GRAND RIVER WATERSHED Water Management Plan

Grand River Watershed Water Management Plan

Considerations for 'Securing' current and planned sources of municipal water supply

Discussion Paper prepared by: Lorrie Minshall, Director, Water Management Plan for the Project Team

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Preface

1. Context

Goal # 3 in the Water Management Plan (WMP) Project Charter is "Secure water supplies". Fundamental deliverables are:

- an assessment of the extent to which future municipal water supply needs are identified, sourced and secured;
- an assembled set of community water demand management objectives/strategies;
- identification of areas with potential for conflict, along with plans for how management strategies will be developed; and
- together, a water supply/demand management strategy that we agree represents a road map for sustainable water use.

In September 2011, staff reported to the WMP Project Team and Steering Committee on the status of municipal water supply planning, that is, whether future municipal water supply needs have been identified, sourced and secured. The Steering Committee concluded that the term "secured" needed to be defined.

Two Municipal Water Supply and Demand Management Working Group meetings were held on April 18th, 2011 and March 2, 2012. During the meetings, municipalities identified concerns with their ability to obtain and maintain long-term water supply capacity in their Permits to Take Water (PTTW) and to protect future sources identified in their long term Water Supply Master Plans (WSMP) from contamination and depletion.

The Water Managers' Working Group met on April 24, 2012 to discuss these questions. Carl Slater, the Ministry of the Environment (MOE) Technical Support Manager - West Central Region - was able to clarify several questions and offer solutions. While further discussion is warranted, the municipal staff seemed to be satisfied that the process, as discussed, could significantly reduce the uncertainties around the security of municipal water supplies from a regulatory perspective.

2. Defining "Secured"

"Secured" means reasonable certainty (i.e. reduced uncertainty) that the current and future sources of municipal water supplies will be available when they are needed. "Available" refers to both physical and regulatory availability.

"Secured" from a physical perspective means that the source will still be viable (i.e. available, sustainable, feasible, of suitable quality) at the time it is needed.

"Secured" from a regulatory perspective means that the municipality will be able to obtain and keep provincial approval to use the water.

Background

1. Mutual Provincial and Municipal Interest in Securing Municipal Drinking Water Supplies

Strategic planning for municipal services involves mutual provincial and municipal interests. Such interests include ensuring that municipalities have secure water supplies to support provincial growth initiatives. Through the Places to Grow Act (among other things), the Government of Ontario has expressed its interest in, and intent to, manage growth and development in a way that supports economic prosperity, protects the environment and helps communities achieve a high quality of life.

As well, the Provincial Policy Statement (PPS) and the Growth Plan for the Greater Golden Horseshoe promote strategic planning for municipal infrastructure, including water supplies. Most industry and commerce in the Grand River watershed is located in municipally serviced areas, and the PPS and Growth Plan call for future development to occur in these areas. However, economic growth and prosperity in municipalities can only occur if the municipality has a secure water supply to support the growth. Typically, if a municipality cannot provide the additional water supply to support new growth, the growth rate is slowed or curtailed until the new supply is available.

Mutual provincial and municipal interest in efficiency in infrastructure is also dependent on a secure water supply. Given the provincial and municipal interest in maximizing the value of public investment, the municipality must locate its water supply sources close-by. Large regional water supply systems (e.g. Great Lakes pipeline) have very high capital, operational and maintenance costs, and may only be feasible once other local options have been fully utilized.

2. Municipal Planning for Growth and Water Services

The Municipal Planning Cycle

The typical municipal water services planning cycle generally includes the following steps:

A municipal Official Plan update designates lands uses and provides for development type and location over a 20 year planning horizon (with proposed five year updates). The Official Plan provides the basis for projecting municipal water supply needs over the 20 year planning horizon. In the context of a continuum, and following the PPS, the Official Plan provides land use-related considerations for source protection, water quantity protection and water demand management.

