

Source Protection Planning – Update

City of Kawartha Lakes

September 6, 2011

Mark Majchrowski

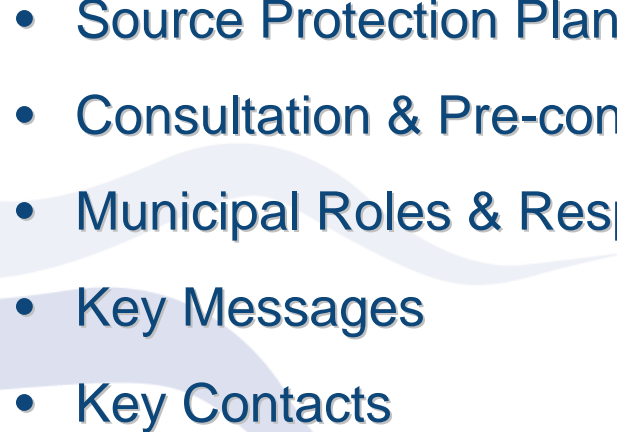
Kawartha-Haliburton Source Protection Area

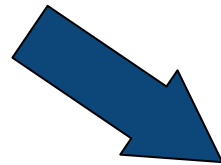
Don Goodyear

South Georgian Bay Lake Simcoe SPR

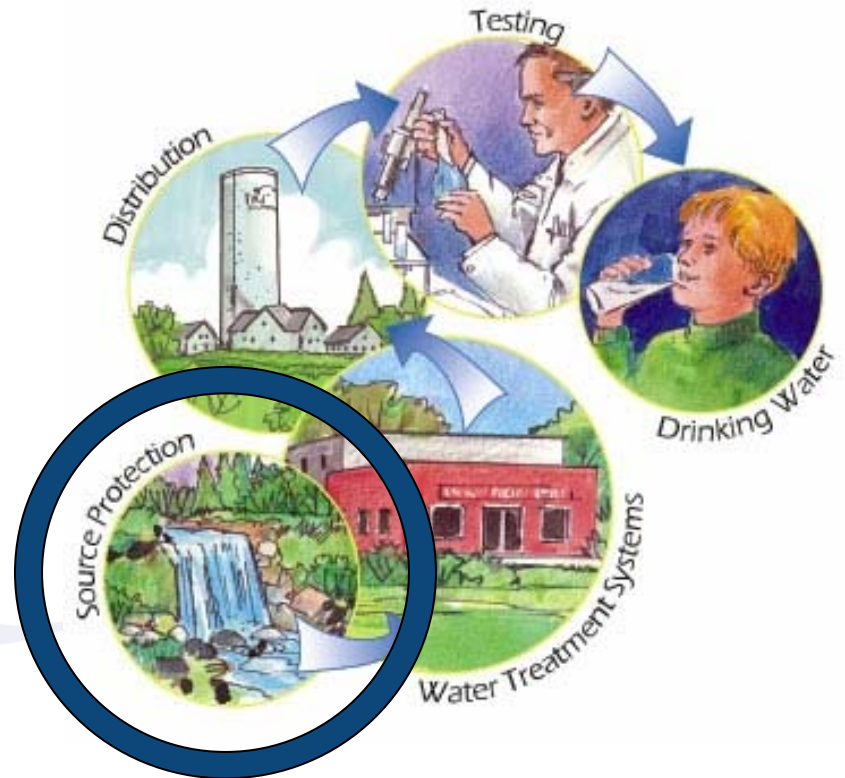


Presentation Outline

- Source Protection: *Principles, Process, Scope*
 - The Science: Assessment Reports
 - Vulnerable Areas
 - Source Protection Plans
 - Consultation & Pre-consultation
 - Municipal Roles & Responsibilities
 - Key Messages
 - Key Contacts
- 

