



## **Policy Review Backgrounder**

Pre-Consultation October 2011

## We look forward to your input...

- Please take a few minutes to look at this guide
- Please send us your comments by November 30, 2011
- Please check the project website at www.quintesource water.ca

#### Safe Water for Our Future

A source protection plan is being prepared for the Quinte Region. The local Source Protection Committee has been working since 2007 to study the region and its 11 municipal drinking water systems and come up with policies to protect those water sources. Similar plans are

being prepared in regions all across Ontario under the *Clean Water Act*, 2006. This work is directed and funded by the Ontario Ministry of the Environment. A project staff team at Quinte Conservation provides technical, administrative and communications support to the committee.



Protecting our drinking water is important for public health and a prosperous future.

### Why Pre-Consultation?

Input on draft source protection policies is very important.
The Source Protection
Committee wants input on whether these policies are implementable. If barriers or

problems are identified with the implementation of the policies, the Source Protection Committee would like to know prior to taking the draft policies to the general public for comment in 2012. There is still time for these draft policies to be refined or modified by the committee. The plan is due August, 2012.



Protected, clean and abundant drinking water is vital to our future. We depend on safe municipal drinking water.

#### Inside:



Numerous public meetings have provided information to the public and gained valuable insights for the project.

# Why are we working to protect sources of drinking water?

In Walkerton, Ontario in May 2000 seven people died and thousands became sick because the water that they drank from their municipal well was contaminated.

Protecting our sources of drinking water from contamination and depletion is important for public health and is part of ensuring safe, abundant drinking water for our future. The Walkerton tragedy showed us that relying on water treatment alone is not enough. To prevent another 'Walkerton' from ever happening again, we need to ensure that all the steps are there to protect our water from the source to our taps. The first step is keeping our water sources clean and protected. Other steps include: effective water treatment, rigorous testing, monitoring and water treatment operator training.

#### **Good Reasons to Protect Water Sources**

The primary reason to protect our municipal drinking water sources is to protect public health. Other benefits of protecting our public water supplies are:

- avoiding the cost and need to clean up contaminated water
- reducing the cost of water treatment
- eliminating the need to search for new drinking water sources when existing ones become contaminated or depleted
- ensuring a long-term supply of clean water
- ensuring an adequate supply for economic growth

"The work to develop a source protection plan is based on science and years of technical work."

#### **Process and Timelines**

Developing a source protection plan is based on science and years of technical work. Reports and studies have been peerreviewed and approved by the Province and public input has been sought at each stage in the process.

Steps	2005	2006	2007	2008	2009	2010	2011	2012
Watershed Studies	XXXX	XXXX	XXXX					
Technical Studies		XXXX	XXXX	XXXX	XXXX			
Terms of Reference				XXXX	X			
Assessment Report					XXX	XXXX	X	
Source Protection Pan							XXXX	XXX

#### The Source Protection Committee

**MEMBER** Max Christie Ron Hamilton Sandy Latchford **Garnet Thompson** Clarence Zieman Jo-Anne Albert Angela Genereaux Rahumathulla Marikkar

Gary Fox Heather Lang Terry Shea Terry Kennedy

Mel Plewes Doug Parker Eric Bauer Phillip Norton Todd Kring **Curtis Maracle** 

Andrew Landy\* Wendy Lavender\*

Mike Kerby\*

**REPRESENTING** 

Chairman

local municipalities local municipalities local municipalities local municipalities local municipalities small business/industry large business/industry

agriculture agriculture

tourism and recreation environmental associations

general public general public general public general public

Bay of Quinte Mohawks Bay of Quinte Mohawks Source Protection Authority

**Health Units** 

Ministry of the Environment



The Source Protection Committee on site at one of the Ouinte Region's 11 drinking water systems.

"The primary reason to protect our municipal drinking water sources is to protect public health."

## The Source Protection Staff Team

#### **STAFF**

**Keith Taylor** Bryon Keene Mark Boone Amy Dickens Julie Munro

Lynette Lambert Lucille Fragomeni Nancy Marshall

#### **DUTIES**

Project Manager

Water Resources Engineer

Hydrogeologist **GIS** Specialist

**Surface Water Specialist** Water Quality Technician Communications Coordinator Administrative Assistant

#### **Contact:**

Keith Taylor, Project Manager **Quinte Conservation** 

2061 Old Highway 2, R. R. # 2, Belleville, ON K8N 4Z2 Phone: 613-968-3434 ext 114 or 613-354-3312 ext 114

Email: ktaylor@quinteconservataion.ca



Source Protection Committee members have carefully considered how the threats identified for each drinking water system can be managed or eliminated.

