



Conservation Ontario Submission to the Walkerton Inquiry

Public Hearing #1

Conservation Ontario, on behalf of all conservation authorities and specifically in partnership with Saugeen Conservation and the Grand River Conservation Authority, respectfully submits this paper in response to the Agenda outlined for Public Hearing #1. This paper addresses only those agenda items for which Conservation Ontario has expertise and perspectives.

Conservation Ontario Recommendations Regarding the Guiding Principles:

a. Clear Responsibilities And Leadership

It is recommended that:

The Province clarify the roles and responsibilities of the Provincial Government, municipalities, conservation authorities and other agencies with respect to water management in general, and the protection of drinking water specifically. This must be addressed through an integrated provincial water policy framework for Ontario.

In Ontario, water management is highly fragmented and administratively complex. While the Ministry of the Environment and the Ministry of Natural Resources are the key ministries involved in water quality and water supply, a large number of other ministries and agencies are responsible for aspects of water management. Ontario does not have a formal framework for protecting the quality and quantity of our water resources. This lack of an integrated provincial water policy framework and the fragmentation of water responsibilities has sometimes led to uncertainty about specific water management roles and responsibilities and resulted in inconsistent links between planning and implementation. Other Provinces such as British Columbia, Alberta, Quebec and Nova Scotia have recently recognized the importance of developing an integrated strategy for water management which provides a framework within which the protection of drinking water is one component. These Provinces are in the process of developing water resource management strategies with broad-based public input.

b. Risk Management/Precautionary Principle

It is recommended that:

The Province support the conclusions reached by the background paper for the Walkerton Inquiry entitled "Managing Health Risks From Drinking Water" (Krewski, D. et al, 2001).

In particular, the province should support conclusion 4, *Source Water Protection: The most effective approach for managing microbiological risks from drinking water is source water protection The advantage of good source water protection is that it is a means of preventing water contamination ("pollution prevention") as opposed to requiring the need to address a pollution problem ("react and cure")* (p.14).

Further work is required in evaluating the health risk reduction.

c. Multi-Barrier Approach

It is recommended that:

A multiple barrier approach to protecting drinking water quality be adopted with source water protection as an essential first barrier.

Modern water treatment has utilized the concept of multiple–barrier protection of drinking water. This concept relies upon sequential application of barriers against contamination, particularly pathogens. Generally, the multiple barrier system for maintaining a good drinking water quality consists of:

- Source water protection
- Water treatment
- Properly designed and operated water distribution system with residual disinfectant
- Comprehensive testing and training

d. Source Water Protection

It is recommended that:

The protection of drinking water sources be recognized as a permanent and integral part of a long-term, secure water supply strategy.

While source water protection is the first barrier, it has not been sufficiently emphasized or incorporated into regulations or standards, as have the other three barriers. Source water protection represents the first layer in a multiple defense system for ensuring that clean water is available to all water users. Source water protection is especially vital to water users, such as rural residents and businesses, whose geographic location and low water usage afford them few alternative drinking water supply options and may limit the economic viability of employing end-of-pipe treatment measures. Source protection programs are consistent with practices being adopted by water supply agencies in other international jurisdictions.

It is recommended that:

The watershed be recognized as the viable unit for managing water and implementing source water protection.

A watershed is an area of land that drains into a common water body, such as a river or lake. A watershed can also be known as a basin or a catchment. A watershed is an ecosystem with complex interacting natural components. Human activities have a direct influence on the quality and quantity of surface water and groundwater in the watershed. Upstream activities influence river flows and water quality downstream. Surface and groundwater systems have a limited tolerance for stress, and long-term problems can develop that are costly and difficult to remediate.

The watershed is the appropriate unit for the management of both surface and groundwater resources. Valerie Gibbons in her report *Managing the Environment: Executive Summary* (Executive Resource Group, 2001) states that there should be a strategic shift in managing the environment "towards a place-based approach with boundaries that make environmental sense and facilitate a cross-media, cumulative approach (such as watershed management)". While groundwater aquifers sometimes extend beyond surface water drainage boundaries, the human activities and resulting influences occur and can be managed within a surface watershed context. Drinking water source protection programs should be developed as part of an overall watershed management plan.

It is recommended that:

The Province require that local agencies prepare watershed management plans to assess and protect existing and future water sources within the context of other environmental, economic and social considerations.

The responsibility for planning water supply and pollution control in Ontario's watersheds requires the co-operation of numerous agencies, municipalities, and conservation authorities. It is essential that these institutions agree on a management plan and work co-operatively to protect the natural systems and manage impacts and demands as necessary to ensure safe and secure water supplies. Protecting the quantity and quality of water supply also depends on actions by landowners and industry. A watershed management plan, developed and implemented locally with full knowledge and participation by the landowners and industries that must take action, will ensure that water quantity and quality are valued and protected at their source before quantity and quality become a problem.

The watershed management process can be seen as a continuum that includes producing a plan, implementing the plan, monitoring the effectiveness of the plan, and evaluating and updating the plan. The watershed plan can be used as a guide for managing and protecting groundwater and surface water supplies. It is through this process that future water supplies are identified, risks of contamination are assessed and plans for water supply protection are put into place.

e. Public Participation

It is recommended that:

Public participation be recognized as an integral component of watershed management, including source protection.