A Municipal WSMP is used to identify the long-term water supply needs associated with the Official Plan, and sets out how water supply needs will be met for the planning horizon. The WSMP typically applies for a 25-50 year planning horizon, with proposed five year updates. The WSMP follows the framework of the Municipal Class Environmental Assessment process. The process includes: an evaluation of the need for additional water supply; a public consultation program; an assessment of a reasonable range of alternatives; consideration of effects on the environment and of the alternatives; and a systematic evaluation of preferred alternatives. The WSMP can also set out the projected water demand management assumptions or objectives.

A Water Efficiency Master Plan establishes the extent to which water conservation/efficiency will be used to meet the water demand management assumptions, or the objectives set out in the WSMP.

A Water Reserve Capacity Report, prepared annually, documents actual water use, water production capacity, development planning and remaining capacity. Municipalities commit future lots based on a capacity that has been determined to be present (as set out in the PPS). For a secure water supply, it is important that the existing permitted capacity is maintained to ensure that the allocated municipal reserve capacity is not undermined.

Long Term Water Supply Planning (25-50 year planning horizon)

The municipal water services planning cycle generally has a 25 to 50-year planning horizon to ensure that the 20-year water services planning, associated with the municipal Official Plan is not locking the municipality into short-sighted decisions. It allows time for planning, financing and implementing complex or costly new infrastructure initiatives that may require 20+ years to bring on-line. The 25 to 50-year planning horizon:

- provides background for need and justification (for the Environmental Assessment process);
- includes an assessment of potential alternatives, optional concepts, cost comparisons, basic feasibility assessments (including capacity), and sustainability considerations;
- addresses provincial interests as defined by the PPS, including suitability, capacity, sustainability, and potential environmental impact;
- identifies, with appropriate consultation, a project or a range of projects as the next steps to satisfy the need; and
- provides sufficient investigation of preferred alternatives to expect that, all things remaining equal, the basic concepts for new water supply are available in principle and will continue to be available.

A 25 to 50-year planning horizon provides assurances that there are viable long-term alternatives. This is particularly important for land-locked communities relying on local groundwater supplies to enable planning for future alternatives that involve changes to the nature of the supply source.

Short Term Water Supply Planning (20-25 year planning horizon)

A 20-year planning horizon provides for immediate water supply needs associated with the Official Plan, including those required under the Places to Grow Act and the Growth Plan for the Greater Golden Horseshoe. Supply needs are achieved by conducting individual water supply projects, which typically include an environmental study report with design concepts and the feasibility assessment to complete an Environmental Assessment.

The process should provide sufficient certainty to expect no big surprises in the approvals process.

For a secure water supply, there is a need to be able to move directly from the water supply needs identified in the Official Plan, through the Environmental Assessment and approvals process and on to implementation of the WSMP before the identified water supply is needed. The anticipated timeline to

accommodate the municipal water supply planning cycle, and the provincial approvals process under the current situation for growth areas in the Grand River watershed, is 8-15 years.

The generalized timeline is as follows (Waterloo Region's example):

- Exploratory drilling and report writing 2-3 years.
- Environmental Assessment 3-5 years RFP, tendering, field program, hydrogeological assessment, public consultation, ESR writing: 3-4 years; 5 years if new GUDI assessment protocols require increased testing periods, ESR review.
- Approvals PTTW 1-2 year Detailed review of hydrogeologic report, meetings/discussion, parallel pre-design.
- Detailed design, construction and commissioning 2-4 years depending on piping distances, staff availability, scheduling and budget.

However, a protracted public consultation process, extended testing periods, or Part II order requests in the Environmental Assessment process can significantly delay final approvals. The 8-15 year timeline to implement water supply plans increases uncertainty in the security of supply. The timeline can be reduced by:

- a) streamlining the Environmental Assessment process to 2-3 years maximum, by more directly involving MOE staff in the process and reducing the time required for decisions on Part II order requests, and
- b) streamlining the PTTW process to 6 months by using the Environmental Assessment documentation as the basis for the permit.

