



Report to: Development Services Committee

Meeting Date: April 30, 2018

SUBJECT: Proposed Amendments to the CTC Source Protection Plan
(Wards 2, 5, and 6)

PREPARED BY: Patrick Wong, Natural Heritage Planner, x 6922

REVIEWED BY: Lilli Duoba, Manager, Natural Heritage, x7925

RECOMMENDATION:

- 1) That the report titled “Proposed Amendments to the CTC Source Protection Plan” be received;
- 2) That Council endorse the proposed amendments to the Central Lake Ontario, Toronto and Region, Credit Valley Source Protection Plan, as identified in Appendix 1 to this report;
- 3) That this report be circulated to the Toronto and Region Conservation Authority, the Regional Municipality of York, and the Ontario Ministry of the Environment and Climate Change;
- 4) And that Staff be authorized and directed to do all things necessary to give effect to this resolution.

PURPOSE:

The purpose of this report is to seek Council’s endorsement of the proposed amendments to the Central Lake Ontario, Toronto and Region, Credit Valley Source Protection Plan (CTC SPP). As part of the approval process for these amendments, the Toronto and Region Conservation Authority (TRCA) have advised that a municipal council resolution is required for all municipalities impacted by the proposed amendment.

BACKGROUND:

In April 2017, staff initiated an Official Plan amendment in order to update the City’s 2014 Official Plan (as partially approved on Oct. 30, 2015, May 26, 2016, Mar. 10, 2017, Apr. 21, 2017, and Nov. 24, 2017) and incorporate the requirements of the CTC SPP as part of a mandatory conformity exercise. The statutory Public Meeting was held on June 6, 2017.

Following the Public Meeting, amendments to the CTC SPP were proposed by staff at the TRCA in order to address implementation issues identified by York Region.

DISCUSSION:**Proposed amendments to the groundwater recharge policies**

Amendments have been proposed to the policies for 'Wellhead Protection Area – Quantity' (WHPA-Q). WHPA-Q are locations on the landscape where development may have an impact on the quantity of groundwater for nearby municipal wells. The existing policy for WHPA-Q (known as "Policy REC-1" in the CTC SPP) require that a technical engineering study be prepared to demonstrate how groundwater recharge will be maintained in a post-development scenario. Figure 1 shows lands identified as WHPA-Q within Markham.

Based on the technical review of TRCA and York Region staff, there are portions of the WHPA-Q where the risk of development on municipal groundwater wells is significantly lower. These areas provide little to no groundwater recharge to municipal wells and concerns have been raised that the existing policy is onerous and unnecessarily restrictive. Within these low risk areas, the proposed changes to the REC-1 policy would eliminate the requirement to prepare a full water balance assessment and to fully compensate for any loss in the volume of groundwater recharge as a result of development.

The proposed changes to the CTC SPP would still ensure that the protection of municipal water sources is maintained. For instance, the use of Low Impact Development (LID) measures for all new development will still be required under the revised REC-1 policy.

Other minor changes to the policies have also been proposed to better align with the requirements and definitions of other policy documents (e.g., adjacent Source Protection Plans and the Greenbelt Plan). Appendix 1 outlines the proposed changes to the "REC-1" policy. Staff have discussed the proposed changes with York Region and TRCA staff and support the proposed amendments.

Other amendments to the CTC SPP do not affect lands in Markham

Other proposed amendments to the CTC SPP are summarized below (See Appendix 1 for the proposed wording) and do not affect lands in Markham:

- Modification of restricted land uses that may be designated by the Risk Management Officer (Region of York responsibility)
- Clarification of policies for salt management plans and snow storage around municipal groundwater wells
- Clarification of policies for septic systems on existing lots of records in proximity to municipal groundwater wells
- Modifications to the Significant Groundwater Recharge Area (SGRA) mapping (See Figure 2). Based on the SGRA mapping previously provided in 2017, staff have not identified any changes in Markham.

FINANCIAL CONSIDERATIONS:

Not applicable.

HUMAN RESOURCES CONSIDERATIONS:

Not applicable.

ALIGNMENT WITH STRATEGIC PRIORITIES:

Implementation of Source Protection requirements is aligned with the City's strategic priority to protect and enhance the natural environment.

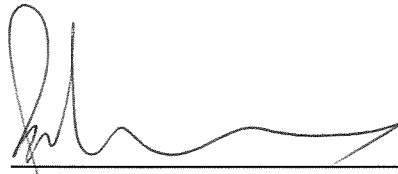
BUSINESS UNITS CONSULTED AND AFFECTED:

The report has been reviewed by the Engineering Department who will be responsible for review of technical studies associated with Source Protection requirements.

RECOMMENDED BY:



Biju Karumanchery, M.C.I.P., R.P.P.,
Director of Planning and Urban Design



Brian Lee, P. Eng.,
Acting Commissioner of Development
Services

ATTACHMENTS:

- Figure 1: Wellhead Protection Area – Quantity (WHPA-Q) Map
- Figure 2: Significant Groundwater Recharge Area (SGRA) Map
- Appendix 1: Proposed amendments to the CTC Source Protection Plan, March 2018

