Issue has been identified, in all Issue Contributing Areas for the application of hauled sewage;</li> <li>viii. Where a Trichloroethylene Issue has been identified, in all Wellhead Protection Areas for the injection of liquid industrial waste, landfilling of municipal waste and/or solid non-hazardous waste.</li> </ul> <p>b. The Ministry of the Environment, Conservation and Parks shall ensure that the Environmental Compliance Approval that governs an existing waste disposal site contains appropriate terms and conditions to ensure that the activity ceases to be a significant drinking water threat. The Environmental Compliance Approval should include annual reporting to the Ministry of the Environment, Conservation and Parks of water quality monitoring in related groundwater monitoring wells and surface water monitoring locations as appropriate in the following vulnerable areas where the following activities are identified as a significant drinking water threat:</p> <ul style="list-style-type: none"> <li>i. In Wellhead Protection Areas A and B where the vulnerability is equal to ten (10) for the application of hauled sewage to land, land-farming of petroleum waste, landfilling of hazardous waste,</li> </ul>

Policy Number	
	<p>and storage of hazardous or Polychlorinated Biphenyl (PCB) waste at landfills or transfer stations;</p> <ul style="list-style-type: none"> <li>ii. In Wellhead Protection Areas A, B and C where the vulnerability is greater than or equal to eight (8) for the injection of liquid industrial waste, landfilling of municipal waste and/or solid non-hazardous waste;</li> <li>iii. In Intake Protection Zone One (1) for the application of hauled sewage to land, land-farming of petroleum waste, or landfilling of municipal waste, solid non-hazardous waste, and/or hazardous waste and storage of hazardous or Polychlorinated Biphenyl (PCB) waste at landfills or transfer stations;</li> <li>iv. In Intake Protection Zones Two (2) and Three (3) where the vulnerability is equal to or greater than eight (8) for the application of hauled sewage to land;</li> <li>v. In Intake Protection Zones Two (2) and Three (3) where the vulnerability is equal to nine (9) for the land-farming of petroleum waste, or landfilling of municipal waste, solid non-hazardous waste, and/or hazardous waste, and storage of hazardous waste at landfills or transfer stations ;</li> <li>vi. In Wellhead Protection Area E where the vulnerability is greater than or equal to eight (8) for the application of hauled sewage to land;</li> <li>vii. In Wellhead Protection Area E where the vulnerability is greater than nine (9) for the land-farming of petroleum waste, or landfilling of municipal waste, solid non-hazardous waste, and/or hazardous waste, and storage of hazardous waste at landfills or transfer stations;</li> <li>viii. Where a Nitrate Issue has been identified, in all Issue Contributing Areas for landfilling of municipal waste and/or solid non-hazardous waste;</li> <li>ix. Where a Nitrate Issue has been identified, in all Issue Contributing Areas for the application of hauled sewage;</li> <li>x. Where a Trichloroethylene Issue has been identified, in all Wellhead Protection Areas for the injection of liquid industrial waste, landfilling of municipal waste and/or solid non-hazardous waste.</li> </ul> <p>Where there is a Nitrate Issue, the Environmental Compliance Approval for landfilling of municipal waste and/or solid non-hazardous waste, should include annual reporting to the Ministry of the Environment, Conservation and Parks and monitoring for nitrogen as appropriate.</p> <p>Where there is a Nitrate Issue, the Environmental Compliance Approval for the application of hauled sewage should include annual</p>

Policy Number	
	<p>reporting to the Ministry of the Environment, Conservation and Parks and monitoring for nitrogen as appropriate.</p> <p>Where there is a Trichloroethylene Issue, the Environmental Compliance Approval for the injection of liquid industrial waste, landfilling of municipal waste and/or solid non-hazardous waste should include annual reporting to the Ministry of the Environment, Conservation and Parks and monitoring for trichloroethylene and degradation products as appropriate.</p> <p>c. The Ministry of the Environment, Conservation and Parks shall ensure that the Environmental Compliance Approval that governs existing or new temporary waste destruction units for polychlorinated biphenyl contains appropriate terms and conditions to ensure that the activity ceases to be or does not become be a significant drinking water threat. The Environmental Compliance Approval should include annual reporting to the Ministry of the Environment, Conservation and Parks of water quality monitoring in related groundwater monitoring wells and surface water monitoring locations as appropriate in the following vulnerable areas:</p> <p>i. In Wellhead Protection Areas A and B where the vulnerability is equal to ten (10);</p> <p>ii. In Intake Protection Zone One (1).</p>
<p>RW-CW-3</p> <p><i>Future Part IV-Prohibit</i></p>	<p>To ensure that the establishment, operation and maintenance of a new waste disposal site within the meaning of Part V of the <i>Environmental Protection Act</i> and exempt from Environmental Compliance Approvals does not become a significant drinking water threat, where this activity would be a significant drinking threat, this activity is designated for the purpose of Section 57 of the <i>Clean Water Act, 2006</i> and is prohibited within the following vulnerable areas:</p> <p>i. In Wellhead Protection Areas A and B where the vulnerability is equal to ten (10) for the application of hauled sewage to land, land-farming of petroleum waste, landfilling of hazardous waste, and storage of hazardous, or Polychlorinated Biphenyl (PCB) waste at landfills or transfer stations;</p> <p>ii. In Wellhead Protection Areas A, B and C where the vulnerability is greater than or equal to eight (8) for the injection of liquid industrial waste, landfilling of municipal waste and/or solid non-hazardous waste;</p> <p>iii. In Intake Protection Zone One (1) for the application of hauled sewage to land, land-farming of petroleum waste, or landfilling of municipal waste, solid non-hazardous waste, and/or</p>

Policy Number	
	<p>hazardous waste; and storage of hazardous or PCB waste at landfills or transfer stations;</p> <ul style="list-style-type: none"> <li>iv. In Intake Protection Zones Two (2) and Three (3) where the vulnerability is equal to or greater than eight (8) for the application of hauled sewage to land;</li> <li>v. In Intake Protection Zones Two (2) and Three (3) where the vulnerability is equal to nine (9) for the land-farming of petroleum waste, or landfilling of municipal waste, solid non-hazardous waste, and/or hazardous waste, and storage of hazardous waste at landfills or transfer stations;</li> <li>vi. In Wellhead Protection Area E where the vulnerability is greater than or equal to eight (8) for the application of hauled sewage to land;</li> <li>vii. In Wellhead Protection Area E where the vulnerability is greater than nine (9) for the land-farming of petroleum waste, or landfilling of municipal waste, solid non-hazardous waste, and/or hazardous waste, and storage of hazardous waste at landfills or transfer stations;</li> <li>viii. Where a Nitrate Issue has been identified, in all Issue Contributing Areas for landfilling of municipal waste and/or solid non-hazardous waste;</li> <li>ix. Where a Nitrate Issue has been identified, in all Issue Contributing Areas for the application of hauled sewage;</li> <li>x. Where a Trichloroethylene Issue has been identified, in all Wellhead Protection Areas for the injection of liquid industrial waste, landfilling of municipal waste and/or solid non-hazardous waste.</li> </ul>
<p>RW-CW-4</p> <p><i>Existing Part IV-RMP</i></p>	<p>To ensure that the operation and maintenance of an existing waste disposal site within the meaning of Part V of the <i>Environmental Protection Act</i> and exempt from Environmental Compliance Approvals ceases to be a significant drinking water threat, where this activity is a significant drinking water threat, this activity shall be designated for the purpose of Section 58 of the <i>Clean Water Act, 2006</i> and a Risk Management Plan shall be required, within the following vulnerable areas:</p> <ul style="list-style-type: none"> <li>i. In Wellhead Protection Areas A and B where the vulnerability is equal to ten (10) for the application of hauled sewage to land, land-farming of petroleum waste, the landfilling of hazardous waste, and storage of hazardous, Polychlorinated Biphenyl (PCB) or liquid hazardous waste at landfills and transfer stations;</li> <li>ii. In Wellhead Protection Areas A, B and C where the vulnerability is greater than or equal to eight (8) for the injection of liquid industrial waste, landfilling of municipal waste and/or solid non-hazardous waste;</li> </ul>

Policy Number	
	<ul style="list-style-type: none"> <li>iii. In Intake Protection Zone One (1) for the application of hauled sewage to land, land-farming of petroleum waste, or landfilling of municipal waste, solid non-hazardous waste, and/or hazardous waste, and storage of hazardous or PCB waste at landfills and transfer stations;</li> <li>iv. In Intake Protection Zones Two (2) and Three (3) where the vulnerability is equal to or greater than eight (8) for the application of hauled sewage to land;</li> <li>v. In Intake Protection Zones Two (2) and Three (3) where the vulnerability is equal to nine (9) for the land-farming of petroleum waste, or landfilling of municipal waste, solid non-hazardous waste, and/or hazardous waste, and storage of hazardous waste at landfills or transfer stations;</li> <li>vi. In Wellhead Protection Area E where the vulnerability is greater than or equal to eight (8) for the application of hauled sewage to land;</li> <li>vii. In Wellhead Protection Area E where the vulnerability is greater than nine (9) for the land-farming of petroleum waste, or landfilling of municipal waste, solid non-hazardous waste, and/or hazardous waste, and storage of hazardous waste at landfills or transfer stations;</li> <li>viii. Where a Nitrate Issue has been identified, in all Issue Contributing Areas for landfilling of municipal waste and/or solid non-hazardous waste;</li> <li>ix. Where a Nitrate Issue has been identified, in all Issue Contributing Areas for the application of hauled sewage;</li> <li>x. Where a Trichloroethylene Issue has been identified, in all Wellhead Protection Areas for the injection of liquid industrial waste, landfilling of municipal waste and/or solid non-hazardous waste.</li> </ul>
RW-CW-5  <i>Existing/Future Education &amp; Outreach</i>	<p>To promote best management practices and to provide guidance about the importance of source water protection, the Region of Waterloo shall develop education and awareness programs for persons engaged in existing and new activities in the following areas</p> <ul style="list-style-type: none"> <li>i. In Wellhead Protection Areas A and B where the vulnerability is equal to ten (10) for the storage of hazardous, Polychlorinated Biphenyl (PCB) or small quantity exemptions of hazardous wastes or liquid industrial wastes at any type of disposal site including generators, receivers and transfer/processing sites;</li> <li>ii. In Intake Protection Zone 1 for the storage of hazardous, PCB or small quantity exemptions of hazardous wastes or liquid industrial wastes at any type of disposal site including generators, receivers and transfer/processing sites.</li> </ul>



## Threat 2.0 – The Establishment, Operation or Maintenance of a System that Collects, Stores, Transmits, Treats, or Disposes of Sewage

Policy Number	
RW-MC-6  <i>Future Land Use Planning</i>	<p>To ensure small onsite sewage systems and onsite sewage system holding tanks do not become significant drinking water threats, the Region of Waterloo and the Area Municipalities shall amend, where required, their Official Plans to prohibit the creation of new lots that rely on servicing by small septic systems and/or to require all new lots to connect to existing municipal wastewater services within the following areas:</p> <ul style="list-style-type: none"> <li>i. In Wellhead Protection Area A;</li> <li>ii. In Wellhead Protection Area B where the vulnerability is equal to ten (10) for municipal wells which are designated under the <i>Safe Drinking Water Act</i> as Groundwater Under the Direct Influence of surface water (GUDI);</li> <li>iii. Where a Nitrate Issue has been identified, within Wellhead Protection Areas A, B, and C where the vulnerability is greater than or equal to eight (8);</li> <li>iv. Where a Nitrate Issue has been identified, for the K23 wellfield, in the Issue Contribution Area where the vulnerability is equal to six (6).</li> </ul>
RW-MC-7  <i>Future Land Use Planning</i>	<p>To ensure small onsite sewage systems and onsite sewage system holding tanks do not become significant drinking water threats, the Region of Waterloo and the Area Municipalities shall amend where required their Official Plans to permit the creation of a new lot relying on servicing by a new small onsite sewage system only in accordance with the Regional Implementation Guideline for Source Water Protection Studies to the satisfaction of the Region of Waterloo within the following areas:</p> <ul style="list-style-type: none"> <li>i. In Wellhead Protection Area B where the vulnerability is to equal ten (10) for municipal wells which are not designated under the <i>Safe Drinking Water Act</i> as Groundwater Under the Direct Influence of surface water (GUDI);</li> <li>ii. Where a Nitrate Issue has been identified, in Issue Contributing Areas where the vulnerability is less than or equal to six (6).</li> </ul>
RW-CW-8  <i>Existing/Future Specify Action</i>	<p>To ensure small onsite sewage systems and holding tanks cease to be or do not become significant drinking water threats, where these activities are or would be significant drinking water threats, the Area Municipalities shall implement a septic system maintenance inspection program, as required under the <i>Ontario Building Code</i> for the following areas:</p> <ul style="list-style-type: none"> <li>i. In Wellhead Protection Areas A and B where the vulnerability is equal to ten (10);</li> </ul>

Policy Number	
	ii. Where a Nitrate Issue has been identified, in all Issue Contributing Areas.
RW-CW-8.1  <i>Existing Incentive</i>	<p>To promote best management practices and to provide guidance about the importance of source water protection the Region of Waterloo shall develop and implement an incentive program for persons with existing small onsite sewage systems and holding tanks where they are significant for the following areas:</p> <ul style="list-style-type: none"> <li>i. In Wellhead Protection Areas A and B where the vulnerability is equal to ten (10);</li> <li>ii. Where a Nitrate Issue has been identified, in all Issue Contributing Areas.</li> </ul>
RW-MC-9  <i>Future Prescribed Instr.</i>	<p>To ensure new large onsite sewage systems do not become a significant drinking water threat, where this activity would be a significant drinking water threat, the Ministry of the Environment, Conservation and Parks shall prohibit, within the Environmental Compliance Approvals process, new large septic systems in the following areas:</p> <ul style="list-style-type: none"> <li>i. In Wellhead Protection Areas A and B where the vulnerability is equal to ten (10);</li> <li>ii. Where a Nitrate Issue has been identified, in all Issue Contributing Areas where the vulnerability is greater than or equal to six (6).</li> </ul>
RW-MC-10  <i>Existing/Future Prescribed Instr.</i>	<p>To ensure existing and new large onsite sewage systems cease to be or do not become significant drinking water threats, where this activity is or would be a significant drinking water threat, the following policies apply:</p> <ul style="list-style-type: none"> <li>a. The Ministry of the Environment, Conservation and Parks shall ensure that the Environmental Compliance Approval for an existing large onsite sewage system contains terms and conditions as appropriate to ensure that the activity ceases to be a significant drinking water threat in the following vulnerable areas: <ul style="list-style-type: none"> <li>i. In Wellhead Protection Areas A and B where the vulnerability is equal to ten (10);</li> <li>ii. Where a Nitrate Issue has been identified, in all Issue Contributing Areas.</li> </ul> </li> <li>b. The Ministry of the Environment, Conservation and Parks shall ensure that the Environmental Compliance Approval for a new large onsite sewage system contains terms and conditions as appropriate to ensure that the activity never becomes a significant drinking water threat in the following vulnerable areas:</li> </ul>



Policy Number	
	<p>i. Where a Nitrate Issue has been identified, in all Issue Contributing Areas where the vulnerability is less than six (6).</p> <p>The Environmental Compliance Approval should include annual reporting to the Ministry of the Environment, Conservation and Parks of water quality monitoring in related monitoring wells.</p> <p>For Issue Contributing Areas, the Environmental Compliance Approval should require applicable chemical effluent criteria established using Ministry of the Environment, Conservation and Parks Reasonable Use Policy (Guideline B-7) relative to water quality levels in the municipal aquifer as appropriate.</p>
<p>RW-MC-11</p> <p><i>Future Prescribed Instr.</i></p>	<p>For future effluent discharges from a sewage treatment plant, including lagoons and future below grade storage of sewage and industrial effluent discharge located within the following vulnerable areas and where this activity would be a significant drinking water threat, the following policies apply:</p> <p>The Ministry of the Environment, Conservation and Parks shall prohibit the following activities within the Environmental Compliance Approval process to ensure these activities do not become a significant drinking water threat:</p> <ul style="list-style-type: none"> <li>a. Sewage treatment plant effluent discharge including lagoons; <ul style="list-style-type: none"> <li>i. In Wellhead Protection Areas A and B where the vulnerability is equal to ten (10);</li> <li>ii. In Intake Protection Zone One (1);</li> <li>iii. Where a Nitrate Issue has been identified, in all Issue Contributing Areas where the vulnerability is greater than or equal to six (6).</li> </ul> </li> <li>b. Storage of sewage (treatment tank or storage tank) where the tank is completely underground; <ul style="list-style-type: none"> <li>i. In Wellhead Protection Areas A, B and C where the vulnerability is greater than or equal to eight (8);</li> <li>ii. In Intake Protection Zone One (1);</li> <li>iii. Where a Nitrate and/or Trichloroethylene Issue has been identified, in all Wellhead Protection Areas where the vulnerability is greater than or equal to six (6).</li> </ul> </li> <li>c. Industrial effluent discharge to surface; <ul style="list-style-type: none"> <li>i. In Intake Protection Zone One (1).</li> </ul> </li> </ul>
<p>RW-MC-11.1</p> <p><i>Existing/Future</i></p>	<p>The Ministry of the Environment, Conservation and Parks shall ensure that the Environmental Compliance Approval that governs the following existing or future activities contain terms and conditions, as</p>

Policy Number	
<i>Prescribed Instr.</i>	<p>appropriate, to ensure that the activity does not become and/or ceases to be a significant drinking water threat to groundwater and drinking water supplies within the specified vulnerable areas:</p> <ul style="list-style-type: none"> <li>a. Existing: <ul style="list-style-type: none"> <li>i. Sewage treatment plant effluent discharges including lagoons; <ul style="list-style-type: none"> <li>i. In Wellhead Protection Areas A and B where the vulnerability is equal to ten (10);</li> <li>ii. In Wellhead Protection Area E where the vulnerability is greater than eight (8);</li> <li>iii. Where a Nitrate Issue has been identified, in all Issue Contributing Areas where the vulnerability is greater than or equal to six (6);</li> <li>iv. Where a Nitrate Issue has been identified, in all Issue Contributing Areas where the vulnerability is less than six (6);</li> <li>v. In Intake Protection Zone One (1);</li> <li>vi. In Intake Protection Zone Two and Three (3) where the vulnerability is greater than or equal to eight (8).</li> </ul> </li> <li>ii. Storage of sewage (treatment tank or storage tank) where the tank is completely underground; <ul style="list-style-type: none"> <li>i. In Wellhead Protection Area A, B and C where the vulnerability is greater than or equal to eight (8);</li> <li>ii. In Intake Protection Zone One (1);</li> <li>iii. Where a Nitrate and/or Trichloroethylene Issue has been identified, in Issue Contributing Areas where the vulnerability is greater than or equal to six (6);</li> <li>iv. Where a Nitrate and/or Trichloroethylene Issue has been identified, in all Issue Contributing Areas where the vulnerability is less than six (6).</li> </ul> </li> <li>iii. Storage of sewage (treatment tank or storage tank) and any part of the tank is at or above grade; <ul style="list-style-type: none"> <li>i. In Wellhead Protection Areas A, B and C where the vulnerability is greater than or equal to eight (8);</li> <li>ii. In Intake Protection Zone One (1);</li> <li>iii. Where a Nitrate and/or TCE Issue has been identified, in all Issue Contributing Areas where the vulnerability is greater than or equal to six (6);</li> <li>iv. Where a Nitrate and/or Trichloroethylene Issue has been identified, in all Issue Contributing Areas where the vulnerability is less than six (6).</li> </ul> </li> </ul> </li> <li>iv. Industrial effluent discharge to surface;</li> </ul>

Policy Number	
	<ul style="list-style-type: none"> <li>i. In Intake Protection Zone One (1);</li> <li>ii. In Wellhead Protection Area E where the vulnerability is greater than eight (8);</li> <li>iii. Where a Nitrate, Chloride and/or Trichloroethylene Issue has been identified, in Wellhead Protection Area E where the vulnerability is greater than or equal to six (6);</li> <li>iv. In Intake Protection Zones Two (2) and Three (3) where the vulnerability is greater than or equal to eight (8).</li> </ul> <p>v. Sewage treatment plant bypass discharges to surface water</p> <ul style="list-style-type: none"> <li>i. In Intake Protection Zone One (1);</li> <li>ii. In Wellhead Protection Area E where the vulnerability is greater than eight (8);</li> <li>iii. Where a Nitrate and/or Trichloroethylene Issue has been identified, in Wellhead Protection Area E where the vulnerability is greater than or equal to six (6);</li> <li>iv. Intentionally deleted to preserve numbering;</li> <li>v. In Intake Protection Zones Two (2) and Three (3) where the vulnerability is greater than or equal to eight (8).</li> </ul> <p>b. Future:</p> <ul style="list-style-type: none"> <li>i. Sewage treatment plant effluent discharges including lagoons; <ul style="list-style-type: none"> <li>i. In Intake Protection Zones Two (2) and Three (3) where the vulnerability is greater than or equal to eight (8);</li> <li>ii. In Wellhead Protection Area E where the vulnerability is greater than eight (8);</li> <li>iii. Where a Nitrate Issue has been identified, in all Issue Contributing Areas where the vulnerability is less than or equal to six (6).</li> </ul> </li> <li>ii. Storage of sewage (treatment tank or storage tank) where the tank is completely underground; <ul style="list-style-type: none"> <li>i. Where a Nitrate and/or Trichloroethylene Issue has been identified, in all Issue Contributing Areas where the vulnerability is less than six (6).</li> </ul> </li> <li>iii. Storage of Sewage (treatment tank or storage tank) and any part of the tank is at or above grade; <ul style="list-style-type: none"> <li>i. In all Wellhead Protection Areas A, B and C where the vulnerability is greater than or equal to eight (8);</li> <li>ii. In Intake Protection Zone One (1);</li> <li>iii. Where a Nitrate and/or Trichloroethylene Issue has been identified, in all Issue Contributing Areas where the vulnerability is greater than or equal to six (6);</li> </ul> </li> </ul>

Policy Number	
	<p>iv. Where a Nitrate and/or Trichloroethylene Issue has been identified, in all Issue Contributing Areas where the vulnerability is less than six (6).</p> <p>iv. Industrial effluent discharge to surface;</p> <ul style="list-style-type: none"> <li>i. In Wellhead Protection Area E where the vulnerability is greater than eight (8);</li> <li>ii. Where a Nitrate, Chloride and/or Trichloroethylene Issue has been identified, in Wellhead Protection Area E where the vulnerability is greater than or equal to six (6);</li> <li>iii. In Intake Protection Zones Two (2) and Three (3) where the vulnerability is greater than or equal to eight (8).</li> </ul> <p>v. Sewage treatment plant bypass discharges to surface water</p> <ul style="list-style-type: none"> <li>i. In Intake Protection Zone One (1);</li> <li>ii. In Wellhead Protection Area E where the vulnerability is greater than eight (8);</li> <li>iii. Where a Nitrate and/or Trichloroethylene Issue has been identified, in the Issue Contributing Area where the vulnerability is greater than or equal to six (6);</li> <li>iv. In the Intake Protection Zones Two (2) and Three (3) where the vulnerability is greater than or equal to eight (8).</li> </ul> <p>For storage of sewage, the terms and conditions should include, as a minimum, measures to reduce the likelihood of spills and leaks, measures to contain and respond to spills and annual reporting to the Ministry of Environment, Conservation and Parks.</p> <p>For effluent discharge from a sewage treatment plant, including lagoons, the terms and conditions should include, as a minimum, monitoring for nitrogen where a Nitrate Issue has been identified, annual reporting to the Ministry of the Environment, Conservation and Parks of water quality monitoring in related groundwater monitoring wells, as appropriate, and contingency plans for responding to spills and leaks.</p> <p>For industrial effluent discharge to surface, the terms and conditions should include, as a minimum, measures to ensure facilities are maintained, contingency plans for responding to spills and leaks, and surface water monitoring for nitrogen where there is a Nitrate Issue.</p>
RW-MC-12  <i>Existing/Future Prescribed Instr.</i>	For sanitary sewers and related pipes including pump stations located within the following vulnerable areas and where this activity is or would be a significant drinking water threat, the following policies apply:

Policy Number	
	<p>a. The Ministry of the Environment, Conservation and Parks shall ensure that the Environmental Compliance Approval for existing sanitary sewers and related pipes includes appropriate terms and conditions to ensure that the activity ceases to be a significant drinking water threat within the following areas:</p> <ul style="list-style-type: none"> <li>i. In Wellhead Protection Areas A and B where the vulnerability is equal to ten (10);</li> <li>ii. Where a Nitrate Issue has been identified, in all Issue Contributing Areas where the vulnerability is greater than or equal to six (6).</li> </ul> <p>b. The Ministry of the Environment, Conservation and Parks shall ensure that the Environmental Compliance Approval for new sanitary sewer and related pipes including pumping stations includes appropriate terms and conditions to ensure that the activity does not become a significant drinking water threat in the following areas:</p> <ul style="list-style-type: none"> <li>i. In Wellhead Protection Areas A and B where the vulnerability is equal to ten (10);</li> <li>ii. Where a Nitrate Issue has been identified, all Issue Contributing Areas where the vulnerability is greater than or equal to six (6).</li> </ul> <p>The Environmental Compliance Approval shall include contingency plans for responding to spills as appropriate. Within Wellhead Protection Area A, the Environmental Compliance Approval shall also include enhanced construction to reduce likelihood of leaks.</p>
RW-CW-12.1  <i>Future Specify Action</i>	<p>The Region of Waterloo and Area Municipalities are requested to update their Region of Waterloo and Area Municipalities Design Guidelines and Supplemental Specifications for Municipal Services document within two (2) years from the date the Source Protection Plan takes effect to require enhanced construction standards to ensure that the activity does not become a significant drinking water threat in the following areas:</p> <ul style="list-style-type: none"> <li>i. In Wellhead Protection Area A.</li> </ul>
RW-MC-13  <i>Existing/Future Prescribed Instr.</i>	<p>For combined sewers located within the following vulnerable areas and where this activity is or would be a significant drinking water threat, the following policies apply:</p> <ul style="list-style-type: none"> <li>a. The Ministry of the Environment, Conservation and Parks shall ensure that the Environmental Compliance Approval that governs existing combined sewers contains terms and conditions, as appropriate, to ensure that the activity ceases to be a significant</li> </ul>

Policy Number	
	<p>drinking water threat to groundwater and drinking water supplies within the specified vulnerable areas:</p> <ul style="list-style-type: none"> <li>i. In Intake Protection Zone One (1);</li> <li>ii. In Intake Protection Zones Two (2) and Three (3) where the vulnerability is greater than or equal to eight (8);</li> <li>iii. In Wellhead Protection Area E where the vulnerability is greater than eight (8);</li> <li>iv. Where a Nitrate and/or Trichloroethylene Issue has been identified, in Wellhead Protection Area E where the vulnerability is greater than six (6)..</li> </ul> <p>b. The Ministry of the Environment, Conservation and Parks shall prohibit future combined sewers within the Environmental Compliance Approvals process to ensure they do not become a significant drinking water threat:</p> <ul style="list-style-type: none"> <li>i. In Intake Protection Zone One (1);</li> <li>ii. In Intake Protection Zones Two (2) and Three (3) where the vulnerability is greater than or equal to eight (8);</li> <li>iii. In Wellhead Protection Area E where the vulnerability is greater than eight (8);</li> <li>iv. Where a Nitrate and/or Trichloroethylene Issue has been identified, in Wellhead Protection Area E where the vulnerability is greater than six (6)..</li> </ul>
RW-CW-14  <i>Existing Specify Action</i>	<p>The Area Municipalities shall establish contingency plans for responding to spills for sanitary sewers and related pipes that are significant threats in the following areas:</p> <ul style="list-style-type: none"> <li>i. Where a Nitrate Issue has been identified, in Wellhead Protection Area E where the vulnerability is less than six (6).</li> </ul>
RW-MC-15  <i>Existing Prescribed Instr.</i>	<p>For existing discharge from a stormwater management facility within vulnerable areas where this activity is a significant drinking water threat, the Ministry of the Environment, Conservation and Parks, in consultation with the owner of the stormwater management facility and following the completion of the assessment identified in policy RW-CW-19, shall ensure that the Environmental Compliance Approval that governs the stormwater management facility includes appropriate terms and conditions to ensure that the activity ceases to be a significant drinking water threat in the following vulnerable areas:</p> <ul style="list-style-type: none"> <li>i. In Wellhead Protection Areas A and B where the vulnerability is equal to ten (10);</li> <li>ii. In Wellhead Protection Area E where the vulnerability is greater than or equal to eight (8);</li> </ul>

Policy Number	
	<ul style="list-style-type: none"> <li>iii. In Intake Protection Zones Two (2) and Three (3) where the vulnerability is greater than or equal to eight (8);</li> <li>iv. In Intake Protection Zone One (1);</li> <li>v. Where a Nitrate and/or Chloride Issue has been identified, in all Issue Contributing Areas.</li> </ul>
RW-MC-16  <i>Future Prescribed Instr.</i>	<p>To ensure the new discharge from a stormwater management facility does not become a significant drinking water threat within vulnerable areas where this activity would be a significant drinking water threat:</p> <ul style="list-style-type: none"> <li>a. The Ministry of the Environment, Conservation and Parks shall prohibit the new discharge from a stormwater management facility within the Environmental Compliance Approvals process in the following areas as appropriate: <ul style="list-style-type: none"> <li>i. In Wellhead Protection Area A;</li> <li>ii. In Intake Protection Zone One (1).</li> </ul> </li> <li>b. The Ministry of the Environment, Conservation and Parks shall ensure that the Environmental Compliance Approval that governs the new discharge from a stormwater management facility includes appropriate terms and conditions to ensure the activity does not become a significant drinking water threat when permitted in the following areas as appropriate: <ul style="list-style-type: none"> <li>i. In Wellhead Protection Area B where the vulnerability is equal to ten (10);</li> <li>ii. In Wellhead Protection Area E where the vulnerability is greater than or equal to eight (8);</li> <li>iii. In Intake Protection Zones Two (2) and Three (3) where the vulnerability is greater than or equal to eight (8);</li> <li>iv. Where a Nitrate and/or Chloride Issue has been identified, in all Issue Contributing Areas except Wellhead Protection Area A.</li> </ul> </li> </ul> <p>The Environmental Compliance Approval should include, as a minimum, water quality monitoring measures and reporting annually to the Ministry of the Environment, Conservation and Parks, as appropriate. Where there is a Nitrate, and/or Chloride Issue, groundwater and/or surface water quality shall be monitored for Nitrate and Chloride, respectively.</p>
RW-MC-17  <i>Future Land Use Planning</i>	<p>The Region of Waterloo and the Area Municipalities shall review and, if necessary, amend their Official Plans and Zoning By-laws to prohibit stormwater management facilities in the following areas to ensure these activities never become significant drinking water threats:</p> <ul style="list-style-type: none"> <li>i. In Wellhead Protection Area A;</li> </ul>