In this regard, the municipality can streamline the process by incorporating field investigations required for the PTTW process (e.g. sustainability) into the Environmental Assessment process. The MOE advises that the process can be streamlined, provided that the PTTW is being applied within a reasonable length of time following the completion of the Environmental Assessment process (i.e. all of the technical information and conditions are still valid).

The Environmental Assessment assumptions on need and justification, capacity and sustainability need to be carried through to the PTTW approval process. The MOE advises that they rely on the municipality to provide this information at the time of the application; master plans or Environmental Assessment reports that contain this information should accompany new PTTW applications.

3. Provincial Interests, Policies and Approvals

There are a number of provincial interests, policies and approvals that influence the water supply planning process, including the following:

<u>Places to Grow Act</u> – The Ontario government's initiative to manage growth and development in Ontario in a way that supports economic prosperity, protects the environment and helps communities achieve a high quality of life. The designated Greater Golden Horseshoe planning area west of the GTA includes most of the Grand River watershed. In particular, the planning area west of the GTA in the Grand River

watershed includes Dufferin County, Wellington County and the City of Guelph, Waterloo Region, Brant County and the City of Brantford and Haldimand County. The cities of Guelph, Kitchener, Waterloo, Cambridge and Brantford are noted as urban growth centres.

As part of the Preamble: The Government of Ontario recognizes that an integrated and co-ordinated approach to making decisions about growth across all levels of government will contribute to maximizing the value of public investments.

<u>Provincial Planning Policy Statement (PPS)</u> – The statement of the Ontario government's policies on land use planning. It provides direction for the entire province on matters of provincial interest related to land use planning and development, and promotes the provincial "policy-led" planning system.

With respect to infrastructure and public service facilities for sewage and water, the PPS says

1.6.1 Infrastructure and public service facilities shall be provided in a coordinated, efficient and cost-effective manner to accommodate projected needs. Planning for infrastructure and public service facilities shall be integrated with planning for growth so that these are available to meet current and projected needs.

1.6.2 The use of existing infrastructure and public service facilities should be optimized wherever feasible, before consideration is given to developing new infrastructure and public service facilities.

1.6.4 Planning for sewage and water services shall:

a) direct and accommodate expected growth in a manner that promotes efficient use of existing municipal sewage services and municipal water services;

b) ensure that these systems are provided in a manner that 1) can be sustained by the water resources upon which such services rely; 2) is financially viable and complies with all regulatory requirements; and 3) protects human health and the natural environment;

c) promote water conservation and water use efficiency; and

d) integrate servicing and land use considerations at all stages of the planning process; and allow lot creation only if there is confirmation of sufficient reserve municipal sewage system capacity and water system capacity.

<u>Growth Plan for the Greater Golden Horseshoe, 2006</u> – informs decision-making regarding growth management in the GGH. It is a 25-year plan that aims to:

- revitalize downtowns to become vibrant and convenient centres;
- create complete communities that offer more options for living, working, learning, shopping and playing;
- provide housing options to meet the needs of people at any age;
- curb sprawl and protect farmland and green spaces; and

• reduce traffic gridlock by improving access to a greater range of transportation options.

<u>Environmental Assessment</u> – provides for the protection, conservation and wise management of the environment in Ontario. The Environmental Assessment process:

- includes the Municipal Class Environmental Assessment process, which governs an approved class environmental assessment process with respect to a class of undertakings (such as municipal water supply projects); and
- establishes the need and justification, consideration and evaluation of options, an opportunity for stakeholder and public consultation, and open and transparent decision-making.

An Environmental Assessment is typically completed "just in time", because Environmental Assessment approvals have a 10-year life after which an update/addendum is required.

<u>Permit to Take Water (PTTW)</u> – provides for the conservation, protection and management of Ontario's waters and for their efficient and sustainable use, in order to promote Ontario's long-term environmental, social and economic well-being.

