

# DRINKING WATER SOURCE PROTECTION

ACT FOR CLEAN WATER



## Assessment Reports and Source Protection Plans

The Assessment Report is a science-based report generated locally for each Source Protection Area to comply with the Clean Water Act, 2006. It contains information on threats to drinking water quality and quantity for municipal sources. The Assessment Report identifies vulnerable areas and the land-use activities that may pose a threat.

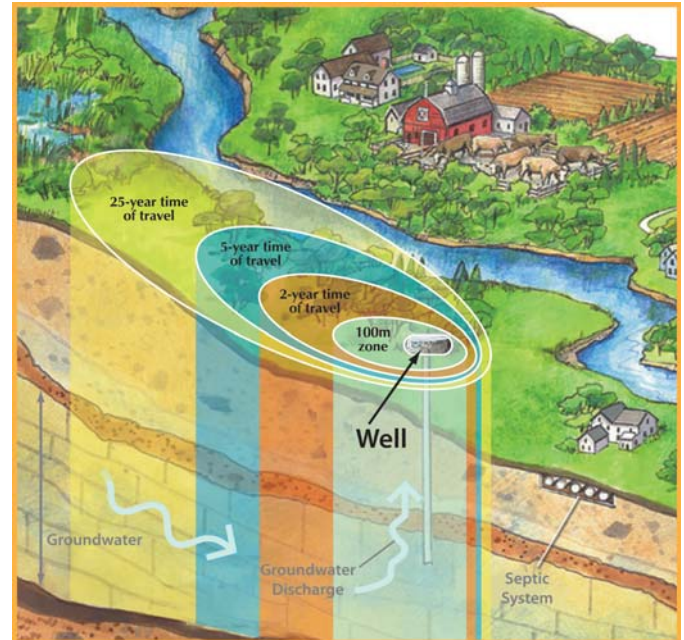
Assessment Reports contain information on water budgets, ground and surface water flow, groundwater recharge areas, Intake Protection Zones, and Wellhead Protection Areas where contaminants may enter a drinking water source.

The Source Protection Plan (SPP) is a locally-developed plan based on the scientific studies of the Assessment Reports and involves a collaborative approach with many opportunities for public input.

The Source Protection Plan contains a series of policies that address activities and land uses. The policies reduce or eliminate risks within designated zones around water intakes or municipal wells that are the source water for local municipal drinking water systems.

The objectives of the Source Protection Plan are:

1. To protect existing and future drinking water sources in the source protection area.
2. To ensure that, for every area identified in an assessment report as an area where an activity is or would be a significant drinking water threat, the activity never becomes or ceases to be a significant drinking water threat.



WHPA-D WHPA-C WHPA-B WHPA-A

Wellhead Protection Areas A-D above are the areas relevant to this program. The letter A, represents a 100 metre radius/circle around the well where it is most vulnerable to contamination. WHPA B-D represent the time it takes for a contaminant to reach the municipal water source; B-2 years, C-5 years and D-25 years. There is also a WHPA-E around certain wells impacted by surface water.

Municipal intake zones, also part of this program, can be found on page 2.

### Ontario's Clean Water Act:

- requires that local communities, through local Source Protection Committees, assess existing and potential threats to their water, and that they set out and implement the actions needed to reduce or eliminate these threats;
- empowers communities to take action to prevent threats from becoming significant;
- requires public participation on every local Source Protection Plan; the planning process for source protection is open to everyone in the community;
- requires that all plans and actions are based on sound science.

To learn more about this program, visit: [home.waterprotection.ca](http://home.waterprotection.ca) or call 519-470-3000

# How do I know if a Source Protection Plan (SPP) policy applies to a property I own or use?

Is the property near a municipal drinking water source, a Wellhead Protection Area (WHPA) or Intake Protection Zone (IPZ)/Events-based Area (EBA)?

Visit Chapter 5 of the Source Protection Plan and look at maps that include your property, they are sorted by Municipal System.

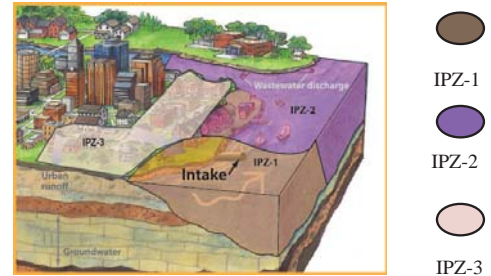
The colours on the map relate to the vulnerability or susceptibility of that area to contaminants that would affect the quality of water in the municipal well.

