

## CTC Groundwater Quantity Policy Options - Applicable to Orangeville and Area Tier 3 Water Budget Local Area-A

Policy #	Threat Activity	Existing or Future	Prohibit/Manage	Tool	Working Group Proposed Policies
<b>#19 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</b>					
1	Demand - population growth	E	M	PI	Direct the MOE to review all existing Permits To Take Water (PTTW) within a Tier 3 water budget Local Area identified as having significant water quantity threats and amend or strengthen the permits and/or reduce permitted quantity takings as technically necessary, to ensure that municipal water supply requirements for the current and planned service capacity (per the population numbers used in the Tier 3 water budget) will be met on a sustainable basis and, in consultation with the Ministry of Natural Resources, ensure that the ecological and hydrological integrity of key hydrologic features, functions and aquatic systems will be maintained, improved or restored.
2	Demand - population growth	F	P/M	PI	Direct the MOE to not issue PTTWs for new or increased taking within a Tier 3 water budget Local Area identified as having significant water quantity threats unless the proponent can demonstrate using the Tier 3 water budget model that: a) the taking will not affect the ability to meet the municipal water supply requirements for the current and planned service capacity; b) it will not negatively affect the takings of other existing holders of PTTW; c) the new use can be serviced on a sustainable basis; and d) the ecological and hydrological integrity of key hydrologic features, functions and aquatic systems will be maintained, improved or restored.
3	Demand - population growth	F	P/M	LUP	Direct land use planning approval authorities to prohibit new or expanded uses that require new or additional water supply within a Tier 3 water budget Local Area identified as having significant water quantity threats unless it can be demonstrated using the Tier 3 water budget model that: a) the taking will not affect the ability to meet the municipal water supply requirements for the current and planned service capacity; b) it will not negatively affect the takings of other existing holders of PTTW; c) the new use can be serviced on a sustainable basis; and d) the ecological and hydrological integrity of key hydrologic features, functions and aquatic systems will be maintained, improved or restored.

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4	Demand - population growth	F	P/M	LUP	Direct land use planning approval authorities to only approve settlement area expansions based on: 1) the proven capacity, using the Tier 3 water budget model, to sustainably provide municipal water services; and 2) an analysis of the implications of future potential growth on water sources, wastewater receiving water bodies, and ecological, hydrological and aquatic systems.
5	Demand - population growth	F	M	Other	Direct municipalities to provide notice to property owners of identified lands (as shown in the Tier 3 Water Budget maps) that due to potential water quantity issues it may be necessary to review or change existing land use designations.
6	Demand - population growth	F	M	Other	Where Tier 3 water budgets have demonstrated water quantity supply constraints to the servicing of projected future growth, direct municipalities and the provincial growth management/planning ministries (such as MOE, MMAH, MOI (Growth Secretariat)) to jointly reconsider and reduce population and employment targets to levels that are sustainable on locally based water systems, pursuant to section 39(4) of the CWA.
7	Demand - water conservation	E/F	M	Other	Direct municipalities to maintain, develop and implement strategies and programs for effective water conservation which may include, but not be limited to: a) water demand management such as metering and variable pricing systems; b) rainwater harvesting where appropriate; c) used/grey water recycling; d) the consideration of incentives for site design to conserve water and to retrofit buildings with low flow fixtures; and e) limits on outdoor watering .
8	Demand - water conservation	E/F	M	E & O, I	Direct municipalities to develop and implement education programs to ensure that property owners and businesses understand: a) their role in protecting water supplies; b) actions that can be taken to protect water supplies; and c) the financial incentive programs and projects that they could be eligible for under future funding of the Ontario Drinking Water Stewardship Program.
9	Demand - water conservation	E/F	M	Other	Direct municipalities to establish a regular inspection program to detect and repair leaks in the water distribution system in order to conserve drinking water.
10	Demand - water conservation	E/F	M	Other	Request that the responsible parties for the Low Level Water Response Program consider the findings of the Tier 3 Water Budget in any response program that would affect the Local Area-A.
					Monitoring policies required for all above.