Policy Number	
RW-MC-18  <i>Future Land Use Planning</i>	<p>ii. In Intake Protection Zone One (1).</p> <p>The Region of Waterloo and Area Municipalities shall review and, if necessary, amend their Official Plans to require any development proposals for new storm water management facilities shall be subject to a study to assess impact and mitigation measures in accordance with the Regional Implementation Guideline for Source Water Protection Studies to the satisfaction of the Region of Waterloo within the following areas:</p> <ul style="list-style-type: none"> <li>i. In Wellhead Protection Area B where the vulnerability is equal to ten (10);</li> <li>ii. In Wellhead Protection Area E where the vulnerability is greater than eight (8);</li> <li>iii. In Intake Protection Zones Two (2) and Three (3) where the vulnerability is greater than eight (8);</li> <li>iv. Where a Nitrate and/or Chloride Issue has been identified, in all Issue Contributing Areas except Wellhead Protection Area A.</li> </ul> <p>Where a proposed stormwater management pond is located within 500 metres of a Drinking Water System that obtains water from a bedrock aquifer, the study shall, as a minimum, assess changes in classification of the municipal supply well and or changes in hydrogeological conditions that could affect the pathogen vulnerability to the well.</p>
RW-CW-19  <i>Existing Specify Action</i>	<p>The Area Municipalities, in collaboration with the Region of Waterloo and the Ministry of Environment, Conservation and Parks shall undertake an assessment of stormwater management facilities to determine appropriate scope and type of measures to protect drinking water sources within two (2) years from the date the Source Protection Plan takes effect to ensure that this activity ceases to be a significant drinking water threat in the following areas:</p> <ul style="list-style-type: none"> <li>i. In Wellhead Protection Areas A and B where the vulnerability is equal to ten (10);</li> <li>ii. In Wellhead Protection Area E where the vulnerability is greater than eight (8);</li> <li>iii. In Intake Protection Zones Two (2) and Three (3) where the vulnerability is greater than or equal to eight (8);</li> <li>iv. Where a Chloride and/or Nitrate Issue has been identified, in all Issue Contributing Areas.</li> </ul>
RW-CW-19.1  <i>Future Specify Action</i>	<p>The Region of Waterloo and Area Municipalities are requested to update their Region of Waterloo and Area Municipalities Design Guidelines and Supplemental Specifications for Municipal Services document within two (2) years from the date the Source Protection Plan takes effect to require enhanced inspection and testing</p>



Policy Number	
	<p>standards to ensure that stormwater management facilities do not become a significant drinking water threat in the following areas:</p> <ul style="list-style-type: none"> <li>i. In Wellhead Protection Area A and B where the vulnerability is equal to ten (10)</li> </ul>
<p>RW-CW-20</p> <p><i>Existing/Future</i>  <i>a) Part IV-Prohibit</i>  <i>b )Part IV-RMP</i></p>	<p>To ensure the existing and future discharge from a stormwater management facility exempt from Environmental Compliance Approvals does not become or ceases to be a significant drinking water threat:</p> <ul style="list-style-type: none"> <li>a. The future discharge from a stormwater management facility within vulnerable areas where this activity would be a significant drinking water threat is designated for the purpose of Section 57 of the <i>Clean Water Act, 2006</i> and is prohibited within the following vulnerable areas where there is or would be a significant drinking water threat: <ul style="list-style-type: none"> <li>i. In Wellhead Protection Area A;</li> <li>ii. In Intake Protection Zone One (1).</li> </ul> </li> <li>b. The discharge from a stormwater management facility shall be designated for the purpose of Section 58 of the <i>Clean Water Act, 2006</i> and a Risk Management Plan shall be required with the persons or agencies engaging or proposing to engage in the following areas: <ul style="list-style-type: none"> <li>a. Existing: <ul style="list-style-type: none"> <li>i. In Wellhead Protection Areas A and B where the vulnerability is equal to ten (10);</li> <li>ii. In Wellhead Protection Area E where the vulnerability is greater than or equal to eight (8);</li> <li>iii. In Intake Protection Zone One (1);</li> <li>iv. In Intake Protection Zones Two (2) and Three (3) where the vulnerability is greater than or equal to eight (8);</li> <li>v. Where a Nitrate and/or Chloride Issue has been identified, in all Issue contributing Areas except Wellhead Protection Area A.</li> </ul> </li> <li>b. Future: <ul style="list-style-type: none"> <li>i. In Wellhead Protection Area B where the vulnerability is equal to ten (10);</li> <li>ii. In Wellhead Protection Area E where the vulnerability is greater than or equal to eight (8);</li> <li>iii. In Intake Protection Zones Two (2) and Three (3) where the vulnerability is greater than or equal to eight (8);</li> </ul> </li> </ul> </li> </ul>

Policy Number	
	<p>iv. Where a Nitrate and/or Chloride Issue has been identified, in all Issue Contributing Areas except Wellhead Protection Area A.</p> <p>The Risk Management Plan shall include, as a minimum, water quality monitoring and reporting to the Risk Management Official. Where there is a Nitrate and/or Chloride Issue, the Risk Management Plan shall also include water quality monitoring for nitrate or chloride, respectively.</p>
<p>RW-CW-20.1</p> <p><i>Existing Incentive</i></p>	<p>To promote best management practices and to provide guidance about the importance of source water protection, the Region of Waterloo shall develop and implement an incentive program for persons engaging in the existing discharge of stormwater from a stormwater management facility exempt from Environmental Compliance Approvals in the following areas:</p> <ul style="list-style-type: none"> <li>i. In Wellhead Protection Areas A and B where the vulnerability is equal to ten (10);</li> <li>ii. In Wellhead Protection Area E where the vulnerability is greater than or equal to eight (8);</li> <li>iii. In Intake Protection Zone One (1);</li> <li>iv. In Intake Protection Zones Two (2) and Three (3) where the vulnerability is greater than or equal to eight (8);</li> <li>v. Where a Nitrate and/or Chloride Issue has been identified, in all Issue Contributing Areas except Wellhead Protection Area A.</li> </ul>

### Threat 3.0 – The Application of Agricultural Source Material (ASM) to Land

### Threat 4.0 – The Storage of Agricultural Source Material (ASM)

Policy Number	<b>3.1 – Application of agricultural source material (ASM) to land</b> <b>4.1 – Storage of agricultural source material (ASM)</b>
<p>RW-CW-21</p> <p><i>Existing/Future Part IV-Prohibit</i></p>	<p>The existing and/or future application, temporary field storage or permanent storage of agricultural source material is designated for the purpose of Section 57 of the <i>Clean Water Act, 2006</i> and is prohibited within the following vulnerable areas where there is or would be a significant drinking water threat:</p> <ul style="list-style-type: none"> <li>a. Existing:             <ul style="list-style-type: none"> <li>i. Temporary field storage;                 <ul style="list-style-type: none"> <li>i. In Wellhead Protection Areas A and B where the vulnerability is equal to ten (10);</li> <li>ii. In Intake Protection Area One (1);</li> <li>iii. In Wellhead Protection Area E where the vulnerability is greater than or equal to eight (8);</li> </ul> </li> </ul> </li> </ul>

Policy Number	<b>3.1 – Application of agricultural source material (ASM) to land</b> <b>4.1 – Storage of agricultural source material (ASM)</b>
	<ul style="list-style-type: none"> <li>iv. Where a Nitrate Issue has been identified, in all Issue Contributing Areas.</li> <li>ii. Permanent storage;               <ul style="list-style-type: none"> <li>i. In Intake Protection Zone One (1).</li> </ul> </li> <li>iii. Application;               <ul style="list-style-type: none"> <li>i. In Wellhead Protection Area A;</li> <li>ii. In Intake Protection Zone One (1).</li> </ul> </li> <li>b. Future:               <ul style="list-style-type: none"> <li>i. Application;                   <ul style="list-style-type: none"> <li>i. In Wellhead Protection Area A;</li> <li>ii. In Intake Protection Zone One (1).</li> </ul> </li> <li>ii. Temporary field storage;                   <ul style="list-style-type: none"> <li>i. In Wellhead Protection Areas A and B where the vulnerability is equal to ten (10);</li> <li>ii. In Intake Protection Zone One (1);</li> <li>iii. In Wellhead Protection Area E where the vulnerability is greater than or equal to eight (8);</li> </ul> </li> <li>iv. Where a Nitrate Issue has been identified, in all Issue Contributing Areas.</li> <li>iii. Permanent storage;                   <ul style="list-style-type: none"> <li>i. In Wellhead Protection Area A;</li> <li>ii. In Intake Protection Zone One (1).</li> </ul> </li> </ul> </li> </ul>
RW-MC-21.1  <i>Existing/Future Prescribed Instr.</i>	<p>To ensure that the exiting and/or future application, temporary field storage or permanent storage of agricultural source material cease to be or do not become a significant drinking water threat where the activities are or would be a significant threat, the Ministry of Agriculture, Food and Rural Affairs shall prohibit these activities through Nutrient Management Plans and Strategies to ensure they do not become a significant drinking water threat:</p> <ul style="list-style-type: none"> <li>a. Existing:               <ul style="list-style-type: none"> <li>i. Temporary field storage;                   <ul style="list-style-type: none"> <li>i. In Wellhead Protection Areas A and B where the vulnerability is equal to ten (10);</li> <li>ii. In Intake Protection Area One (1);</li> <li>iii. In Wellhead Protection Area E where the vulnerability is greater than or equal to eight (8);</li> </ul> </li> <li>iv. Where a Nitrate Issue has been identified, in all Issue Contributing Areas;</li> </ul> </li> <li>ii. Permanent storage;</li> </ul>

Policy Number	<b>3.1 – Application of agricultural source material (ASM) to land</b> <b>4.1 – Storage of agricultural source material (ASM)</b>
	<ul style="list-style-type: none"> <li>i. In Intake Protection Zone One (1).</li> <li>iii. Application; <ul style="list-style-type: none"> <li>i. In Wellhead Protection Area A;</li> <li>ii. In Intake Protection Zone One (1).</li> </ul> </li> <li>b. Future: <ul style="list-style-type: none"> <li>i. Application; <ul style="list-style-type: none"> <li>i. In Wellhead Protection Area A;</li> <li>ii. In Intake Protection Zone One (1).</li> </ul> </li> <li>ii. Temporary field storage; <ul style="list-style-type: none"> <li>i. In Wellhead Protection Areas A and B;</li> <li>ii. In Intake Protection Zone One (1);</li> <li>iii. In Wellhead Protection Area E where the vulnerability is greater than or equal to eight (8);</li> <li>iv. Where a Nitrate Issue has been identified, in all Issue Contributing Areas.</li> </ul> </li> <li>iii. Permanent storage; <ul style="list-style-type: none"> <li>i. In Wellhead Protection Area A;</li> <li>ii. In Intake Protection Zone One (1).</li> </ul> </li> </ul> </li> </ul>
RW-MC-22  <i>Existing/Future Prescribed Instr.</i>	<p>To ensure that the existing and/or future application and permanent storage of agricultural source material within vulnerable areas does not become or ceases to be a significant drinking water threat, the Ministry of Agriculture, Food and Rural Affairs shall review and, if necessary, amend existing and approve new Nutrient Management Plans and Strategies with the terms and conditions set out below, as appropriate, where required under, and in accordance with, the <i>Nutrient Management Act</i> for the following:</p> <ul style="list-style-type: none"> <li>a. Existing: <ul style="list-style-type: none"> <li>i. Application; <ul style="list-style-type: none"> <li>i. In Wellhead Protection Area B where the vulnerability is equal to ten (10);</li> <li>ii. In Wellhead Protection Area E where the vulnerability is greater than or equal to eight (8);</li> <li>iii. Where a Nitrate Issue has been identified, in all Issue Contributing Areas except Wellhead Protection Area A, where the vulnerability is greater than or equal to six (6).</li> </ul> </li> <li>ii. Permanent Storage; <ul style="list-style-type: none"> <li>i. In Wellhead Protection Areas A and B where the vulnerability is equal to ten (10);</li> <li>ii. Intentionally deleted to preserve numbering;</li> </ul> </li> </ul> </li> </ul>

Policy Number	<b>3.1 – Application of agricultural source material (ASM) to land</b> <b>4.1 – Storage of agricultural source material (ASM)</b>
	<ul style="list-style-type: none"> <li>iii. In Wellhead Protection Area E where the vulnerability is greater than or equal to eight (8);</li> <li>iv. Where a Nitrate Issue has been identified, in all Issue Contributing Areas except Wellhead Protection Area A, where the vulnerability is greater than or equal to six (6).</li> </ul> <p>b. Future:</p> <ul style="list-style-type: none"> <li>i. Application; <ul style="list-style-type: none"> <li>i. In Wellhead Protection Area B where the vulnerability is equal to ten (10);</li> <li>ii. In Wellhead Protection Area E where the vulnerability is greater than or equal to eight (8);</li> <li>iii. Where a Nitrate Issue has been identified, in all Issue Contributing Areas except Wellhead Protection Area A, where the vulnerability is greater than or equal to six (6).</li> </ul> </li> <li>ii. Permanent Storage; <ul style="list-style-type: none"> <li>i. In Wellhead Protection Area B where the vulnerability is equal to ten (10);</li> <li>ii. In Wellhead Protection Area E where the vulnerability is greater than or equal to eight (8);</li> <li>iii. Where a Nitrate Issue has been identified, in all Issue Contributing Areas except Wellhead Protection Area A, where the vulnerability is greater than or equal to six (6).</li> </ul> </li> </ul> <p>The Nutrient Management Plans and Strategies for the application of agricultural source material should include measures to be implemented by the farmer and/or custom applicator to ensure application rate, timing and location are appropriate for crop uptake of nitrogen on an annual basis and that reduce potential for surface water run-off and groundwater infiltration.</p> <p>The Nutrient Management Plans and Strategies for the permanent storage of agricultural source material should require facilities to contain a minimum of 240 days for storage and to identify measures to minimize, contain and respond to spills and leaks.</p>
RW-CW-23  <i>Existing/Future</i> <i>Part IV-RMP</i>	<p>To ensure that the existing and/or future application and permanent storage of agricultural source material on farms not phased-in under the <i>Nutrient Management Act</i> within vulnerable areas where these activities are or would be a significant drinking water threat do not become or cease to be a significant drinking water threat, these activities shall be designated for the purpose of Section 58 of the <i>Clean Water Act, 2006</i> and a Risk Management Plan shall be required in the following areas and for the following activities:</p>

Policy Number	<b>3.1 – Application of agricultural source material (ASM) to land</b> <b>4.1 – Storage of agricultural source material (ASM)</b>
	<p>a. Existing:</p> <ul style="list-style-type: none"> <li>i. Application; <ul style="list-style-type: none"> <li>i. In Wellhead Protection Area B where the vulnerability is equal to ten (10);</li> <li>ii. In Wellhead Protection Area E where the vulnerability is greater than or equal to eight (8);</li> <li>iii. Where a Nitrate Issue has been identified in all Issue Contributing Areas except in Wellhead Protection Area A where the vulnerability is greater than or equal to six (6).</li> </ul> </li> <li>ii. Permanent Storage; <ul style="list-style-type: none"> <li>i. In Wellhead Protection Areas A and B where the vulnerability is equal to ten (10);</li> <li>ii. In Wellhead Protection Area E where the vulnerability is greater than or equal to eight (8);</li> <li>iii. Where a Nitrate Issue has been identified, in all Issue Contributing Areas except Wellhead Protection Area A, where the vulnerability is greater than or equal to six (6).</li> </ul> </li> </ul> <p>b. Future:</p> <ul style="list-style-type: none"> <li>i. Application; <ul style="list-style-type: none"> <li>i. In Wellhead Protection Area B where the vulnerability is equal to ten (10);</li> <li>ii. In Wellhead Protection Area E where the vulnerability is greater than or equal to eight (8);</li> <li>iii. Where a Nitrate Issue has been identified, in all Issue Contributing Areas except Wellhead Protection Area A, where the vulnerability is greater than or equal to six (6).</li> </ul> </li> <li>ii. Permanent Storage; <ul style="list-style-type: none"> <li>i. In Wellhead Protection Area B where the vulnerability is equal to ten (10);</li> <li>ii. In Wellhead Protection Area E where the vulnerability is greater than or equal to eight (8);</li> <li>iii. Where a Nitrate Issue has been identified, in all Issue Contributing Areas except Wellhead Protection Area A, where the vulnerability is greater than or equal to six (6).</li> </ul> </li> </ul> <p>For the application of agricultural source material, the Risk Management Plan should include, as a minimum, measures to ensure application rate, timing and location are appropriate for crop uptake of nitrogen on an annual basis and that reduce potential for surface water run-off and groundwater infiltration.</p>

Policy Number	3.1 – Application of agricultural source material (ASM) to land 4.1 – Storage of agricultural source material (ASM)
	For the permanent storage of agricultural source material, the Risk Management Plan should include, as a minimum, measures to reduce the likelihood of spills and leaks and contain and respond to the spills.
RW-CW-24  <i>Existing/Future a) Incentive b) Education &amp; Outreach</i>	<p>To promote best management practices and to provide guidance about the importance of source water protection:</p> <ul style="list-style-type: none"> <li>a. The Region of Waterloo shall develop and implement an incentive program for persons engaging in the activity of the existing application, temporary storage and/or permanent storage of agricultural source material on farms not phased in under the Nutrient Management Act in the following areas: <ul style="list-style-type: none"> <li>i. In Wellhead Protection Areas A and B where the vulnerability is equal to ten (10);</li> <li>ii. In Wellhead Protection Area E where the vulnerability is greater than or equal to eight (8);</li> <li>iii. Where a Nitrate Issue has been identified, in all Issue Contributing Areas where the vulnerability is greater than or equal to six (6).</li> </ul> </li> <li>b. The Region of Waterloo shall develop and implement an education and outreach program for persons engaging in the existing and new application and temporary and permanent storage of agricultural source material in the following areas: <ul style="list-style-type: none"> <li>i. In Intake Protection Zones Two (2) and Three (3) where the vulnerability is greater than or equal to eight (8);</li> <li>ii. Where a Nitrate Issue has been identified, in all Issue Contributing Areas where the vulnerability is less than six (6).</li> </ul> </li> </ul>

### Threat 6.0 – The Application of Non-Agricultural Source Material (NASM) to Land

### Threat 7.0 – The Handling and Storage of Non-Agricultural Source Material (NASM)

Policy Number	6.1 – Application of non-agricultural source material (NASM) to land 7.1 – The handling and storage of non-agricultural source material (NASM)
RW-MC-25  <i>Existing/Future Prescribed Instr.</i>	To ensure the existing and/or future application, handling and storage of non-agricultural source material cease to be or do not become a significant drinking water threat where these activities are or would be a significant threat, the Ministry of the Environment, Conservation



Policy Number	<b>6.1 – Application of non-agricultural source material (NASM) to land</b> <b>7.1 – The handling and storage of non-agricultural source material (NASM)</b>
	<p>and Parks and/or Ministry of Agriculture, Food and Rural Affairs shall prohibit these activities within the Environmental Compliance Approvals process and/or Non-Agricultural Source Material Plans to ensure they do not become a significant drinking water threat:</p> <p>a. Existing:</p> <ul style="list-style-type: none"> <li>i. Application, Handling, Storage; <ul style="list-style-type: none"> <li>i. In Wellhead Protection Area A;</li> <li>ii. In Intake Protection Zone One (1).</li> </ul> </li> </ul> <p>b. Future:</p> <ul style="list-style-type: none"> <li>i. Application, Handling, Storage; <ul style="list-style-type: none"> <li>i. In Wellhead Protection Area A;</li> <li>ii. In Intake Protection Zone One (1).</li> </ul> </li> </ul>
RW-MC-26  <i>Existing/Future Prescribed Instr.</i>	<p>To ensure the existing and/or future application, handling and storage of non-agricultural source material do not become or cease to be a significant drinking water threat where these activities are or would be a significant threat Ministry of Agriculture, Food and Rural Affairs shall review and, if necessary, amend existing and approve new Non-Agricultural Source Material Plans with the terms and conditions set out below, as appropriate, where required under the <i>Nutrient Management Act</i> for the following:</p> <p>a. Existing:</p> <ul style="list-style-type: none"> <li>i. Application; <ul style="list-style-type: none"> <li>i. In Wellhead Protection Area B where the vulnerability is equal to ten (10);</li> <li>ii. In Wellhead Protection Area E where the vulnerability is greater than or equal to eight (8);</li> <li>iii. Where a Nitrate Issue has been identified, in all Issue Contributing Areas except Wellhead Protection Area A.</li> </ul> </li> <li>ii. Handling and Storage; <ul style="list-style-type: none"> <li>i. In Wellhead Protection Area B where the vulnerability is equal to ten (10);</li> <li>ii. In Wellhead Protection Area E where the vulnerability is greater than or equal to eight (8);</li> <li>iii. Where a Nitrate Issue has been identified, in all Issue Contributing Areas except Wellhead Protection Area A.</li> </ul> </li> </ul> <p>b. Future:</p> <ul style="list-style-type: none"> <li>i. Application;</li> </ul>



Policy Number	<b>6.1 – Application of non-agricultural source material (NASM) to land</b> <b>7.1 – The handling and storage of non-agricultural source material (NASM)</b>
	<ul style="list-style-type: none"> <li>i. In Wellhead Protection Area B where the vulnerability is equal to ten (10);</li> <li>ii. In Wellhead Protection Area E where the vulnerability is greater than or equal to eight (8);</li> <li>iii. Where a Nitrate Issue has been identified, in all Issue Contributing Areas except Wellhead Protection Area A.</li> </ul> <ul style="list-style-type: none"> <li>ii. Handling and Storage;               <ul style="list-style-type: none"> <li>i. In Wellhead Protection Area B where the vulnerability is equal to ten (10);</li> <li>ii. In Wellhead Protection Area E where the vulnerability is greater than or equal to eight (8);</li> <li>iii. Where a Nitrate Issue has been identified, in all Issue Contributing Areas except Wellhead Protection Area A.</li> </ul> </li> </ul> <p>For the application of non-agricultural source material, the Plan should include measures that reduce potential for surface water run-off and groundwater infiltration of nitrogen.</p>
RW-MC-27  <i>Existing/Future Prescribed Instr.</i>	<p>To ensure that existing and/or future off-farm application or handling and storage of non-agricultural source material as processed organic waste (i.e. biosolids) do not become or cease to be a significant drinking water threat where these activities are or would be a significant threat, the Ministry of the Environment, Conservation and Parks shall review and, if necessary, amend, existing and approve new Environmental Compliance Approvals with the conditions set out below, as appropriate, for the following:</p> <ul style="list-style-type: none"> <li>a. Existing:           <ul style="list-style-type: none"> <li>i. Application;               <ul style="list-style-type: none"> <li>i. In Wellhead Protection Area B where the vulnerability is equal to ten (10);</li> <li>ii. In Wellhead Protection Area E where the vulnerability is greater than eight (8);</li> <li>iii. Where a Nitrate Issue has been identified in all Issue Contributing Areas except in Wellhead Protection Area A.</li> </ul> </li> <li>ii. Handling and Storage;               <ul style="list-style-type: none"> <li>i. In Wellhead Protection Area B where the vulnerability is equal to ten (10);</li> <li>ii. In Wellhead Protection Area E where the vulnerability is greater than eight (8);</li> <li>iii. Where a Nitrate Issue has been identified in all Issue Contributing Areas except in Wellhead Protection Area A.</li> </ul> </li> </ul> </li> </ul>

Policy Number	<b>6.1 – Application of non-agricultural source material (NASM) to land</b> <b>7.1 – The handling and storage of non-agricultural source material (NASM)</b>
	<p>b. Future:</p> <ul style="list-style-type: none"> <li>i. Application; <ul style="list-style-type: none"> <li>i. In Wellhead Protection Area B where the vulnerability is equal to ten (10);</li> <li>ii. In Wellhead Protection Area E where the vulnerability is greater than eight (8);</li> <li>iii. Where a Nitrate Issue has been identified in all Issue Contributing Areas except in Wellhead Protection Area A.</li> </ul> </li> <li>ii. Handling and storage; <ul style="list-style-type: none"> <li>i. In Wellhead Protection Area B where the vulnerability is equal to ten (10);</li> <li>ii. In Wellhead Protection Area E where the vulnerability is greater than eight (8);</li> <li>iii. Where a Nitrate Issue has been identified in all Issue Contributing Areas except in Wellhead Protection Area A.</li> </ul> </li> </ul> <p>For the application of non-agricultural source material, the Approval should include measures to ensure application rate, timing and location are appropriate for uptake of nitrogen on an annual basis and that reduce potential for surface water run-off and groundwater infiltration.</p> <p>For the handling and storage of non-agricultural source material, the Approval should include measures to minimize, contain and respond to spills and leaks.</p>
RW-MC-27.1 Removed	Intentionally deleted to preserve numbering.

### Threat 8.0 – The Application of Commercial Fertilizer to Land

### Threat 9.0 – The Handling and Storage of Commercial Fertilizer

Policy Number	<b>8.1 – Application of commercial fertilizer to land</b> <b>9.1 – Handling and storage of commercial fertilizer</b>
RW-CW-28  <i>Existing/ Future</i> <i>Part IV-Prohibit</i>	To ensure the existing and/or future handling and storage of commercial fertilizer cease to be or do not become a significant drinking water threat where these activities are or would be a significant threat, these activities are designated for the purpose of Section 57 of the <i>Clean Water Act, 2006</i> and are prohibited within the following vulnerable areas and for the following activities:

Policy Number	8.1 – Application of commercial fertilizer to land 9.1 – Handling and storage of commercial fertilizer
	<p>a. Existing:</p> <ul style="list-style-type: none"> <li>i. Handling and Storage;</li> <li>i. In Wellhead Protection Area A.</li> </ul> <p>b. Future:</p> <ul style="list-style-type: none"> <li>i. Handling and Storage;</li> <li>i. In Wellhead Protection Area A.</li> </ul>
<p>RW-CW-29</p> <p><i>Existing/ Future Part IV-RMP</i></p>	<p>To ensure that existing and future application and handling and storage of commercial fertilizer do not become or cease to be a significant drinking water threat where these activities are or would be a significant threat, these activities shall be designated for the purpose of Section 58 of the <i>Clean Water Act, 2006</i> and a Risk Management Plan shall be required in the following areas and for the following activities:</p> <p>a. Existing:</p> <ul style="list-style-type: none"> <li>i. Application; <ul style="list-style-type: none"> <li>i. In Wellhead Protection Areas A and B where the vulnerability is equal to ten (10);</li> <li>ii. In Intake Protection Zone One (1);</li> <li>iii. In Wellhead Protection Area E where the vulnerability is equal to nine (9);</li> <li>iv. Where a Nitrate Issue has been identified, in all Issue Contributing Areas where the vulnerability is greater than or equal to six (6).</li> </ul> </li> <li>ii. Handling and Storage; <ul style="list-style-type: none"> <li>i. In Wellhead Protection Area B, where the vulnerability is equal to ten (10);</li> <li>ii. Where a Nitrate Issue has been identified, all Issue Contributing Areas except Wellhead Protection Area A where the vulnerability is greater than or equal to six (6).</li> </ul> </li> </ul> <p>b. Future:</p> <ul style="list-style-type: none"> <li>i. Application; <ul style="list-style-type: none"> <li>i. In Wellhead Protection Areas A and B where the vulnerability is equal to ten (10);</li> <li>ii. In Intake Protection Zone One (1);</li> <li>iii. In Wellhead Protection Area E where the vulnerability is equal to nine (9);Where a Nitrate Issue has been identified, in all Issue Contributing Areas where the vulnerability is greater than or equal to six (6).</li> </ul> </li> <li>ii. Handling and Storage;</li> </ul>

Policy Number	<b>8.1 – Application of commercial fertilizer to land</b> <b>9.1 – Handling and storage of commercial fertilizer</b>
	<ul style="list-style-type: none"> <li>i. In Wellhead Protection Area B, where the vulnerability is equal to ten (10);</li> <li>ii. Where a Nitrate Issue has been identified, in all Issue Contributing Areas except Wellhead Protection Area A where the vulnerability is greater than or equal to six (6).</li> </ul> <p>For the application of commercial fertilizer, the Risk Management Plan shall include, as a minimum, measures to ensure application rate, timing and location are appropriate for uptake of nitrogen on an annual basis and that reduce potential for surface water run-off and increase groundwater infiltration.</p> <p>For the handling and storage of commercial fertilizer, the Risk Management Plan shall include, as a minimum, measures to reduce the likelihood of spills and leaks and contain and respond to spills.</p>
RW-CW-30  <i>Existing/Future</i> <i>a) Incentive</i> <i>b) Education &amp; Outreach</i>	<p>To promote best management practices and to provide guidance about the importance of source water protection:</p> <ul style="list-style-type: none"> <li>a. The Region of Waterloo shall develop and implement an incentive program for persons engaging in the activity of the existing application and storage of commercial fertilizer in the following areas: <ul style="list-style-type: none"> <li>i. In Wellhead Protection Areas A and B where the vulnerability is equal to ten (10);</li> <li>ii. In Intake Protection Zone One (1);</li> <li>iii. In Wellhead Protection Area E where the vulnerability is equal to nine (9); Where a Nitrate Issue has been identified, in all Issue Contributing Areas where the vulnerability is greater than or equal to six (6).</li> </ul> </li> <li>b. The Region of Waterloo shall develop and implement an education and outreach program for persons engaging in existing and new application and storage of commercial fertilizer in the following areas: <ul style="list-style-type: none"> <li>i. In Intake Protection Zones Two (2) and Three (3) where the vulnerability is equal to nine (9);</li> <li>ii. Where a Nitrate Issue has been identified, in all Issue Contributing Areas where the vulnerability is less than six (6).</li> </ul> </li> </ul>

