

ERO 019-1340 Updating Ontario's Water Quantity Management Framework

The Ontario Society of Professional Engineers (OSPE) is the advocacy body and voice of the engineering profession. Ontario currently has over 85,000 professional engineers, 250,000 engineering graduates, 6,600 engineering post-graduate students and 37,000 engineering undergraduate students.

OSPE is pleased to present the following submission concerning Updating Ontario's Water Quantity Management Framework.

OSPE finds the information in the proposal paper well-presented along with the supporting data from BluMetric Environmental Inc. While this provincial proposal paper deals only with Water Quantity Management, we see no discussion on Water Quality Management. Perhaps there is a reason for this, but we do not see how this proposal by the province can ignore Water Quality Management. We have in this response made references to some water quality issues.

GOAL 1: Establish clear provincial priorities of water use

1. Do you support including priorities of water use in regulation? Why or why not?

Yes, priorities are needed where a limited resource is used between competing entities. Managing the amount of groundwater available in most aquifers are priorities of water use regulation, largely to protect its capacity for long range municipal growth. This includes the volumes to serve the bottled water industry. This is a shared responsibility that must be thought through between the Ministry of the Environment, Conservation and Parks (MECP), municipalities and the bottled water firms.

2. How should priorities of use be applied to water taking decisions?

Necessity takes priority and that should be the order for taking decisions. The order of necessity moves from human consumption and environmental sustenance to agriculture and irrigation and then to commercial and industrial uses.

Mention is made in the proposal paper of some local areas in the province where groundwater resources are under stress. However, OSPE sees no suggestions in the proposal paper or other supporting documents, on what the province proposes to do to alleviate this condition. Perhaps this issue has been dealt with by the province and not recited here. OSPE suggests that this be communicated in the future.

When should it be applied?

This should be applied when demand (current and future) exceeds supply. Normally it should be planned that the quantity of water at the water source will cover all of the water user needs but in times of volume decrease like periods of drought or extended ice periods, priority should be applied to allow for continued essential use and systematically limit, defer, or divert non-essential use.

What process should be followed?

Environmental allocations plus water use permitting.

Who should be involved?

The MECP and all stakeholder sectors by way of representative organizations (municipalities, agriculture, industry, mining, Conservation Authorities).

The province initiated a very thorough program over 20 years ago after the Walkerton Inquiry involving the regional Conservation Authorities and municipalities to create regulations for land use on the lands known as the wellhead contributing areas. The municipalities involved have created rules in their land use planning and now part of their zoning regulations. These groups should be involved in discussions regarding new water taking permits.

What information should be considered?

The following information should be considered:

- Scientific assessments of water availability and of demands, by quantity and quality.
- Quantity of water required for essential use (human, environment, agriculture).
- Minimum quantity of water required for commercial and industrial use.
- The valuation process by which a value is put on water for each sector. Different valuations would be applied within each sector to various increments in unit water demand.
- Stakeholder participation is essential.

3. Municipal drinking water supply is proposed as a highest priority use. What municipal drinking water needs should be considered a priority (e.g., current, planned growth, longer-term growth)?

A realistic, reasonable unit water demand for current and future municipal use should be a priority in urban centres, but not wasteful use. Water conservation should be encouraged through the licensing processes.

As population grows so does the number of homes and facilities that require water use and this can easily be factored into planning for the short term as conditions do not change much. Planning longer-term may not be as easy because of unexpected changes to climate and other newly emerging factors that may affect water quantity and quality. Analyzing samples and trending on-going data will be the way forward to validate longer-term predictions

In ecological, significant conservation areas, it might be argued that highest priority would be a minimum ecological water allocation. In key food production areas, it might be argued that highest priority would be the food production. Water conservation should be encouraged in this sector as well. Therefore, consideration must always be given to the impact on the agriculture industry and Indigenous People. We suggest that the municipal committee members of the Source Water Protection groups in the municipality and the Conservation Authorities be consulted along with the bottled water firms.

The Province of Ontario must also control/limit the impact on water quality arising from salting of highways and municipal roads.