<sup>\*</sup> Liaison members are non-voting members



Roblin Lake is the source of drinking water for the Village of Ameliasburgh municipal water system.

### **The Quinte Region**

Our drinking water comes from lakes, rivers and streams or underground sources. The Quinte Source Protection Region is based on the jurisdiction of Quinte Conservation. This region includes the watersheds of the Moira, Napanee and Salmon Rivers and all of Prince Edward County, an area of about 6,000 square kilometres in eastern Ontario. There are approximately 117,000 people living in the region.

Eleven municipal drinking water systems serve about 50% of the population. Seven systems are intakes from surface water and four are groundwater systems that have wells drilled into the underlying aquifers. The remaining population obtains water from private wells using groundwater; in some cases surface water from shore wells; or for some cottages, directly from a river or lake.

There are three key areas in our region where Source Protection Plan policies will apply:

- Wellhead Protection Areas or WHPAs where groundwater supplying municipal wells is vulnerable
- Intake Protection Zones or IPZs where surface water supplying municipal intakes is vulnerable
- Highly Vulnerable Aquifers or HVAs where regional groundwater is vulnerable

## **Project Website**

For more information visit the project website at:

#### www.quintesourcewater.ca

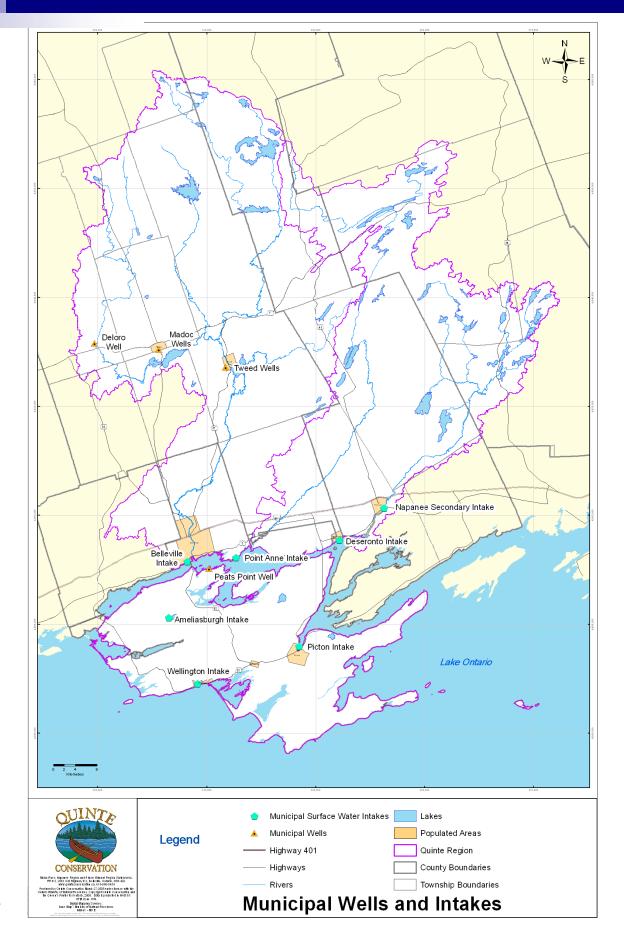
This website has links to the Clean Water Act and associated Regulations, the Ministry of the Environment Drinking Water Portal and the Conservation Ontario website.

## **Drinking Water Systems in the Quinte Region**

Location of Municipal Water Source	Type of Water Source
Village of Deloro	groundwater
Village of Madoc	groundwater (influenced by surface water)
Village of Tweed	groundwater
Hamlet of Peats Point in Prince Edward County	groundwater (influenced by surface water)
Village of Ameliasburgh	surface water - Roblin Lake
Village of Wellington	surface water - Lake Ontario
Town of Picton	surface water - Picton Bay
Town of Deseronto	surface water - Bay of Quinte
Town of Greater Napanee - Backup System	surface water - Napanee River
City of Belleville - Main Intake	surface water - Bay of Quinte
City of Belleville - Point Anne	surface water - Bay of Quinte



Picton Bay is the water source for the Town of Picton municipal water system.