### Threat 10.0 – The Application of Pesticide to Land

### Threat 11.0 – The Handling and Storage of Pesticide

Policy Number	10.1 – Application of pesticide to land
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RW-CW-31  <i>Future Part IV-Prohibit</i>	<p>To ensure the new application and handling and storage of pesticide does not become a significant drinking water threat, these activities are designated for the purpose of Section 57 of the <i>Clean Water Act, 2006</i> and are prohibited within the following vulnerable areas and for the following activities:</p> <p>a. Future:</p> <ul style="list-style-type: none"> <li>i. Application, Handling and Storage; <ul style="list-style-type: none"> <li>i. In a Wellhead Protection Area A;</li> <li>ii. In Intake Protection Zone One (1).</li> </ul> </li> </ul>
RW-CW-32  <i>Existing/Future Part IV-RMP</i>	<p>To ensure that existing and/or future application and handling and storage of pesticides do not become or cease to be a significant drinking water threat where these activities are or would be a significant threat, these activities shall be designated for the purpose of Section 58 of the <i>Clean Water Act, 2006</i> and a Risk Management Plan shall be required in the following areas and for the following activities:</p> <p>a. Existing:</p> <ul style="list-style-type: none"> <li>i. Application; <ul style="list-style-type: none"> <li>i. In Wellhead Protection Area A;</li> <li>ii. In Wellhead Protection Area B where the vulnerability is equal to ten (10);</li> <li>iii. In Intake Protection Zone One (1);</li> <li>iv. In Wellhead Protection Area E where the vulnerability is greater than eight (8).</li> </ul> </li> <li>ii. Handling and Storage; <ul style="list-style-type: none"> <li>i. In Wellhead Protection Area A;</li> <li>ii. In Wellhead Protection Area B where the vulnerability is equal to ten (10);</li> <li>iii. In Intake Protection Zone One (1);</li> <li>iv. In Wellhead Protection Area E where the vulnerability is equal to nine (9).</li> </ul> </li> </ul> <p>b. Future:</p> <ul style="list-style-type: none"> <li>i. Application; <ul style="list-style-type: none"> <li>i. In Wellhead Protection Area B where the vulnerability is equal to ten (10);</li> <li>ii. In Wellhead Protection Area E where the vulnerability is greater than eight (8).</li> </ul> </li> <li>ii. Handling and Storage; <ul style="list-style-type: none"> <li>In Wellhead Protection Area B where the vulnerability is equal to ten (10).</li> </ul> </li> </ul>
RW-CW-33	<p>To promote best management practices and to provide guidance about the importance of source water protection:</p>

<p><i>Existing/Future</i>  a) <i>Incentive</i>  b) <i>Education &amp; Outreach</i></p>	<p>a. The Region of Waterloo shall develop and implement an incentive program for persons engaging in the activity of the existing application and storage of pesticide in the following areas:</p> <ul style="list-style-type: none"> <li>i. In Wellhead Protection Areas A and B where the vulnerability is equal to ten (10);</li> <li>ii. In Intake Protection Zone One (1);</li> <li>iii. In Wellhead Protection Area E where the vulnerability is greater than eight (8).</li> </ul> <p>b. The Region of Waterloo shall develop and implement an education and outreach program for persons engaging in existing and new application and storage of pesticide in the following areas:</p> <ul style="list-style-type: none"> <li>i. In Intake Protection Zones Two (2) and Three (3) where the vulnerability is greater than eight (8).</li> </ul>
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### Threat 12.0 – The Application of Road Salt

### Threat 13.0 – The Handling and Storage of Road Salt

Policy Number	
<p>RW-CW-34</p> <p><i>Future</i>  <i>Part IV-Prohibit</i></p>	<p>To ensure the new application of road salt does not become a significant drinking water threat where this activity would be a significant threat, this activity is designated for the purpose of Section 57 of the <i>Clean Water Act, 2006</i> and is prohibited within the following vulnerable areas and for the following activities:</p> <p>a. Future:</p> <ul style="list-style-type: none"> <li>i. Application of salt on roadways related to the development of new roads that would occur as the result of the approval of a <i>Planning Act</i> or <i>Condominium Act</i> application; <ul style="list-style-type: none"> <li>i. In Wellhead Protection Area A;</li> <li>ii. In Intake Protection Zone One (1).</li> </ul> </li> <li>ii. Application of salt on new parking lots that would occur as the result of the approval of a <i>Planning Act</i>, <i>Condominium Act</i> or Ontario Building Code application; <ul style="list-style-type: none"> <li>i. In Wellhead Protection Area A, for large parking lots;</li> <li>ii. In Intake Protection Zone One (1), for medium and large parking lots.</li> </ul> </li> </ul>
<p>RW-CW-34.1</p> <p><i>Existing/Future</i>  <i>Part IV-Prohibit</i></p>	<p>To ensure the existing and future handling and storage of road salt ceases to be or does not become a significant drinking water threat where this activity is or would be a significant threat, this activity is designated in accordance with Section 57 of the <i>Clean Water Act</i>,</p>

	<p>2006 and is prohibited within the following vulnerable areas and for the following activities:</p> <ul style="list-style-type: none"> <li>a. Existing: <ul style="list-style-type: none"> <li>i. In Wellhead Protection Area A where the vulnerability is equal to ten (10), for any uncovered storage of any amount and covered for amounts greater than or equal to one (1) tonne of salt or greater than or equal to one thousand (1000) liters of brine ;</li> <li>ii. In Intake Protection Zone One (1), for any uncovered storage of any amount and covered for amounts greater than or equal to one (1) tonne of salt or greater than or equal to one thousand (1000) liters of brine;</li> <li>iii. Where a Chloride and/or Sodium Issue has been identified, in all Wellhead Protection Areas, for any uncovered storage of any amount.</li> </ul> </li> <li>b. Future: <ul style="list-style-type: none"> <li>i. In Wellhead Protection Areas A and B where the vulnerability is equal to ten (10), for any uncovered storage of any amount and covered for amounts greater than or equal to one (1) tonne of salt or greater than or equal to one thousand (1000) liters of brine;</li> <li>ii. In Intake Protection Zone One (1) for any uncovered storage of any amount and covered for amounts greater than or equal to one (1) tonne of salt or greater than or equal to one thousand (1000) liters of brine;</li> <li>iii. Where a Chloride and/or Sodium Issue has been identified, in all Wellhead Protection Areas, for any uncovered storage of any amount.</li> </ul> </li> </ul>
<p>RW-CW-35</p> <p><i>Existing/ Future Part IV-RMP</i></p>	<p>To ensure the existing and/or future application of road salt does not become or ceases to be a significant drinking water threat where this activity is or would be a significant threat, this activity shall be designated for the purpose of Section 58 of the <i>Clean Water Act, 2006</i> and a Risk Management Plan shall be required within the following areas and for the following activities:</p> <ul style="list-style-type: none"> <li>a. Existing: <ul style="list-style-type: none"> <li>i. Application of Salt on Roadways; <ul style="list-style-type: none"> <li>i. In Wellhead Protection Areas A and B where the vulnerability is equal to ten (10);</li> <li>ii. Where a Chloride and/or Sodium Issue has been identified, in all Wellhead Protection Areas</li> </ul> </li> </ul> </li> <li>ii. Application on Parking Lots;</li> </ul>



	<ul style="list-style-type: none"> <li>i. In Wellhead Protection Areas A and B where the vulnerability is equal to ten (10), for medium or large parking lots;</li> <li>ii. In Intake Protection Zone One (1), for medium and large parking lots;</li> <li>iii. Where a Chloride and/or Sodium Issue has been identified, in all Wellhead Protection Areas, for medium and large parking lots.</li> </ul> <p>b. Future:</p> <ul style="list-style-type: none"> <li>i. Application of Salt on Roadways that would occur as the result of the approval of a <i>Planning Act</i>, <i>Condominium Act</i>, or Ontario Building Code application or upon completion of an Environmental Assessment in accordance with the Environmental Assessment Act; <ul style="list-style-type: none"> <li>i. In Wellhead Protection Area B where the vulnerability is equal to ten (10);</li> <li>ii. Where a Chloride and/or Sodium Issue has been identified, in all Wellhead Protection Areas except for Wellhead Protection Area A.</li> </ul> </li> <li>ii. Application on Parking Lots that would occur as the result of the approval of a <i>Planning Act</i>, <i>Condominium Act</i> or Ontario Building Code application; <ul style="list-style-type: none"> <li>i. In Wellhead Protection Area A, for medium parking lots;</li> <li>ii. In Wellhead Protection Area B where the vulnerability is equal to ten (10), for medium or large parking lots;</li> <li>iii. Where a Chloride and/or Sodium Issue has been identified, in all Wellhead Protection Areas except for Wellhead Protection Area A, for medium and large parking lots.</li> </ul> </li> </ul> <p>The Risk Management Plan for application of salt on large and medium parking lots shall contain, as a minimum, management practices that achieve a performance standard equivalent to that of an accredited site under the Smart About Salt program to reduce the impact of de-icing activities and for new parking lots include design considerations for driving areas and sidewalks to reduce impacts to drinking water sources.</p> <p>The Risk Management Plan for application of salt on roadways shall include, as a minimum, measures to ensure application rate, timing and location reduce the potential for surface water runoff and groundwater infiltration and meet the objectives of Environment Canada's Code of Practice for Environmental Management of Road Salts including identification of areas where significant threats can occur as Vulnerable Areas and management practices in these areas.</p>
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<p>RW-CW-35.1</p> <p><i>Existing/ Future</i> <i>Part IV-RMP</i></p>	<p>To ensure that the storage of road salt does not become or ceases to be a significant drinking water threat where this activity is or would be a significant threat, this activity shall be designated for the purpose of Section 58 of the <i>Clean Water Act, 2006</i> and a Risk Management Plan shall be required within the following areas and for the following activities:</p> <p>a. Existing:</p> <ul style="list-style-type: none"> <li>i. Storage; <ul style="list-style-type: none"> <li>i. In Wellhead Protection Area A where the vulnerability is equal to ten (10) for covered storage in amounts less than one (1) tonne of salt or less than one thousand (1000) L of brine;</li> <li>ii. In Wellhead Protection Areas B where the vulnerability is equal to ten (10), for any uncovered storage of any amount and covered for amounts greater than or equal to one (1) tonne of salt or greater than or equal to one thousand (1000) liters of brine;</li> <li>iii. Where a Chloride and/or Sodium Issue has been identified, in all Wellhead Protection Areas except Wellhead Protection Area A, for covered storage in amounts greater than or equal to one (1) tonne of salt or greater than one thousand (1000) L of brine;</li> </ul> </li> </ul> <p>b. Future:</p> <ul style="list-style-type: none"> <li>i. Storage; <ul style="list-style-type: none"> <li>i. In Wellhead Protection Area A where the vulnerability is equal to ten (10) for covered storage in amounts less than one (1) tonne of salt or less than one thousand (1000) L of brine;</li> <li>ii. Where a Chloride and/or Sodium Issue has been identified, in all Wellhead Protection Areas except Wellhead Protection Area A, , for covered storage in amounts greater than or equal to one (1) tonne of salt or greater than one thousand (1000) L of brine.</li> </ul> </li> </ul> <p>The Risk Management Plan for the handling and storage of salt or brine shall contain, as a minimum, management practices that achieve a performance standard equivalent to that of an accredited site under the Smart About Salt program to reduce the impact of de-icing activities and for new parking lots include design considerations for roads and sidewalks to reduce the impact.</p>
<p>RW-MC-36</p> <p><i>Future</i></p>	<p>The Region of Waterloo and Area Municipalities shall amend their Official Plans to state that <i>Planning Act</i> and <i>Condominium Act</i> applications proposing new roads as part of a subdivision and condominium applications where salt could be applied may be</p>

<p><i>Land Use Planning</i></p>	<p>permitted subject to study in accordance with the Regional Implementation Guideline for Source Water Protection Studies and a Regional Salt Impact Assessment to the satisfaction of the Region of Waterloo:</p> <ul style="list-style-type: none"> <li>i. In Wellhead Protection Area B where the vulnerability is equal to ten (10);</li> <li>ii. Where a Chloride and/or Sodium Issue has been identified, in all Wellhead Protection Areas except Wellhead Protection Area A.</li> </ul>
<p>RW-CW-37</p> <p><i>Existing/Future</i>  <i>a) Incentive</i>  <i>b) Education &amp; Outreach</i></p>	<p>To provide guidance about the importance of source water protection and to promote best management practices:</p> <ul style="list-style-type: none"> <li>a. The Region of Waterloo shall develop and implement an incentive program for persons engaging in the following existing activities in the following areas: <ul style="list-style-type: none"> <li>i. Application of salt on large or medium-sized parking lots: <ul style="list-style-type: none"> <li>i. In Wellhead Protection Areas A and B where the vulnerability is equal to ten (10);</li> <li>ii. In Intake Protection Zone One (1);</li> <li>iii. Where a Chloride and/or Sodium issue has been identified, in all Wellhead Protection Areas.;</li> </ul> </li> <li>ii. Storage of salt: <ul style="list-style-type: none"> <li>i. In Wellhead Protection Areas A and B where the vulnerability is equal to ten (10);</li> <li>ii. Where a Chloride and/or Sodium issue has been identified, in all Wellhead Protection Areas for storage in amounts greater than or equal to one (1) tonne of salt or greater than one thousand (1000) liters of brine</li> </ul> </li> </ul> </li> </ul> <p>The incentive program shall encourage the implementation of the best management practices that form the core of the Smart About Salt program to reduce the impact of winter de-icing activities.</p> <ul style="list-style-type: none"> <li>b. The Region of Waterloo shall develop and implement an education and outreach program for persons involved in the existing and new application and handling and storage of salt in the following areas: <ul style="list-style-type: none"> <li>i. Application of salt on large or medium-sized parking lots: <ul style="list-style-type: none"> <li>i. In Wellhead Protection Areas A and B where the vulnerability is equal to ten (10);</li> <li>ii. In Intake Protection Zone One (1);</li> <li>iii. Where a Chloride and/or Sodium issue has been identified, in all Wellhead Protection Areas.;</li> </ul> </li> <li>ii. Storage of salt: <ul style="list-style-type: none"> <li>i. In Wellhead Protection Areas A and B where the vulnerability is equal to ten (10);</li> </ul> </li> </ul> </li> </ul>

	<ul style="list-style-type: none"> <li>ii. Where a Chloride and/or Sodium Issue has been identified, in all Wellhead Protection Areas.</li> <li>iii. Application of salt on small parking lots and on roadways: <ul style="list-style-type: none"> <li>i. Where a Chloride and/or Sodium issue has been identified, in all Wellhead Protection Areas;</li> <li>ii. In Intake Protection Zone One (1).</li> </ul> </li> </ul> <p>The education and outreach programs shall encourage the implementation of the best management practices that form the core of the Smart About Salt program to reduce the impact of winter de-icing activities.</p> <ul style="list-style-type: none"> <li>c. The Area Municipalities, in conjunction with the Region of Waterloo, shall develop and implement an education and outreach program for persons involved in the application and storage of salt in the following areas: <ul style="list-style-type: none"> <li>i. Where a Chloride and/or Sodium Issue has been identified, in all Wellhead Protection Areas.</li> </ul> </li> </ul> <p>The education and outreach program shall include messages about best salt management practices to protect drinking water in their winter maintenance bylaw promotion.</p>
RW-CW-38 Removed	Intentionally deleted to preserve numbering.
RW-CW-39  <i>Existing Specify Action</i>	Where a Chloride and/or Sodium Issue has been identified, the Region of Waterloo and Area Municipalities shall review and, if necessary, revise their Salt Management Plans for the application of salt on roadways in all Wellhead Protection Areas. The Salt Management Plan shall include, as a minimum, measures to ensure application rate, timing and location reduce the potential for salt-related surface water run-off and groundwater infiltration and meet the objectives of Environment Canada's Code of Practice for Environmental Management of Road Salts including the salt vulnerable area mapping to include areas where significant threats can occur.
RW-NB-39.1  <i>Existing Specify Action</i>	Where a Chloride and/or Sodium Issue has been identified, the Ontario Ministry of Transportation should review and, if necessary, revise their Salt Management Plans for the application of salt on roadways in all Wellhead Protection Areas. The Salt Management Plan should include, as a minimum, measures to ensure application rate, timing and location reduce the potential for salt-related surface water run-off and groundwater infiltration and meet the objectives of Environment Canada's Code of Practice for Environmental Management of Road Salts including the salt vulnerable area mapping to include areas where significant threats can occur.

<p>RW-CW/NB-40</p> <p><i>Existing/Future Specify Action</i></p>	<p>The Region of Waterloo and Area Municipalities and the Ontario Ministry of Transportation shall enhance road design measures in Environmental Assessments to modify, widen or expand existing roads and/or design/develop new roads to minimize the impact from any application of salt on roadways related to the development of new roads in the following area:</p> <ul style="list-style-type: none"> <li>i. In Wellhead Protection Area B where the vulnerability is equal to ten (10);</li> <li>ii. Where a Chloride and/or Sodium Issue has been identified, in all Wellhead Protection Areas. The assessment should make recommendation for enhanced measures to protect drinking water sources to be carried through detailed design and construction of the road.</li> </ul>
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### Threat 14.0 – The Storage of Snow

Policy Number	14.1 – Storage of snow on a site
<p>RW-CW-41</p> <p><i>Existing/Future Part IV-Prohibit</i></p>	<p>To ensure the existing and/or future storage of snow ceases to be or does not become a significant drinking water threat where this activity is or would be a significant threat, the activity is designated for the purpose of Section 57 of the <i>Clean Water Act, 2006</i> and is prohibited within the following vulnerable areas and for the following activities:</p> <ul style="list-style-type: none"> <li>a. Existing: <ul style="list-style-type: none"> <li>i. Storage; <ul style="list-style-type: none"> <li>i. In Wellhead Protection Areas A and B where the vulnerability is equal to ten (10);</li> <li>ii. In Intake Protection Zone One (1);</li> <li>iii. In Intake Protection Zones Two (2) and Three (3) and Wellhead Protection Area E where the vulnerability is equal to nine (9);</li> <li>iv. Where a Chloride, Sodium and/or Nitrate Issue has been identified, in all Issue Contributing Areas where the vulnerability is greater than or equal to six (6), with an area greater than or equal to 0.5 hectares.</li> </ul> </li> </ul> </li> <li>b. Future: <ul style="list-style-type: none"> <li>i. Storage; <ul style="list-style-type: none"> <li>i. In Wellhead Protection Areas A and B where the vulnerability is equal to ten (10);</li> <li>ii. In Intake Protection Zone One (1);</li> <li>iii. In Intake Protection Zones Two (2) and Three (3) and Wellhead Protection Area E where the vulnerability is equal to nine (9);</li> </ul> </li> </ul> </li> </ul>

Policy Number	14.1 – Storage of snow on a site
	<p>iv. Where a Chloride, Sodium and/or Nitrate Issue has been identified, in all Issue Contributing Areas where the vulnerability is greater than or equal to six (6), with an area greater than or equal to 0.5 hectares.</p>
<p>RW-CW-42</p> <p><i>Existing/Future Part IV-RMP</i></p>	<p>To ensure the existing and/or future storage of snow does not become or ceases to be a significant drinking water threat where this activity is or would be a significant threat, this activity shall be designated for the purpose of Section 58 of the <i>Clean Water Act, 2006</i> and a Risk Management Plan shall be required in the following areas and for the following activities:</p> <p>a. Existing:</p> <p>i. Storage;</p> <p>i. Where a Chloride, Sodium and/or Nitrate Issue has been identified, in all Issue Contributing Areas where the vulnerability is greater than or equal to six (6), with an area greater than or equal to 0.05 and less than 0.5 hectares.</p> <p>b. Future:</p> <p>i. Storage;</p> <p>i. Where a Chloride, Sodium and/or Nitrate Issue has been identified, in all Issue Contributing Areas where the vulnerability is greater than or equal to six (6), with an area greater than or equal to 0.05 and less than 0.5 hectares.</p> <p>The Risk Management Plan shall include, as a minimum, measures to reduce risk based on an assessment of criteria in the Ministry of the Environment, Conservation and Parks implementation of Guideline B-4 (Snow Disposal and De-icing Operations in Ontario 2011) including measures that minimize the impact of surface and sub-surface drainage in selection of suitable sites for disposal.</p>
<p>RW-CW-43</p> <p><i>Existing a) Incentive</i></p> <p><i>Existing/Future b) Education &amp; Outreach</i></p>	<p>To provide guidance about the importance of source water protection and to promote best management practices;</p> <p>a. The Region of Waterloo shall develop and implement an incentive program for persons involved in existing storage of snow in the following areas:</p> <p>i. In Wellhead Protection Areas A and B where the vulnerability is equal to ten (10);</p> <p>ii. Where a Chloride, Sodium and/or Nitrate Issue has been identified, in all Issue Contributing Areas.</p>

Policy Number	14.1 – Storage of snow on a site
	<p>b. The Region of Waterloo shall develop and implement an education and outreach program for persons involved in existing and future storage of snow in the following areas:</p> <ul style="list-style-type: none"> <li>i. In Wellhead Protection Areas A and B where the vulnerability is equal to ten (10);</li> <li>ii. Where a Chloride, Sodium and/or Nitrate Issue has been identified, in all Issue Contributing Areas.</li> </ul> <p>The education and outreach program should encourage the use of beneficial management practices that ensure that the activity does not become or ceases to be a threat to drinking water.</p>
RW-NB-44  <i>Future Specify Action</i>	<p>The Ontario Ministry of the Environment, Conservation and Parks should consider an approval process for storage of snow in Wellhead Protection Areas where this activity can be a significant drinking water threat following Guideline B-4 (Snow Disposal and De-icing Operations in Ontario, 2011) including measures that minimize the impact of surface and sub-surface drainage for any new storage of snow.</p>

### Threat 15.0 – The Handling and Storage of Fuel

Policy Number	15.1 – Handling and storage of fuel
RW-CW-45  <i>Existing/Future Part IV-Prohibit</i>	<p>To ensure the existing and/or new handling and storage of a fuel ceases to be or does not become a significant drinking water threat where this activity is or would be a significant threat, this activity is designated for the purpose of Section 57 of the <i>Clean Water Act, 2006</i> and is prohibited within the following vulnerable areas and for the following activities except where used in a single detached dwelling:</p> <ul style="list-style-type: none"> <li>a. Existing:               <ul style="list-style-type: none"> <li>i. Below Grade Handling and Storage;                   <ul style="list-style-type: none"> <li>i. In Wellhead Protection Area A, for liquid fuel excluding fuel storage associated with a municipal water supply emergency generator facility.</li> </ul> </li> </ul> </li> <li>b. Future:               <ul style="list-style-type: none"> <li>i. Below Grade Handling and Storage;                   <ul style="list-style-type: none"> <li>i. In Wellhead Protection Areas A and B where the vulnerability is equal to ten (10), for liquid fuel and fuel oil;</li> <li>ii. In Intake Protection Zone One (1) for liquid fuel and fuel oil.</li> </ul> </li> </ul> </li> </ul>



Policy Number	15.1 – Handling and storage of fuel
	<ul style="list-style-type: none"> <li>ii. Above Grade Handling and Storage;               <ul style="list-style-type: none"> <li>i. In Wellhead Protection Area A, for liquid fuel excluding fuel storage associated with a municipal water supply emergency generator facility;</li> <li>ii. In Wellhead Protection Area A, for fuel oil;</li> <li>iii. In Intake Protection Zone One (1), for liquid fuel and fuel oil.</li> </ul> </li> </ul>
RW-CW-46  <i>Existing/Future</i> <i>Part IV-RMP</i>	<p>To ensure the existing and/or future handling and storage of fuel does not become or ceases to be a significant drinking water threat where this activity is or would be a significant threat, this activity shall be designated for the purpose of Section 58 of the <i>Clean Water Act, 2006</i> and a Risk Management Plan shall be required in the following areas and for the following activities:</p> <p>a. Existing:</p> <ul style="list-style-type: none"> <li>i. Below Grade Handling and Storage;               <ul style="list-style-type: none"> <li>i. In Wellhead Protection Area B where the vulnerability is equal to ten (10), for liquid fuel;</li> <li>ii. In Wellhead Protection Area A, for liquid fuel storage associated with a municipal water supply emergency generator facility;</li> <li>iii. In Wellhead Protection Areas A and B where the vulnerability is equal to ten (10), for fuel oil;</li> <li>iv. In Intake Protection Zone One (1), for liquid fuel and fuel oil;</li> <li>v. Intake Protection Zones Two (2) and Three (3) where the vulnerability is equal to nine (9), for liquid fuel and fuel oil;</li> <li>vi. In Wellhead Protection Area E where the vulnerability is equal to nine (9), for liquid fuel and fuel oil.</li> </ul> </li> <li>ii. Above Grade Handling and Storage;               <ul style="list-style-type: none"> <li>i. In Wellhead Protection Areas A and B where the vulnerability is equal to ten (10), for liquid fuel;</li> <li>ii. In Wellhead Protection Areas A and B where the vulnerability is equal to ten (10), for fuel oil tanks;</li> <li>iii. Intake Protection Zones Two (2) and Three (3) where the vulnerability is equal to nine (9), for liquid fuel and fuel oil;</li> <li>iv. In Wellhead Protection Area E where the vulnerability is equal to nine (9), for liquid fuel and fuel oil.</li> </ul> </li> </ul> <p>b. Future:</p> <ul style="list-style-type: none"> <li>i. Above Grade Handling and Storage;</li> </ul>

Policy Number	15.1 – Handling and storage of fuel
	<ul style="list-style-type: none"> <li>i. In Wellhead Protection Area B where the vulnerability is equal to ten (10), for liquid fuel except at bulk liquid fuel facilities, gas stations and transportation terminals;</li> <li>ii. In Wellhead Protection Area A, for liquid fuel associated with a municipal water supply emergency generator facility;</li> <li>iii. In Wellhead Protection Area B where the vulnerability is equal to (10), for fuel oil tanks;</li> <li>iv. Intake Protection Zones Two (2) and Three (3) where the vulnerability is equal to nine (9), for liquid fuel and fuel oil;</li> <li>v. In Wellhead Protection Area E where the vulnerability is equal to nine (9), for liquid fuel and fuel oil.</li> </ul> <p>The Risk Management Plan shall include, as a minimum, measures to reduce the likelihood of spills and leaks and contain and respond to spills.</p>
RW-MC-47  <i>Future Land Use Planning</i>	Where future storage of fuel would be a significant drinking water threat within a vulnerable area, the Region of Waterloo and Area Municipalities shall review and, if necessary, amend their Official Plans and Zoning By-laws to prohibit new bulk liquid fuel facilities, gas stations and transportation terminals excluding fuel storage associated with a municipal emergency generator facility in Wellhead Protection Areas A and B where the vulnerability is equal to ten (10).
RW-CW-48  <i>Existing/Future a)Incentive b) &amp; c)Education &amp; Outreach</i>	<p>To provide guidance about the importance of source water protection and to promote best management practices:</p> <ul style="list-style-type: none"> <li>a. The Region of Waterloo shall develop and implement an incentive program for persons engaging in the activity of the existing handling and storage of fuel oil and liquid fuel except at bulk liquid fuel facilities, gas stations, transportation terminals and aggregate operations in Wellhead Protection Areas A and B where the vulnerability is equal to ten (10), Intake Protection Zone One (1), Intake Protection Zones Two (2) and Three (3) where the vulnerability is equal to nine (9), and Wellhead Protection Area E where the vulnerability is equal to nine (9). The incentive program shall facilitate the use of beneficial management practices that reduce the impact on groundwater.</li> <li>b. The Region of Waterloo shall develop and implement an education and outreach program for persons engaged in the existing and new storage of fuel oil in Wellhead Protection Areas A and B where the vulnerability is equal to ten (10). The education program shall provide homeowners with information relating to potential impacts of spills to drinking water sources and to fuel suppliers regarding their obligations for inspections.</li> </ul>

Policy Number	15.1 – Handling and storage of fuel
	c. The Region of Waterloo shall develop and implement an education and outreach program for persons engaged in the existing and new handling and storage of liquid fuel where it is a secondary land use in Wellhead Protection Area B where the vulnerability is equal to ten (10), Intake Protection Zone One (1), Intake Protection Zones Two (2) and Three (3) where the vulnerability is equal to nine (9), and Wellhead Protection Area E where the vulnerability is equal to nine (9). The education program shall encourage property owners to implement beneficial management practices for protection of groundwater.
RW-MC-49  <i>Existing/Future Prescribed Instr.</i>	Where existing and/or new handling and storage of fuel is or would be a significant drinking water threat within a vulnerable area for activities regulated under the <i>Aggregate Resources Act</i> within vulnerable areas, the Ministry of Northern Development, Mines, Natural Resources and Forestry, should ensure that licenses, permits and site plans issued under the <i>Aggregate Resources Act</i> and related regulations, standards and policies include terms and conditions, as appropriate, to ensure the activity does not become or ceases to be a significant drinking water threat.