- Red areas on maps have a vulnerability score of 10 - this is the most vulnerable area, where a spill of a contaminant could reach the drinking water supply in a short time.
- Orange areas on maps have a vulnerability score of 8.
- Yellow areas on maps have a vulnerability score of 6.
- Medium green areas on maps have a vulnerability score of 4.

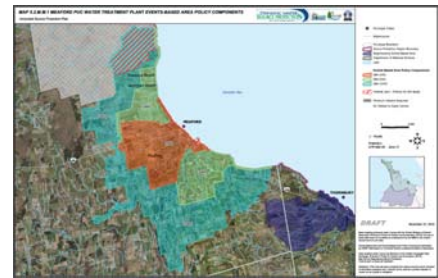
Chapter 5 of the Source Protection Plan matches the vulnerability score and WHPA or IPZ zone to applicable policies. To the upper right is a sample map that shows a local WHPA with vulnerability scores. The IPZ diagram (middle right) shows three areas relevant to this program. The EBA map (bottom right) indicates the volume thresholds where fuel storage policies would apply.



Sample Chapter 5 map showing vulnerability scores



IPZ diagram showing three zones



EBA map showing fuel policy thresholds

## THREAT ACTIVITIES?

Certain Products



Specific Quantities



Property portion in a vulnerable zone



Significant drinking water threat requiring policy

Chemical threats include:

- Waste disposal
- Manure application and storage
- Non-agricultural source material (food processing waste, pulp and paper waste, sewage biosolids)
- Commercial fertilizer
- Pesticides
- Fuel handling and storage
- Organic solvents



Pathogen threats include:

- Waste disposal
- Sewage systems
- Manure application and storage
- Non-agricultural source material
- Livestock grazing

Dense non-aqueous phase liquids (DNAPLs), they include:

- Spot removers
- Degreasers
- Paint thinners

These liquids are highly toxic and more dense than water and do not dissolve or mix easily in water. If they get into an aquifer or water body they will sink to bottom and are almost impossible to remove leaving the water source permanently contaminated.

# How to Read Source Protection Plan Policies

For each threat activity in the SPP, Chapter 6 has an introduction that highlights the number of policies and section references for related policies.

The following example is for Threat 21:

A total of eleven policies apply to the prescribed drinking water threat “Threat 21. The Use of Land as Livestock Grazing or Pasturing Land, an Outdoor Confinement Area or a Farm-Animal Yard.” Of these, four are particular to this threat category and are detailed to the right, while seven other policies can be found in section 6.2 General Policies of the Source Protection Plan.

The chart after the introduction (top right) outlines what policy approach was used and whom will be implementing that specific policy and whether the policy applies to existing or future activities.

Policy text for 21-02(bottom right) identifies the specific area where the policy applies, WHPA-A, which is a 100m radius around a municipal well, WHPA-B, score of 10 and WHPA-E, score of 8. This policy uses setbacks similar to the *Nutrient Management Act*.

Chapter 6 of the SPP contains full policy text for all significant drinking water threats.

Threat 21. The Use of Land as Livestock Grazing or Pasturing Land, an Outdoor Confinement Area or a Farm-Animal Yard				
Policy Text ID	Policy Name	Policy Approach	Implementing Body	Activity Type (Existing/Future)
21-01	Prohibition	Prohibition	RMO	Future
21-02	Risk Management Plan - Grazing or Pasturing	Risk Management Plan	RMO	Existing, Future
21-03	Risk Management Plan - Confinement Area or Yard	Risk Management Plan	RMO	Existing, Future
21-04	Constraint on Nutrient Management Approvals- Confinement Area or Yard	Prescribed Instrument	Ministry of Agriculture, Food and Rural Affairs	Existing, Future
See also General Policies:		G-11 Financial Support Fund		
G-01 Restricted Land Use - Non-residential		G-12 Municipal/Conservation Authority Implementation Assistance		
G-04 Amend Official Plan and Zoning By-law		G-14 Compliance Monitoring for Prescribed Instruments		
G-05 Incentive Program				
G-06 Education Program				

EXAMPLE - see local Source Protection Plan for full current details  
 Policy Text ID: 21-02 Policy Text: Risk Management Plan - grazing or pasturing  
 The policy applies in all vulnerable areas where use of land as livestock grazing or pasturing land is or would be a significant drinking water threat (existing activity or future activity).  
 Establishment of a Risk Management Plan is required. The use of land as livestock grazing or pasturing land may only occur in accordance with an approved Risk Management Plan and is therefore designated for the purposes of s.58 of the *Clean Water Act*.  
 The Risk Management Plan shall satisfy the following provisions:  
 1. The Risk Management Plan shall be based on appropriate agricultural best management practices.  
 2. The Risk Management Plan shall contain measures that will prevent farm animals from accessing land that lies within three metres of the top of bank of a watercourse. A reasonable allowance can be made to provide a stream crossing where necessary.  
 The Risk Management Plan shall be renewed every five years or at the discretion of the Risk Management Official.  
 All locations for Risk Management Plans for existing activities shall be inventoried within three years and plans established within five years of the effective date of the Source Protection Plan. Monitoring policies MP-24 and MP-25 apply.