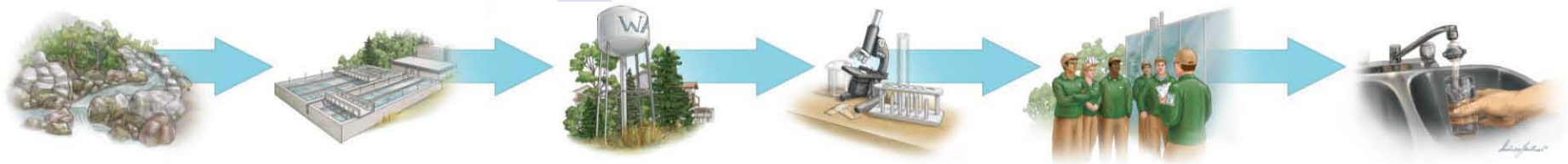


***The purpose of the
Clean Water Act
is to protect
existing and future
sources of drinking water***



Source Protection: Principles

- **Prevention:** safeguarding drinking water for the health of our communities
- **Multi-barrier:** source protection is the first barrier in the drinking water safety net and focuses on preventing contaminants from entering the drinking water system
- **Shared responsibility:** locally driven, collaborative planning process in partnership with multiple stakeholders
- **Watershed/Subwatershed:** basic unit for source protection planning



Source Protection Process

Identify

Assessment Reports:

- Technical foundation for the Plan;
- Evaluates watershed vulnerability and threats to drinking water

(2006-2011)

Plan

Source Protection Plans:

- Outlines the specific policies to ensure significant drinking water threats will not be a problem in the future
- Other policies/actions to ensure municipal water supply systems are protected.

(2011-2012)

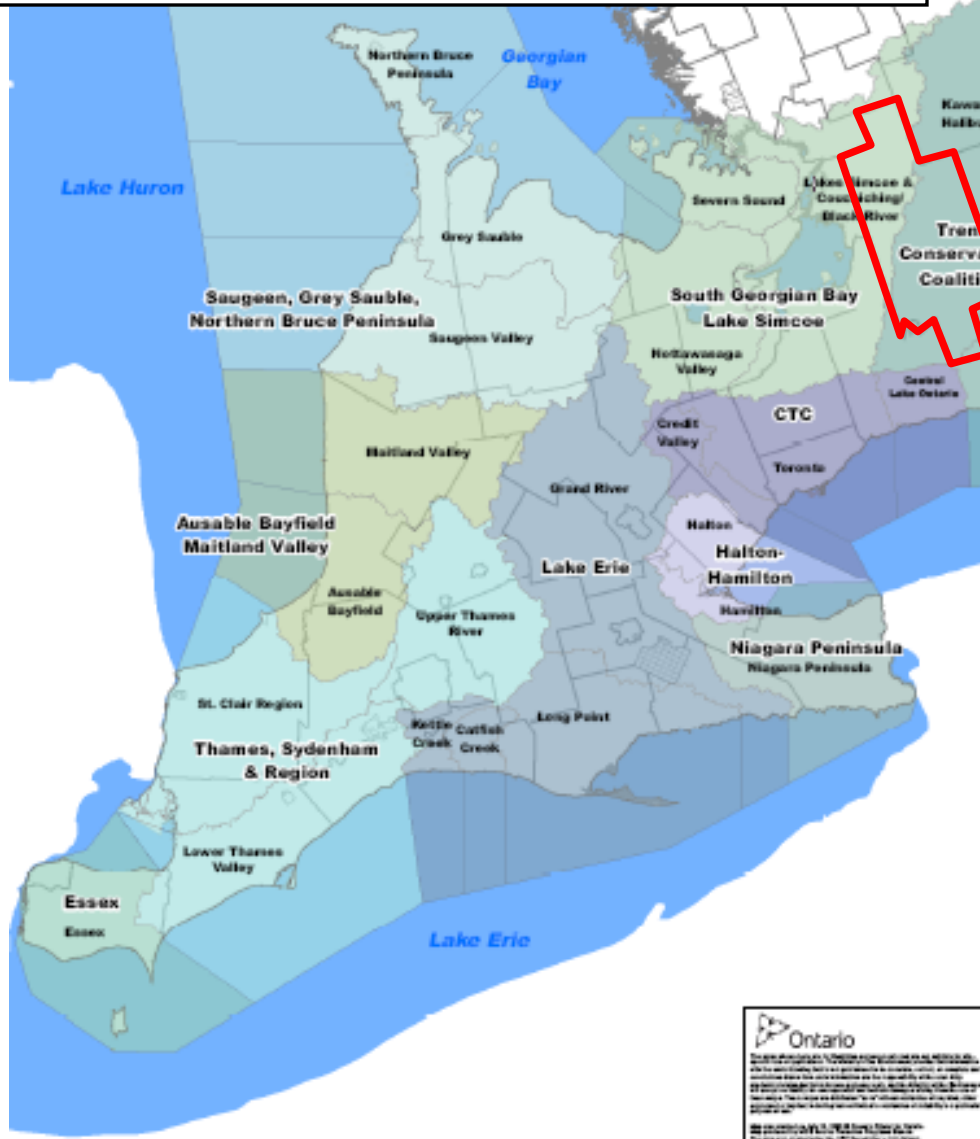
Implement & Monitor

- Implement the source protection plan
- Inspect and Enforce
- Monitor and Report
- Review plan