### Threat 16.0 – The Handling and Storage of a Dense Non-Aqueous Phase Liquid (DNAPL)

Policy Number	16.1 – Handling and storage of a dense non-aqueous phase liquid (DNAPL)
RW-CW-50  <i>Existing/Future Part IV-Prohibit</i>	<p>To ensure the existing and/or future handling and storage of a dense non-aqueous phase liquid ceases to be or does not become a significant drinking water threat where this activity is or would be a significant threat, this activity is designated for the purpose of Section 57 of the <i>Clean Water Act, 2006</i> and is prohibited within the following vulnerable areas and for the following activities:</p> <p>a. Existing:</p> <ul style="list-style-type: none"> <li>i. Handling and Storage; <ul style="list-style-type: none"> <li>i. In Wellhead Protection Area A.</li> </ul> </li> </ul> <p>b. Future:</p> <ul style="list-style-type: none"> <li>i. Handling and Storage: <ul style="list-style-type: none"> <li>i. In Wellhead Protection Area A;</li> <li>ii. In Wellhead Protection Area B where the vulnerability is equal to ten (10);</li> </ul> </li> </ul>

Policy Number	16.1 – Handling and storage of a dense non-aqueous phase liquid (DNAPL)
	<p>iii. Where a Trichloroethylene Issue has been identified, in all Wellhead Protection Areas where the vulnerability is greater than or equal to eight (8), for trichloroethylene and related degradation products.</p>
<p>RW-CW-51</p> <p><i>Existing/Future Part IV-RMP</i></p>	<p>To ensure that the existing and/or future handling and storage of a dense non-aqueous phase liquid ceases to be or does not become a significant drinking water threat where this activity is or would be a significant threat, this activity shall be designated for the purpose of Section 58 of the <i>Clean Water Act, 2006</i> and a Risk Management Plan shall be required in the following areas and for the following activities:</p> <p>a. Existing:</p> <p>i. Handling and Storage;</p> <p>i. In Wellhead Protection Areas B and C where the vulnerability is greater than or equal to eight (8);</p> <p>ii. Where a Trichloroethylene Issue has been identified, in all Wellhead Protection Areas except Wellhead Protection Area A, where the vulnerability is greater than or equal to eight (8), for trichloroethylene and related degradation products.</p> <p>b. Future:</p> <p>i. Handling and Storage;</p> <p>i. In Wellhead Protection Areas B and C where the vulnerability is equal to six (6) or eight (8);</p> <p>ii. Where a Trichloroethylene Issue has been identified, in all Wellhead Protection Areas except Wellhead Protection Area A, where the vulnerability is equal to six (6), for trichloroethylene and related degradation products.</p> <p>The Risk Management Plan shall include, as a minimum, measures to reduce the likelihood of spills and leaks and contain and respond to spills.</p>
<p>RW-CW-52</p> <p><i>Existing Incentive</i></p>	<p>To provide guidance about the importance of source water protection and to promote best management practices, the Region of Waterloo shall develop and implement an incentive program for persons engaging in the existing handling and storage of a dense non-aqueous phase liquid within the following vulnerable areas:</p>

Policy Number	16.1 – Handling and storage of a dense non-aqueous phase liquid (DNAPL)
	<ul style="list-style-type: none"> <li>i. In all Wellhead Protection Areas except Wellhead Protection Area A, where the vulnerability is greater than or equal to eight (8);</li> <li>ii. Where a Trichloroethylene Issue has been identified, in all Wellhead Protection Areas except Wellhead Protection Area A, where the vulnerability is greater than or is equal to eight (8), for trichloroethylene and related degradation products.</li> </ul> <p>The incentive program shall facilitate, as a minimum, measures to reduce the likelihood of spills and leaks and contain and respond to spills.</p>
RW-CW-53  <i>Existing/Future Education &amp; Outreach</i>	<p>To provide guidance about the importance of source water protection and to promote best management practices the Region of Waterloo shall develop and implement an education and outreach program for persons engaged in the existing and future handling and storage of dense non-aqueous phase liquids in the following areas:</p> <ul style="list-style-type: none"> <li>i. In all Wellhead Protection Areas where the vulnerability is less than eight (8).</li> </ul> <p>The education and outreach program shall provide property owners with information relating to potential impacts of spills to drinking water and encourage implementation of beneficial management practices for protection of groundwater from dense non-aqueous phase liquid storage and handling.</p>

### Threat 17.0 – The Handling and Storage of an Organic Solvent

Policy Number	17.1 – Handling and storage of an organic solvent
RW-CW-54  <i>Existing/Future Part IV-Prohibit</i>	<p>To ensure the existing and/or future handling and storage of an organic solvent ceases to be or does not become a significant drinking water threat where this activity is or would be a significant threat, this activity is designated for the purpose of Section 57 of the <i>Clean Water Act, 2006</i> and is prohibited within the following vulnerable areas and for the following activities:</p> <ul style="list-style-type: none"> <li>a. Existing: <ul style="list-style-type: none"> <li>i. Handling and Storage; <ul style="list-style-type: none"> <li>i. In Wellhead Protection Area A, below grade.</li> </ul> </li> </ul> </li> <li>b. Future:</li> </ul>

Policy Number	17.1 – Handling and storage of an organic solvent
	<ul style="list-style-type: none"> <li>i. Handling and Storage;               <ul style="list-style-type: none"> <li>i. In Wellhead Protection Area A, above and below grade;</li> <li>ii. In Wellhead Protection Area B where the vulnerability is equal to ten (10), below grade.</li> </ul> </li> </ul>
RW-CW-55  <i>Existing/Future Part IV-RMP</i>	<p>To ensure the existing and/or future handling and storage of an organic solvent does not become or ceases to be a significant drinking water threat where this activity is or would be a significant threat, this activity shall be designated for the purpose of Section 58 of the <i>Clean Water Act, 2006</i> and a Risk Management Plan shall be required in the following areas and for the following activities:</p> <ul style="list-style-type: none"> <li>a. Existing:               <ul style="list-style-type: none"> <li>i. Handling and Storage;                   <ul style="list-style-type: none"> <li>i. In Wellhead Protection Area A, above grade;</li> <li>ii. In Wellhead Protection Area B where the vulnerability is equal to ten (10), above and below grade.</li> </ul> </li> </ul> </li> <li>b. Future:               <ul style="list-style-type: none"> <li>i. Handling and Storage;                   <ul style="list-style-type: none"> <li>i. In Wellhead Protection Area B where the vulnerability is equal to ten (10), above grade.</li> </ul> </li> </ul> </li> </ul> <p>The Risk Management Plan shall include, as a minimum, measures to reduce the likelihood of spills and leaks and contain and respond to spills.</p>
RW-CW-55.1  <i>Existing Incentive</i>	<p>To provide guidance about the importance of source water protection and to promote best management practices, the Region of Waterloo shall develop and implement an incentive program for persons engaging in existing handling and storage of organic solvent within the following vulnerable areas:</p> <ul style="list-style-type: none"> <li>i. In Wellhead Protection Area A, above grade;</li> <li>ii. In Wellhead Protection Area B where the vulnerability is equal to ten (10), above and below grade.</li> </ul>

### Threat 18.0 – The Management of Runoff that Contains Chemicals Used in the De-icing of Aircraft

Policy Number	18.1 – The management of runoff that contains chemicals used in the de-icing of aircraft
RW-CW-56	To ensure that the expansion of existing or new airport facilities that lead to the generation of run-off containing de-icing chemicals does

Policy Number	18.1 – The management of runoff that contains chemicals used in the de-icing of aircraft
<i>Existing/Future</i> a) <i>Part IV-Prohibit</i> b) <i>Part IV- RMP</i>	<p>not become a significant drinking water threat within a vulnerable area where this activity would be a significant drinking water threat:</p> <p>a. Any new management of run-off that contains chemicals used in the de-icing of aircraft is designated for the purpose of Section 57 of the <i>Clean Water Act, 2006</i> and is prohibited in the following areas:</p> <ul style="list-style-type: none"> <li>i. In Wellhead Protection Areas A and B where the vulnerability equals ten (10);</li> <li>ii. In Intake Protection Zone One (1);</li> <li>iii. In Intake Protection Zones Two (2) and Three (3) where the vulnerability is equal to nine (9);</li> <li>iv. In Wellhead Protection Area E where the vulnerability is equal to nine (9).</li> </ul> <p>b. This activity shall be designated for the purpose of Section 58 of the <i>Clean Water Act, 2006</i> and a Risk Management Plan shall be required with existing management of run-off structures that contains chemicals used in the de-icing of aircraft where this activity could be a significant drinking water threat within the following areas:</p> <ul style="list-style-type: none"> <li>i. In Wellhead Protection Areas A and B where the vulnerability is equal to ten (10);</li> <li>ii. In Intake Protection Zone One (1);</li> <li>iii. In Intake Protection Zones Two (2) and Three (3) where the vulnerability is equal to nine (9);</li> <li>iv. In Wellhead Protection Area E where the vulnerability is equal to nine (9).</li> </ul>

### Threat 21.0 – The Use of Land as Livestock Grazing or Pasturing Land, an Outdoor Confinement Area or Farm-Animal Yard

Policy Number	
RW-CW-57  <i>Existing/Future</i> <i>Part IV-Prohibit</i>	<p>To ensure the existing and/or future use of land as livestock grazing or pasturing land, an outdoor confinement area or farm-animal yard ceases to be or does not become a significant drinking water threat where this activity is or would be a significant threat, this activity is designated for the purpose of Section 57 of the <i>Clean Water Act, 2006</i> and is prohibited within the following vulnerable areas and for the following activities:</p> <p>a. Existing:</p>



Policy Number	
	<ul style="list-style-type: none"> <li>i. Outdoor Confinement Area or Farm-Animal Yard;               <ul style="list-style-type: none"> <li>i. In Wellhead Protection Area A.</li> </ul> </li> <li>b. Future:               <ul style="list-style-type: none"> <li>i. Outdoor Confinement Area or Farm-Animal Yard;                   <ul style="list-style-type: none"> <li>i. In Wellhead Protection Area A;</li> <li>ii. Where a Nitrate Issue has been identified, in Wellhead Protection Areas A and B where the vulnerability is equal to ten (10);</li> <li>iii. In Intake Protection Zone One (1).</li> </ul> </li> <li>ii. Livestock Grazing or Pasturing Land;                   <ul style="list-style-type: none"> <li>i. Where a Nitrate Issue has been identified, in Wellhead Protection Area A;</li> <li>ii. In Intake Protection Zone One (1).</li> </ul> </li> </ul> </li> </ul>
RW-CW-58  <i>Existing/Future Part IV-RMP</i>	<p>To ensure the existing and/or future use of land as livestock grazing or pasturing land, an outdoor confinement area or farm-animal yard ceases to be or does not become a significant drinking water threat where this activity is or would be a significant threat, this activity is designated for the purpose of Section 58 of the <i>Clean Water Act, 2006</i> and a Risk Management Plan shall be required in the following areas and for the following activities:</p> <ul style="list-style-type: none"> <li>a. Existing:               <ul style="list-style-type: none"> <li>i. Outdoor Confinement Area or Farm-Animal Yard;                   <ul style="list-style-type: none"> <li>i. In Wellhead Protection Area B where the vulnerability is equal to ten (10);</li> <li>ii. In Intake Protection Zone One (1);</li> <li>iii. Where a Nitrate Issue has been identified, in all Issue Contributing Areas except Wellhead Protection Area A, where the vulnerability is greater than or equal to six (6).</li> </ul> </li> <li>ii. Livestock Grazing or Pasturing Land;                   <ul style="list-style-type: none"> <li>i. In Wellhead Protection Area A;</li> <li>ii. In Intake Protection Zone One (1);</li> <li>iii. Where a Nitrate Issue has been identified, in Wellhead Protection Areas B and C where the vulnerability is greater than or equal to eight (8).</li> </ul> </li> </ul> </li> <li>b. Future:               <ul style="list-style-type: none"> <li>i. Outdoor Confinement Area or Farm-Animal Yard;</li> </ul> </li> </ul>

Policy Number	
	<ul style="list-style-type: none"> <li>i. In Wellhead Protection Area B where the vulnerability is equal to ten (10);</li> <li>ii. Where a Nitrate Issue has been identified, in all Issue Contributing Areas where the vulnerability is equal to six (6) or eight (8);</li> <li>iii. Where a Nitrate Issue has been identified, in Wellhead Protection Area E where the vulnerability is greater than six (6).</li> </ul> <ul style="list-style-type: none"> <li>ii. Livestock Grazing or Pasturing Land;               <ul style="list-style-type: none"> <li>i. In Wellhead Protection Areas A and B where the vulnerability is equal to ten (10);</li> <li>ii. Where a Nitrate Issue has been identified, in all Issue Contributing Areas except Wellhead Protection Area A, where the vulnerability is greater than or equal to eight (8).</li> </ul> </li> </ul> <p>The Risk Management Plan shall include, as a minimum, measures to manage the generation of manure, livestock activities, and reduce the potential for surface water run-off and groundwater infiltration.</p>
RW-CW-59  <i>Existing Incentive</i>	<p>To provide guidance about the importance of source water protection and to promote best management practices, the Region of Waterloo shall develop and implement an incentive program for persons engaging in the existing use of land as an outdoor confinement area or a farm-animal yard and the existing use of land as livestock grazing or pasturing land in the following areas:</p> <ul style="list-style-type: none"> <li>i. In Wellhead Protection Areas A and B where the vulnerability is equal to ten (10);</li> <li>ii. In Intake Protection Zone One (1);</li> </ul> <p>Where a Nitrate Issue has been identified, in all Issue Contributing Areas where the vulnerability is greater than or equal to six (6).</p>
RW-CW-60  <i>Existing/Future Education &amp; Outreach</i>	<p>The Region of Waterloo shall develop and implement an education and outreach program for persons engaged in the existing and future use of land as livestock grazing or pasturing land, outdoor confinement area or a farm animal yard in the following areas:</p> <ul style="list-style-type: none"> <li>i. In Wellhead Protection Areas A and B where the vulnerability is equal to ten (10), for new use of land as livestock grazing or pasturing land;</li> <li>ii. In Intake Protection Zones Two (2) and Three (3) where the vulnerability is greater than or equal to eight (8);</li> <li>iii. In Wellhead Protection Area E where the vulnerability is greater than or equal to eight (8);</li> </ul>

Policy Number	
	iv. Where a Nitrate Issue has been identified, in all Issue Contributing Areas except Wellhead Protection Area A.

### Threat 22.0 – The Establishment and Operation of a Liquid Hydrocarbon Pipeline

Policy Number	22.1 – Conveyance of a liquid hydrocarbon by a pipeline
RW-NB-61  <i>Future Specify Action</i>  <i>Significant:</i> WHPA-A-10; WHPA-B-10; IPZ-1-9  <i>Moderate/Low:</i> WHPA-B-6 & 8 WHPA-C-6 & 8 WHPA-D-6 WHPA-E-5.6 to 8.1 IPZ-2-7.2 IPZ-3-5 to 8	To ensure the establishment and operation of a liquid hydrocarbon pipeline within the meaning of O.Reg. 210/01 under the <i>Technical Safety and Standards Act</i> or that is subject to the <i>Canadian Energy Regulator Act</i> , never becomes a significant, moderate or low drinking water threat, where this activity would be a significant, moderate or low drinking water threat, the Canada Energy Regulator, or the Ontario Energy Board should ensure that the Source Protection Authority and the Region of Waterloo are provided the location of any new proposed pipeline.
RW-NB-61.1  <i>Future Specify Action</i>  <i>Significant:</i> WHPA-A-10; WHPA-B-10; IPZ-1-9  <i>Moderate/Low:</i> WHPA-B-6 & 8 WHPA-C-6 & 8 WHPA-D-6 WHPA-E-5.6 to 8.1 IPZ-2-7.2 IPZ-3-5 to 8	To ensure the establishment and operation of a liquid hydrocarbon pipeline within the meaning of O. Reg. 210/01 under the <i>Technical Safety and Standards Act</i> or that is subject to the <i>Canadian Energy Regulator Act</i> never becomes a significant, moderate or low drinking water threat, where this activity would be a significant, moderate or low drinking water threat, the Canada Energy Regulator, Ontario Energy Board, Technical Standards and Safety Authority (TSSA), and Impact Assessment Agency should ensure that drinking water source protection is considered as a risk factor in their decision making framework.

Policy Number	22.1 – Conveyance of a liquid hydrocarbon by a pipeline
<p>RW-NB-61.2</p> <p><i>Future Specify Action</i></p> <p><i>Significant:</i> WHPA-A-10; WHPA-B-10; IPZ-1-9</p> <p><i>Moderate/Low:</i> WHPA-B-6 &amp; 8 WHPA-C-6 &amp; 8 WHPA-D-6 WHPA-E-5.6 to 8.1 IPZ-2-7.2 IPZ-3-5 to 8</p>	<p>To ensure the establishment and operation of a liquid hydrocarbon pipeline within the meaning of O. Reg. 210/01 under the Technical Safety and Standards Act or that is subject to the Canadian Energy Regulator Act never becomes a significant, moderate or low drinking water threat, where the activity would be a significant, moderate or low drinking water threat, pipeline owners should ensure that best available source protection information is used such as up to date vulnerable areas in assessment reports when developing, operating and maintaining liquid hydrocarbon pipelines, including developing and updating emergency planning zones (EPZs).</p>
<p>RW-NB-61.3</p> <p><i>Future Specify Action</i></p> <p><i>Significant:</i> WHPA-A-10; WHPA-B-10; IPZ-1-9</p> <p><i>Moderate/Low:</i> WHPA-B-6 &amp; 8 WHPA-C-6 &amp; 8 WHPA-D-6 WHPA-E-5.6 to 8.1 IPZ-2-7.2 IPZ-3-5 to 8</p>	<p>To ensure the establishment and operation of a liquid hydrocarbon pipeline within the meaning of O. Reg. 210/01 under the <i>Technical Safety and Standards Act</i> or that is subject to the <i>Canadian Energy Regulator Act</i> never becomes a significant , moderate or low drinking water threat, where the activity would be a significant, moderate or low drinking water threat, pipeline owners should, upon request by the Municipality, reimburse costs borne by the Municipality where work in relation to this activity is required by a regulator with regards to protecting drinking water sources or where the work identified by the drinking water system owner is supported based on due diligence and best practices as it relates to source protection and the protection of public health. Examples may include but are not limited to spill clean-up and rehabilitation activities, events-based modelling or other technical work required to support current vulnerability scoring.</p>

**Threat 19.0 – An activity that takes water from an aquifer or a surface water body without returning the water taken to the same aquifer or surface water body**

**Threat 20.0 – An activity that reduces the recharge of an aquifer**

Policy Number	
RW-CW-62  <i>Existing/Future Education &amp; Outreach WHPA-Q</i>	To ensure that any consumptive water taking and any activity that reduces the recharge of an aquifer cease to be or never become significant drinking water threats, where these activities are or would be significant drinking water threats as prescribed by the <i>Clean Water Act, 2006</i> , the Region of Waterloo shall support any water efficiency education and outreach programs developed by The Township of Centre Wellington to promote water conservation, demand management and use of best management practices that maintain groundwater recharge for private water users within the Region of Waterloo.
RW-CW-63  <i>Existing/Future Specify Action WHPA-Q</i>	To ensure that any consumptive water taking and any activity that reduces the recharge of an aquifer cease to be or never become significant drinking water threats, where these activities are or would be significant drinking water threats as prescribed by the <i>Clean Water Act, 2006</i> , the Region of Waterloo will collaborate with the County of Wellington, Grand River Conservation Authority, and Ministry of the Environment, Conservation and Parks, to support management of local water resources and protection of municipal drinking water supply sources, including but not limited to establishing a drought response program, consideration of climate change impacts and mitigation, encourage monitoring, data sharing and coordination among the agencies, and support the use, maintenance, and update of the Tier 3 Water Budget model.
RW-CW-64  <i>Future Specify Action WHPA-Q</i>	To ensure that any consumptive water taking and any activity that reduces the recharge of an aquifer never become significant drinking water threats, where these activities would be significant drinking water threats as prescribed by the <i>Clean Water Act, 2006</i> , any municipality or conservation authority developing or approving a sub-watershed study terms of reference and monitoring program shall review, and where appropriate, incorporate the Tier 3 Water Budget results as part of the sub-watershed study.
RW-MC-65  <i>Existing/Future Prescribed Instr. WHPA-Q</i>	To ensure that any consumptive water taking ceases to be or never becomes a significant drinking water threat where this activity is or would be a significant drinking water threat as prescribed by the <i>Clean Water Act, 2006</i> , the following shall apply: <ul style="list-style-type: none"> <li>a. The Ministry of the Environment, Conservation and Parks shall review and, if necessary, amend Permits To Take Water (PTTW) and / or Drinking Water Works Permits to ensure that the municipal supply will not be adversely impacted, and to consider the Tier 3</li> </ul>

Policy Number	
	<p>Water Budget results including consideration of water supply requirements for planned growth and prolonged drought.</p> <p>b. The Ministry of the Environment, Conservation and Parks shall issue Permits To Take Water (PTTW) and / or Drinking Water Works Permits to ensure that the municipal supply will not be adversely impacted. The Ministry of the Environment, Conservation and Parks, where appropriate, should ensure the use of the Tier 3 Water Budget model, reports and data in its evaluation of these takings including consideration of water supply requirements for planned growth and prolonged drought.</p> <p>The Ministry of the Environment, Conservation and Parks shall consider the following Permit to Take Water terms and conditions that address:</p> <ul style="list-style-type: none"> <li>i. groundwater and surface water monitoring;</li> <li>ii. demand management: water needs assessment (review of permitted maximum takings) and water efficiency measures;</li> <li>iii. information sharing with the Ministry of the Environment, Conservation and Parks, municipalities and conservation authorities including a condition of approval for permit holders to provide municipalities and conservation authorities technical reports and monitoring data gathered pursuant to a condition of the PTTW (as per first bullet); and</li> <li>iv. drought management planning for drought sensitive wells / systems.</li> </ul>
<p>RW-MC-66</p> <p><i>Future Prescribed Instr. WHPA-Q</i></p>	<p>To ensure that any consumptive water taking never becomes a significant drinking water threat, where this activity would be a significant drinking water threat, as prescribed by the <i>Clean Water Act, 2006</i>, the Ministry of Northern Development, Mines, Natural Resources and Forestry, in consultation with the Ministry of the Environment, Conservation and Parks, owner of the municipal drinking water system for the respective WHPA-Q, and Grand River Conservation Authority, shall include appropriate terms and conditions in any new approvals under the Aggregate Resources Act, 1990 for extraction below the water table to ensure the sustainability of the applicable municipal water sources identified in the WHPA-Q.</p>
<p>RW-NB-67</p> <p><i>Existing/Future Specify Action WHPA-Q</i></p>	<p>To ensure that any consumptive water taking ceases to be or never becomes a significant drinking water threat where this activity is or would be a significant drinking water threat as prescribed by the <i>Clean Water Act, 2006</i>, the Ministry of the Environment, Conservation and Parks and / or the Ministry of Northern Development, Mines, Natural Resources and Forestry should ensure source protection is included as a risk factor of Sites with Permits to Take Water (PTTW) and / or</p>

Policy Number	
	<i>Aggregate Resources Act, 1990</i> Licenses in WHPA-Q Areas in the ministry local office risk-based compliance inspection planning process.
RW-MC-68  <i>Future Land Use Planning WHPA-Q</i>	To ensure that any consumptive water taking never becomes a significant drinking water threat where this activity would be a significant drinking water threat as prescribed by the <i>Clean Water Act, 2006</i> , the Region of Waterloo and local municipalities shall review and amend as required their Official Plan policies and / or study requirements, to ensure any consumptive water taking associated with a development application does not impact the sustainability of the Centre Wellington municipal water supplies and ensure any study associated with a development application is required to be submitted as part of a complete application.



**Appendix A: List of Policies As Per Section 34 Of Regulation 287/07****LIST A**

Title: Significant threat policies that affect decisions under the *Planning Act* and *Condominium Act*, 1998

Opening Statement: “Clause 39 (1)(a), subsections 39 (2), (4) and (6), and sections 40 and 42 of the Clean Water Act, 2006 apply to the following policies:”

Content: RW-MC-1.2, RW-CW-1.3, RW-MC-1.4, RW-MC-1.13, RW-MC-1.18, RW-MC-6, RW-MC-7, RW-MC-17, RW-MC-18, RW-MC-36, RW-MC-47, RW-MC-68

---

**LIST B**

Title: Moderate and low threat policies that affect decisions under the *Planning Act* and *Condominium Act*, 1998

Opening Statement: “Subsection 39 (1) (b) of the Clean Water Act, 2006 applies to the following policies:”

Content: No Applicable Policies

---

**LIST C**

Title: Significant threat policies that affect Prescribed Instrument decisions

Opening Statement: “Subsection 39 (6), clause 39 (7) (a), section 43 and subsection 44 (1) of the Clean Water Act, 2006 apply to the following policies:”

Content: RW-MC-1.2, RW-MC-1.13, RW-MC-1.16, RW-MC-1.27, RW-MC-2, RW-MC-9, RW-MC-10, RW-MC-11, RW-MC-11.1, RW-MC-12, RW-MC-13, RW-MC-15, RW-MC-16, RW-MC-21.1, RW-MC-22, RW-MC-25, RW-MC-26, RW-MC-49, RW-MC-65, RW-MC-66

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**LIST D**

Title: Moderate and low threat policies that affect Prescribed Instrument decisions

Opening Statement: “Clause 39 (7) (b) of the Clean Water Act, 2006 applies to the following policies:”

Content: No Applicable Policies

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**LIST E**

Title: Significant threat policies that impose obligations on municipalities, source protection authorities and local boards

Opening Statement: “Section 38 and subsection 39 (6) of the Clean Water Act, 2006 applies to the following policies:”

Content: RW-CW-1.1.1, RW-CW-1.1.2, RW-CW-1.5, RW-CW-1.6, RW-MC-1.13, RW-CW-1.14, RW-CW-1.19, RW-CW-1.20, RW-CW-5, RW-CW-8, RW-CW-8.1, RW-CW-12.1, RW-CW-14, RW-CW-19, RW-CW-19.1, RW-CW-20.1, RW-CW-24, RW-CW-27.1, RW-CW-30, RW-CW-33, RW-CW-37, , RW-CW-39, RW-CW/NB-40, RW-CW-43, RW-CW-48, RW-CW-52, RW-CW-53, RW-CW-55.1, RW-CW-59, RW-CW-60, RW-CW-62, RW-CW-63, RW-CW-64, RW-MC-68

---

**LIST F**

Title: Monitoring policies referred to in subsection 22 (2) of the Clean Water Act, 2006

Opening Statement: “Section 45 of the Clean Water Act, 2006 applies to the following policies:”

Content: RW-CW-1.8, RW-CW-1.9, RW-CW-1.10, RW-CW-1.12, RW-NB-1.15, RW-MC-1.16

---

**LIST G**

Title: Policies related to section 57 of the Clean Water Act, 2006

Opening Statement: “The following policies relate to section 57 (prohibition) of the Clean Water Act.”

Content: RW-CW-1.1.1, RW-CW-1.1.2, RW-MC-1.13, RW-CW-3, RW-CW-20a, RW-CW-21, RW-CW-25, RW-CW-25.1, RW-CW-28, RW-CW-31, RW-CW-34, RW-CW-34.1, RW-CW-41, RW-CW-45, RW-CW-50, RW-CW-54, RW-CW-56, RW-CW-57

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**LIST H**

Title: Policies related to section 58 of the Clean Water Act, 2006

Opening Statement: “The following policies relate to section 58 (Risk Management Plans) of the Clean Water Act.”

Content: RW-CW-1.1.1, RW-CW-1.1.2, RW-CW-4, RW-CW-20b, RW-CW-23, RW-CW-26.1, RW-CW-29, RW-CW-32, RW-CW-35, RW-CW-35.1, RW-CW-42, RW-CW-46, RW-CW-51, RW-CW-55, RW-CW-56, RW-CW-58

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**LIST I**

Title: Policies related to section 59 of the Clean Water Act, 2006

Opening Statement: “The following policies relate to section 59 (restricted land uses) of the Clean Water Act.”