GOAL 2: Update our approach to managing water takings in stressed areas

1. Under what circumstances should the ministry consider assessing and managing water takings on an area basis?

Managing water takings can be well done using the data on each of the aquifers and the utilities and bottled water firms. The extensive BlueMetric report data should make this a reasonably easy and satisfactory exercise. Eventually this should be done where current and projected demands exceed the safe yield of local water resources, taking into account the capacity of water importation.

2. What suggestions do you have for the process of assessing and developing a strategy to manage water takings on an area basis? For example, how should local water users, stakeholders, and Indigenous communities be engaged?

The municipal and water bottling firms can follow the MECP guidelines as set out in the proposed paper if either of these groups are experiencing water withdrawal problems in the operation of their wells. In order to move forward there must be engagement of the municipal water utilities, with help from the Source Water Protection groups, the Conservation Authority in the area, the bottled water firms affected, the agriculture industry, and Indigenous Peoples affected.

OSPE would also suggest the idea of having a peak rate for non-essential users during periods of drought since this will further sensitize them on the need to limit use and adopt the strategy to manage water taking on an area basis.

3. How can the province help water users be more prepared for drought?

OSPE supports the Ministry's proposal to develop additional guidance that would encourage proactive measures to manage water takings under drought conditions. In order to do so, OSPE believes that the province must invest in proper drought forecasts.

OSPE is glad to hear that the proposed guidance and technical work would be coordinated with Ontario Low Water Response and will ensure roles and responsibilities are clearly articulated and that there is no duplication of efforts and policies.

GOAL 3: Make water taking data more accessible

1. Is there any water quantity and monitoring information reported to the ministry that should not be made publicly available? If so, why?

All water uses should be made publicly available. We agree that the province should work to improve the access to water quantity data. OSPE supports the paper's conclusion that "providing public access to water quantity data unlocks the value of the data and promotes increased trust and transparency in the government's management of water resources".

2. Would the proposed online resource be helpful to you? Why or why not? Are there other mechanisms for sharing this information that would be helpful to you?

OSPE supports the Ministry's proposal to build a public-facing online resource that would house data and data analysis tools. OSPE also agrees with the need for this platform to consolidate, integrate, and provide timely public access to existing and new data.

3. What data would you like to see included in the online resource?

We recommend the following data to be included in this online resource

- Ranges in unit water demands by sector and by sub-classifications.
- Actual total and unit water consumption by significant water users
- Safe yield and yield range by water resource, and
- Water quality descriptors by source

4. How would you like to see water quantity data presented? What are the most useful formats (e.g. maps with embedded information, reports, tables, story pages)?

OSPE recommends the use of:

- Maps with embedded information, linked to reports and tables
- Online sources where reports/tables can be obtained by sector
- Story pages for educational use

5. What water resources information and guidance would you like to see made available to the public?

Information such as challenges exerted on water resources (quantity and quality), drought or shortage information, as well as educational tools on how to conserve water should be made available to the public.

Other comments:

- OSPE also suggests the province develop and maintain provincial oversight on the operations of utilities to ensure water quality safety and reporting water quality data to its users in the municipal water supply systems.
- The province must monitor the certification of the system operators to offset a chance for another Walkerton event.

GOAL 4: Give host municipalities more input into water bottling decisions

1. Do you support the proposal to require water bottling companies to seek support from their host municipality when applying for a Permit to Take Water? Why or why not?

We support a situation where the municipality has the higher priority for providing water to its residents when resources are limited. When the local water resource is limiting, we support the proposal to require water bottling companies to seek support from their host municipality when applying for a Permit to Take Water.

OSPE is glad that the proposal paper specifically mentions the fact that “obtaining support from the host municipality would be in addition to any other requirements or conditions that the Ministry might have in deciding whether to issue a Permit to Take Water. This includes any requirements associated with meeting the Crown’s duty to consult Indigenous communities.”

From the data provided by BlueMetric it seems that the bottled water industry water taking does not, in most areas, impact significantly on the municipal systems. It is essential that this industry must defer to the needs of the municipal water systems for adequate aquifer capacity. This means more say by municipalities in the permits given to the bottled water industry in their area.

Sincerely,



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