(2013 & beyond)

- **Source Protection: Scope**

19 Source Protection Regions and Committees
38 Source Protection Areas (CAs*)



Source Protection Areas & Regions:
Southern Ontario



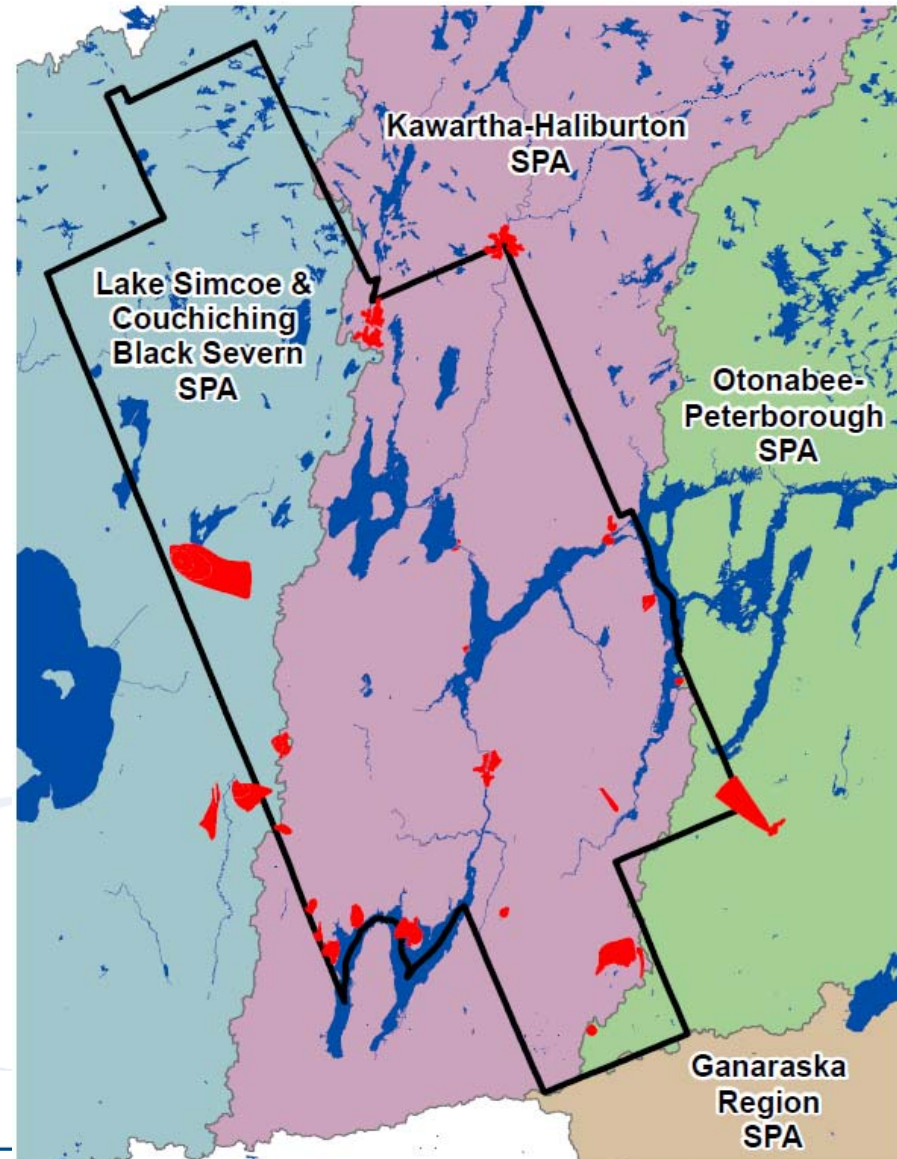
Source Protection: Scope

Trent Conservation Coalition SPR

- Kawartha-Haliburton SPA
- Otonabee-Peterborough SPA
- Ganaraska Region SPA

South Georgian Bay Lake Simcoe SPR

- Lake Simcoe and Couchiching Black Severn SPA



Source Protection Committees

- Multi-stakeholder committee
- 1/3 municipal representation
- Carries out localized decision making to protect drinking water sources



support

Source Protection Authority (CA based)