Content: RW-CW-1.1.1, RW-CW-1.1.2, RW-CW-1.3

---

**LIST J**

Title: Specify Action policies

Opening Statement: For the purposes of section 33 of Ontario Regulation 287/07, the following policies are identified as Specify Action policies:

Content: RW-NB-1.22, RW-NB-1.23, RW-NB-1.24, RW-NB-1.25; RW-NB-1.26, RW-NB-39.1

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**List K**

Title: Significant threat policies targeted to bodies other than municipalities, local boards or source protection authorities for implementation

Opening Statement: The following policies are identified as non-legally binding policies:

Content: RW-NB-1.7, RW-NB-1.17, RW-NB-1.21, RW-CW-19, RW-CW/NB-39, RW-NB-39.1, RW-CW/NB-40, RW-NB-44, RW-NB-61, RW-NB-61.1, RW-NB-61.2, RW-NB-61.3, RW-NB-67

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## Appendix B: Prescribed Instruments and Policy Summary Tables

Table 1: Prescribed Instruments Which Apply To Source Protection Plan Policies In Lists C And D Above (S.34 (4) Of O. Reg. 287/07)

Policy #	Legal Effect (conform with, have regard to)	Environmental Protection Act	Nutrient Management Act	Ontario Water Resources Act	Pesticide Act	Aggregate Resources Act	Safe Drinking Water Act
RW-MC-1.2	Must Conform	Yes	Yes	Yes	No	Yes	No
RW-MC-1.16	Must Conform	Yes	No	No	No	No	No
RW-MC-1.13	Must Conform	Yes	Yes	Yes	No	Yes	No
RW-MC-1.27	Must Conform	No	Yes	No	No	No	No
RW-MC-2	Must Conform	Yes	No	No	No	No	No
RW-MC-9	Must Conform	Yes	No	Yes	No	No	No
RW-MC-10	Must Conform	Yes	No	Yes	No	No	No
RW-MC- 11	Must Conform	Yes	No	Yes	No	No	No
RW-MC-11.1	Must Conform	Yes	No	Yes	No	No	No
RW-MC-12	Must Conform	Yes	No	Yes	No	No	No
RW-MC-13	Must Conform	Yes	No	Yes	No	No	No
RW-MC-15	Must Conform	Yes	No	Yes	No	No	No
RW-MC-16	Must Conform	Yes	No	Yes	No	No	No
RW-MC-21.1	Must Conform	Yes	Yes	No	No	No	No
RW-MC-22	Must Conform	No	Yes	No	No	No	No
RW-MC-26	Must Conform	No	Yes	No	No	No	No
RW-MC-49	Must Conform	No	No	No	No	Yes	No
RW-MC-65	Must Conform	No	No	Yes	No	No	Yes
RW-MC-66	Must Conform	No	No	No	No	Yes	No

Table 2: Policy Summary Matrix

Policy ID#	Legal Effect (conform with, have regard to, non-binding)	Policy affects decisions under the Planning Act and Condominium Act, 1998 (Lists A and B)	Policy affects Prescribed Instrument decisions (Lists C and D)	Significant threat policies that impose obligations on municipalities, source protection authorities and local boards (List E)	Monitoring policies referred to in s.22 (2) of the CWA (List F)	Part IV Policies - Significant threat policies that are designated in the plan as requiring a Risk Management Plan, are prohibited under s. 57, or to which s. 59 of the CWA applies (Lists G, H, and I)	Specify Action Policies (List J)	Significant threat policies targeted to bodies other than municipalities, local boards or source protection authorities for implementation List K)
RW-CW-1.1.1	Comply With	No	No	Yes	No	Yes	No	No
RW-CW-1.1.2	Comply With	No	No	Yes	No	Yes	No	No
RW-MC-1.2	Must Conform	Yes	Yes	No	No	No	No	No
RW-CW-1.3	Comply With	Yes	No	No	No	Yes	No	No
RW-MC-1.4	Must Conform	Yes	No	No	No	No	No	No
RW-CW-1.5	Comply With	No	No	Yes	No	No	No	No
RW-CW-1.6	Comply With	No	No	Yes	No	No	No	No

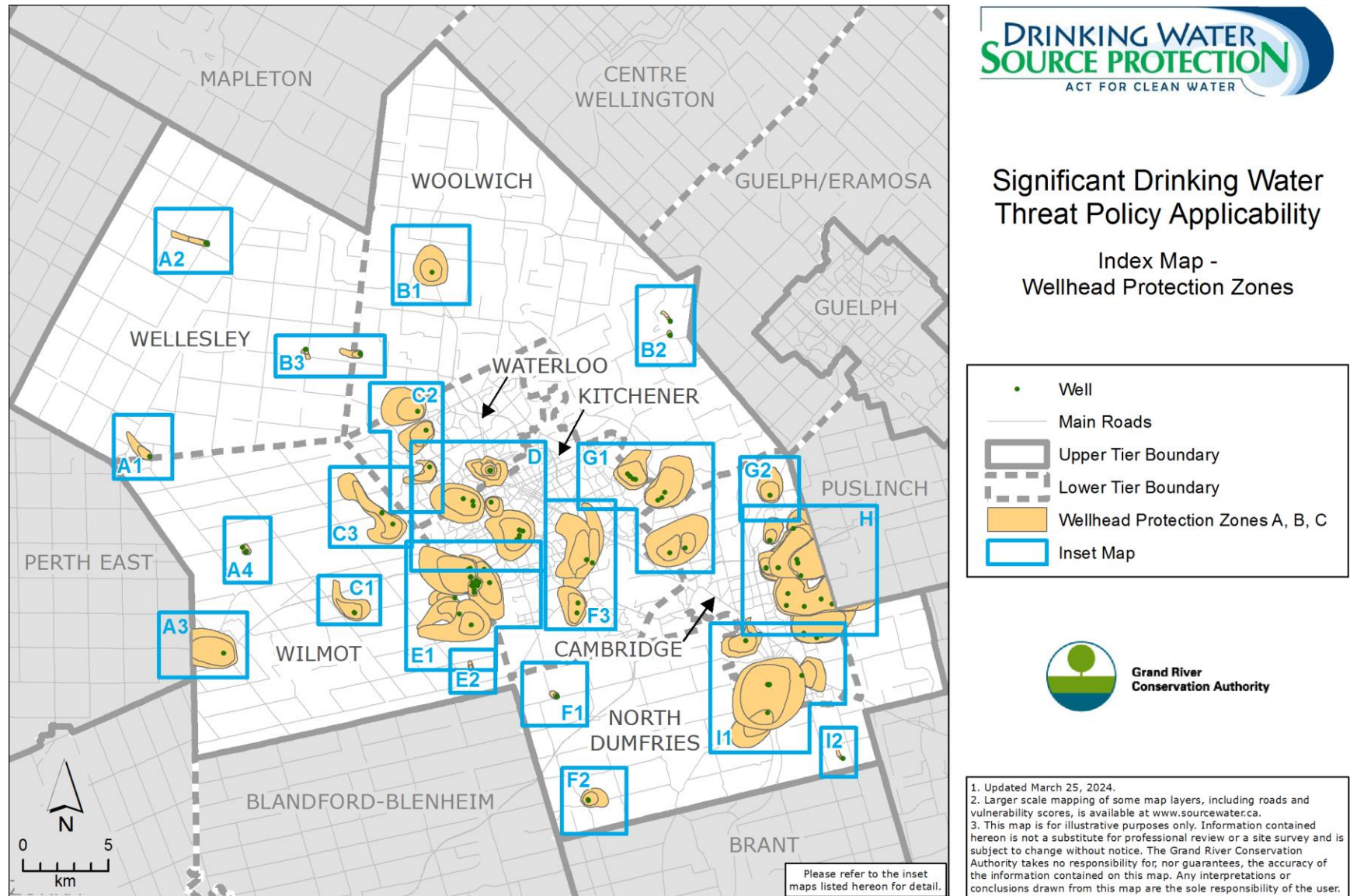
Policy ID#	Legal Effect (conform with, have regard to, non-binding)	Policy affects decisions under the Planning Act and Condominium Act, 1998 (Lists A and B)	Policy affects Prescribed Instrument decisions (Lists C and D)	Significant threat policies that impose obligations on municipalities, source protection authorities and local boards (List E)	Monitoring policies referred to in s.22 (2) of the CWA (List F)	Part IV Policies - Significant threat policies that are designated in the plan as requiring a Risk Management Plan, are prohibited under s. 57, or to which s. 59 of the CWA applies (Lists G, H, and I)	Specify Action Policies (List J)	Significant threat policies targeted to bodies other than municipalities, local boards or source protection authorities for implementation (List K)
RW-NB-1.7	Non-Binding	No	No	No	No	No	No	Yes
RW-CW-1.8	Comply With	No	No	No	Yes	No	No	No
RW-CW-1.9	Comply With	No	No	No	Yes	No	No	No
RW-CW-1.10	Comply With	No	No	No	Yes	No	No	No
RW-CW-1.12	Comply With	No	No	No	Yes	No	No	No
RW-MC-1.13	Must Conform	Yes	Yes	Yes	No	Yes	No	No
RW-CW -1.14	Comply With	No	No	Yes	No	No	No	No
RW-MC-1.16	Must Conform	No	Yes	No	Yes	No	No	No
RW-NB-1.17	Non-Binding	No	No	No	No	No	No	Yes
RW-MC-1.18	Comply With	Yes	No	No	No	No	No	No
RW-CW-1.20	Comply With	No	No	Yes	No	No	No	No
RW-NB-1.21	Non-binding	No	No	No	No	No	No	Yes
RW-NB-1.22	Non-binding	No	No	No	No	No	Yes	No
RW-NB-1.23	Non-binding	No	No	No	No	No	Yes	No
RW-NB-1.24	Non-binding	No	No	No	No	No	Yes	No
RW-NB-1.25	Non-binding	No	No	No	No	No	Yes	No
RW-NB-1.26	Non-binding	No	No	No	No	No	Yes	No
RW-MC-1.27	Must Conform	No	Yes	No	No	No	No	No
RW-MC-2	Must Conform	No	Yes	No	No	No	No	No
RW-CW-3	Comply With	No	No	No	No	Yes	No	No
RW-CW-4	Comply With	No	No	No	No	Yes	No	No
RW-CW-5	Comply With	No	No	Yes	No	No	No	No
RW-MC-6	Must Conform	Yes	No	No	No	No	No	No
RW-MC-7	Must Conform	Yes	No	No	No	No	No	No
RW-CW-8	Comply With	No	No	Yes	No	No	No	No
RW-CW-8.1	Comply With	No	No	Yes	No	No	No	No
RW-MC-9	Must Conform	No	Yes	No	No	No	No	No
RW-MC-10	Must Conform	No	Yes	No	No	No	No	No
RW-MC-11	Must Conform	No	Yes	No	No	No	No	No
RW-MC-11.1	Must Conform	No	Yes	No	No	No	No	No
RW-MC-12	Must Conform	No	Yes	No	No	No	No	No
RW-CW-12.1	Comply With	No	No	Yes	No	No	No	No
RW-MC-13	Must Conform	No	Yes	No	No	No	No	No
RW-CW-14	Comply With	No	No	Yes	No	No	No	No
RW-MC-15	Must Conform	No	Yes	No	No	No	No	No
RW-MC-16	Must Conform	No	Yes	No	No	No	No	No
RW-MC-17	Must Conform	Yes	No	No	No	No	No	No
RW-MC-18	Must Conform	Yes	No	No	No	No	No	No
RW-CW-19	Comply With	No	No	Yes	No	No	No	Yes

Policy ID#	Legal Effect (conform with, have regard to, non-binding)	Policy affects decisions under the Planning Act and Condominium Act, 1998 (Lists A and B)	Policy affects Prescribed Instrument decisions (Lists C and D)	Significant threat policies that impose obligations on municipalities, source protection authorities and local boards (List E)	Monitoring policies referred to in s.22 (2) of the CWA (List F)	Part IV Policies - Significant threat policies that are designated in the plan as requiring a Risk Management Plan, are prohibited under s. 57, or to which s. 59 of the CWA applies (Lists G, H, and I)	Specify Action Policies (List J)	Significant threat policies targeted to bodies other than municipalities, local boards or source protection authorities for implementation List K)
RW-CW-19.1	Comply With	No	No	Yes	No	No	No	No
RW-CW-20	Comply With	No	No	No	No	Yes	No	No
RW-CW-20.1	Comply With	No	No	Yes	No	No	No	No
RW-CW-21	Comply With	No	No	No	No	Yes	No	No
RW-MC-21.1	Must Conform	No	Yes	No	No	No	No	No
RW-MC-22	Must Conform	No	Yes	No	No	No	No	No
RW-CW-23	Comply With	No	No	No	No	Yes	No	No
RW-CW-24	Comply With	No	No	Yes	No	No	No	No
RW-CW-25	Must Conform	No	Yes	No	No	No	No	No
RW-MC-26	Must Conform	No	Yes	No	No	No	No	No
RW-MC-27	Must Conform	No	Yes	No	No	No	No	No
RW-CW-28	Comply With	No	No	No	No	Yes	No	No
RW-CW-29	Comply With	No	No	No	No	Yes	No	No
RW-CW-30	Comply With	No	No	Yes	No	No	No	No
RW-CW-31	Comply With	No	No	No	No	Yes	No	No
RW-CW-32	Comply With	No	No	No	No	Yes	No	No
RW-CW-33	Comply With	No	No	Yes	No	No	No	No
RW-CW-34	Comply With	No	No	No	No	Yes	No	No
RW-CW-34.1	Comply With	No	No	No	No	Yes	No	No
RW-CW-35	Comply With	No	No	No	No	Yes	No	No
RW-CW-35.1	Comply With	No	No	No	No	Yes	No	No
RW-MC-36	Must Conform	Yes	No	No	No	No	No	No
RW-CW-37	Comply With	No	No	Yes	No	No	No	No
RW-CW-39	Comply With	No	No	Yes	No	No	No	No
RW-NB-39.1	Non-binding	No	No	No	No	No	Yes	No
RW-CW/NB-40	Comply With /Non-binding	No	No	Yes	No	No	No	Yes
RW-CW-41	Comply With	No	No	No	No	Yes	No	No
RW-CW-42	Comply With	No	No	No	No	Yes	No	No
RW-CW-43	Comply With	No	No	Yes	No	No	No	No
RW-NB-44	Non-binding	No	No	No	No	No	No	Yes
RW-CW-45	Comply With	No	No	No	No	Yes	No	No
RW-CW-46	Comply With	No	No	No	No	Yes	No	No
RW-MC-47	Must Conform	Yes	No	No	No	No	No	No
RW-CW-48	Comply With	No	No	Yes	No	No	No	No

Policy ID#	Legal Effect (conform with, have regard to, non-binding)	Policy affects decisions under the Planning Act and Condominium Act, 1998 (Lists A and B)	Policy affects Prescribed Instrument decisions (Lists C and D)	Significant threat policies that impose obligations on municipalities, source protection authorities and local boards (List E)	Monitoring policies referred to in s.22 (2) of the CWA (List F)	Part IV Policies - Significant threat policies that are designated in the plan as requiring a Risk Management Plan, are prohibited under s. 57, or to which s. 59 of the CWA applies (Lists G, H, and I)	Specify Action Policies (List J)	Significant threat policies targeted to bodies other than municipalities, local boards or source protection authorities for implementation (List K)
RW-MC-49	Must Conform	No	Yes	No	No	No	No	No
RW-CW-50	Comply With	No	No	No	No	Yes	No	No
RW-CW-51	Comply With	No	No	No	No	Yes	No	No
RW-CW-52	Comply With	No	No	Yes	No	No	No	No
RW-CW-53	Comply With	No	No	Yes	No	No	No	No
RW-CW-54	Comply With	No	No	No	No	Yes	No	No
RW-CW-55	Comply With	No	No	No	No	Yes	No	No
RW-CW-55.1	Comply With	No	No	Yes	No	No	No	No
RW-CW-56	Comply With	No	No	No	No	Yes	No	No
RW-CW-57	Comply With	No	No	No	No	Yes	No	No
RW-CW-58	Comply With	No	No	No	No	Yes	No	No
RW-CW-59	Comply With	No	No	Yes	No	No	No	No
RW-CW-60	Comply With	No	No	Yes	No	No	No	No
RW-NB-61	Non Binding	No	No	No	No	No	No	Yes
RW-NB-61.1	Non Binding	No	No	No	No	No	No	Yes
RW-NB-61.2	Non Binding	No	No	No	No	No	No	Yes
RW-NB-61.3	Non Binding	No	No	No	No	No	No	Yes
RW-CW-62	Comply With	No	No	Yes	No	No	No	No
RW-CW-63	Comply With	No	No	Yes	No	No	No	No
RW-CW-64	Comply With	No	No	Yes	No	No	No	No
RW-MC-65	Must Conform	No	Yes	No	No	No	No	No
RW-MC-66	Must Conform	No	Yes	No	No	No	No	No
RW-NB-67	Non Binding	No	No	No	No	No	No	Yes
RW-MC-68	Must Conform	Yes	No	Yes	No	No	No	No

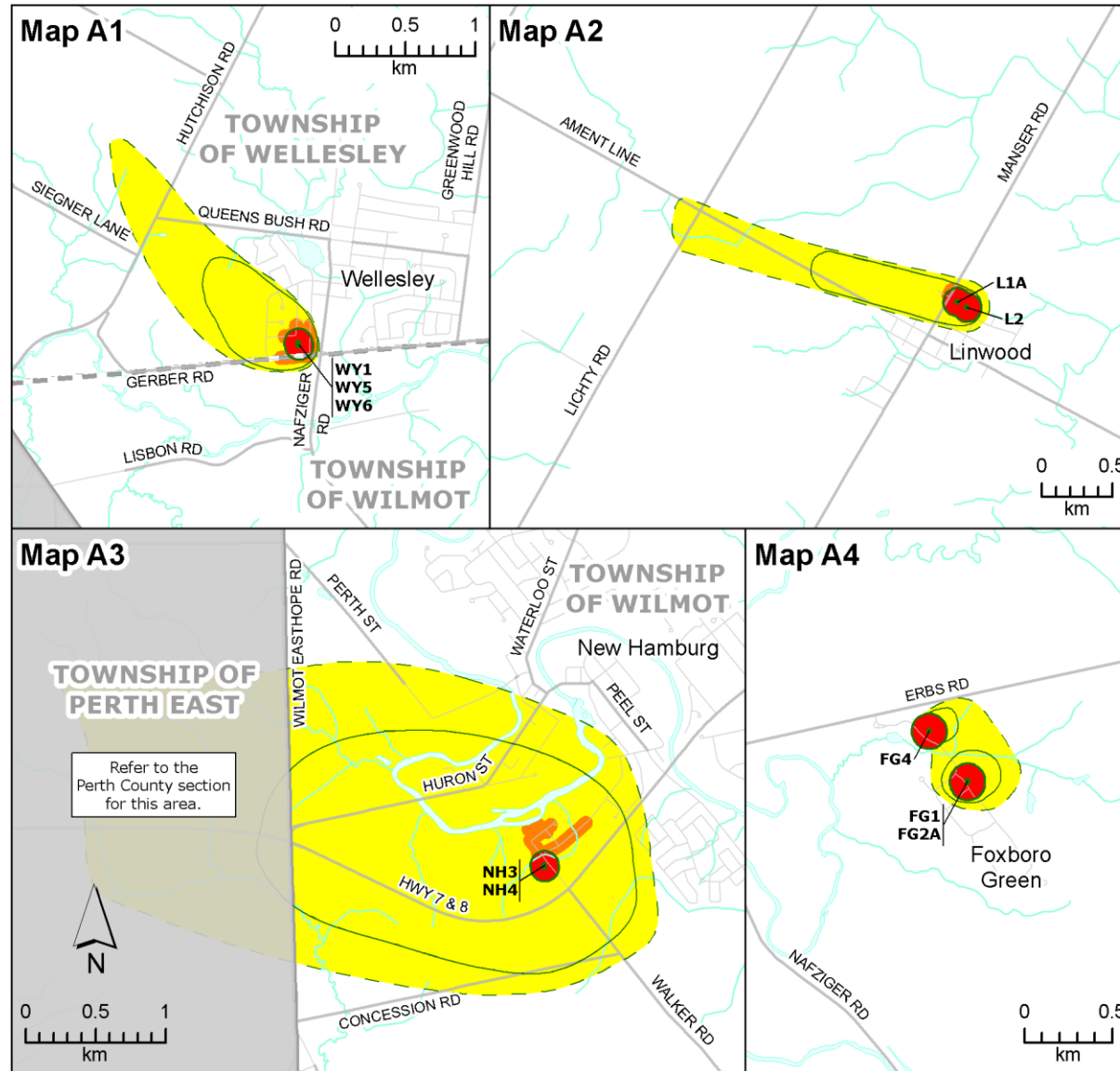


## 10.4 Schedule A: Region of Waterloo Groundwater Systems: Index Map





## 10.5 Schedule B: Region of Waterloo Groundwater Systems: Map A

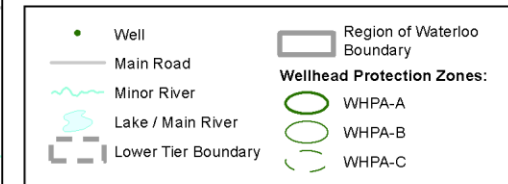


## Significant Drinking Water Threat Policy Applicability

Significant Drinking Water Threat Policy Categories	Vulnerability Scores on Map		
1. Waste Disposal	10	8	2,4,6
2. Sewage Systems			
3, 4. Agricultural Source Material			
6, 7. Non-Agricultural Source Material*			
8, 9. Commercial Fertilizer*			
10, 11. Pesticide			
12, 13. Road Salt*			
14. Storage of Snow			
15. Fuel			
16. DNAPLs			
17. Organic Solvents			
18. Aircraft De-icing			
21. Livestock Area			
22. Oil Pipelines			

Note: This table provides a summary of the activities listed in the Clean Water Act (2006) that apply as Prescribed Drinking Water Threats (PDWT) within Non-GUDI Wellhead Protection Zones on this map. For details refer to the Drinking Water Threats Tables from the Ministry of the Environment and Climate Change, and the text of this Source Protection Plan.

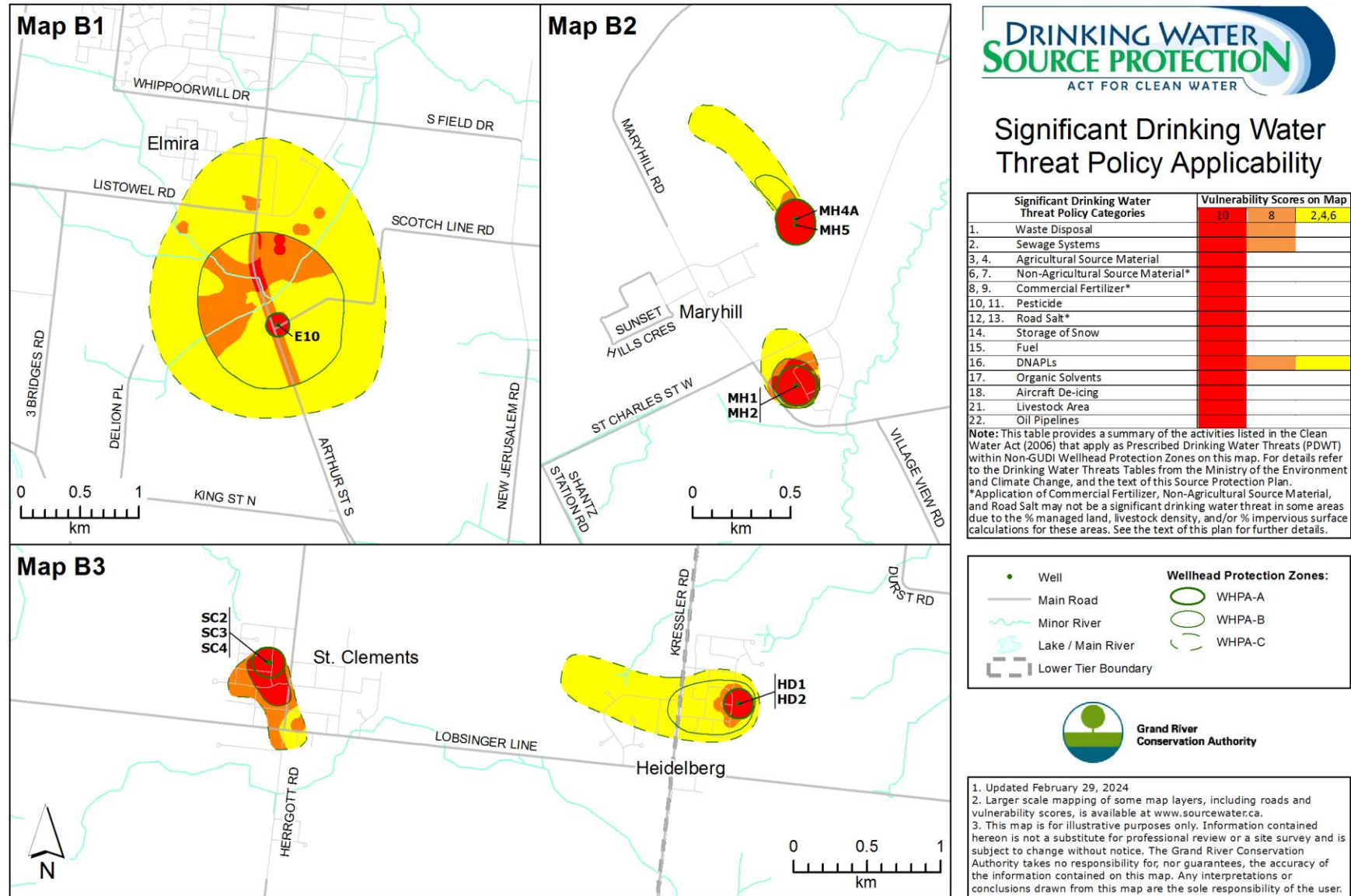
\*Application of Commercial Fertilizer, Non-Agricultural Source Material, and Road Salt may not be a significant drinking water threat in some areas due to the % managed land, livestock density, and/or % impervious surface calculations for these areas. See the text of this plan for further details.



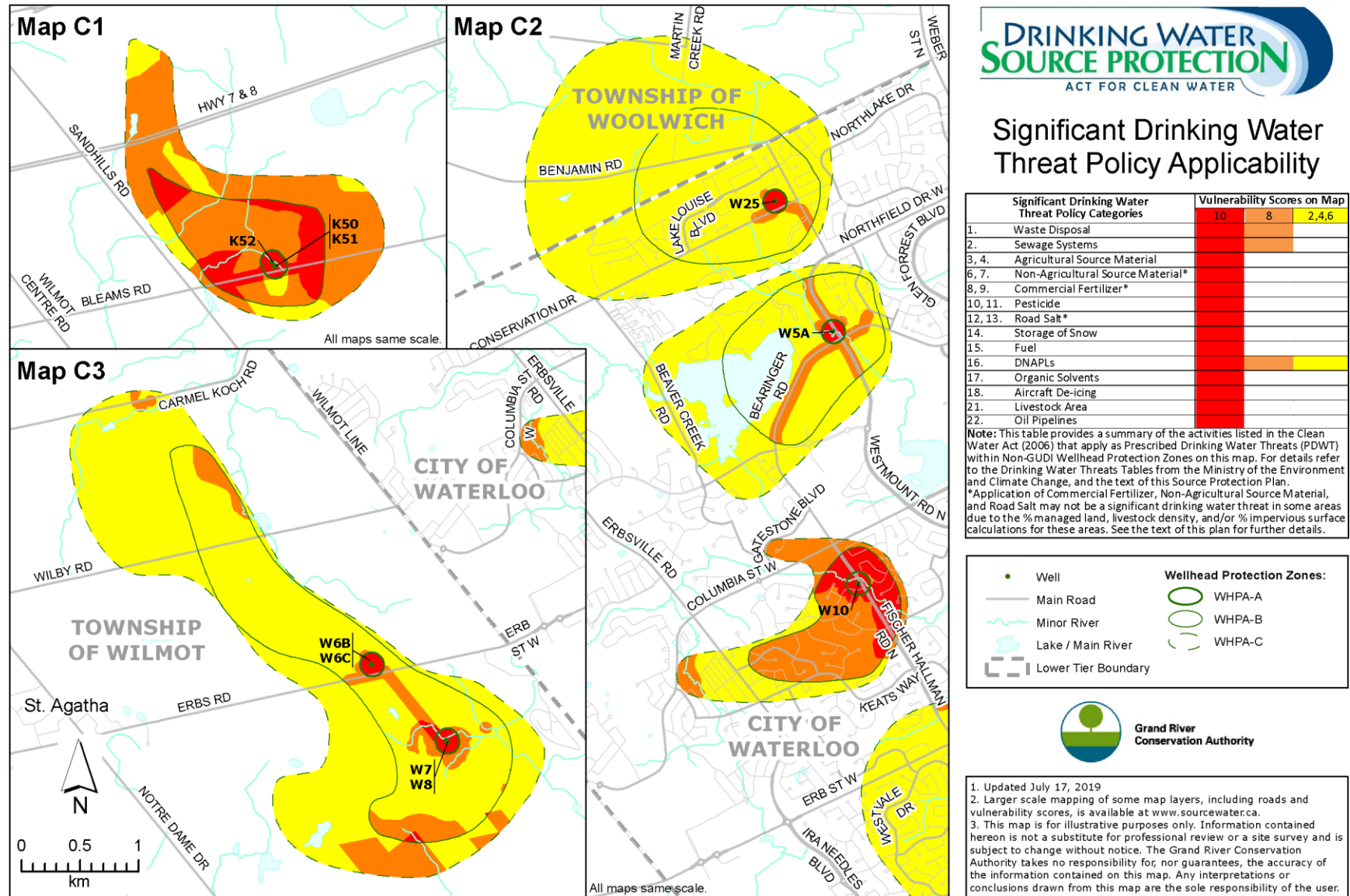
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1. Updated July 24, 2019  
2. Larger scale mapping of some map layers, including roads and vulnerability scores, is available at [www.sourcewater.ca](http://www.sourcewater.ca).  
3. This map is for illustrative purposes only. Information contained hereon is not a substitute for professional review or a site survey and is subject to change without notice. The Grand River Conservation Authority takes no responsibility for, nor guarantees, the accuracy of the information contained on this map. Any interpretations or conclusions drawn from this map are the sole responsibility of the user.