Figure 1: Wellhead Protection Area – Quantity (WHPA-Q) Map

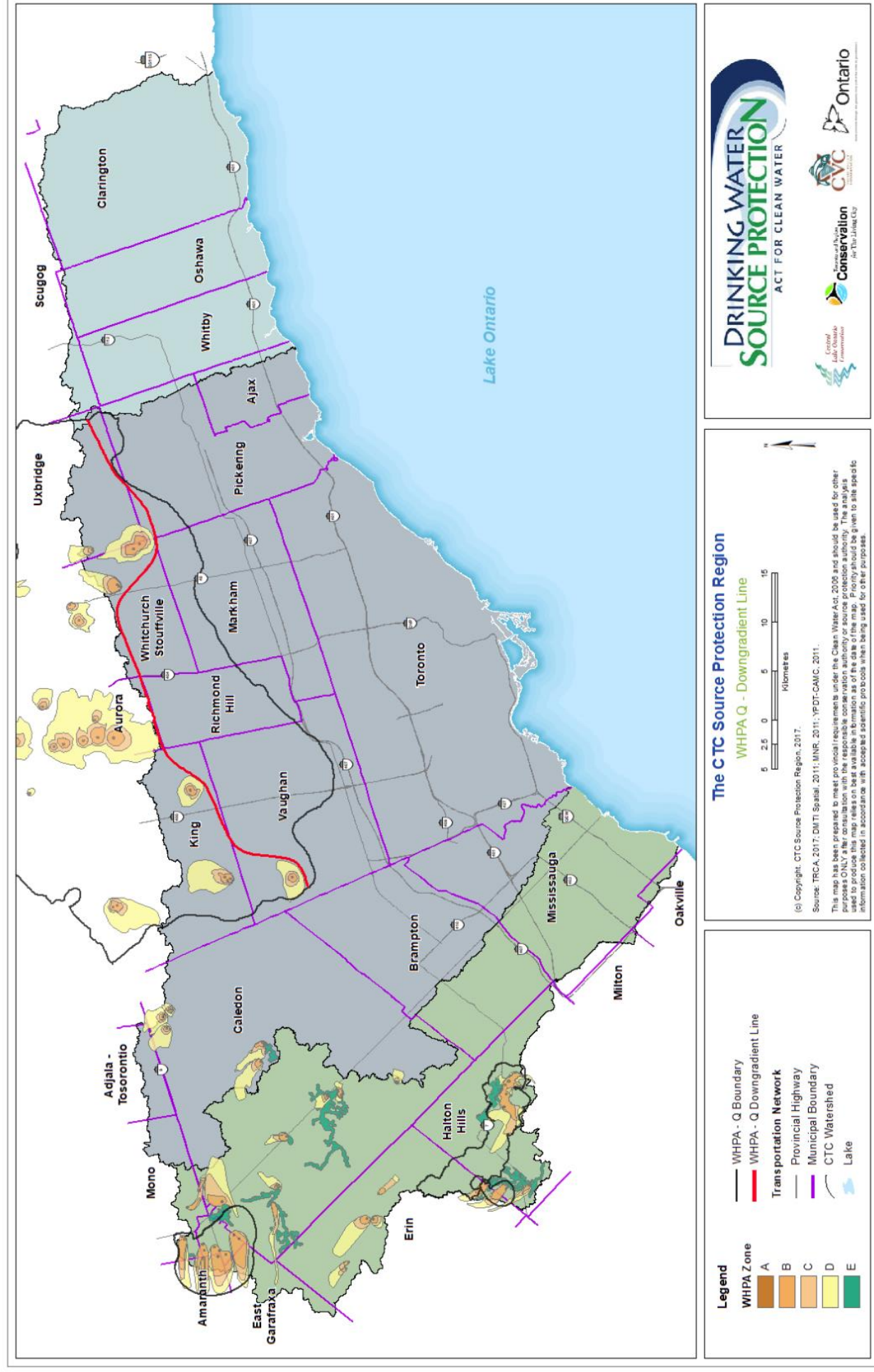
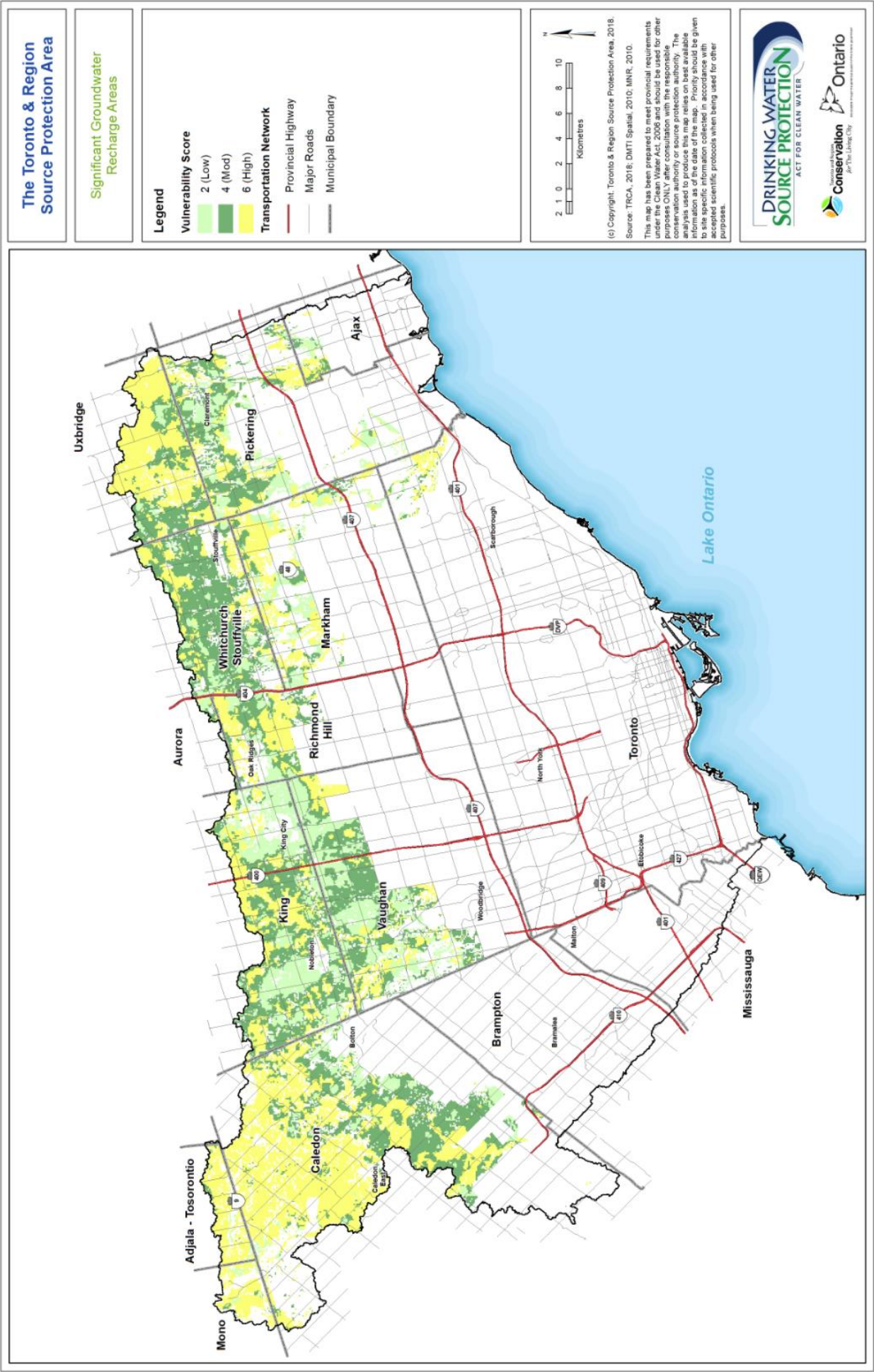