Under the Ontario Water Resources Act (Section 34), a PTTW is required, with a few exceptions, for the taking of water in excess of 50,000 L/day. The PTTW process requires submission of an application, which includes a summary of adjacent land uses, nearby surface water features, private wells and a hydrogeologic and/or hydrologic assessment of potential impacts from pumping. Conditions within the permits are established to protect the quality and quantity of the natural environment, foster efficient use and conservation of waters, and ensure the fair sharing and sustainable use of Ontario's water.

Water is assumed to be for the "common good" of the public in Ontario and is therefore not subject to "ownership". The MOE has a policy or philosophy of "fair sharing" and "first come-first served" for all water users in the PTTW process. Municipalities do not have a priority position with respect to new water supply.

PTTW have an expiry date which usually requires renewal on a 5 or 10-year cycle. Approved permits are posted on the Environmental Registry, with the exception of permits for municipal wells, as they have undertaken public consultation through the Environmental Assessment process.

Permit applications (with a few exceptions) are also circulated to the municipality and the conservation authority for comment. This provides the municipality with an opportunity to bring their interests related to existing and planned water supplies to the MOE's attention and to request that appropriate studies (impact on planned municipal takings, sustainability of taking) be required.

Decisions to restrict a non-municipal PTTW to protect a future municipal water source must be defensible before the Environmental Review Tribunal. The MOE is able to recognize and give status to planned municipal water supply sources in their PTTW decisions when the municipality holds a PTTW for its planned supply, and also when a preferred option has been approved by Council through an Environmental Assessment process.

<u>Clean Water Act</u> – Promulgated in 2007, the *Clean Water Act, 2006* enables the development of watershed-based Source Protection Plans (SPP) to protect the quality and quantity of municipal drinking

water supplies. Development of a SPP includes preparation of an Assessment Report, which maps vulnerable areas around wells and intakes and calculates the risk of specific threats to those supplies. For water quality, wellhead and intake protection zones are delineated and scored, and a list of 19 prescribed drinking water threats are assessed. Significant threats to municipal drinking water sources that are identified through this process, whether existing or potential, must be addressed through policies in the SPP.

The Proposed Grand River SPP has been submitted by the Grand River Conservation Authority to the Minister of the Environment. This Proposed Plan addresses significant water quality threats, and water quantity threats in the Townships of Amaranth and East Garafraxa. Studies to identify significant water quantity threats in other municipalities (if any) are not yet completed, and will be incorporated into a future Plan update. Approval of the SPP is expected by late-2014, and it is anticipated that the document will be updated on an approximate five-year cycle.

The SPP improves security for both existing and future municipal water supplies. From a water quality perspective, this is accomplished by requiring action be taken to reduce the risk of contamination from existing and future activities that pose a significant threat to municipal drinking water sources. New tools provided by the *Clean Water Act, 2006* (e.g. prohibition of future threat activities; Risk Management Plans for both existing and future threat activities) enhance the ability of municipalities and provincial agencies to deal with significant drinking water threats. Specifically, Risk Management Plans can be followed up on to ensure that protective measures are maintained. In addition, efforts undertaken through the source protection planning program have significantly increased technical understanding of the relative vulnerability of municipal drinking water sources to contamination and activities that pose a risk to the quality of municipal drinking water supplies.

For water quantity, a tiered water budget and risk assessment process is undertaken to determine whether any significant threats to quantity occur. The tiered process includes Tier 1 and 2 Water Quantity Stress Assessments (WQSA) which assess, on a sub-watershed scale, the degree to which water is used in relation to the amount of water available. If the water use is moderate or high, a Tier 3 or local area Water Quantity Risk Assessment (WQRA) is undertaken. The Tier 3 WQRA confirms if municipal water supplies are able to meet future demands, including demand in drought conditions and as might be affected by climate change. Pumping rates used for the water budget assessment are based on current water takings; future water demands deal only with future municipal needs, and are based on water supply needs identified in approved Environmental Assessments and PTTW.

In the Grand River watershed, the Tier 2 WQSA identified a number of municipal systems that require a Tier 3 assessment, including the City of Guelph, the Region of Waterloo Integrated Urban System, Guelph-Eramosa Township, Centre Wellington and several smaller systems in Waterloo Region. Tier 3 WQRA studies are underway for Guelph and the Region of Waterloo Integrated Urban System. The Grand River SPP will be updated to include policies to deal with significant water quantity threats (if any) when the Tier 3 WQRA studies have been completed.