Improperly stored chemicals can be a threat to water sources.

#### Which Activities are Drinking Water Threats?

The Province of Ontario identified the following activities as threats to our drinking water. These threats may be ranked as low, moderate or significant threats. To be a significant threat the activity must be in a vulnerable area and have a high risk score. The risk score is based on the closeness to the water source, amount of material involved, storage method and other factors. More information is in the Assessment Report at www.quintesourcewater.ca.

- Waste disposal sites
- Sewage systems, including septic systems
- Storage, management and application of agricultural source material (e.g. manure)
- · Handling, storage and application of non-agricultural source material (e.g. biosolids, food waste)
- · Handling, storage and application of commercial fertilizers
- Handling, storage and application of pesticides
- Handling, storage and application of road salt

- Storage of snow
- Handling and storage of fuel (e.g. gasoline, home heating oil)
- · Handling and storage of dense non-aqueous phase liquids (DNAPLs, e.g. paint strippers, metal and plastic cleaning solvents, dry cleaning solvents)
- Handling and storage of organic solvents (e.g. dry cleaning solvents, paint thinners, glue solvents)
- Chemicals used in the de-icing of aircraft
- Livestock grazing, pasturing, outdoor confinement areas and farm-animal yards

"Policies to address the threats will be part of the Source Protection Plan."



Handling and storage of fuel is the most commonly identified significant threat in the region.

## Significant threats in the Quinte Region

The Assessment Report identified significant threats on over 300 parcels of land in the Quinte Region. The two most numerous significant threats are the handling and storage of fuel and septic systems.

The Assessment Report is the study of all 11 municipal drinking water systems in the Quinte Region. It identifies: vulnerable areas for both groundwater and surface water sources; information about water quality and quantity issues; activities and conditions that pose a threat to the quality and quantity of drinking water sources and; it ranks the threats as low, moderate or significant.

Significant Threats in the Quinte Region	Total*
Handling and storage of fuel	178
Septic systems (small)	164
Livestock grazing	30
Application of agricultural source material	28
Application of pesticide	23
Sewage (large and municipal)	11
Storage of agricultural source material	10
Handling & storage of DNAPLs (dangerous chemicals)	10
Handling and storage of pesticide	6
Application of non agricultural source material	5
Road Salt application	4
Handling & storage of non agricultural source material	3
Former waste disposal sites (pre-existing conditions)	2
Application of fertilizer	2
Handling & storage of organic solvents	1
Handling & management of agricultural source material	1

<sup>\*</sup>Total - totals are best estimates of the number of significant threats. More than one type of threat can take place on each parcel of land in vulnerable areas.

#### What can be done about threats now?

Funding is available now to help landowners do projects that have a positive impact on source water quality. Stewardship projects in the most vulnerable areas near municipal groundwater wells and surface water intakes can receive up to 80 percent funding.

Types of eligible projects include:

- septic inspections and upgrades,
- well decommissioning and upgrades,
- improvements to storage and handling of manure and certain dangerous chemicals

Twenty-four stewardship projects completed around Roblin Lake since 2008 appear to be making a difference. Analysis of lake water quality data shows an improving trend since the program began. Most of the completed projects were septic system replacements. Roblin Lake is the drinking water source for the Village of Ameliasburgh.

Funding is through the Ontario Drinking Water Stewardship Program. An application form and more details are available at www.quintesourcewater.ca.



Stewardship projects that upgrade or replace poorly functioning septic systems can have a positive impact on water quality.

## How does an activity become a significant threat?

The Ministry of the Environment has determined which activities are threats to our drinking water. See the list on page 6. To determine which threats are significant, moderate or low, the Ministry developed this formula:

risk score = hazard rating X vulnerability score

There are detailed tables that provide a hazard rating based on the nature of the activity, the

quantity and type.

The vulnerability score is based on the proximity to the water source and how fast the contaminant could reach the water source.

Type of Threat	Risk Score
Significant	80 to 100
Moderate	60 to 79
Low	41 to 59

#### What about moderate and low threats?

Eliminating or managing significant threats and ensuring low and moderate threats never become significant is the goal of source protection planning.

As its first priority the Quinte Region Source Protection Committee has developed policies to address significant drinking water threats. Policies for moderate and low threats will be tackled as time permits, and most likely, not until the next round of source protection planning.