Figure 2: Significant Groundwater Recharge Area (SGRA) Map



TEXT HIGHLIGHTED IN GREY INDICATES A REMOVAL (~~STRIKETHROUGH~~) OR ADDITION (**BOLD**) FROM APPROVED CTC SOURCE PROTECTION PLAN (JULY 2015)

TRANSITION PROVISION

Under the *Clean Water Act, 2006*, there is consideration for source protection plans (SPPs) to have a Transition Provision that outlines the circumstances under which a “future” drinking water threat activity, that would otherwise be prohibited, may be considered as “existing”, even if the activity has not yet commenced. The intent is to allow applications in transition to proceed while drinking water threats are managed under the “existing threat” policies.

The CTC Source Protection Committee included a Transition Provision to recognize situations where an approval-in-principle to proceed with a development application had already been obtained, or where a complete application was made prior to the date the SPP came into effect, but requires further planning approvals to implement the application in progress.

The CTC SPP was approved by the Minister of Environment and Climate Change on July 28, 2015 and became effective on December 31, 2015. Applications submitted after the effective date of the CTC SPP may only be transitioned if they are helping to implement an application in process prior to the date the CTC SPP took effect.

“Existing Threat” policies apply to prescribed drinking water threat activities under the following circumstances:

- 1) A drinking water threat activity that is part of a development proposal where a Complete Application (as determined by the municipality or Niagara Escarpment Commission) was made under the *Planning Act*, *Condominium Act* or *Niagara Escarpment Planning and Development Act* (NEPDA) prior to the day the Source Protection Plan comes into effect. The policy for “existing” drinking water threats also applies to any further applications required under the *Planning Act*, *Condominium Act*, Prescribed Instruments, or a development permit under the NEPDA, to implement the development proposal.
- 2) A drinking water threat activity that is part of an application accepted for a Building Permit, which has been submitted in compliance with Division C 1.3.1.13 (~~5~~) of the *Ontario Building Code* **under the *Building Code Act, 1992 as amended***, prior to the day the Source Protection Plan comes into effect.
- 3) A drinking water threat activity that is part of an application accepted for the issuance or amendment of a Prescribed Instrument prior to the day the Source Protection Plan comes into effect.

Explanatory Document Text

The Transition Provision outlines the circumstances under which a future significant drinking water threat activity may be considered an existing significant drinking water threat activity.

The *Clean Water Act, 2006* requires source protection plans to contain policies to address both existing and future threat activities. The *Clean Water Act, 2006* further specifies that all policies will come into effect upon the plan approval date or an effective date specified by the Minister of the Environment and Climate Change. Transition provisions have been developed to recognize those situations where an applicant has either obtained an approval-in-principle to proceed with a development application, or where a complete application has already been made to a planning approval authority that are “in process” on the date the Source Protection Plan comes into effect. They are not designed to allow proponents to ignore or circumvent the provision contained in this Plan. They will allow the applications to proceed subject to existing significant drinking water threat policies.

The CTC Source Protection Committee concluded a transition provision should be included in the Source Protection Plan to be fair to those with applications in progress or that have received an approval-in-principle to proceed with works. The policy will allow those with complete applications made under the *Planning Act* or *Condominium Act*, building permits submitted in compliance with Division C.1.3.1.13 (5) of the *Ontario Building Code Act, 1992 as amended*, development permits under the *Niagara Escarpment Planning and Development Act*, or an application for the issuance or amendment of a Prescribed Instrument prior to the day the Source Protection Plan comes into effect to be treated as existing threat activities.

Transition Provision and Policy REC-1

Policy REC-1 is intended to apply to “future threats” in a WHPA-Q2 with a significant or moderate risk level. However, if an application subject to REC-1 Parts 2a) and 2b) is submitted after the date the source protection plan came into effect (December 31, 2015), but is required to implement a development proposal in progress (as per the Transition Provision), the threat (reducing aquifer recharge) is to be managed as “existing”.