## 10.6 Schedule C: Region of Waterloo Groundwater Systems: Map B

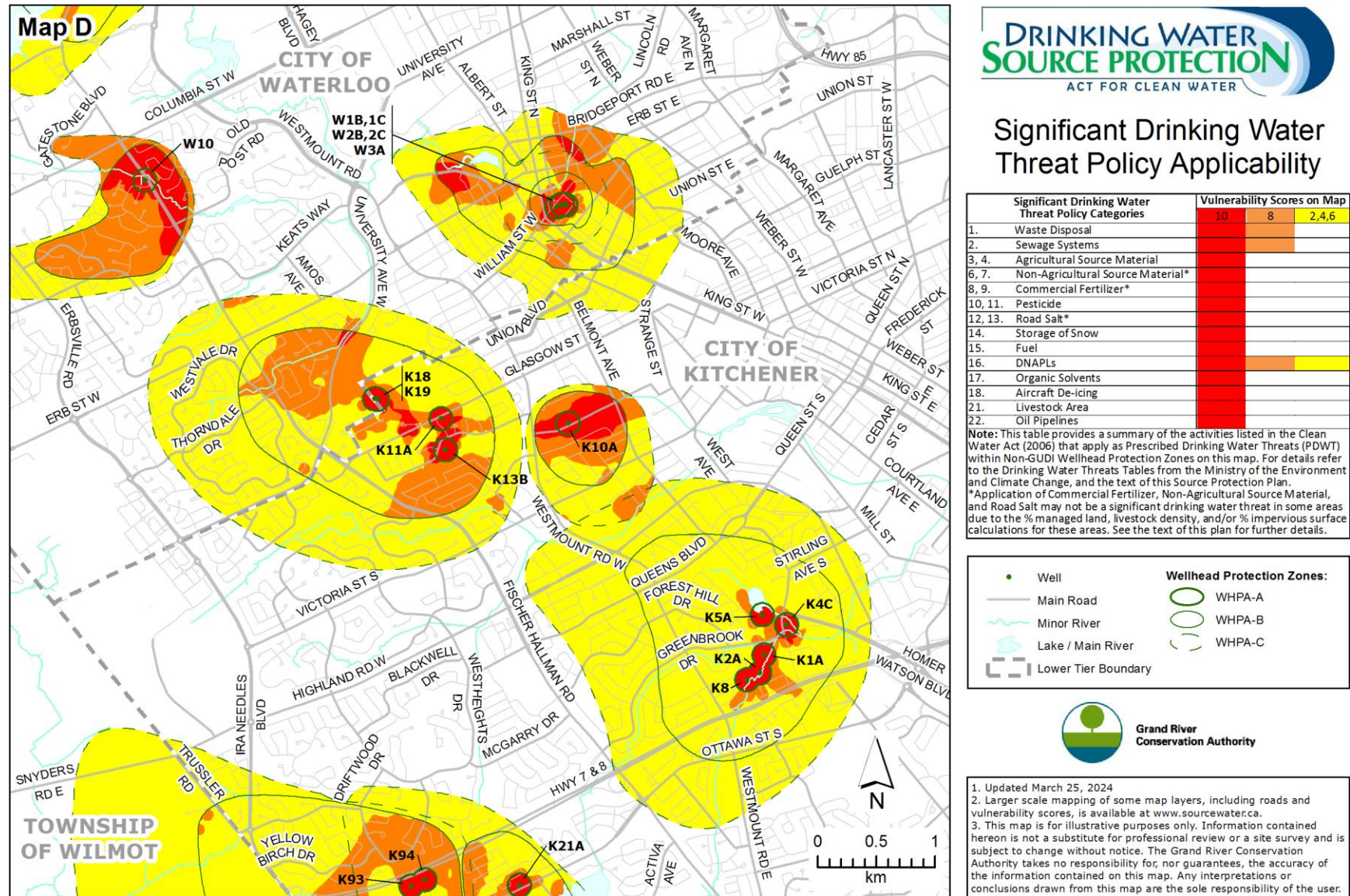


## 10.7 Schedule D: Region of Waterloo Groundwater Systems: Map C

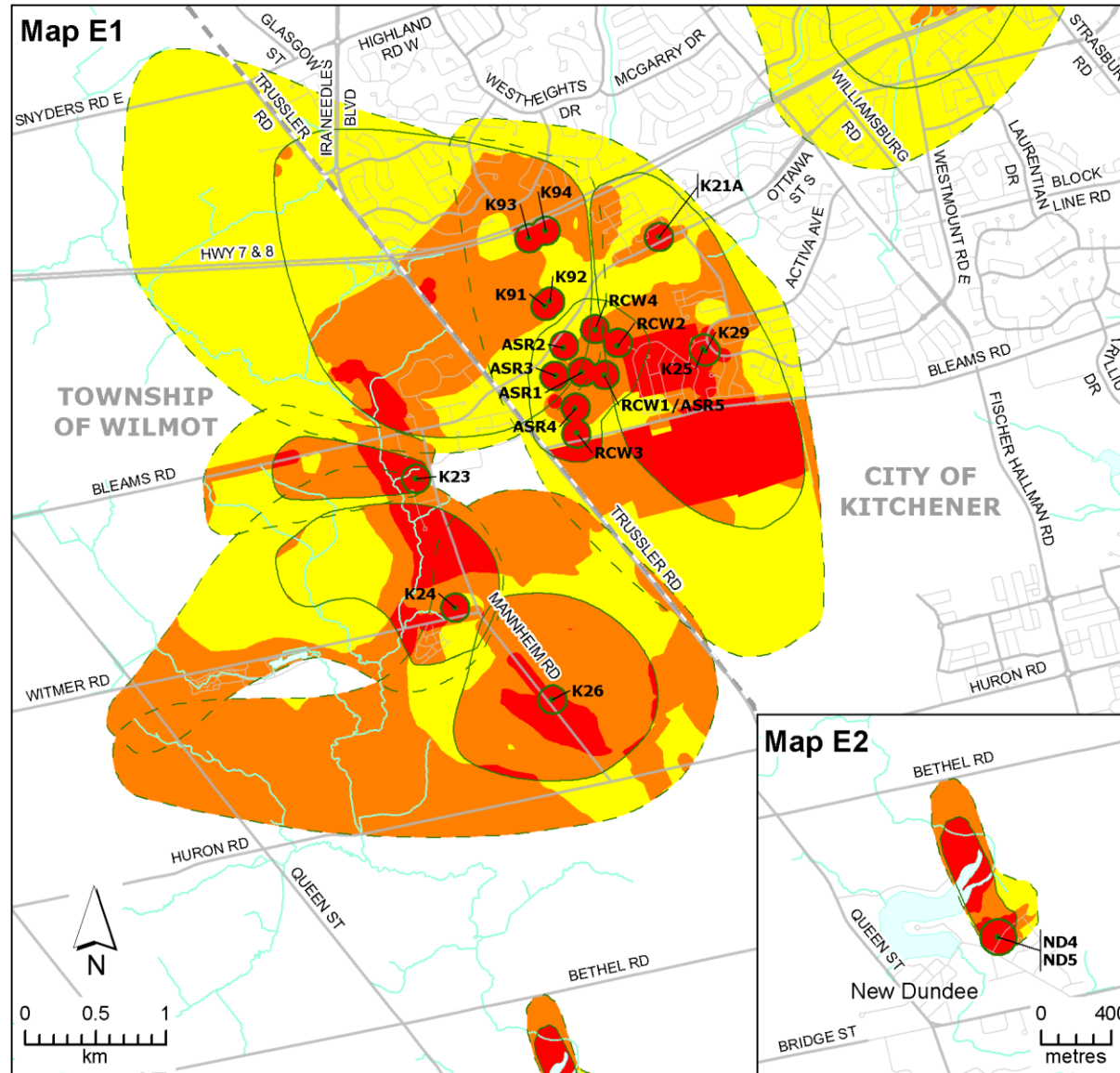




## 10.8 Schedule E: Region of Waterloo Groundwater Systems: Map D



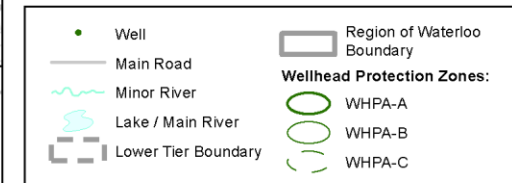
## 10.9 Schedule F: Region of Waterloo Groundwater Systems: Map E



## Significant Drinking Water Threat Policy Applicability

Significant Drinking Water Threat Policy Categories	Vulnerability Scores on Map		
	10	8	2,4,6
1. Waste Disposal			
2. Sewage Systems			
3, 4. Agricultural Source Material			
6, 7. Non-Agricultural Source Material*			
8, 9. Commercial Fertilizer*			
10, 11. Pesticide			
12, 13. Road Salt*			
14. Storage of Snow			
15. Fuel			
16. DNAPLs			
17. Organic Solvents			
18. Aircraft De-icing			
21. Livestock Area			
22. Oil Pipelines			

Note: This table provides a summary of the activities listed in the Clean Water Act (2006) that apply as Prescribed Drinking Water Threats (PDWT) within Non-GUDI Wellhead Protection Zones on this map. For details refer to the Drinking Water Threats Tables from the Ministry of the Environment and Climate Change, and the text of this Source Protection Plan.  
\*Application of Commercial Fertilizer, Non-Agricultural Source Material, and Road Salt may not be a significant drinking water threat in some areas due to the % managed land, livestock density, and/or % impervious surface calculations for these areas. See the text of this plan for further details.

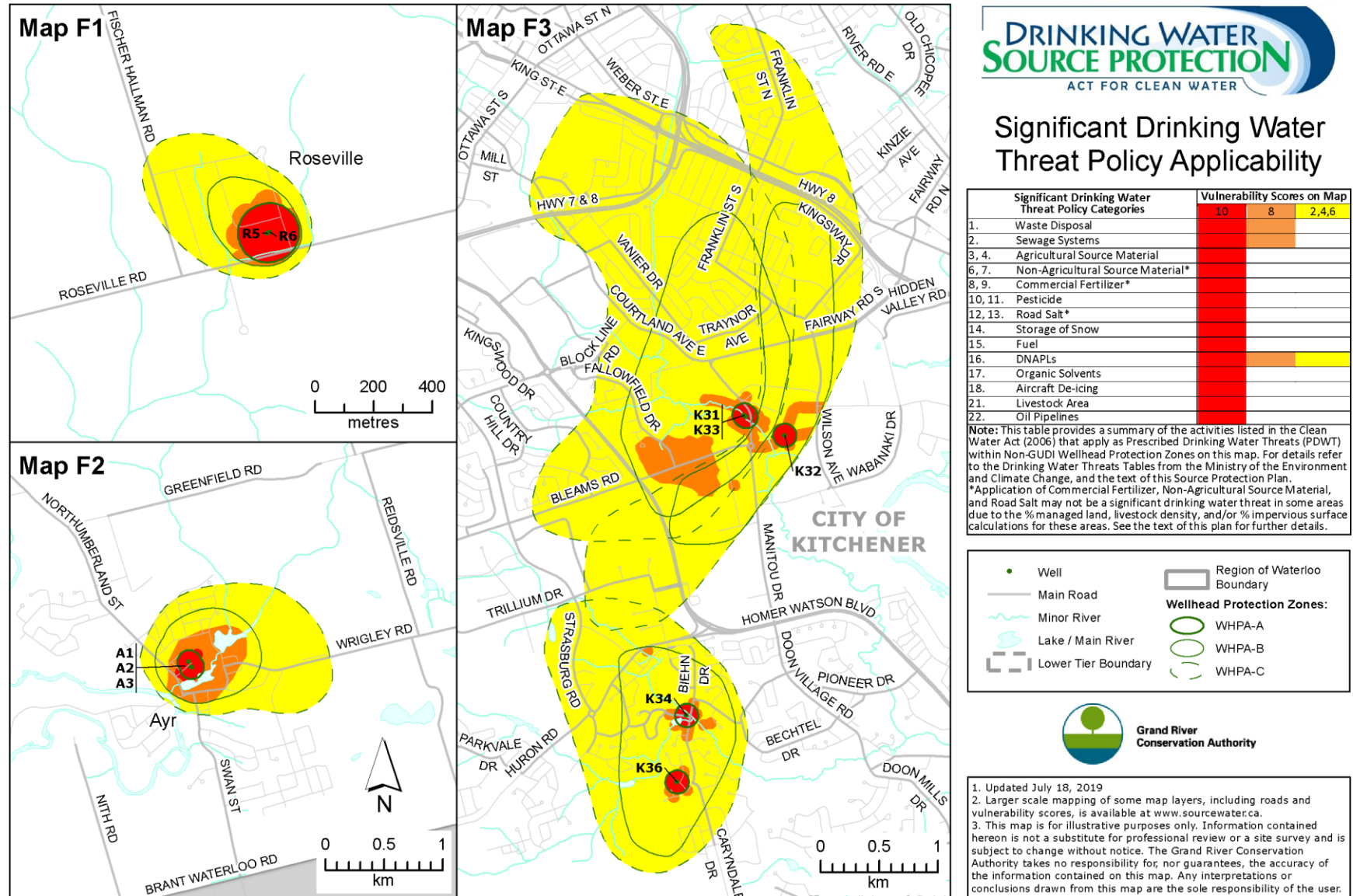


Grand River Conservation Authority

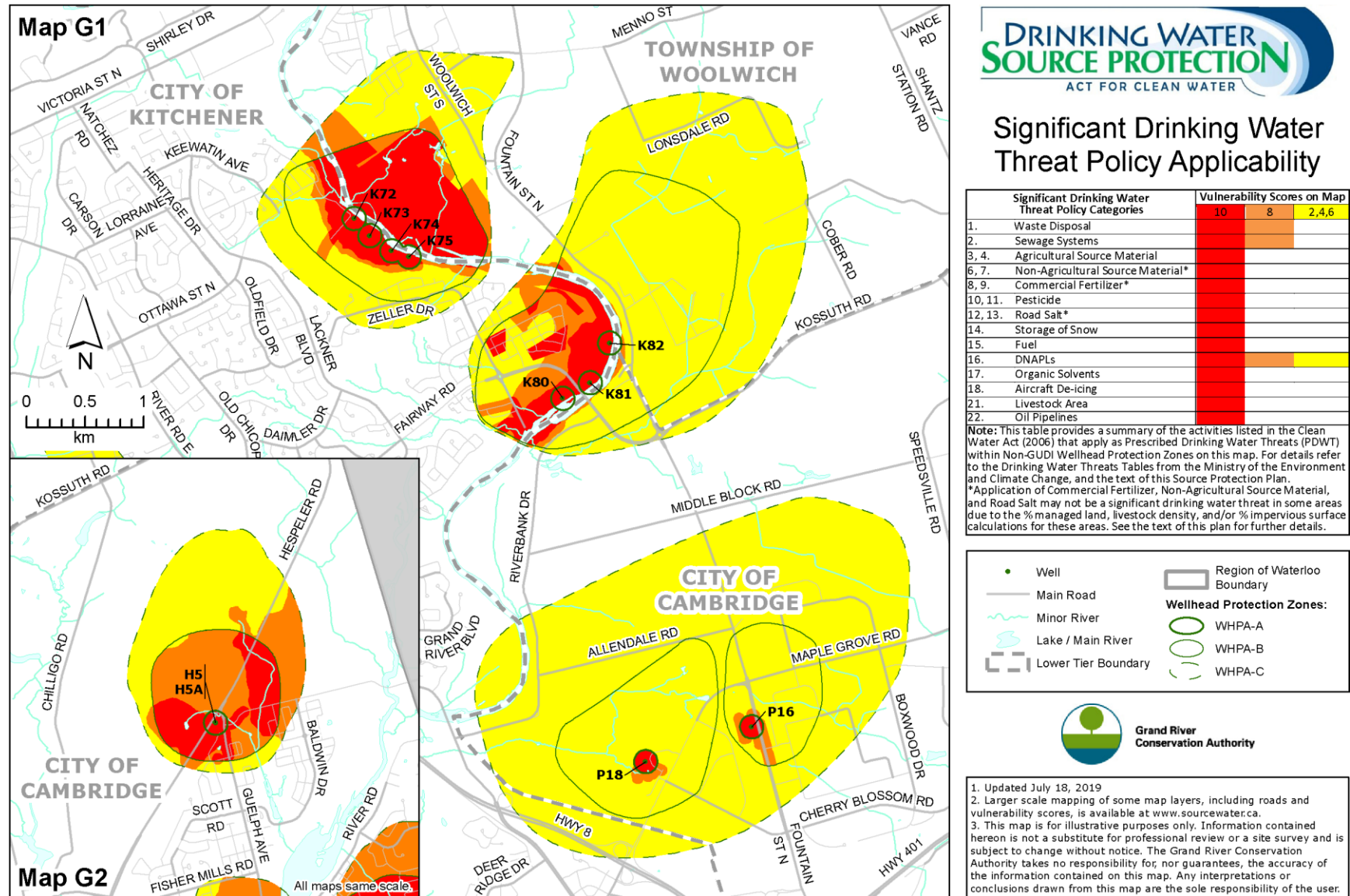
1. Updated September 25, 2020
2. Larger scale mapping of some map layers, including roads and vulnerability scores, is available at [www.sourcewater.ca](http://www.sourcewater.ca).
3. This map is for illustrative purposes only. Information contained hereon is not a substitute for professional review or a site survey and is subject to change without notice. The Grand River Conservation Authority takes no responsibility for, nor guarantees, the accuracy of the information contained on this map. Any interpretations or conclusions drawn from this map are the sole responsibility of the user.



## 10.10 Schedule G: Region of Waterloo Groundwater Systems: Map F

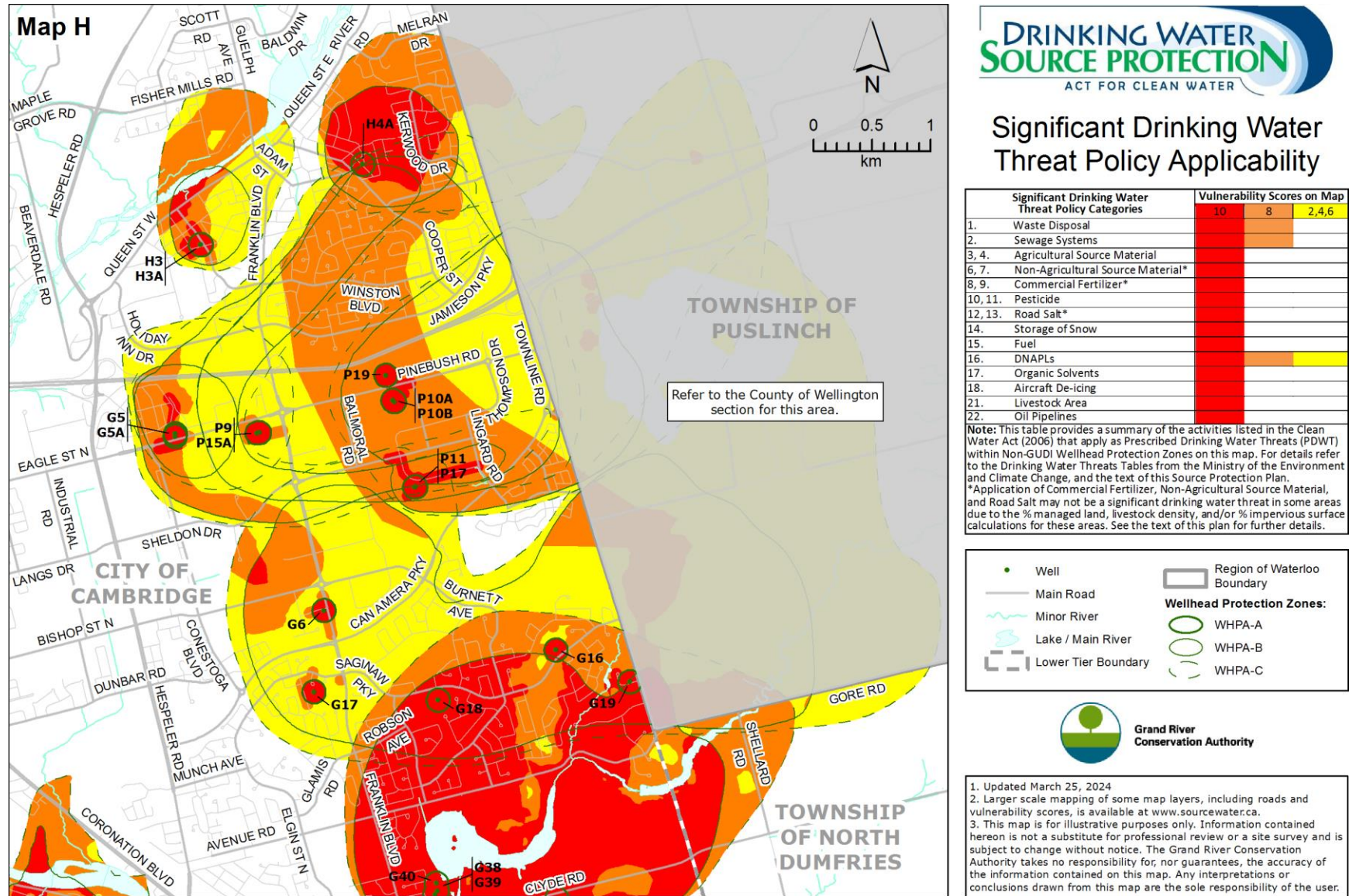


## 10.11 Schedule H: Region of Waterloo Groundwater Systems: Map G



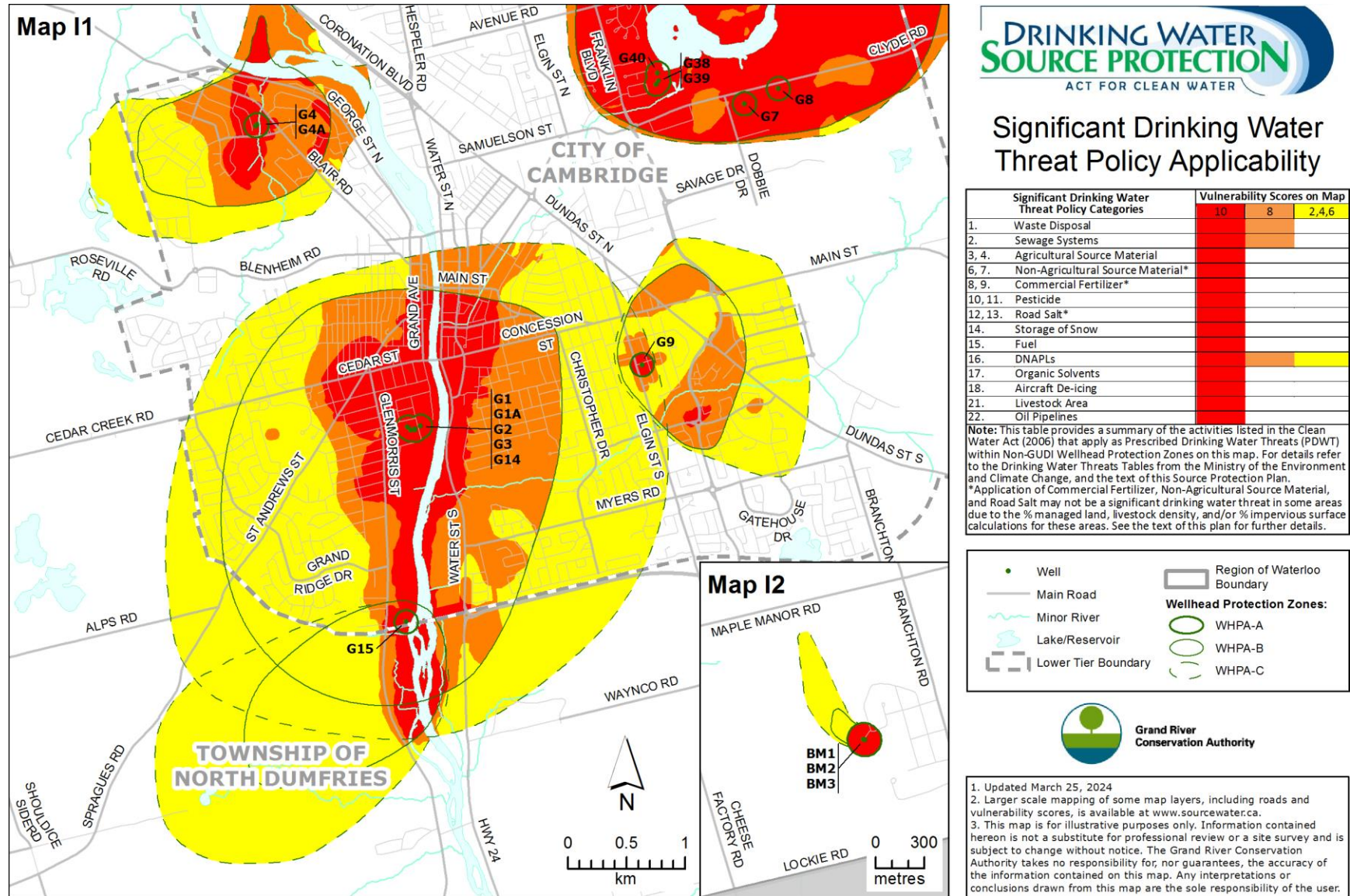


## 10.12 Schedule I: Region of Waterloo Groundwater Systems: Map H





## 10.13 Schedule J: Region of Waterloo Groundwater Systems: Map I

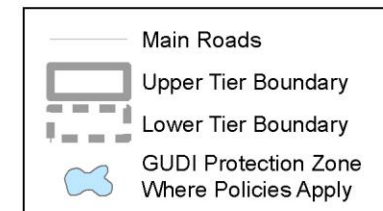


## 10.14 Schedule K: Region of Waterloo GUDI Systems: Index Map



## Significant Drinking Water Threat Policy Applicability

Index Map -  
Groundwater Under Direct  
Influence of Surface Water  
(GUDI) Protection Zones

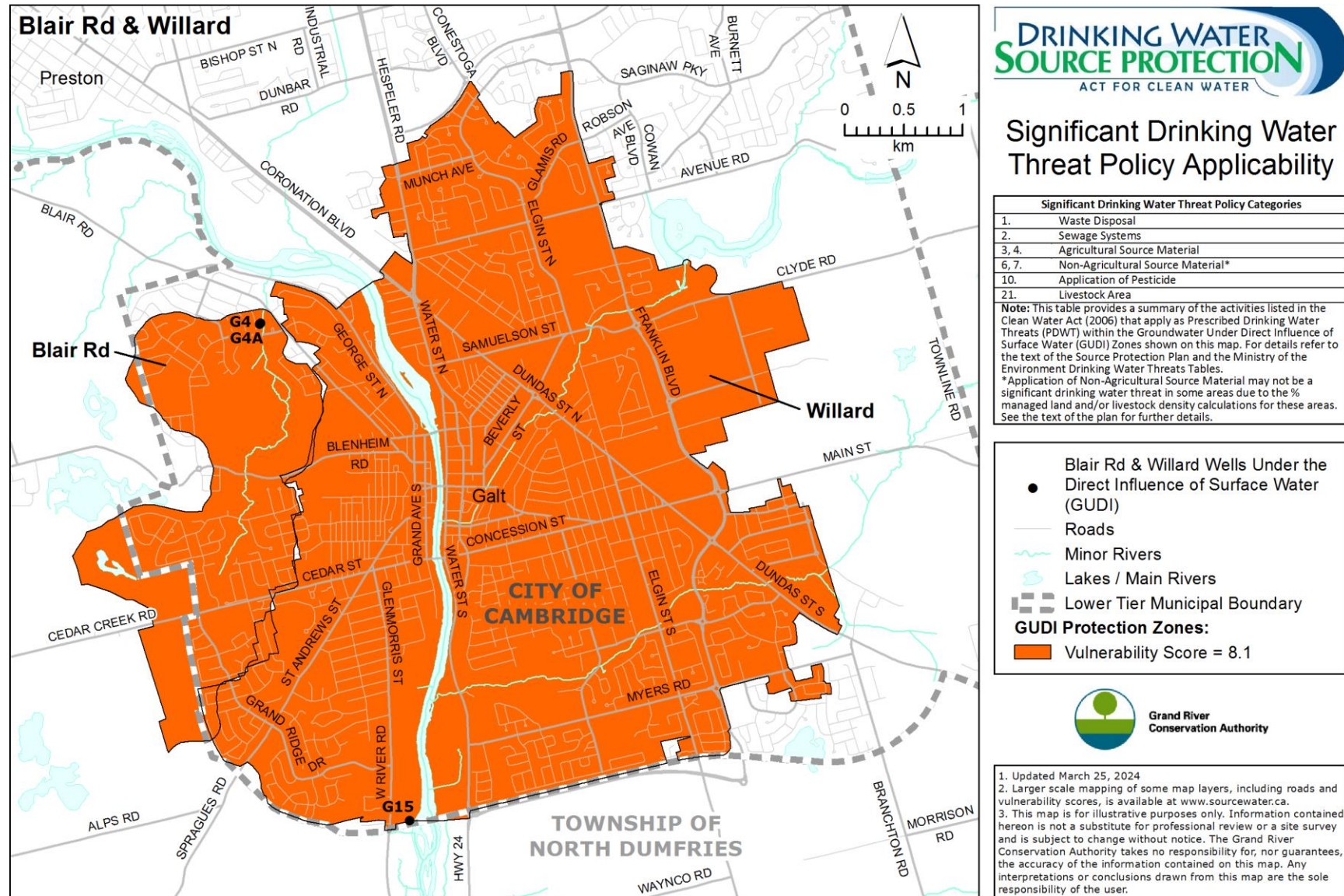


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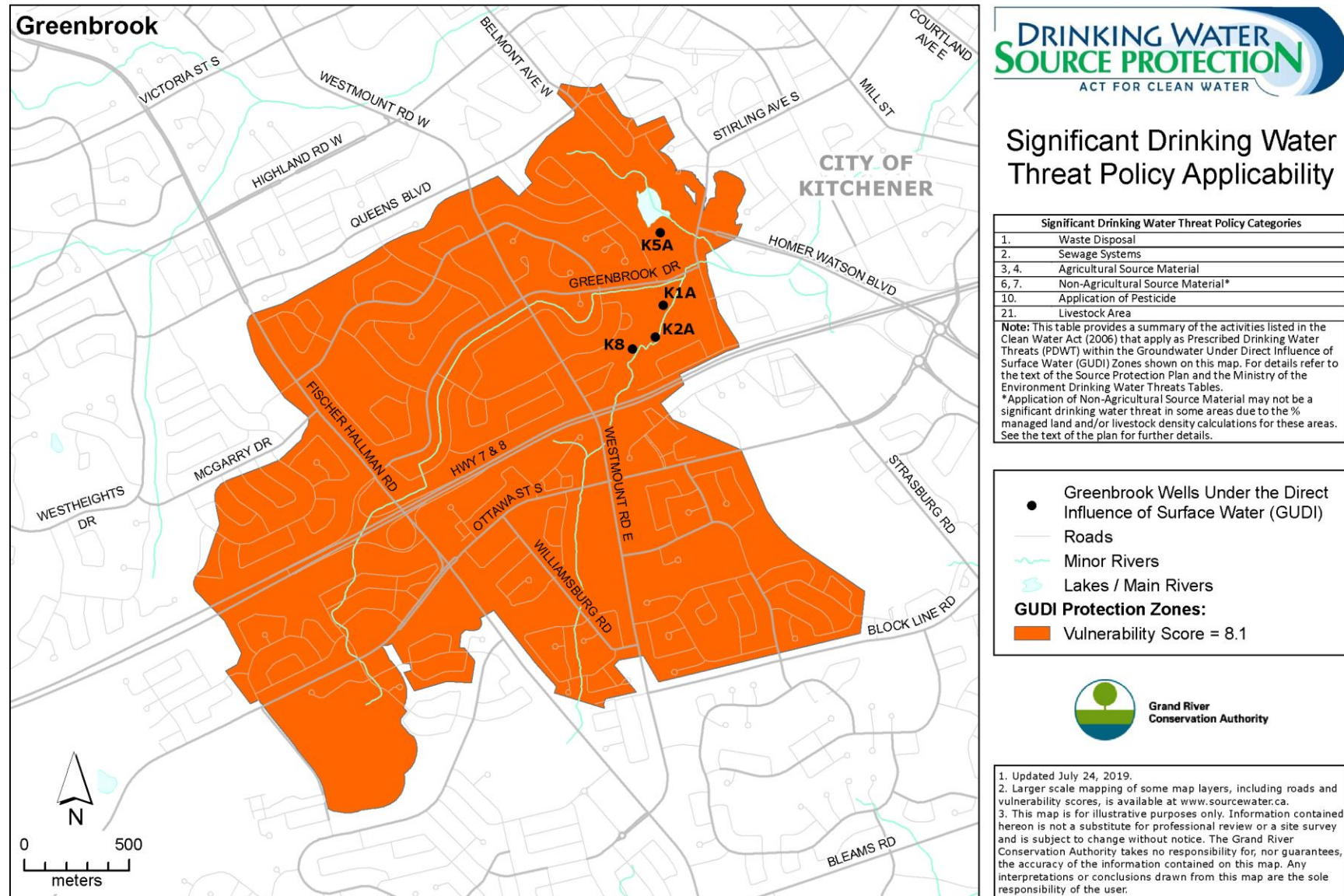
1. Updated January 25, 2019.
2. Larger scale mapping of some map layers, including roads and vulnerability scores, is available at [www.sourcewater.ca](http://www.sourcewater.ca).
3. This map is for illustrative purposes only. Information contained hereon is not a substitute for professional review or a site survey and is subject to change without notice. The Grand River Conservation Authority takes no responsibility for, nor guarantees, the accuracy of the information contained on this map. Any interpretations or conclusions drawn from this map are the sole responsibility of the user.