From a water quantity perspective, the SPP improves security for both existing and future municipal water supplies. This is accomplished by requiring action be taken to reduce the risk of depletion from existing and future activities related to water taking or reduced aquifer recharge, that pose a significant threat to municipal drinking water sources. For the most part, the policies to reduce the risk of depletion of municipal drinking water supplies would affect PTTW decisions by the MOE.

Challenges and opportunities for 'securing' existing and planned municipal water supply sources

As a result of discussions with municipal and MOE representatives, the following are considerations for "securing" existing municipal water supply sources:

1. Characteristics of a regulatory environment that supports security (reduces uncertainty) in municipal water supply services

The following are listed as characteristics of a regulatory environment that would provide support to municipalities in securing water supply, and thereby reducing the uncertainties in their future supply sources:

- provides support throughout the continuum of municipal water supply planning;
- considers the provincial drivers for growth (i.e. Places to Grow) and assists the municipality in its plan to secure water supply for growth;
- fosters good communication and collaboration to transfer knowledge and maintain trust among provincial and municipal staff;
- allows for basic need and justification, feasibility, capacity, and sustainability to be established at the earliest possible stage (earlier than the Environmental Assessment process) and maintained though the continuum of the water supply planning;
- considers the realities of planning for, operating and maintaining a safe, reliable water supply system (basis for land development approvals, prudent redundancy, contingency);
- minimizes uncertainty associated with permit renewals for existing supply sources; and
- considers the municipal WSMP and the continued viability of planned sources in decisions on other (private) PTTW and discharge Environmental Compliance Approvals applications.

2. Available tools

Source Protection under the Clean Water Act, 2006

Source protection planning under the *Clean Water Act, 2006* provides an opportunity to protect the quality of existing and planned municipal drinking water sources ('planned' meaning there is an approved Environmental Assessment in place) and the quantity of existing and future municipal drinking water sources ('future' meaning as required to support the approved Official Plan). Quantity protection is applied in moderate and high use sub-watersheds (i.e. areas requiring a Tier 3 Water Quantity Risk Assessment).

Once an Environmental Assessment is complete for a planned municipal water supply source, (i.e. a preferred option is approved by municipal Council or the MOE, where a Part II order has been requested) the well/intake is defined as a "planned source" under the *Clean Water Act, 2006.* This means that it must be included in the Assessment Report and the SPP, allowing for the protection of water quantity and quality through SPP policies.

Permit to Take Water Regulation under the Ontario Water Resources Act

As part of the PTTW review process, the MOE circulates PTTW applications (with a few exceptions) to the municipality and the conservation authority. This provides the municipality with an opportunity to bring their interests related to existing and planned water supplies to the MOE's attention, and to request that appropriate studies (e.g. impact on planned municipal takings, sustainability of taking) be required.

Land Use Planning under the Planning Act

As per the Artemesia Water Case Decision, water taking is a land use decision, allowing municipal Official Plan policies and zoning by-laws to restrict water taking in identified areas (for example, for the protection of future water supply sources identified in the long term WSMP). Where a municipality makes such a policy, the MOE Director will not approve water taking where it is restricted by the municipal Official Plan policies.

3. Maintaining permitted capacity

The MOE has confirmed that, where municipalities have a PTTW for current sources (that are not conditional on further monitoring or adaptive management plans), the municipality can consider the source "secure" from a regulatory perspective for the purposes of this WMP.

4. Short duration of permits (frequency of renewal)

From a municipal perspective, a 10-year renewal period on a PTTW is a workable timeframe, although a longer time period would be preferred. A 5-year, or shorter PTTW, creates considerable uncertainty and is inconsistent with the municipal planning cycle.