- appoints the source protection committee
- administrative and technical support

Working Groups

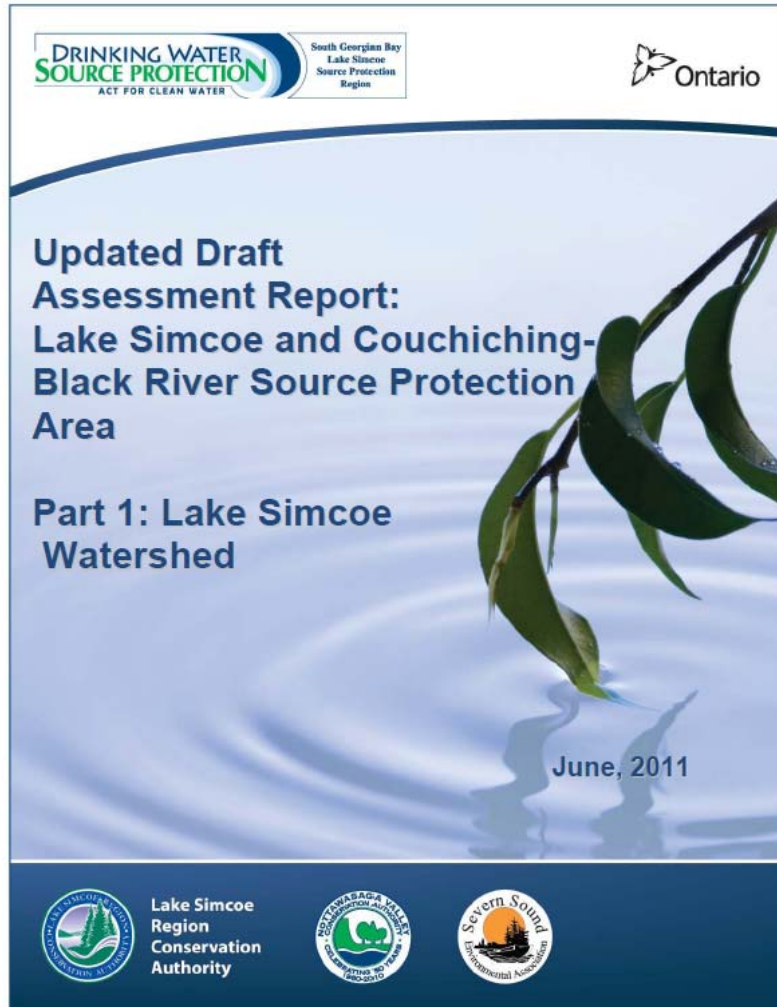
- input into plan & policy development

Trent Conservation Coalition (TCC)

- regional & technical input, management



The Science: Assessment Reports



Assessment Reports

What is the Assessment Report?

- **Identifies and evaluates ‘vulnerable areas’**
 - **Surface Water Intakes**
 - **Wellhead Protection Areas**
- **Identifies the types of existing or potential future land use activities in each of the vulnerable areas that could be ‘threats’ to source water quality**
- **Prepared in accordance with Provincial standards**
- **Reviewed and approved by Director, MOE**