## 10.15 Schedule L: Region of Waterloo GUDI Systems: Blair Rd &amp; Willard

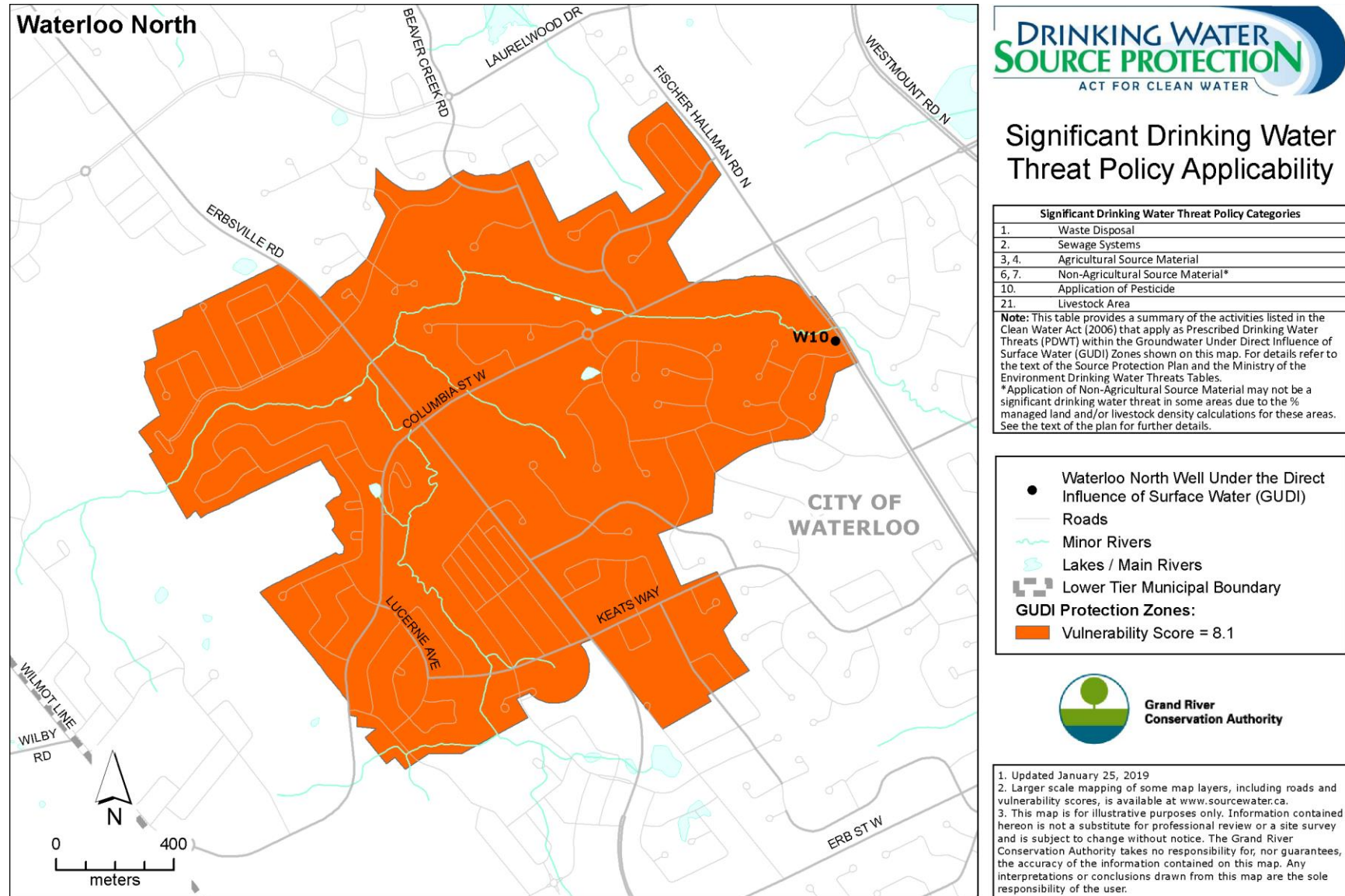


## 10.16 Schedule M: Region of Waterloo GUDI Systems: Greenbrook

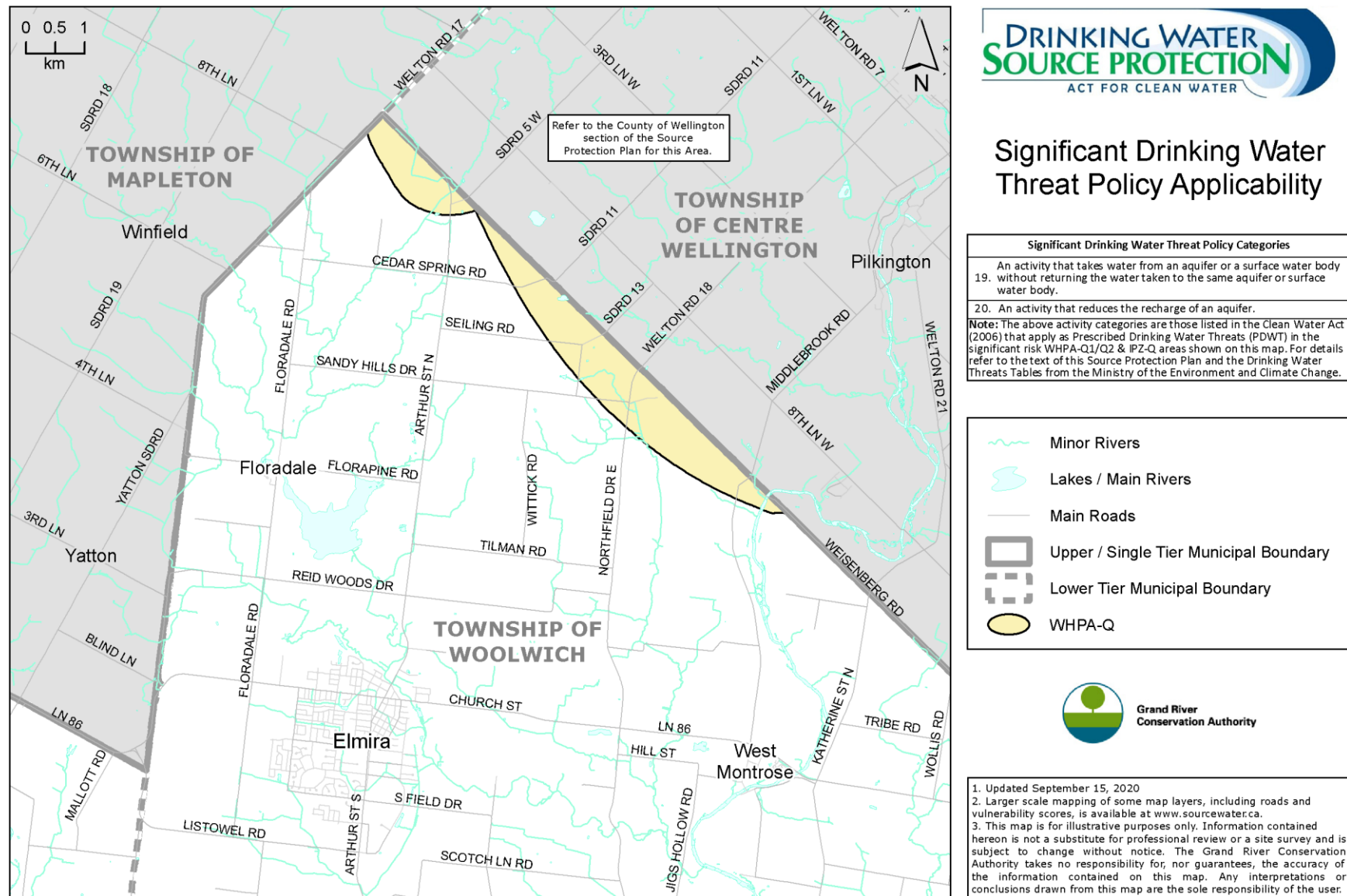




## 10.17 Schedule N: Region of Waterloo GUDI Systems: Waterloo North

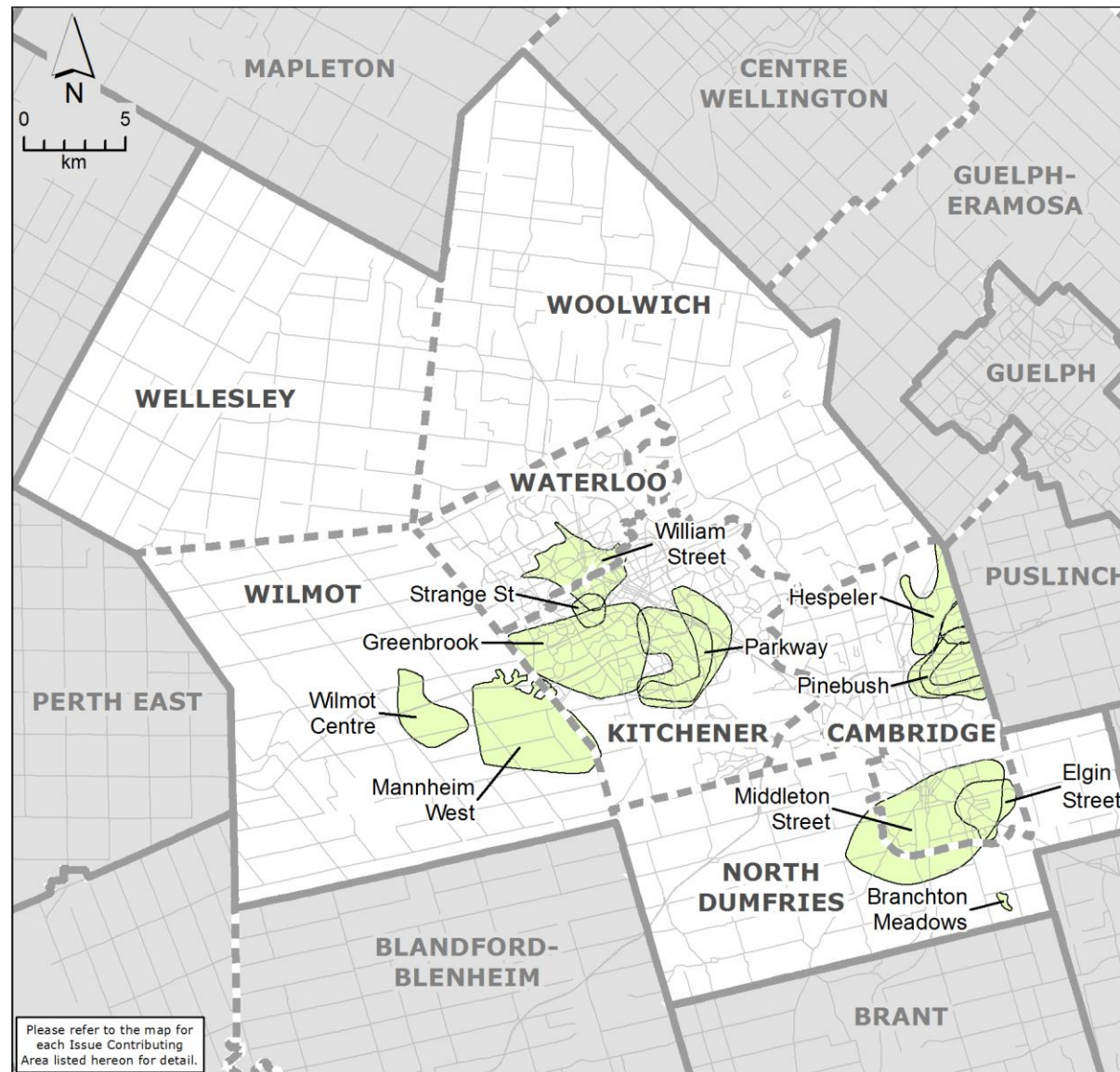


## 10.18 Schedule O: Region of Waterloo Wellhead Protection Area, Water Quantity: Township of Woolwich



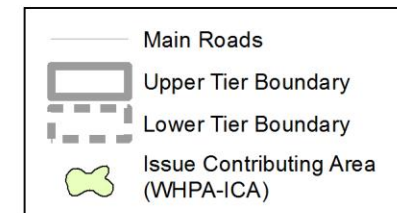


## 10.19 Schedule P: Region of Waterloo Issue Contributing Areas: Index Map



## Significant Drinking Water Threat Policy Applicability

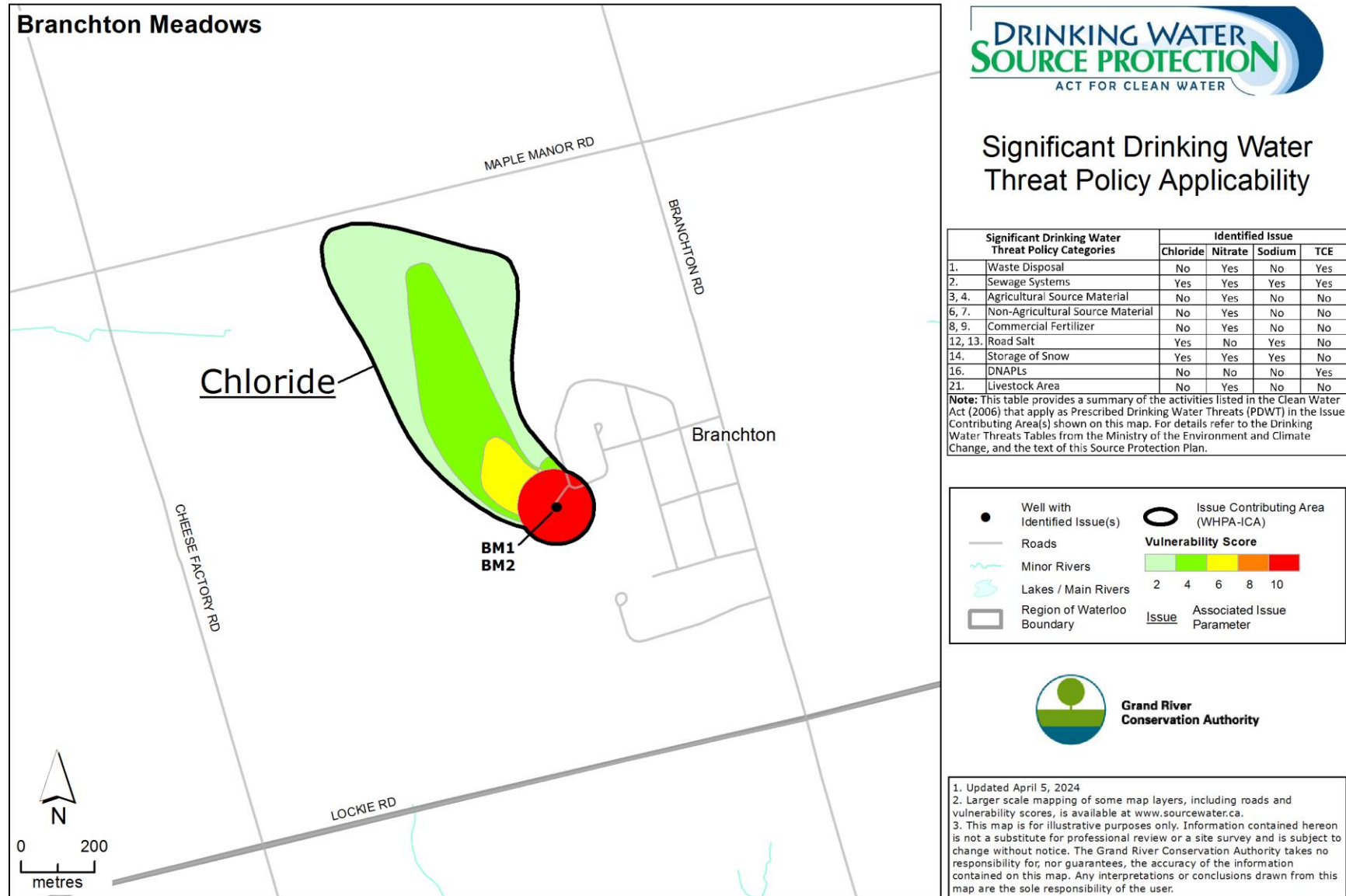
Index Map - Issue Contributing Areas



Grand River Conservation Authority

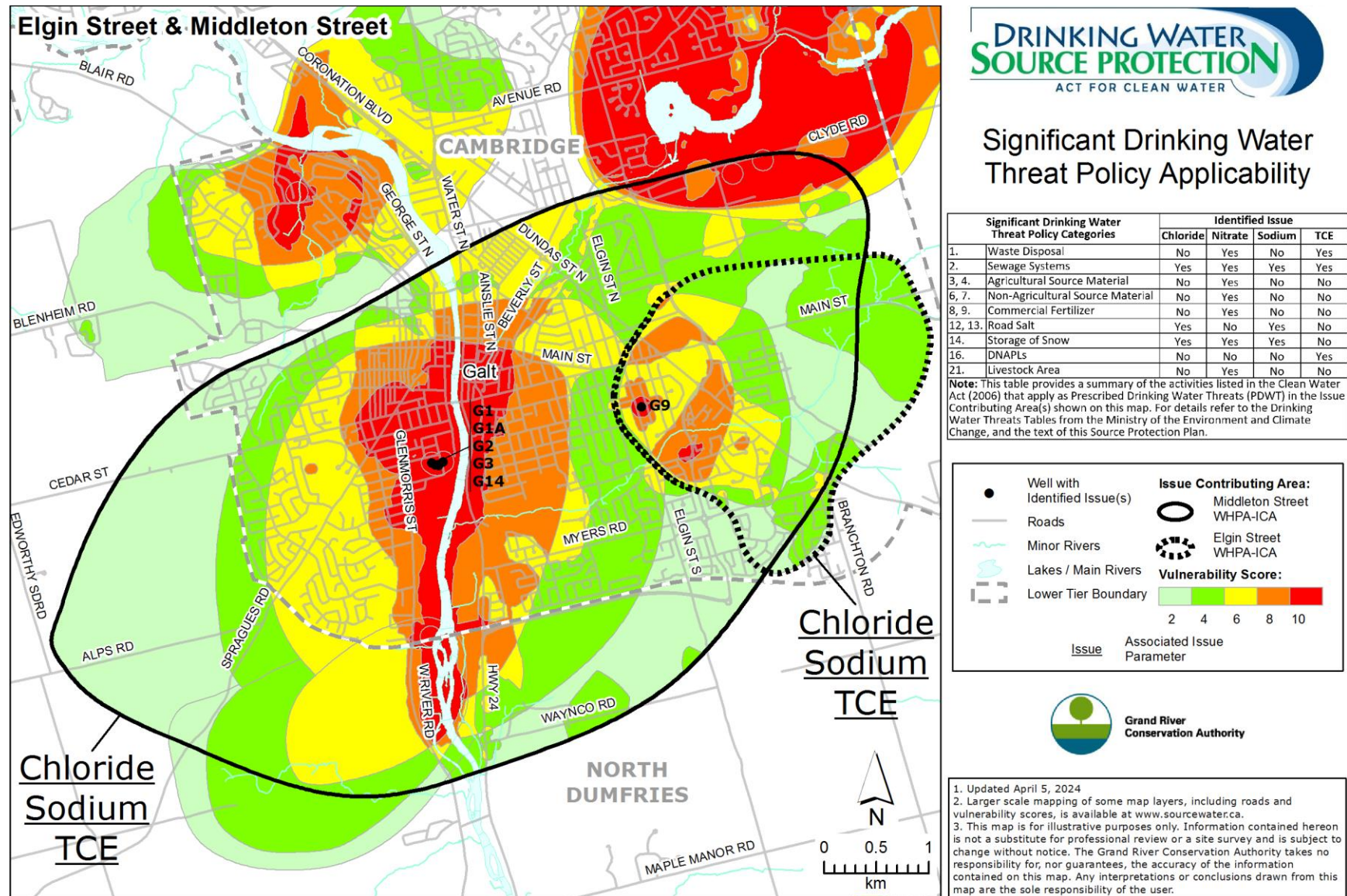
1. Updated April 4, 2024.
2. Larger scale mapping of some map layers, including roads and vulnerability scores, is available at [www.sourcewater.ca](http://www.sourcewater.ca).
3. This map is for illustrative purposes only. Information contained hereon is not a substitute for professional review or a site survey and is subject to change without notice. The Grand River Conservation Authority takes no responsibility for, nor guarantees, the accuracy of the information contained on this map. Any interpretations or conclusions drawn from this map are the sole responsibility of the user.