Through the plan review process, the Planning Approval Authority will decide what is required to ensure the “existing” threat does not become significant. This is generally to be determined through water balance assessments, or their equivalent (e.g. addendums or amendments to previous stormwater management reports undertaken on site). The Planning Approval Authority may, however, determine that an application submitted after the Transition Provision deadline to implement an application in progress would not increase impervious cover and a water balance assessment (or equivalent) is not required.

The CTC Source Protection Committee intended to allow the Planning Approval Authority the flexibility to require the appropriate level of detail in a specific water balance assessment (or equivalent) that is commensurate with the scale and location of the proposed development. Some areas of the WHPA-Q2 are particularly important for recharge (i.e. Significant Groundwater Recharge Areas) and should be given specific protection, while others may not be as important and/or cannot provide the required level of infiltration. Therefore, the water balance assessment (or equivalent) should include a site specific assessment, acknowledgement of previous planning approvals obtained or in progress that could impact infiltration, and an identification of recharge characteristics.

Ultimately, the intent of the water balance assessment is to demonstrate, to the satisfaction of the Planning Approval Authority, that pre-development recharge will be maintained to the greatest extent feasible through best management practices such as low impact development (LID), minimizing impervious surfaces, and lot level infiltration.

Policy ID	Timelines for Policy Implementation
	Land Use Planning
T-8	Official plans shall be amended for conformity with the Source Protection Plan within 5 years from the date the Source Protection Plan takes effect, or at the time of the next review in accordance with s.26 of the Planning Act, whichever occurs first. Zoning by-laws shall be amended within 3 years after the approval of the official plan.

Explanatory Document Text

Section 40(1) of the *Clean Water Act, 2006* requires that the Council of a municipality or a municipal planning authority that has jurisdiction in an area to which the source protection plan applies shall amend its Official plan to conform with significant threat policies and designated Great Lakes policies set out in the source protection plan. In part 2 of Section 40, the Council or municipal planning authority are required to make these amendments before the date specified in the source protection plan. Timeline T-8 in the CTC Source Protection Plan required that Official Plans be amended for conformity within 5 years from the date the Plan took effect (i.e., December 2020).

Several upper tier municipalities within the CTC Source Protection Region have communicated the difficulty with achieving the December 2020 timeline as outlined in the CTC Source Protection Plan which also impacts the ability of those lower tier municipalities dependent on the completion of the conformity exercise by their upper tier counterparts in meeting the same timeline. Further, the Government of Ontario released the Growth Plan for the Greater Golden Horseshoe ('Growth Plan') in May 2017. The Growth Plan was prepared and approved under the *Places to Grow Act, 2005* and took effect on July 1, 2017. Upper Tier municipalities are expected to review and update their Official Plans to conform with the updated Growth Plan by July 2022; lower tier municipalities must conform within 1 year of their upper tier counterparts. CTC Source Protection Region municipalities have communicated that completing conformity with the CTC Source Protection Plan and the Growth Plan, 2017, in unison, would be more time and cost effective.

CTC Source Protection Plan Policies for Section 34 Amendment – Consultation with Municipalities – April 2, 2018

Policy ID	Implementing Body	Legal Effect	Policy	When Policy Applies	Monitoring Policy
GEN-1			s.59 Restricted Land Uses		
			All land uses are designated for the purpose of Section 59 Restricted Land Uses under the <i>Clean Water Act, 2006</i> , with the exception of residential uses, in all areas where the following activities are, or would be, a significant drinking water threat....		
	Municipality RMO	A I	In accordance with Section 59 of the <i>Clean Water Act, 2006</i>, all land uses, except solely residential uses, where significant drinking water threat activities have been designated for the purposes of Sections 57 and 58 of the <i>Clean Water Act, 2006</i>, are hereby designated as Restricted Land Uses and a written notice from the Risk Management Official shall be required prior to approval of any Building Permit, <i>Planning Act</i> or <i>Condominium Act</i> application. Despite the above policy, a Risk Management Official may issue written direction specifying the situations under which a planning authority or Chief Building Official may be permitted to make the determination that a site specific land use designation is, or is not, designated for the purposes of Section 59. Where such direction has been issued, a site specific land use that is the subject of an application for approval under the <i>Planning Act</i> or for a permit under the <i>Building Code Act</i> is not designated for the purposes of Section 59, provided that the planning authority or Chief Building Official, as applicable, is satisfied that: - The application complies with the written direction issued by the Risk Management Official; and, - 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. Where the Risk Management Official has provided written direction designating a land use for the purpose of section 59, a written Notice from the Risk Management Official shall be required prior to approval of any Building Permit under the <i>Building Code Act, 1992</i> as amended, in addition to <i>Planning Act</i> and <i>Condominium Act</i> applications in accordance with Section 59 of the <i>Clean Water Act, 2006</i>.	Immediately (T-9) Amend OPs for conformity within 5 years and ZBLs within 3 years of OP approval (T-8)	MON-1 MON-2

Explanatory Document Text

Policy GEN-1 manages existing and future activities within vulnerable areas where the activity is or would be a significant drinking water threat as designated under section 59 of the *Clean Water Act, 2006*, by requiring Risk Management Officials to screen applications for works proposed under the *Planning Act*, the *Condominium Act*, and the *Building Code Act, 1992* as amended, excluding residential uses.