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11	Water supply management - Regional water management strategy	E/F	M	Strategic Action	Direct Dufferin County municipalities that share a water source (i.e. aquifer) in the CTC to implement within 3 years of approval of Source Protection Plan, a joint municipal water management system or authority to plan and operate potable water systems to ensure that water quality and quantity is maintained or improved and cost efficiencies are realized.
12	Water supply management - Regional water management strategy	E/F	M	Strategic Action	Proposed duties of a municipal water management system or authority to be established pursuant to the recommendation above is to be responsible for the supply and distribution of potable water to each of the three municipalities, including the maintenance and repair of all existing systems, and the investigation and procurement of future requirements.
13	Water supply management - Regional water management strategy	E/F	M	Strategic Action	Direct the MOE to facilitate and support implementation of a joint municipal water management system or authority for Dufferin County municipalities that share a water source (i.e. aquifer) in the CTC.
14	Water supply management - Monitoring	E/F	M	Strategic Action	Direct the MOE to adopt and fund the Tier 3 water budget model for each Local Area as the primary model to evaluate future PTTW, and for municipalities and others to evaluate development and; contribute to the funding for new continuous flow gauging stations that should be added to key surface water features to monitor the long term trends in surface water quantity.
15	Water supply management - Monitoring	E/F	M	PI	Direct MOE through the PTTW program to require municipalities to maintain water quantity monitoring and data input in order to periodically run the Tier 3 model, analyze its predictions for water quantity issues, make refinements to the model on an ongoing basis, and use it in the assessment of water balance requirements for new development and redevelopment.
					Monitoring policies required for all above.

### CTC Groundwater Quantity Policy Options

Policy #	Threat Activity	Existing or Future	Prohibit/Manage	Tool	Working Group Proposed Policies
<b>#20 An activity that reduces recharge to an aquifer</b>					
16	Land use planning - impervious surfaces	F	M	LUP	Direct municipalities to review existing Official Plans to add policies to ensure that land uses with high impervious values are located outside of groundwater recharge areas.
17	Land use planning - impervious surfaces	F	M	LUP	Direct municipalities, when establishing land use designations for planned urban boundary expansions, to locate open space or other low-impervious land uses on areas confirmed through site-specific hydrogeological studies as Significant Groundwater Recharge Areas or Highly Vulnerable Aquifers.
18	Land use planning - impervious surfaces	E/F	M	LUP	<p>Direct land use planning approval authorities to amend their Official Plans to include policies requiring the use of low impact development guidelines and techniques for managing urban stormwater for new development and areas of redevelopment within Tier 3 water budget Local Areas to ensure that:</p> <ul style="list-style-type: none"> <li>a) impervious surfaces are minimized;</li> <li>b) water balance on the site is managed such that pre-development rates of infiltration are maintained in the post-development state, to the extent feasible;</li> <li>c) a treatment train approach for stormwater management is used that emphasizes lot level infiltration of clean water, wherever appropriate; and</li> <li>d) where water balance can not be achieved on the development site, off-site compensation to ensure infiltration of clean water will be required.</li> </ul> <p>Where sodium and chloride have been identified as "issues", these policies must ensure that there is no further degradation of water quality by infiltration of salt from run-off.</p>

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19	Land use planning - impervious surfaces	F	P/M	LUP	Direct land use planning approval authorities to amend their Official Plans to prohibit designating new landuses which would reduce recharge, unless using the Tier 3 water budget model it can be demonstrated that the development will ensure that existing water takings can be sustained and the ecological and hydrological integrity are maintained.
20	SGRAs	E/F	M	Research	Direct the responsible Conservation Authority to annually assess the change in the percent impervious cover within the Local Areas to determine whether or not significant drinking water quantity threats are getting worse or new drinking water quantity threats are developing. This analysis should include an update to the Tier 3 Water Budget model.
21	SGRAs <i>Moderate and Low Threats</i>	E/F	M	LUP	Municipalities are encouraged to amend their Official Plans to include policies to protect Significant Groundwater Recharge Areas from incompatible development or site alteration that may reduce recharge to an aquifer.
					Monitoring policies required for all above.