The Assessment Report lists significant, moderate and low threats by drinking water system. The assessment report is posted online at quintesourcewater.ca.



Source Protection Planning is a science based process that is locally driven.

Source Protection Committee members learn about the importance of properly decommissioning old wells to protect our groundwater.

### **Policy Tools to Address Threats**

The main goal of a source protection plan is to ensure that every activity that is a significant drinking water threat ceases to be a significant risk and no other drinking water threats ever become significant. In many circumstances, property owners will be able to manage significant threats to reduce the risk and allow the activity to continue.

Significant drinking water threat policies will be

binding on the province, municipalities, and the whole community. Low and moderate threats require those bodies to 'have regard for' the policies.

A range of policy tools is available to address the threats depending what type is identified. The Source Protection Committee has had to consider which combinations of tools will work best in local circumstances. Can a threat

be managed or should it be prohibited now and /or in the future? What is the best combination of tools to manage the threat effectively? Who will be responsible for implementing the policy? Which policies will be both effective and affordable? These questions and more had to be considered by the committee during policy development.

Policy Tools are described on pages 8 and 9.

"Significant drinking water threat policies will be binding on the province, municipalities, and the whole community."



A Risk Management Plan can be developed by working with the landowner so a risk to water quality can be managed.

#### **Tool: Restricted Land Use**

#### Restricted Land Use:

Conditions could be placed on planning applications or building permits in vulnerable areas to limit the establishment or expansion of activities that could create a significant threat in the future.

This tool can be used as an administrative tool to help municipalities determine what types of development to allow and which could not take place. It can be seen as an early warning or 'red flag' system to avoid

inadvertently approving applications or permits for activities that would conflict with other source protection plan policies.

## Tools: Risk Management Plans & Prohibition

#### **Risk Management Plans:**

(RMPs) set out the safety or protective measures that a property owner will take to ensure that an activity is sufficiently managed. They are intended to be used on a site specific basis to address significant drinking water threat activities, where the

threat cannot be addressed by using one of the other tools. An RMP is negotiated by the Risk Management Official and the Risk Management Inspector follows up for compliance.

Prohibition: Existing and future activities that are or

would be a significant threat to drinking water sources can be prohibited under the Clean Water Act. The Province of Ontario has said however that prohibition and RMPs may not be used for waste disposal and sewage related activities.

## **Tools: Education/Outreach and Incentives**

#### **Education and Outreach**

may be used to inform landowners and others about the impact of specific activities on their drinking water or on their neighbours' drinking water. Examples of education and outreach are promotion of best management practices, flyer deliveries, newspaper articles, publications, workshops, special events, and signs.

Incentives may be used to provide landowners with encouragement to make changes to their properties and practices so that they are less likely to impact drinking water sources. Examples of incentives are stewardship grants, low interest loans, discount coupons, reduced fees for professional or municipal services, and public recognition of good work.

Both these tools can enhance the effectiveness of other approaches.



Providing helpful information about how to reduce threats to water encourages good stewardship and helps to protect our water sources.

# Tools: Land Use Planning and Prescribed Instruments

Land Use Planning is used by municipalities to direct new development to appropriate areas. Zoning by -laws and official plans could be changed to prohibit or restrict new development or activities in highly vulnerable areas that would create new significant

threats. (e.g. no new gas stations near municipal wells).

Prescribed instruments are provincially issued documents with specific rules that govern activities on a specific property. They often contain rules to protect human health and the

environment and may include: licenses, permits, approvals, orders or other legal provincial documents. These documents could be examined and modified or revoked (e.g. certificate of approval for a sewage treatment plant to require more stringent effluent quality limits).

"Zoning by-laws and official plans could be changed to prohibit or restrict new development or activities in highly vulnerable areas..."

#### **Other Tools:**

## Municipal Operations / Infrastructure:

Municipalities can demonstrate leadership by reducing specific risks to a source of drinking water (e.g. preparing an emergency response plan for spills).

**Land Securement:** Under the *Clean Water Act*, municipalities or source

protection authorities can acquire land through purchase, lease, or expropriation in order to protect a source of drinking water.

Other Policies: The source protection plan may include other policies about establishing stewardship programs, **SpecifyActions** and promoting best

management practices, establishing pilot programs, or governing research, among other matters.