CTC Source Protection Plan Policies for Section 34 Amendment – Consultation with Municipalities – April 2, 2018

Where the activities are or would be a significant drinking water threat, this policy requires municipalities to designate land uses within their Official Plans and Zoning By-Laws. This will allow for the pre-screening by the Risk Management Official, ~~via~~ **using** section 59 of the *Clean Water Act, 2006*. Section 59 policies require that municipalities put a process in place to “flag” for the **Chief** Building Official and the Planning Department applications made under the *Planning Act* and ~~or~~ the *Condominium Act*, **as well as** ~~or~~ an application for a building permit **under the *Building Code Act, 1992*, as amended**, that is within a vulnerable area where a threat could be significant and where Part IV authorities are being used to prohibit or manage activities. The “flag” would indicate to the **Chief** Building Official or the Planning Department that the proposal needs to be reviewed by the Risk Management Official. Once the Risk Management Official is satisfied that the applicable Part IV policies are addressed, he/she would issue a “Notice to Proceed”. This Notice is used to let the **Chief** Building Official or Planning Department know they can proceed ~~with~~ **with** ~~in~~ processing the proposal.

Risk Management Officials in the CTC Source Protection Region have communicated that Policy GEN-1, as originally written, had ambiguity regarding their ability to determine when site-specific land uses, activities, or building projects are or are not subject to Section 59 Notice requirements under the *Clean Water Act, 2006*. The revised policy text now has clear policy direction allowing Risk Management Officials the autonomy to determine the site specific land uses that both are and are not subject to Section 59 Notices.

Policy ID	Threat Description	Implementing Body	Legal Effect	Policy	Where Policy Applies	When Policy Applies	Monitoring Policy
SWG-3	Septic Systems Governed under the <i>Building Code Act, 1992</i> as amended	Planning Approval Authority	A	Land Use Planning			
				Where septic systems, including holding tanks, governed under the <i>Building Code Act</i> (vacant existing lot of record) would be a significant drinking water threat, vacant lots of record shall be subject to site plan control so that the location of the individual on-site sewage systems and replacement beds only be permitted if they are sited to ensure they do not become a significant drinking water threat in any of the following areas:		Future: Immediately (T-9)	
				Municipalities shall adopt Official Plan policies that require the enactment or amendment of Site Plan Control By-laws containing provisions for the siting and design of septic systems, including holding tanks, governed under the <i>Building Code Act, 1992</i> as amended, as follows:	See Maps 1.1 - 1.21	Amend OPs for conformity within	MON-1
				Site Plan Control is required for existing vacant lots of record to ensure that the siting and design of on-site septic systems, including the siting of future reserve bed locations, is optimized in relation to significant drinking water threats in any of the following areas:		5-years and ZBLs within 3 years of OP approval (T-8)	
				• WHPA-A (future); or • WHPA-B (VS = 10) (future); or • WHPA-E (VS = 10) (future); or			

Policy ID	Threat Description	Implementing Body	Legal Effect	Policy	Where Policy Applies	When Policy Applies	Monitoring Policy
				the remainder of an Issue Contributing Area for Nitrates or Pathogens (future).			

Explanatory Document Text

Policy SWG-3 is a land use planning policy for future septic systems, including holding tanks, governed under the *Building Code Act, 1992, as amended*, ensuring that vacant lots of record be subject to site plan control so that the location of individual on-site sewage systems and replacement beds are only permitted if they are sited to ensure they do not become a significant drinking water threat. **The intent of this policy is to ensure that site plan control, as a planning and development control tool, is used to optimize the location and design of septic systems when existing vacant lots of record are proposed to be developed within certain designated vulnerable areas identified in the policy.**

The CTC Source Protection Committee recognizes that prohibiting a septic system on a vacant lot where there is no municipal sewer connection available may make it impossible to build on such a lot which has received prior approval for such a use from the municipality. **to obtain a building permit for the lot and thereby void previous planning decisions to create and zone the lot for development.** This was deemed considered to be a significant hardship for the landowner. For this reason, the Source Protection Committee has provided through this policy for the municipality to subject vacant lots of record to site plan control to ensure sewage systems and replacement beds are only permitted if they can be appropriately sited and constructed to protect the municipal well-chosen to require the enactment or amendment of municipal site plan control by-laws to allow for the detailed review of on-site sewage systems for vacant lots in order to optimize their location and design relative to the designated vulnerable areas present.

The verb “optimize” means “to make as effective as possible” or “to make the best of” and was chosen to allow municipal planning authorities the flexibility to use sound professional judgement in the review and approval of the siting and design of on-site sewage systems proposed to facilitate the development of existing vacant lots as part of the municipal site plan control process.

The policy directs municipalities to “adopt Official Plan policies that require the enactment or amendment of Site Plan Control By-laws” for the purposes of the policy. This structure is introduced for the following reasons. First, the *Clean Water Act, 2006* provides in s. 40 and s. 42 that a municipality shall amend its Official Plan and Zoning By-laws to conform to the significant threat policies set out in the source protection plan. There is no authority for the source protection plan to direct that site plan control by-laws conform to the source protection plan outside of the Official Plan conformity process. Second, the *Planning Act* requires municipalities to have enabling policy in their Official Plans in order to use the site plan control power. Requiring an Official Plan to contain specific site plan control by-law policies is therefore consistent with the provisions of the *Clean Water Act, 2006* and current practice under the *Planning Act*.

Municipalities affected by the SWG-3 policy are encouraged to amend their site plan control by-law and associated application review processes in order to conform with this policy in advance of future Official Plan conformity policy direction on a voluntary basis in order to advance the implementation of the source protection plan in as timely a manner as possible. Municipalities are also required to continue to monitor the aquifer and report on the results (see GEN-7). Should the contaminant levels continue to increase, it may be necessary to review this policy and others associated with the Issue.