**Science-based building block for developing policies to
protect municipal drinking water sources**

Prescribed Drinking Water Quality Threats

Waste Disposal

Sewage

Agriculture

Application of **ASM**

Storage of **ASM**

Management of **ASM**

Application of **NASM**

Handling & Storage of **NASM**

Fertilizer Application

Handling & Storage of **Fertilizer**

Pesticide Application

Handling & Storage of **Pesticide**

Livestock confinement/ grazing

Application of **Road Salt**

Handling & Storage of **Road Salt**

Storage of **Snow**

Industrial

Handling & Storage of **Fuel**

Handling & Storage of **DNAPL**

Handling & Storage of **Organic Solvent**

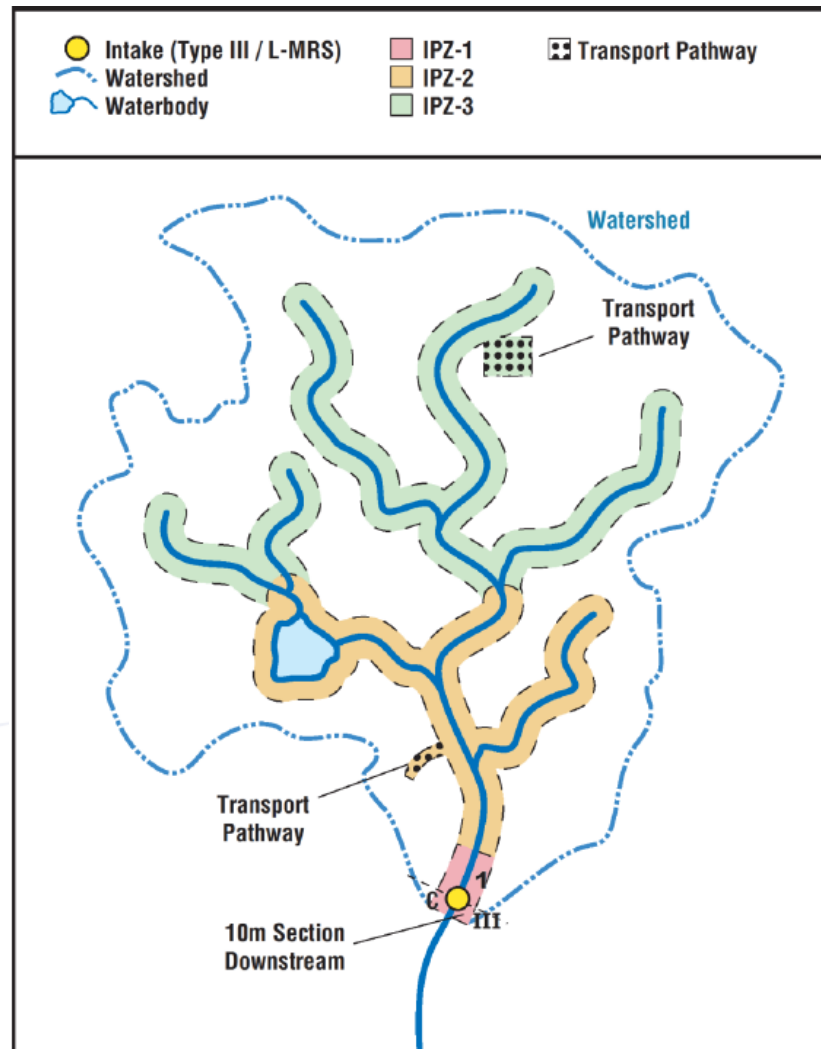
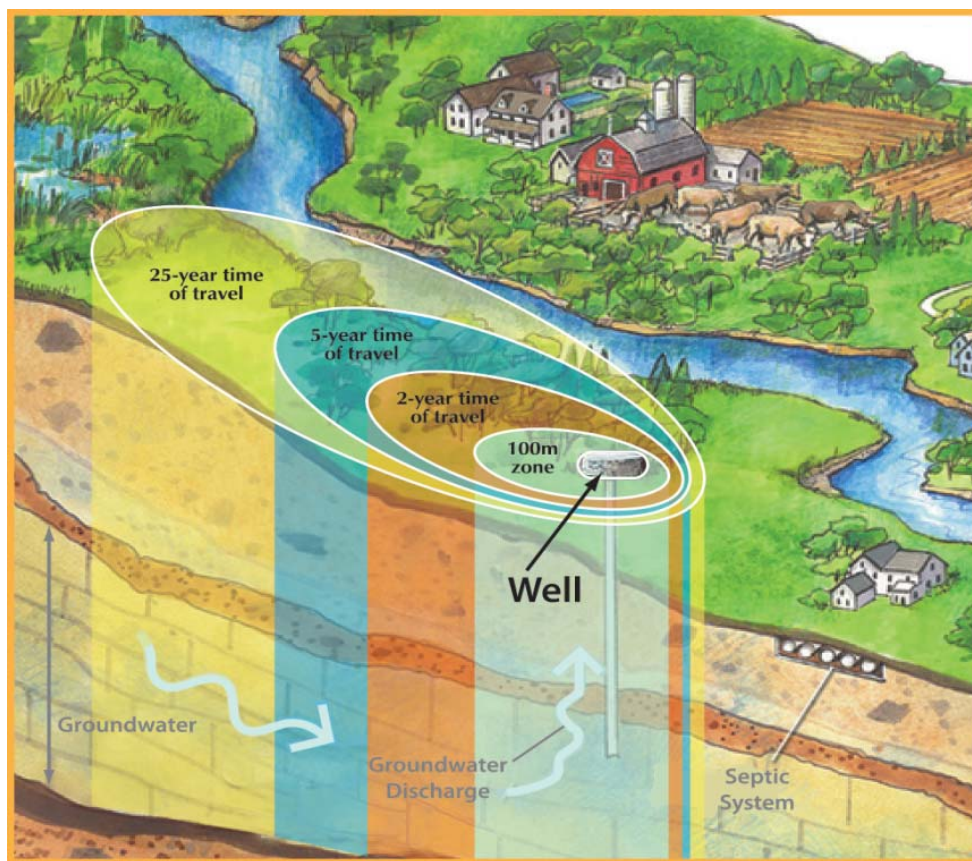
Aircraft De-icing Chemicals