## 10.20 Schedule Q: Region of Waterloo Issue Contributing Areas: Branchton Meadows



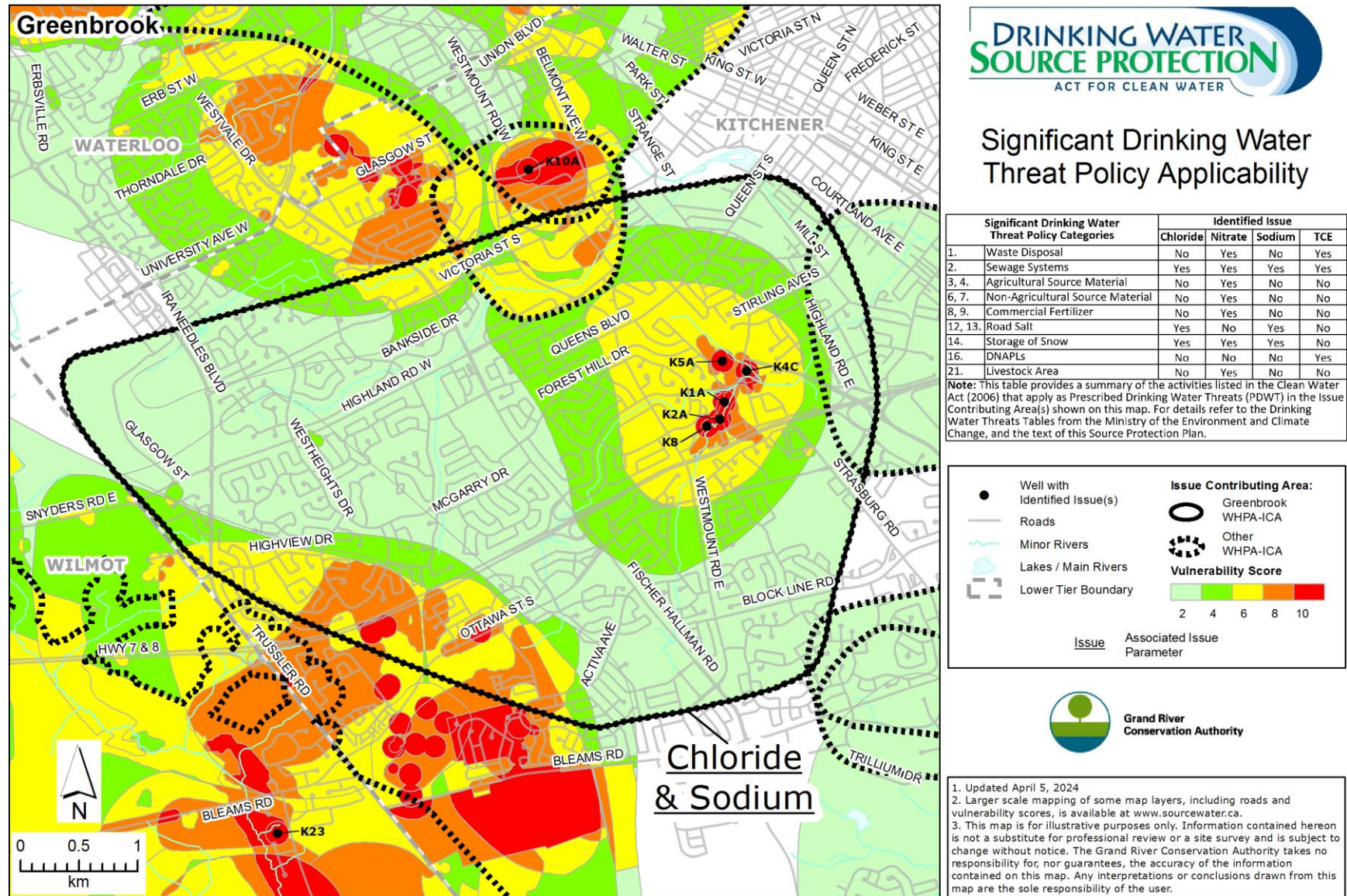


## 10.21 Schedule R: Region of Waterloo Issue Contributing Areas: Elgin &amp; Middleton Street



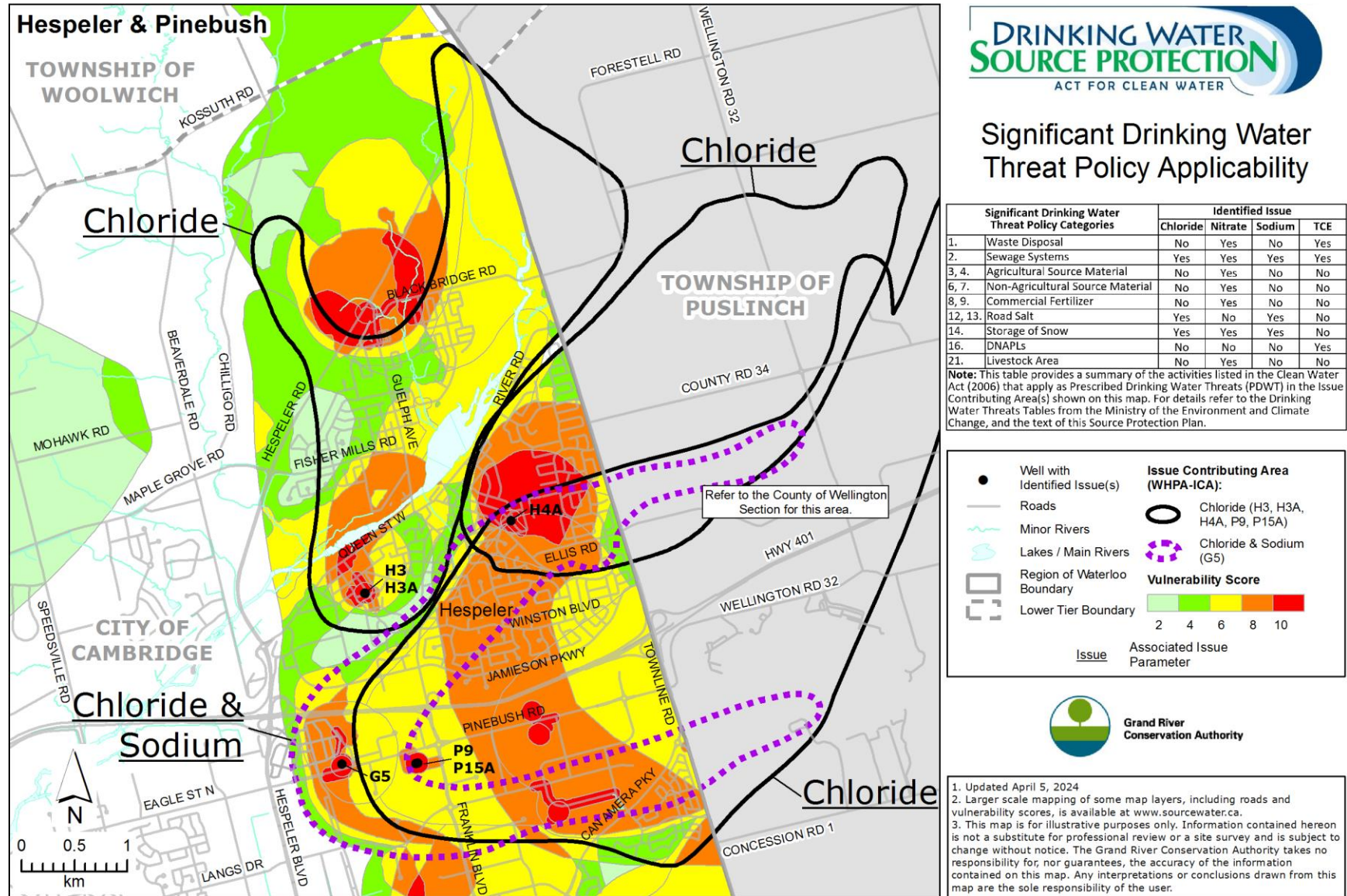


## 10.22 Schedule S: Region of Waterloo Issue Contributing Areas: Greenbrook



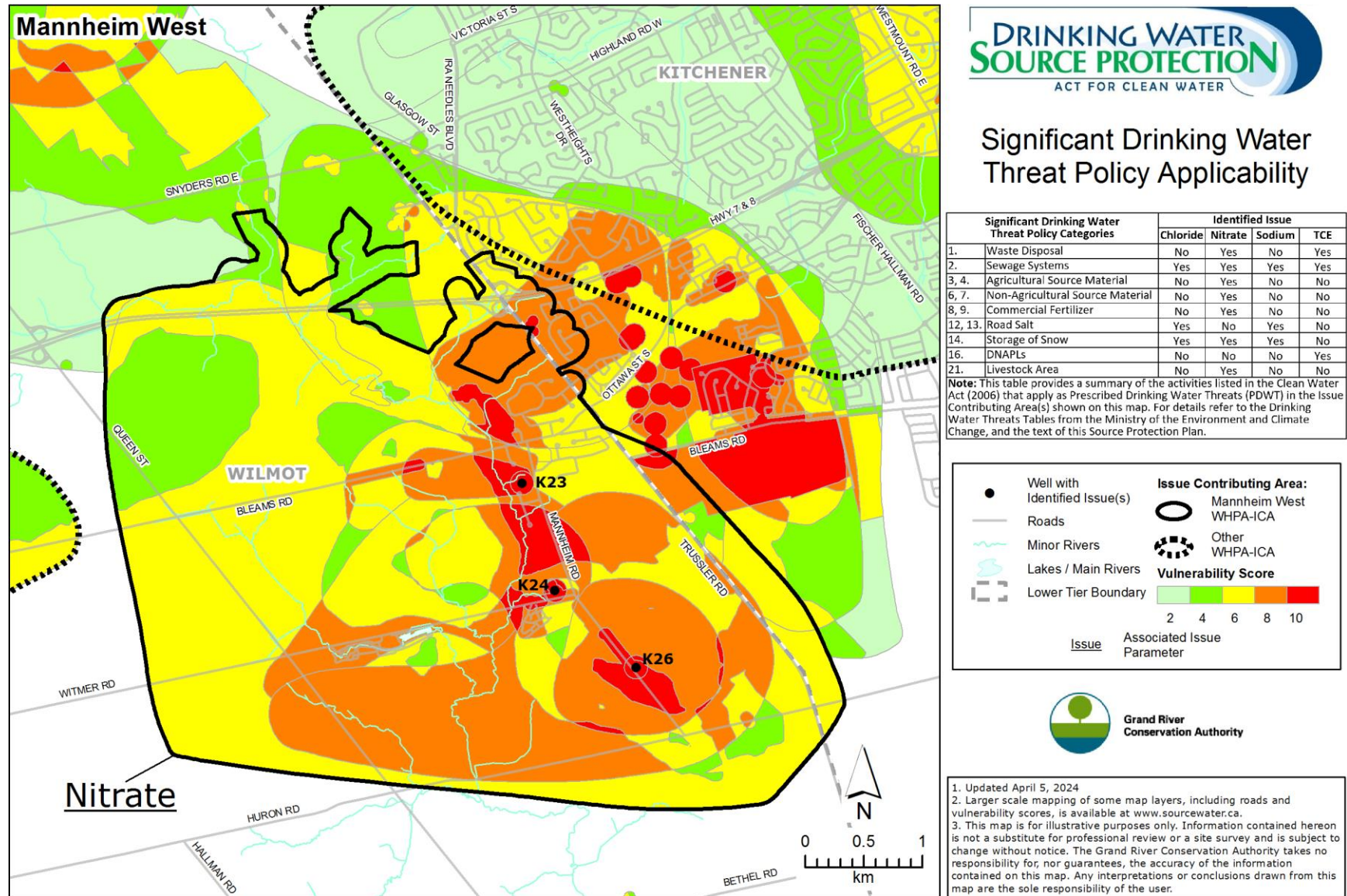


## 10.23 Schedule T: Region of Waterloo Issue Contributing Areas: Hespeler &amp; Pinebush



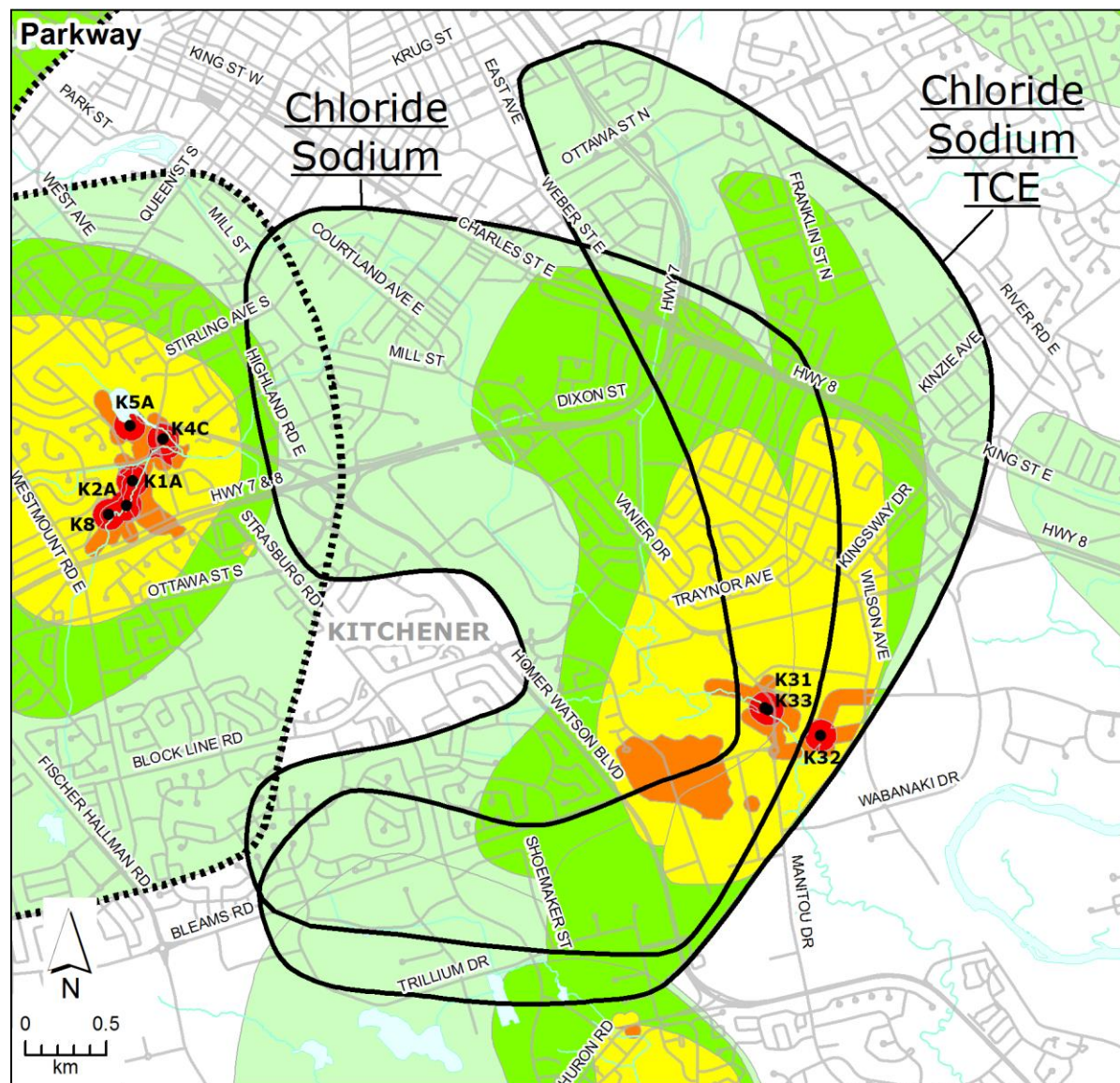


## 10.24 Schedule U: Region of Waterloo Issue Contributing Areas: Mannheim West





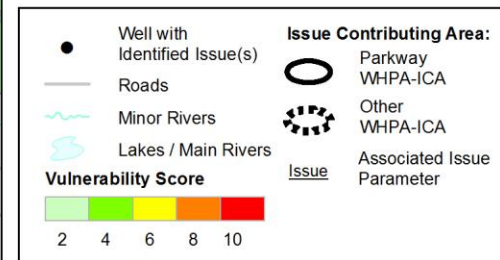
## 10.25 Schedule V: Region of Waterloo Issue Contributing Areas: Parkway



## Significant Drinking Water Threat Policy Applicability

Significant Drinking Water Threat Policy Categories	Identified Issue			
	Chloride	Nitrate	Sodium	TCE
1. Waste Disposal	No	Yes	No	Yes
2. Sewage Systems	Yes	Yes	Yes	Yes
3, 4. Agricultural Source Material	No	Yes	No	No
6, 7. Non-Agricultural Source Material	No	Yes	No	No
8, 9. Commercial Fertilizer	No	Yes	No	No
12, 13. Road Salt	Yes	No	Yes	No
14. Storage of Snow	Yes	Yes	Yes	No
16. DNAPLs	No	No	No	Yes
21. Livestock Area	No	Yes	No	No

**Note:** This table provides a summary of the activities listed in the Clean Water Act (2006) that apply as Prescribed Drinking Water Threats (PDWT) in the Issue Contributing Area(s) shown on this map. For details refer to the Drinking Water Threats Tables from the Ministry of the Environment and Climate Change, and the text of this Source Protection Plan.

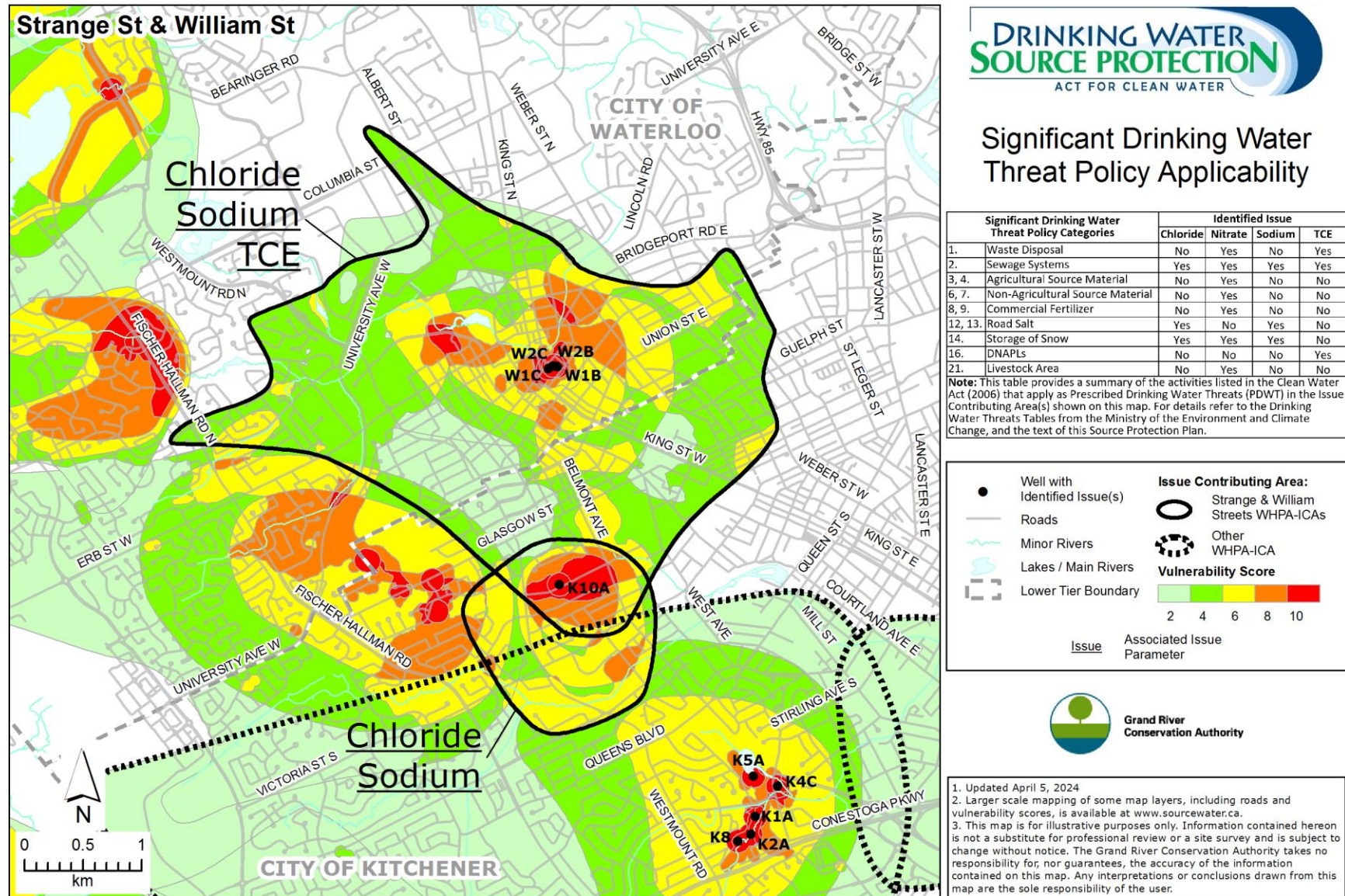


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1. Updated April 5, 2024.
2. Larger scale mapping of some map layers, including roads and vulnerability scores, is available at [www.sourcewater.ca](http://www.sourcewater.ca).
3. This map is for illustrative purposes only. Information contained herein is not a substitute for professional review or a site survey and is subject to change without notice. The Grand River Conservation Authority takes no responsibility for, nor guarantees, the accuracy of the information contained on this map. Any interpretations or conclusions drawn from this map are the sole responsibility of the user.

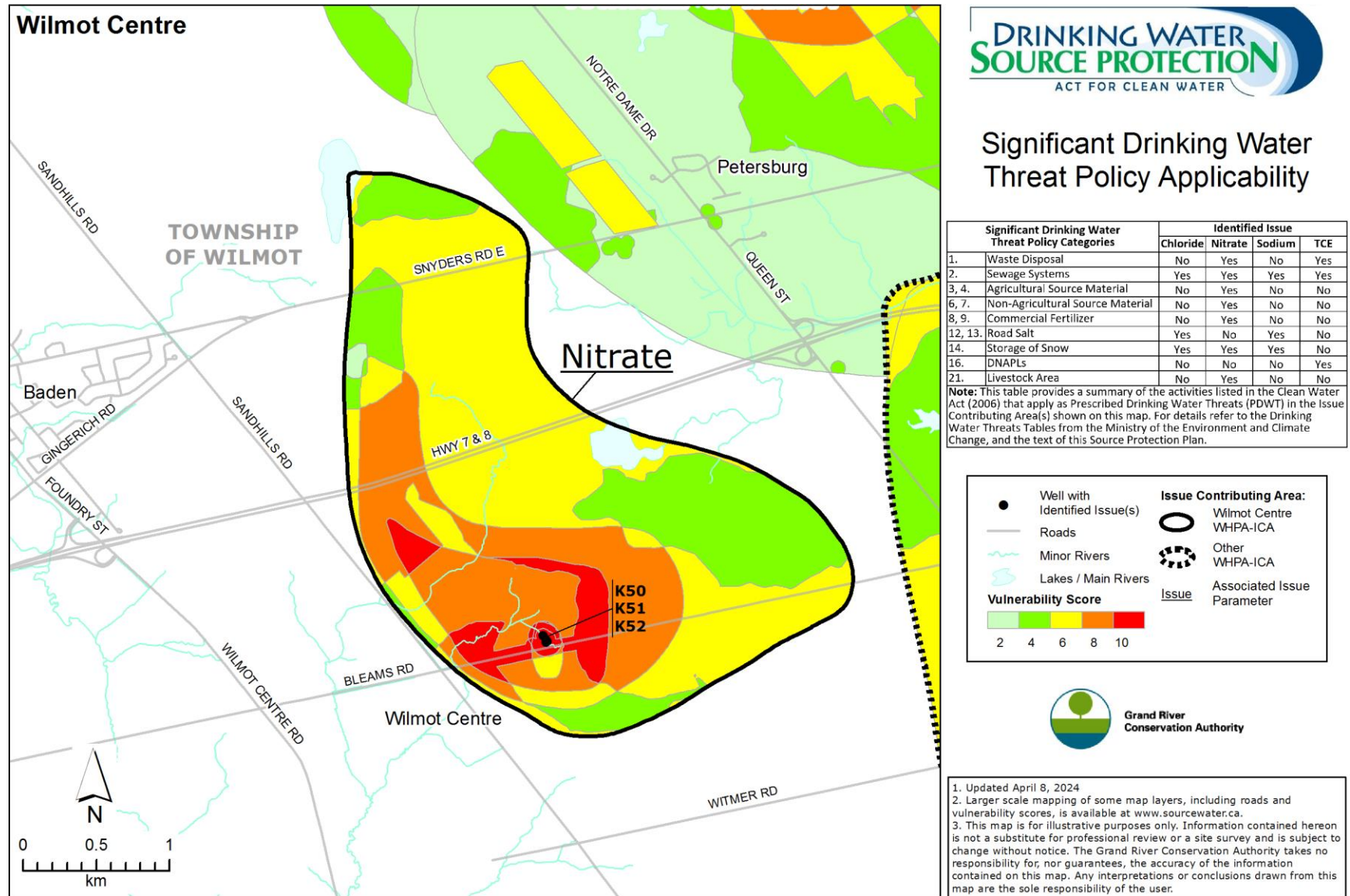


## 10.26 Schedule W: Region of Waterloo Issue Contributing Areas: Strange &amp; William St

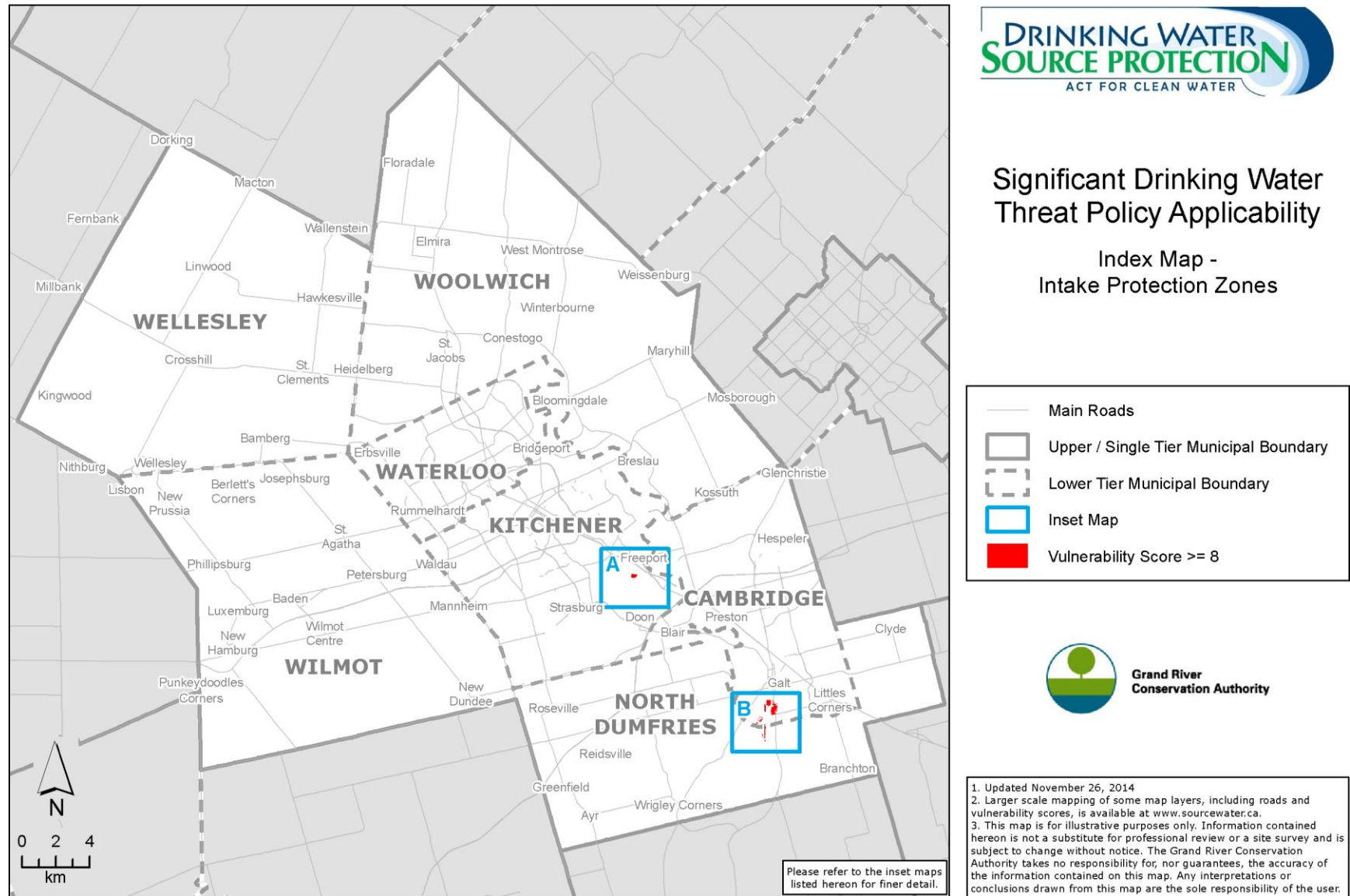




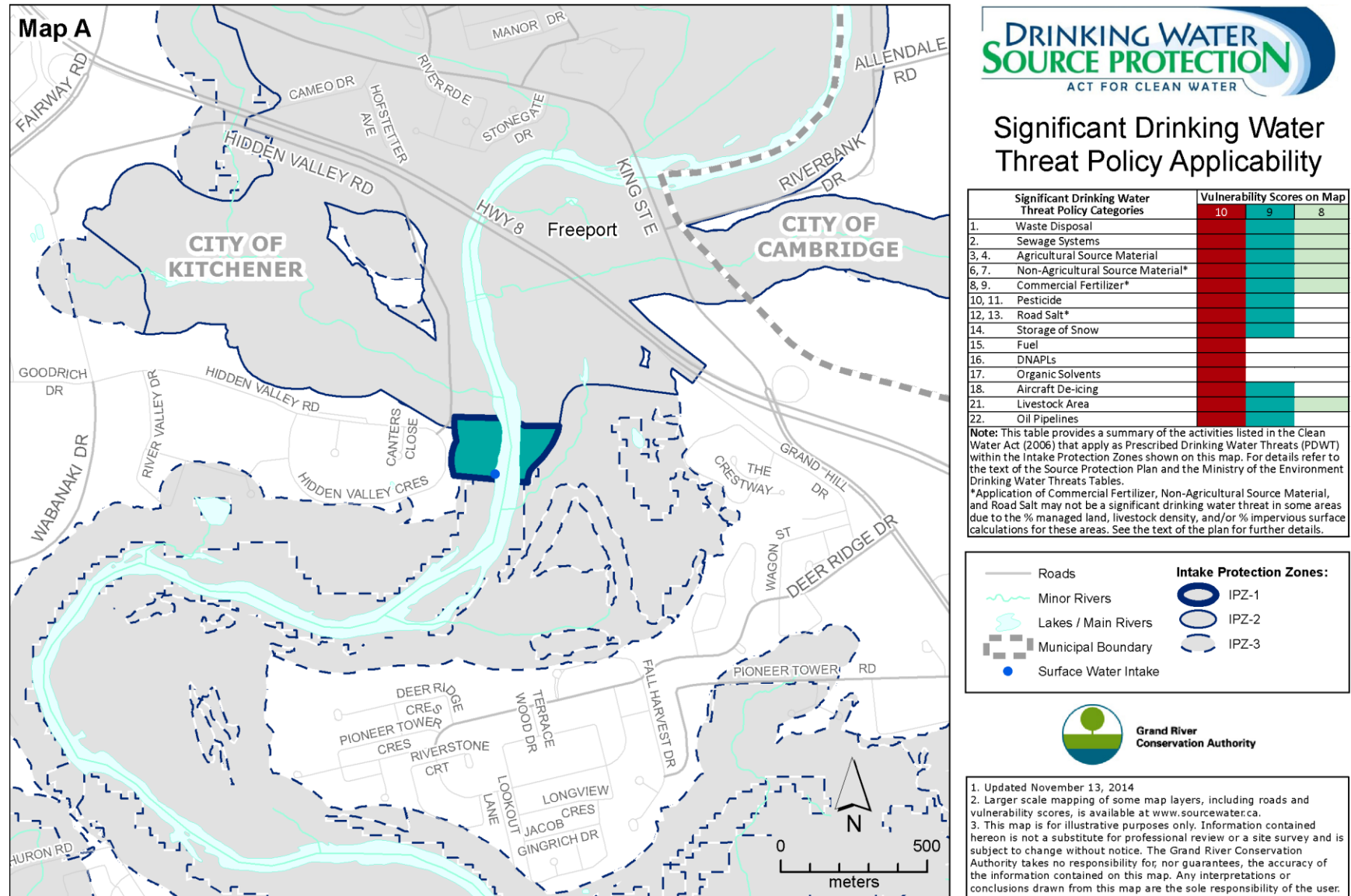
## 10.27 Schedule X: Region of Waterloo Issue Contributing Areas: Wilmot Centre



## 10.28 Schedule Y: Region of Waterloo Surface Water Systems: Index Map

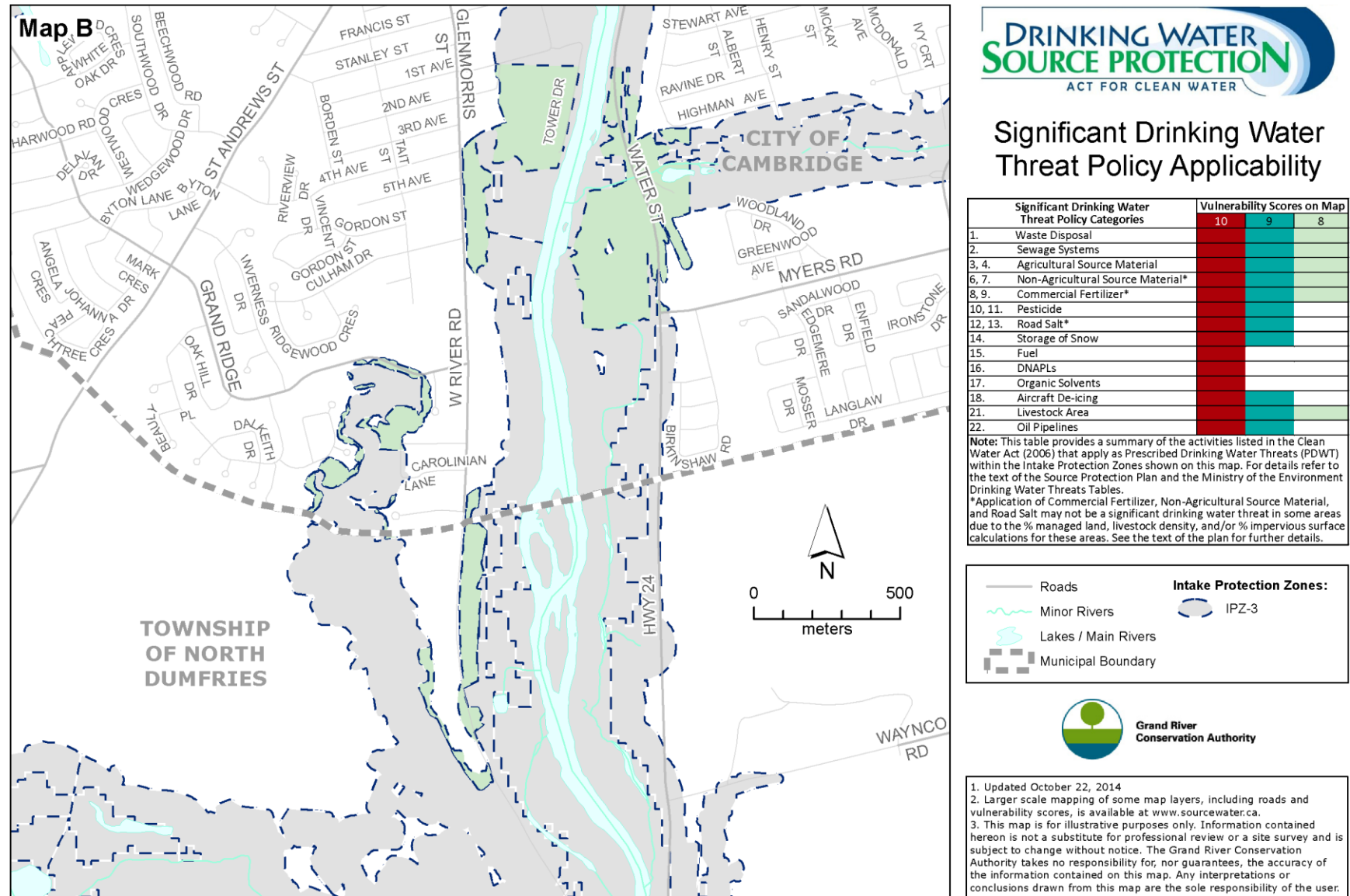


## 10.29 Schedule Z: Region of Waterloo Surface Water Systems: Map A

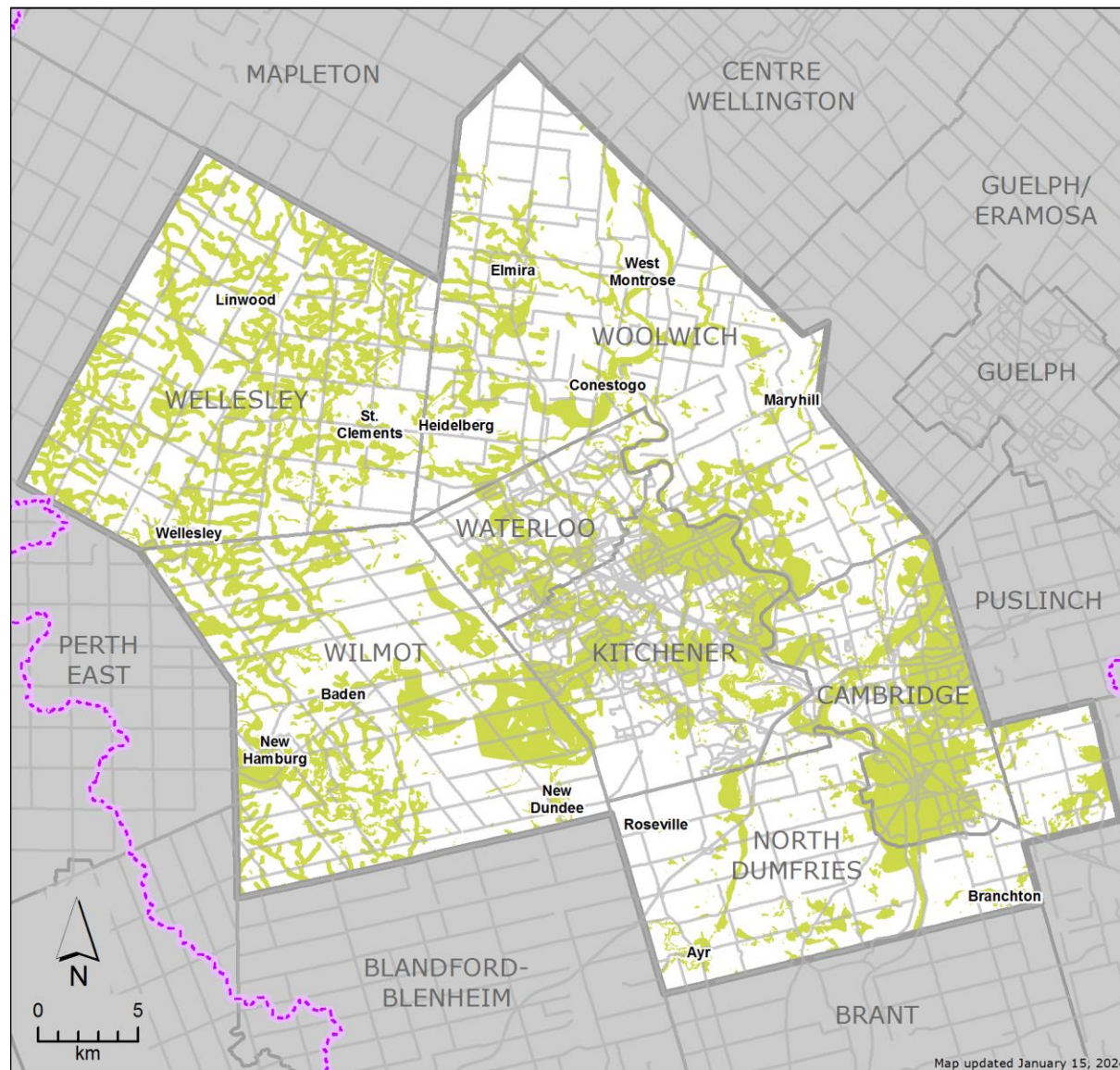




## 10.30 Schedule AA: Region of Waterloo Surface Water Systems: Map B



## 10.31 Schedule AB: Region of Waterloo Low / Moderate Policy Applicability Area (Liquid Hydrocarbon Pipelines)



## Low/Moderate Drinking Water Threat Policy Applicability

Region of Waterloo:  
Liquid Hydrocarbon PipelinesGrand River  
Conservation Authority