Policy ID	Threat Description	Implementing Body	Legal Effect	Policy	Where Policy Applies	When Policy Applies	Monitoring Policy
SAL-10	Moderate/ Low Threats Application of Road Salt	Planning Approval Authority	B	Land Use Planning Where the application of road salt would be a moderate or low drinking water threat, the planning approval authority is encouraged to require a salt management plan, which includes a reduction in the future use of salt, as part of a complete application for development which includes new roads and parking lots in any of the following areas: • WHPA-A (VS = 10) (existing, future); or • WHPA-B (VS ≤ 10) (existing, future); or • WHPA-C (future); or • WHPA-D (future); or • WHPA-E (VS ≥ 4.5 and <9) (future); or • HVA (future); or • SGRA (VS ≥ 6) (future). Such plans should include, but not be limited to, mitigation measures regarding design of parking lots, roadways and sidewalks to minimize the need for repeat application of road salt such as reducing ponding in parking areas, directing stormwater discharge outside of vulnerable areas where possible, and provisions to hire certified contractors.	See Chapter 5 of the respective Assessment Report	Future: Immediately (T-9) Amend OPs for conformity with within 5 years and ZBLs within 3 years of OP approval (T-8)	N/A
				Specify Action Where the application of road salt is, or would be, a moderate or low drinking water threat, the Ministry of the Environment and Climate Change in consultation with other provincial ministries and municipal associations should promote best management practices for the application of road salt, to protect sources of municipal drinking water in any of the following areas: • WHPA-A (VS = 10) (existing, future); or • WHPA-B (VS ≤ 10) (existing, future); or • WHPA-C (existing, future); or • WHPA-D (existing, future); or • WHPA-E (VS ≥ 4.5 and <9) (existing, future); or • HVA (existing, future); or • SGRA (VS ≥ 6) (existing, future).	See Chapter 5 of the respective Assessment Report	Existing & Future: Consider within 2 years (T-15)	N/A
SAL-11	Moderate/ Low Threats Application of Road Salt	MOECC	J				

Policy ID	Threat Description	Implementing Body	Legal Effect	Policy	Where Policy Applies	When Policy Applies	Monitoring Policy
SAL-12	Moderate/ Low Threats Application of Road Salt	Municipality	J	Specify Action Where the application of road salt on unassumed roads and private parking lots with greater than 200 square metres is, or would be, a moderate or low drinking water threat in any of the following areas: • WHPA-A (VS = 10) (existing, future); or • WHPA-B (VS ≤ 10) (existing, future); or • WHPA-C (existing, future); or • WHPA-D (existing, future); or • WHPA-E (VS ≥ 4.5 and <9) (existing, future); or • HVA (existing, future); or • SGRA (VS ≥ 6) (existing, future); the municipality is encouraged to: a) require implementation of a salt management plan which includes the goal to minimize salt usage through alternative measures, while maintaining public safety; and b) require the use of trained individuals in the application of road salt (could include technicians and technologists and others responsible for salt management plans, winter maintenance supervisors, patrollers, equipment operators, mechanics, and contract employees).	See Chapter 5 of the respective Assessment Report	Existing & Future: Consider within 2 years (T-15)	N/A

Moderate/ Low Threats	SPA Municipality	J	Specify Action	See Chapter 5 of the respective Assessment Report	Existing & Future: Consider within 2 years (T-15)	N/A
SAL-13 Application of Road Salt Handling and Storage of Road Salt			Where the application, handling and storage of road salt is, or would be, a moderate or low drinking water threat, the municipality is requested to report the results of its sodium and chloride monitoring programs conducted under the <i>Safe Drinking Water Act</i> and any other monitoring programs annually to the Source Protection Authority. The Source Protection Authority shall assess the information for any increasing trends and advise the Source Protection Committee on the need for new source protection plan policies to be developed to prevent future drinking water issues, in any of the following areas: • WHPA-A (VS = 10) (existing, future); or • WHPA-B (VS ≤ 10) (existing, future); or • WHPA-C (existing, future); or • WHPA-D (existing, future); or • WHPA-E (VS ≥ 4.5 and <9) (existing, future); or • HVA (existing, future); or • SGRA (VS ≥ 6) (existing, future).			

Explanatory Document Text

Policies SAL-10 through SAL-13 apply to low and moderate threat areas.

The CTC Source Protection Committee has chosen to include a land use planning policy using *Planning Act* tools and a number of Specify Action policies where the threat is low or moderate in recognition that road salt application and storage activities **are** carried out throughout ~~all source protection areas~~ **the source protection region**; chloride and sodium are very mobile chemicals that move easily and rapidly into and through aquifers; and that there are many other sources of drinking water that may be protected as well through implementation practices to reduce the threat.

All of these low and moderate threat policies are non-legally binding. Each specific implementer must have regard for the policy in making decisions, but has the flexibility of determining what action(s) will be taken. While an implementer is not required to provide a report on their actions on implementing low or moderate threat policies, the CTC Source Protection Committee encourages them to provide information that will help in future review and revision of policies.