#### **Monitoring Without**

Actions: Another tool available to the Source Protection Committee is to monitor certain threats (low or moderate) without action to gauge the need for a policy in the future.



Monitoring programs provide scientific data on changing water quality conditions.

Public input is an important part of protecting our drinking water sources . Public consultation on draft policies will take place in 2012.

"...working groups made up of local experts...have been providing feedback and local knowledge."



Fertilizers and pesticides must be properly stored, handled and applied to avoid contamination of water sources.

## **Public Input into Policies**

Public input to the planning process starts with the Source Protection Committee members. They bring forth views from the sectors they represent. (See page 3)

Municipalities with drinking water systems have been participating in the planning process since it began in 2007. There have been presentations to councils, meetings with municipal staff, and updates and correspondence from the project team throughout the process.

Specialized Working Groups have helped with valuable

input during policy development. These groups made up of local experts in municipal planning, emergency response and system operation, agriculture, septic systems, and fuel storage have been providing feedback and local knowledge to the committee.

Water system users and members of the public have had the opportunity to attend numerous public meetings leading up to this policy development stage.

Persons that are or could be engaging in an activity that is a significant threat have received information and notification about the work to develop a local source protection plan several times. The public will have the opportunity to review draft policies at public meetings in 2012.

Pre-consultation will take place with municipalities, other organizations and agencies including government ministries.

Following pre-consultation there will be additional opportunities for municipal and public input during the formal consultation on the Draft Proposed Source Protection Plan in early 2012.

#### **Draft Fertilizer/Pesticide Policies**

Fertilizers and pesticides may threaten the safety of drinking water sources due to runoff, leaching, leaks or spills resulting from improper handling, storage or application. They are associated with many land uses including agricultural, active recreational (golf courses, sports fields), institutional, industrial, commercial and residential.

The majority of commercial fertilizers contain nitrogen and phosphorus that have

been identified as chemicals that could impact water sources. Pesticides contain chemicals listed in the Ministry of the Environment Tables of Drinking Water Threats (2009).

Draft policies include the use of Risk Management Plans, Restricted Land Use and Education and Outreach (see page 8 & 9) to address these threats. Risk Management Plans can be used to develop the best plan for each property. The Restricted Land

Use tool will allow municipalities to screen building permits and applications to ensure compliance with the source protection plan. Education and Outreach programs are also proposed to encourage best practices and awareness. Prohibition of the application, storage and handling of these chemicals is proposed in some specific instances and locations near water sources.

### **Draft Septic Policies**

Private sewage systems located in vulnerable areas have been identified as significant threats to our drinking water sources.

Ontario's Building Code (Ontario Regulation 350/06) has been amended. It now calls for on-site private sewage system maintenance inspection programs in areas where septic systems have been identified as significant threats to a municipal source of drinking water. It is not possible to prohibit

private sewage systems under the Clean Water Act. The Source Protection Committee considered Education and Outreach and Land Use Planning (see page 8 & 9)to address significant threats related to private sewage systems.

Education and Outreach programs can inform property owners with septic systems: that they are in the zone where inspections are required; why it is important to properly operate and

maintain a system; and what incentive programs are available.

These draft policies look to municipalities to conduct inspections, outreach and education programs and update official plans and zoning by-laws. Education and Outreach programs can be developed in conjunction with Quinte Conservation and other partners.

Policies were also developed for large sewage systems.



Improper or unapproved septic systems can pose a threat to water quality and human health by leaking untreated raw sewage into the surrounding area.

N.B. Discussions of policies on Pages 10 to 13 are summaries only. Please refer to the actual draft policies for policy text and details regarding applicable areas.

## **Draft Agricultural Policies**

Many activities on a farm may be drinking water threats from the application of manure, fertilizer and pesticides, to the storage of fuel, and housing of livestock. These activities could result in the contamination of both ground and surface water.

The Source Protection Committee obtained input from members of the agricultural community during policy development. Risk Management Plans and Education and Outreach (see page 8 & 9) will be used to

address most agricultural threats.

Development of risk management plans (RMPs) for agricultural operations would consider the best plan for each property. The RMPs would work in conjunction with other measures which may or may not be in place such as nutrient management plans, and other Certificates of Approval. Education and Outreach programs would increase awareness in the agricultural community about the location of the vulnerable zones. It would

also provide information about incentive programs (if any) and best management practices.