Ontario's legal and institutional division of water responsibilities among various levels of government and the common property nature of water requires participation from a variety of government, non-government, community, and private interests in decision-making. Through a participatory process, it is possible to:

- define the problems more effectively;
- access information and understanding that fall outside the scientific realm;
- identify alternative solutions that will be socially acceptable; and,
- create a sense of ownership for the plan or solution, which facilitates implementation.

Therefore, a participatory process should be part of watershed management, particularly in the following phases:

- defining the issues, goals, and objectives;
- providing information to aid the understanding of watershed processes;
- evaluating options and alternatives in the formulation of a watershed plan; and,
- creating linkages, partnerships, and action plans for implementation.

While a participatory process may extend the time needed during the initial stages of analysis and planning, such an investment is normally "returned" late in the process by avoiding or minimizing conflict. For this reason, public involvement is encouraged as early and as broadly in the process as possible to be most effective.

A shared, collaborative approach is required to ensure that implementation is carried out. This requires government agency participation and support as well as strong community involvement. This involvement can be informed and facilitated by the availability of real time, on-line information regarding the state of the resource.

f. Other Principles

It is recommended that:

Adequate and stable source(s) of funding be established to finance watershed management throughout Ontario.

Provincial, municipal and conservation authority investments in securing water supplies and water quality require long-term stable funding to support watershed management operations. Conservation Ontario estimates that the total cost of watershed management activities carried out by conservation authorities, municipalities and the province amounts to about \$282 per capita for persons living in fully serviced municipalities. Municipal governments use the largest proportion of this, about 97%, to finance water supply, wastewater, and storm water management systems. Conservation Ontario further estimates that the cost of upgrading the watershed management activities of conservation

authorities to the level required for effective planning and management water resources would require a 76% increase over current funding levels, which would represent an increase in costs of approximately \$3.50 per capita.

It is recommended that:

At least some costs of source protection programs be recovered from water users, including municipal, private and other users (i.e. user pay principle), and from effluent dischargers (i.e. polluter pay principle).

In addition to the traditional tax-based funding sources, watershed management can be at least partially funded by a user pay approach through the municipal water bill and the provincial Permits to Take Water. Where local funding sources are inadequate, the Province should supplement or provide mechanisms for appropriate distribution of funding to these areas to ensure a base level of watershed management. Incentive-type programs and innovative funding opportunities are required to support capital investments (i.e., projects, studies, structures) necessary to implement watershed management plans.

Conservation Ontario Recommendations Regarding the Overall Role of Government:

a. Constitutional Responsibility

i) Role of Federal Government

It is recommended that:

The Province encourage the Federal Government to develop a national framework for water policy and to strengthen co-operative agreements with provinces under the Canada Water Act.

The Federal Water Policy of 1987 was tabled in Parliament but not extended into a national policy. Funding for co-operative agreements with provinces declined from over \$12 million in the late 1970s and \$8 million in the 1980s to zero in 1998. Since water problems cross political and jurisdictional boundaries and are becoming increasingly global, the Province should encourage the Federal Government to develop a national framework for water policy in close consultation and co-operation with the provinces. The national policy should define the federal government's role in the design of national standards for water quality and environmental monitoring and in providing research, data collection, analysis, and monitoring on a watershed basis to maintain the health of the Great Lakes.

ii) Role of the Provincial Government

It is recommended that:

The Province provide stronger leadership to ensure the best water management and protection of drinking water for Ontario residents.

The Province is ultimately responsible for water. Conservation Ontario believes that the Province should assume a stronger role in developing consistent water quality standards, procedures and regulations to ensure performance at the local and watershed levels. This role can be clarified in an integrated provincial water policy framework.

In addition, the Province should recommit to the concept of watershed management and provide the necessary support (policy, funding, research, data analysis, monitoring, performance standards) to assist local and watershed agencies in developing and implementing watershed management plans.

b. Provincial Government Structure To Provide Safe Drinking Water

It is recommended that:

A lead Minister and Ministry be designated for water in order to facilitate the development and implementation of an integrated provincial water policy framework.

There is a need to coordinate responsibilities around water quality and quantity so that there is clarity of roles thus reducing overlap and duplication. Traditionally, conservation authorities have worked co-operatively with all of the provincial ministries with responsibilities for various aspects of water management. Conservation Ontario supports the idea of designating a lead Minister and Ministry for water in Ontario.

Regardless of how the provincial government structures itself, conservation authorities have extensive experience/expertise in watershed management and could deliver significant components of the water policy framework with their municipal partners.

c. Safe Drinking Water Act

It is recommended that:

An Act for safe drinking water be consistent with an integrated provincial water policy framework and address source water protection through watershed management.

Conservation Ontario believes that an integrated provincial water policy framework is a necessary prerequisite of any new or amended legislation. An overarching framework is required to integrate the wide range of issues and interests in water. The development of such a framework would identify legislative deficiencies that need to be addressed. However, if legislation should precede a water policy framework then it should be reviewed and amended (if necessary) to reflect the guidance provided by the framework.