CTC Source Protection Plan Policies for Section 34 Amendment

Policy ID	Threat Description	Implementing Body	Legal Effect	Policy	Where Policy Applies	When Policy Applies	Monitoring Policy
SNO-1	Storage of Snow	RMO	G	Part IV, s.57, s.58 Where the storage of snow is, or would be, a significant drinking water threat, the following actions shall be taken: 1) The storage of snow is designated for the purpose of s.57 under the <i>Clean Water Act</i>, and is therefore prohibited where the threat is, or would be significant, in any of the following areas: • WHPA-A (existing, future); or • WHPA-B (VS = 10) (future); or • WHPA-E (VS ≥ 9) (future); or • the remainder of an Issue Contributing Area for Sodium or Chloride (future); Notwithstanding the above, emergency snow storage may be permitted outside of WHPA-A as determined by the risk management official and the municipality responsible for snow storage.	See Maps 1.1 - 1.21	Future: Immediately (T-5) Existing: 180 days (T-4)	MON-2
			H	2) The storage of snow is designated for the purpose of s.58 under the <i>Clean Water Act</i>, requiring risk management plans, where the threat is significant in any of the following areas: • WHPA-B (VS = 10) (existing, future); or • WHPA-E (VS ≥ 9) (existing, future); or • The remainder of an Issue Contributing Area for Sodium or Chloride (existing, future). Without limiting other requirements, risk management plans shall include appropriate terms and conditions to ensure the storage of snow, and associated runoff, ceases to be a significant drinking water threat. Notwithstanding the above, emergency snow storage may be permitted outside of WHPA-A as determined by the risk management official and the municipality responsible for snow storage in the absence of a Risk Management Plan.		Existing: 1 year/ 5 years (T-6)	

CTC Source Protection Plan Policies for Section 34 Amendment

Explanatory Document Text

Policy SNO-1 prohibits existing and future snow storage in WHPA-A and future snow storage in WHPA-B (VS = 10), WHPA-E (VS ≥ 9) and in the remainder of an Issue Contributing Area for Sodium or Chloride. In the WHPA-B (VS = 10), WHPA-E (VS ≥ 9) and in the remainder of an Issue Contributing Area for sodium and chloride, existing and future significant drinking water threats are managed using a Risk Management Plan. **Emergency snow storage may be permitted outside of WHPA-A as determined by the Risk Management Official and the municipality responsible for snow storage in the absence of a Risk Management Plan.** situations, future snow storage may be permitted outside of WHPA-A as determined by the Risk Management Official. Existing snow storage is otherwise managed outside of WHPA-A requiring a Risk Management Plan.

Storage of snow can pose a significant drinking water threat depending on the geographic location of the storage area and whether the snow is stored above or below grade. In general, the greater the snow storage area, the greater the risk to drinking water. Generally, snow storage is a seasonal activity that takes place ~~on~~ **along** roadsides, parking lots, and vacant land without the construction of permanent facilities. **When originally developing this policy** the CTC Source Protection Committee encouraged, where possible, the ~~existing~~ storage of snow (which often contains road salts and other contaminants) ~~be located~~ outside of vulnerable areas ~~where possible~~. **The policy as currently written prohibits the existing and future storage of snow in the WHPA-A, the most vulnerable area to a municipal well, as well as future occurrences of the activity where it would be a significant drinking water threat in the WHPA-B (VS=10), WHPA-E (VS≥9), and the remainder of the Issues Contributing Area for sodium and chloride. Given the large surface areas in the Credit Valley Source Protection Area covered by Issues Contributing Areas for sodium and chloride, municipalities have communicated the difficulty implementing a prohibition of a potential future activity. A number of provisions could be included in a Risk Management Plan to ensure that the storage of snow does not become a significant drinking water threat, therefore, the CTC Source Protection Committee has opted to manage any future instances of the activity outside of the WHPA-A.**

CTC Source Protection Plan Policies for Section 34 Amendment

Policy ID	Threat Description	Implementing Body	Legal Effect	Policy	Where Policy Applies	When Policy Applies	Monitoring Policy
REC-1	An activity that reduces recharge to an aquifer	Planning Approval Authority	A	Land Use Planning (Planning Policies for Protecting Groundwater Recharge) For applications under the Planning Act within the Tier 3 Water Budget WHPA-Q2 identified as having significant water quantity threats, the relevant Planning Approval Authority shall ensure recharge reduction does not become a significant drinking water threat by: 1) Requiring new development and site alteration under the Planning Act for lands zoned Low Density Residential (excluding subdivisions) or zoned Agricultural to implement best management practices such as Low Impact Development (LID) with the goal to maintain predevelopment recharge. Implementation of best management practices is encouraged, but voluntary, for Agricultural Uses, Agriculture-related Uses, or On-farm Diversified Uses where the total impervious surface does not exceed 10 per cent of the lot. 2) Requiring that all site plan (excluding an application for one single family dwelling) and subdivision applications to facilitate major development (excluding development on lands down-gradient of municipal wells in the Toronto & Region Source Protection Area [Figure XI]) for new residential, commercial, industrial and institutional uses provide a water balance assessment for the proposed development to the satisfaction of the Planning Approval Authority which addresses each of the following requirements: a) maintain pre-development recharge to the greatest extent feasible through best management practices such as LID, minimizing impervious surfaces, and lot level infiltration; b) where pre-development recharge cannot be maintained on site, implement and maximize off-site recharge enhancement (within the same WHPA-Q2) to compensate for any predicted loss of recharge from the development; and c) for new development (excluding a minor variance) within the WHPA-Q2 and within an Issue Contributing Area (for sodium, chloride or nitrates), the water balance assessment shall consider water quality when recommending best management practices and address how recharge will be maintained and water quality will be protected. The Planning Approval Authority shall use its discretion to implement the requirements of this policy to the extent feasible and practicable given the specific circumstances of a site and off-site recharge opportunities. 3) Only approving settlement area expansions as part of a municipal comprehensive review where it has been demonstrated that recharge functions will be maintained on lands designated Significant Groundwater Recharge Areas within WHPA-Q2. 4) Amending municipal planning documents to reference most current Assessment Reports in regards to the Significant Groundwater Recharge Areas within WHPA-Q2.	Future: WHPA-Q2 with a significant risk level See Maps 3.1 3.2 Future: WHPA-Q2 with a moderate risk level See Maps 3.3 3.4	Future: Immediately (T-9) Amend OPs for conformity within 5 years and ZBLs within 3 years of OP approval (T-8)	MON-1

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EXPLANATORY DOCUMENT TEXT

Policy REC-1 is a land use planning policy that manages activities that reduce recharge to an aquifer. This policy applies to future threats in a WHPA-Q2 with a significant or moderate risk level.