Programs could be delivered by the municipality through cooperation with farm-related partner organizations and the Conservation Authority.

Prohibition, of certain activities like manure spreading, is proposed for the most vulnerable area immediately adjacent to municipal wells.

"Ontario's Building Code...calls for... private sewage system inspection...in areas where septic systems have been identified as significant threats..."



**Source Protection Committee** members visit a local farm in 2010 to hear from the farmer about his farming practices that protect water.

Information provided to people in vulnerable areas about proper handling and storage of fuels will help to protect our water sources.

"Fuel storage tanks have the potential to leak and contaminate both ground and surface water."



Most landfill sites in the Quinte Region are located away from municipal water sources but do sit over highly vulnerable aquifers. This makes them moderate or low threats according to the technical rules.

#### **Draft Fuel Policies**

Fuels provide energy to heat our homes and workplaces, fuel our vehicles, and power machinery. Their use is widespread and so is the potential for contamination of our water and environment. Handling and storage of fuel can be a significant threat to drinking water sources. Spills may occur during handling. Fuel storage tanks have the potential to leak and contaminate both ground and surface water.

Education and Outreach will inform residents that they are in a vulnerable area and

encourage safe handling and storage.

It is proposed that in future new fuel storage will be prohibited in the most vulnerable areas near wells and intakes and Restricted Land Use will help municipalities to red flag these areas. Risk Management Plans will address the threats from existing small and large fuel storage tanks. Programs would be delivered by the municipality.

Draft policies call for double bottom or double walled tanks with leak detection for above grade fuel storage in the most vulnerable areas near municipal wells.

To help assess the effectiveness of these policies the Source Protection Authority will receive annual reports from the Technical Standards and Safety Authority regarding spills, inspection results, orders and site reports.

N.B. Discussions of policies on Pages 10 to 13 are summaries only. Please refer to the actual draft policies for policy text and details regarding applicable areas.

#### **Waste and Other Policies**

Other draft policies cover threats from wastes, including land filling of municipal waste, closed landfill sites, and storage of certain hazardous waste where these activities would be a significant threat to municipal water sources. Implementers of these policies are the Ontario Ministry of the Environment or municipalities as noted in each policy.

The draft policies include the use of Prescribed Instruments for a policy addressing existing and future waste disposal sites where they would be a moderate or low drinking water threat. The Ontario Ministry of the Environment, (as the implementer) would have to "have regard for" this policy (See top of page 8) and require appropriate measures to manage the drinking water threat, taking into account the identification of the Quinte

Region as a having highly vulnerable aquifers.

Draft policies also address the threat from large septic systems and sewage infrastructure and even airplane de-icing. There are policies related to water conservation, spills, emergency planning and transport pathways like abandoned wells. This backgrounder is a brief overview only. Please refer to the actual draft policies for more details.

#### **Draft Road Salt Policies**

Road salt application is an important safety practice that needs to be managed to protect municipal drinking water supplies. Road salts can get washed or leached into water supplies under certain conditions, resulting in contamination.

Draft policies apply to vulnerable areas near

municipal water sources. They call for municipalities and the Ministry of Transportation to update their salt management plans to comply with Environment Canada's Code of Practice for road salts. Draft policies also call for the development of Risk Management Plans for parking lots and roads in the vulnerable areas.

Restricted Land Use designations can help municipalities comply with the plan.

Future storage and handling of road salt will be prohibited in vulnerable areas and an Education and Outreach program will increase awareness in vulnerable areas.



Runoff from road salt application can contaminate municipal water sources.

## **Draft DNAPL and Organic Solvent Policies**

Dense non-aqueous phase liquids or DNAPLS are dangerous chemicals that are heavier than, and do not dissolve in, water. This makes contamination of water sources or groundwater almost impossible to clean up. Examples of DNAPLS are dry cleaning fluids, degreasing solvents, and varnishes.

Draft policies call for Education and Outreach to

increase awareness about the threat from DNAPLS and to encourage proper handling and storage in vulnerable areas near municipal wells. Risk Management Plans for commercial and industrial handling and storage can incorporate any existing measures already in place. Handling and storage of DNAPLS will be prohibited in the area immediately surrounding municipal wells.