The MOE has confirmed that, for municipal PTTW, a permit with a 2 or 5-year expiry is only issued when there is uncertainty about the sustainability of the taking and further monitoring is required. Otherwise, a 10-year permit could be expected.

The MOE is working to simplify the permit and permit renewal process, for example, by permitting wellfields, rather than individual wells in a wellfield.

5. Uncertainty that the planned water supply source will be available when it is needed

Municipalities can significantly reduce uncertainty about the security of their water supply by moving through the Environmental Assessment and PTTW process early, such that their planned supplies can be considered in PTTW decisions and defended, if necessary, at the Environmental Review Tribunal.

The MOE is able to issue PTTW for planned municipal takings, with expiry set for a date (e.g. 10 years) after the takings are brought on-line. This will secure the municipal sources within the PTTW process, but will only be helpful in securing planned municipal water supply sources if the Environmental Assessment and the PTTW processes are completed early.

It is current practice that new wells assess their impact on existing wells through pumping tests. Alternative means are needed to evaluate impacts on planned wells (i.e. wells in place, but not currently pumping). The MOE could require new private wells to test their impact on planned municipal wells in the vicinity, using the municipal pump test results carried out during municipal Environmental Assessment and PTTW application processes. This step could help reduce the uncertainty related to the impact of new private wells on planned municipal sources. As part of its comments on a circulated PTTW application, a municipality can request, through the MOE's request for studies from the proponent, that an examination of the impact of the proposed taking on the planned municipal well(s) be conducted.

Should there be conflict between private uses and planned municipal uses, the MOE could permit private use of the water in the interim period, on the condition that the planned municipal use will have priority at the time it is needed.

6. The length of time required to develop water supply

For a secure water supply, there is a need to be able to move directly from the water supply needs identified in the Official Plan, through the Environmental Assessment and approvals process and on to implementation of the WSMP before the identified water supply is needed.

The 8-15 year timeline to implement WSMPs increases uncertainty in the security of supply. The timeline can be reduced by:

- a) streamlining the Environmental Assessment process to 2-3 years maximum, by more directly involving MOE staff in the process and by reducing the time required for decisions on Part II order requests, and
- b) streamlining the PTTW process to 6 months by using the Environmental Assessment documentation as the basis for the permit.

In this regard, the municipality can streamline the process by incorporating field investigations required for the PTTW process (e.g. sustainability) into the Environmental Assessment process. The Assessment assumptions on need and justification, capacity and sustainability need to be carried through to the PTTW approval process; the municipality should include this information with the PTTW application.

7. Possible complications related to the source protection program under the *Clean Water Act*, 2006

It is unclear how the Tier 2 WQSA will be used in the PTTW process, and this has created uncertainty that municipalities can establish new water supply sources. The MOE notes that the current restrictions on water supply development in high water use areas are limited to specific water takings and do not affect municipal supplies. The concern is that municipalities will need to meet an even higher standard for approval of water supply expansions in high water use areas, and this might make development of these supplies unachievable; the MOE assures that there need not be concern in this regard.

The process for including a new supply source in the SPP would include delineating Wellhead Protection Areas, ranking threats, and creating policies to protect the supply. For quantity, a reassessment of the Tier 2 WQSA and/or Tier 3 WQRA would be needed to "confirm" the sustainability of supply as part of the source protection planning process. The concern is that the timeline for bringing new supplies online may be considerably delayed by this process. From a provincial perspective, MOE staff cannot think of a reason why the SPP updating process would intersect with the municipal water supply planning and approvals process. The municipality may choose to undertake the technical assessment work as part of other investigative processes, but this would apparently be their choice. Therefore, the MOE assures that this process need not increase uncertainty related to the security of existing or planned municipal water supplies.

8. Ability to secure future municipal water supply sources beyond the 25-year planning horizon

A Long-Term Municipal WSMP has no provincial status unless conducted as an individual Environmental Assessment. The MOE's participation in regular Water Managers' Working Group meetings (watershed municipal water services staff and MOE staff), where long term plans are shared, will keep MOE staff aware of the municipal plans and allow them to provide provincial support and assistance in securing municipal water supplies.