The intent of the policy is to ensure that the Planning Approval Authority makes decisions that do not result in recharge reduction from new development becoming a significant drinking water threat within a WHPA-Q2. The Planning Approval Authority, through the plan review process (i.e., *Planning Act* applications) will determine what is required, and determine the acceptability of the proposed actions, in the water balance assessments.

The CTC Source Protection Committee wants the Planning Approval Authority to have the flexibility to require the appropriate level of detail in a specific water balance assessment commensurate with the scale and location of a proposed development. For example, within the WHPA-Q2 are areas that have been identified as Significant Groundwater Recharge Areas which are particularly important due to the nature of the soils and slope that permit higher than average infiltration of precipitation to replenish the groundwater. These areas should be given particular protection. Other areas **within the Tier 3 WHPA-Q2**, may not be important for recharge and/or cannot provide the required infiltration due to the local soil and slope conditions. Site specific assessment and identification of the recharge characteristics of the site should be part of such water balance assessments **or equivalent**. Where a detailed assessment is warranted, using the current version of the Tier 3 Water Budget model and updated information should ensure that the results are technically robust and comparable to the original analysis. The local source protection authority has the model files and information to support this analysis, but it is envisioned that an applicant will have to retain qualified expertise to do the analysis.

The Source Protection Committee encourages the “complete application” check list be updated to include the Water Balance Assessment.

The intent of Part 1) of the policy is to **avoid the burden on individual residential owners or agricultural operations by requiring that they undertake expensive hydrogeological assessments, but to protect recharge by requiring instead that they implement best management practices that will reduce or eliminate any impact from their building or development activities that are subject to planning approvals—provide an appropriate level of policy direction to maintain recharge for development and site alteration associated with smaller-scale or agriculture-related development not covered by Part 2 of this policy. In lieu of providing hydrogeological assessments, applicants are required, or in the case of agriculture-related development where the total lot impervious surface is beneath a threshold of 10 per cent, encouraged to voluntarily implement best management practices, that will reduce or eliminate any impact from their building, or development, or site alteration activities that are subject to planning approvals**

With respect to the voluntary implementation of Part 1) of this policy for Agricultural Uses, Agricultural-Related Uses, and On-farm Diversified Uses these terms have the same meaning as defined in the Provincial Policy Statement, 2014 and as further articulated in the Guidelines on Permitted Uses in Ontario's Prime Agricultural Areas, 2016. The 10 percent impervious threshold for agricultural-related uses is adapted from Policy 3.2.4.2 of the Greenbelt Plan, 2017 for the purposes of this policy.

In general, on low density and agriculturally zoned lands, it is possible to ensure that roof and impermeable surface run-off can be directed to on-site infiltration and thus maintain recharge without requiring technical assessments.

The intent of Part 2) of this policy is to ensure **certain Planning Act applications (excluding an application for one single family dwelling and on lands zoned agricultural) include an assessment of the potential reduction in recharge so that specific measures are identified and implemented to ensure the proposal does**

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not result in recharge reduction becoming a significant drinking water threat within a WHPA-Q2. This requirement applies to **major development** on lands with the greatest potential for reducing recharge, such as commercial, employment, institutional, industrial uses and includes residential subdivisions. ~~but excludes an application for one single family dwelling.~~ *Planning Act* applications applicable to Parts 2 (a) and (b) include site plan applications, draft plan of subdivision applications, and any associated implementing official plan or zoning by-law amendment applications, **however, applications for development on lands zoned agricultural, which do not meet the criteria for major development, and any development on lands down-gradient of municipal wells in the Toronto and Region Source Protection Area [See Figure X], are exempt from Part 2).**

The intent of Part 2 (b) is to allow the municipality the option where it meets local requirements to require the applicant to locate compensating recharge on another site within the WHPA-Q2 where it is not feasible to protect pre-development recharge within the development site. The CTC Source Protection Committee concluded that the local municipality is best placed to determine the optimal actions to protect recharge and this provides them some local flexibility in their decision-making.

Part 2 (c) of this policy applies ONLY to those parts of a WHPA-Q2 which are also within an Issue Contributing Area for Sodium, Chloride or Nitrate. These areas are shown on the maps in the appendices ~~of~~ **of the CTC** Source Protection Plan and also will be provided by the Source Protection Authority in other formats upon request to municipalities or other planning approval authorities. This requirement is intended to ensure that any risk management measure that is implemented to maintain recharge does not create a threat to source water quality. For example, infiltration of stormwater containing road salt in an Issue Contributing Area for Sodium or Chloride is a significant drinking water threat and subject to policies SWG-11 and SWG-12. The CTC Source Protection Committee has included Part 2 (c) of this policy for clarity to ensure that an implementing body does not inadvertently approve an activity to protect water quantity that is a threat to water quality.

The intent of Part 3) is to ensure municipalities evaluate planned growth against recharge reduction at a large scale and only proceed if the planned growth will not result in new significant drinking water threats. Once feasibility of the growth is confirmed, development proponents are subject to Parts 1) and 2) of this policy which are site-specific.