When the local Source Protection Committee was drafting policies they had a choice of tools to use to address drinking water threats. Where possible existing legislation was used; for example - *Nutrient Management Act*, *Building Code Act*. Tools were used to fill in the gaps in regulations in order to meet the *Clean Water Act* goals of protecting municipal drinking water sources.

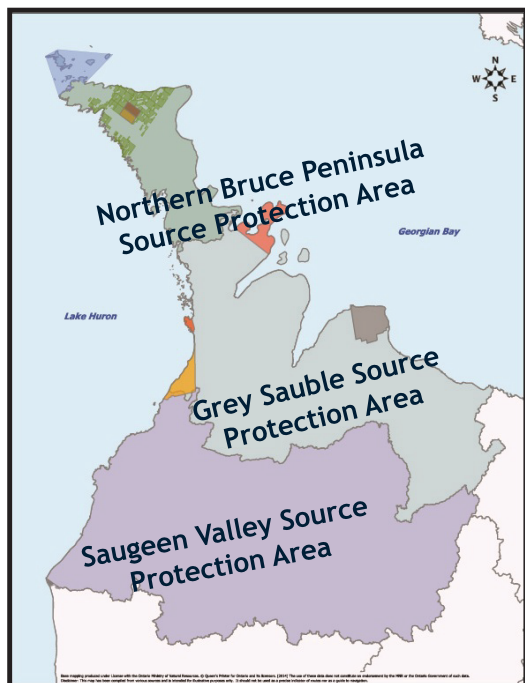
## WHO IS IMPLEMENTING SOURCE PROTECTION PLANS?

Source Protection Authorities: Saugeen Conservation, Grey Sauble Conservation  
 Provincial Government Ministries and Local Boards

## WHO IS IMPLEMENTING PART IV REQUIREMENTS UNDER CLEAN WATER ACT?

Municipalities or designated authority via Risk Management Officials and Risk Management Inspectors

# Saugeen, Grey Sauble, Northern Bruce Peninsula Source Protection Region



In this Region, the Saugeen Valley and Grey Sauble Conservation Authorities along with the Municipality of Northern Bruce Peninsula have partnered together to work with the Source Protection Committee to coordinate the development of a Source Protection Plan for our watersheds. We are committed to working with our municipalities, other stakeholders and the public to protect our drinking water.

This Source Protection Region represents approximately 8400 km<sup>2</sup> and has approximately 160,000 residents. It contains almost the full extents of Grey County and Bruce County, as well as small portions of the Counties of Wellington and Huron. Two First Nation communities: the Chippewas of Saugeen, and the Chippewas of Nawash and twenty-one lower-tier municipalities are wholly or partially within the Region.

In the Saugeen, Grey Sauble, Northern Bruce Peninsula Source Protection Region, our municipal drinking water comes from underground sources (aquifers) drawn from wells located across the region or surface water intakes into Lake Huron and Ruhl Lake. All of these sources are linked in a watershed through the water cycle. Drinking water sources are vulnerable to contamination, long term problems can result if contamination occurs.

## The Source Protection Committee

The Chair and 12 members of the Committee represent a diverse range of interests and bring considerable experience and knowledge to the process. The Committee meets regularly and all regular Committee meetings are open to the public.

Agendas, minutes, notices, and program updates can be viewed on the website at [home.waterprotection.ca](http://home.waterprotection.ca).



**Chair** - Bill Twaddle

**Agricultural** - Dr. David Biesenthal, Robert Emerson, Brent Lanktree

**Municipal** - Mitch Twolan, Ken Furlong, Les Nichols, Kathie Hughes

**Industrial/Commercial** - Mark Kraemer

**Health** - Angela Newman

**Environment** - Bruce Davidson

**Public** - Carolyn Day



### Mission Statement:

Providing leadership to engage the entire community in developing comprehensive, responsible solutions to protect water resources.

*For more information about the work of Drinking Water Source Protection*

### Grey Sauble Conservation Administration

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