Given the length of time required to transcend from growth plan to water supply, the province may want to consider whether the planning horizon for its interest in water supply planning should be extended beyond the current 20-25 years. The province's 20-25 year limit is meant to restrain capital investment in infrastructure. Its interest in water supply planning and source protection could be extended where plans are sufficiently developed.

Conclusions and Recommendations

- 1) Regulatory tools are generally in place for municipalities to work together with the MOE to secure municipal water supplies. For the most part, the municipalities' uncertainties about the security of their existing and planned water supplies relate to communication and information sharing.
- 2) The security of municipal water supplies can be enhanced by a cooperative and supportive working relationship between the MOE and municipalities in planning, establishing and maintaining municipal water supplies. This need is supported by mutual provincial and municipal interest in strategic planning for municipal services, security for municipal water supplies and efficiency in infrastructure.

To enhance cooperative and supportive working relationships, it is recommended that:

- a) the MOE foster a culture of working together with municipalities to solve problems; and
- b) the Grand River Water Managers' Working Group continue to meet regularly and share long term plans to foster good communications and collaboration, transfer knowledge, and keep MOE staff aware of municipal plans.
- 3) MOE has confirmed that, where municipalities have PTTW for current sources (that are not conditional on further monitoring or adaptive management plans), the municipality can consider the source "secure" from a regulatory perspective for the purposes of this WMP.
- 4) The standard 10-year expiry for PTTW is reasonable and consistent with the municipal water supply planning cycle.

It is recommended that:

a) the MOE continue with the 10-year permit expiry and explore options for longer term or other expiry dates, and

- b) the MOE simplify and streamline the application and review process for renewal of existing permits (i.e. everything the same);
- 5) The process for providing additional supplies to meet forecasted future needs can approach or exceed the planning horizon for growth. For efficiency and cost control, the Environmental Assessment and PTTW processes should be streamlined. It is recommended that:
 - a) the MOE and municipal staff pre-consult on information requirements;
 - b) the MOE participate more fully through the Environmental Assessment process to assist with questions and requirements as the process proceeds; and
 - c) the MOE reduce the time required for decisions on Part II order requests.
- 6) To enhance the security of planned water supplies to meet future municipal needs, it is recommended that:
 - a) municipalities consider initiating the Environmental Assessment and PTTW processes as early as practical in their planning cycle, in order to reduce uncertainty about the security of their planned water supply sources;
 - b) the MOE put processes in place to grant permits under the PTTW process for planned municipal water takings ahead of the taking being brought online (the MOE advises that this may require changes in the application and review templates used in the PTTW program);
 - c) for new private water takings near planned municipal wells, the MOE put processes in place to provide for studies of the impact on the planned municipal well as if it were an existing municipal well (municipalities have confirmed that they will share the information required to facilitate this process);
 - d) for large, new private water takings in areas near existing or planned municipal supply wells, municipalities make use of the PTTW application circulation process to request that appropriate studies (impact on planned municipal takings, sustainability of taking) be required; and
 - e) municipalities consider Official Plan policies restricting new water taking in designated areas as required to secure planned sources of supply required to meet their projected future needs.
- 7) The implementation of the Grand River SPP, likely to come into effect in 2014, provides an opportunity to protect the quality of existing and planned municipal drinking water sources, and also the quantity of existing and planned municipal drinking water sources in moderate and high use sub-watersheds (i.e. where Tier 3 Water Quantity Risk Assessments have been carried out).

It is recommended that, between 2020 and 2025, the Water Managers' Working Group jointly evaluate the quality and quantity protection provided by the implementation of the Grand River SPP and whether additional action is required to fill gaps or address implementation issues.

8) The Long Term Municipal WSMPs (beyond the planning horizon of the current Official Plan) are not currently considered in the decision-making for PTTW applications in the area. There are outstanding municipal concerns for securing sources identified in municipal WSMPs to meet the needs beyond the 20-25 year planning horizon of the municipal Official Plan.