Organic solvents are

chemicals capable of dissolving another substance to form a solution. They are very dangerous pollutants. Examples are: chloroform, paint removers and other chemicals used in fungicides and pesticides. Policies for these chemical are similar to those for DNAPLS but also apply to some surface water sources.

Municipalities will be the implementers of these policies.

"DNAPLS are dangerous chemicals that are heavier than, and do not dissolve in, water."

## **Draft Snow Storage Policies**

Snow ploughed from our streets can be contaminated with many harmful substances that can be washed into our water supplies when the snow melts.

Draft policies call for Risk Management Plans for snow storage in the vulnerable areas near ground and surface water sources. A Restricted Land Use policy will help municipalities to red flag the vulnerable areas that require Risk
Management Plans. Although
there are no known existing
threats from snow storage
identified in the Assessment
Report, the committee has
created policies to address
future threats.



Snow stored near a municipal drinking water source could pose a significant threat to the water supply.



The primary reason to protect our municipal water supplies is to protect public health.

"Protecting water now is a responsibility and duty we owe future generations."

## What effect will policies have on economic development?

Good water supplies are key to economic development and a vital component to the future prosperity of our communities. Clean, abundant and protected water supplies are important to attract new business and development. Good water supplies are not only vital for industry and business to operate but business locators are also looking for a good quality of life for their

employees. Safe, clean and protected water supplies will help our communities grow and prosper. Poor water could mean economic decline for a community.

## What about implementation costs?

Protecting water now is a responsibility and duty we owe future generations. Yes, there will be costs to implement source water protection policies but the future benefits are many. Costs may not be as high as anticipated. Efficiencies may be available by working with

existing partners like Conservation Authorities and other stakeholders to implement programs.

Protecting water now not only safeguards public health but reduces the likelihood of future costly cleanups of contaminated water sources or the need to find alternate

sources. Clean protected water sources are key to a prosperous, healthy future for our communities. Failing to protect our water sources is short-sighted and the consequences are dire. The cost of not protecting water is too high. Just ask the people of Walkerton, Ontario.

## What is the cost of *not* protecting water?



We have a responsibility to ensure safe abundant water now and for our future.

Ask the people of Walkerton. It is over 10 years since seven people died and thousands became ill simply from drinking the water from their taps. Today many citizens are still struggling to cope with lives forever changed due to ongoing health issues like irritable bowel syndrome and impaired kidney function requiring dialysis.

Apart from the enormous human toll, the financial costs of the Walkerton water crisis were huge. Costs were \$64.5 million just two years in and the final costs are estimated at well over \$140 million. The cost for bottled water alone during the seven month boil water order was \$7 million and a lot of that water was donated. Immediately following the crisis the cost of

the municipality's insurance tripled.

No municipality can afford the terrible toll of a water crisis. Our province created the Clean Water Act to prevent another tragedy like the one that occurred in Walkerton.

# During your review you may wish to evaluate the draft policies by considering:

#### 1. Overall Standard

Is the policy easily understood?

#### 2. Effective Dates

Are the take effect dates, and/or conformity dates, where applicable, reasonable? Is it feasible for your municipality, agency or ministry to implement the policies by the dates stated? Please note that some dates are mandated (immediate) and others are suggested.

#### 3. Implementation

Examine how you will fund the implementation of the policy. Do you have the capacity? Are there other partners or local programs that could be leveraged to make implementation cost-effective and successful? Policy reviewers are requested to be specific in their comments about implementation costs.

#### 4. Technical Capacity

Is your municipality, agency or ministry technically capable of implementing the policy? Are there other partners with the technical background that could be leveraged to make implementation cost effective and successful?

#### 5. Monitoring

Do you have the capacity to monitor and report on policy effectiveness? If not, is there a partner agency that could assist?

#### 6. Local Conditions

Is the scope of the policy appropriate?

Is there a more effective policy option that has not been considered by the committee?

#### 7. Consistency

To what degree do the draft policies agree with the approach taken by other committees within your municipality or area of jurisdiction? (Some policy reviewers have two or more source protection regions (or areas) within their area of jurisdiction.) If there is a draft policy for the same threat from another source protection committee within your municipality or jurisdiction, which policy do you prefer and specifically why?

#### 8. Other Barriers to Implementation

Are there any other barriers to the implementation of these policies? Please be specific.





**Policy Review Backgrounder** 

NOTES:		