Water Quantity

Consumptive Water Taking

Activity that Reduces Aquifer Recharge

Vulnerable Areas



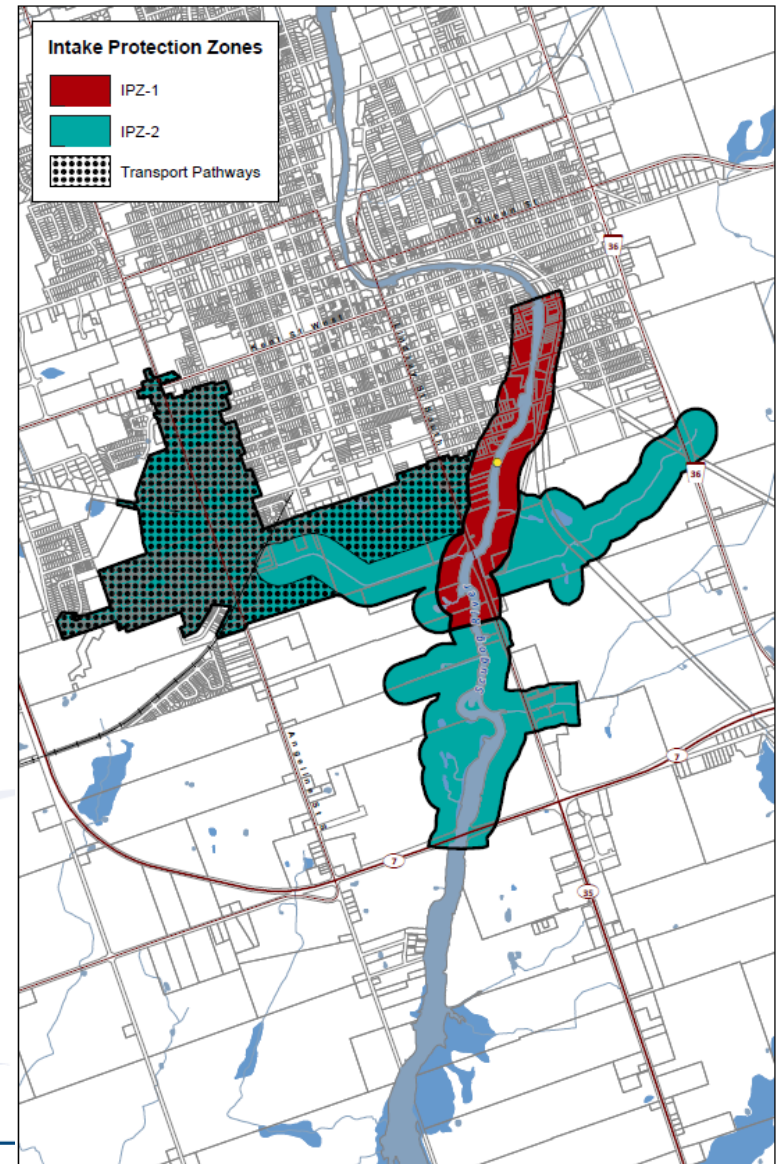
Lindsay

City of Kawartha Lakes Kawartha-Haliburton SPA

Threat Summary*

- 1 Waste Disposal Site
 - 1 Septic System
 - 6 ASM Application
 - 1 ASM Storage
 - 8 Pesticide Application
 - 1 Pesticide Storage
 - 2 Road Salt Application
 - 1 Livestock Pasturing/ Confinement
-
- 13 Parcels Affected

* May 2, 2011 Assessment Report



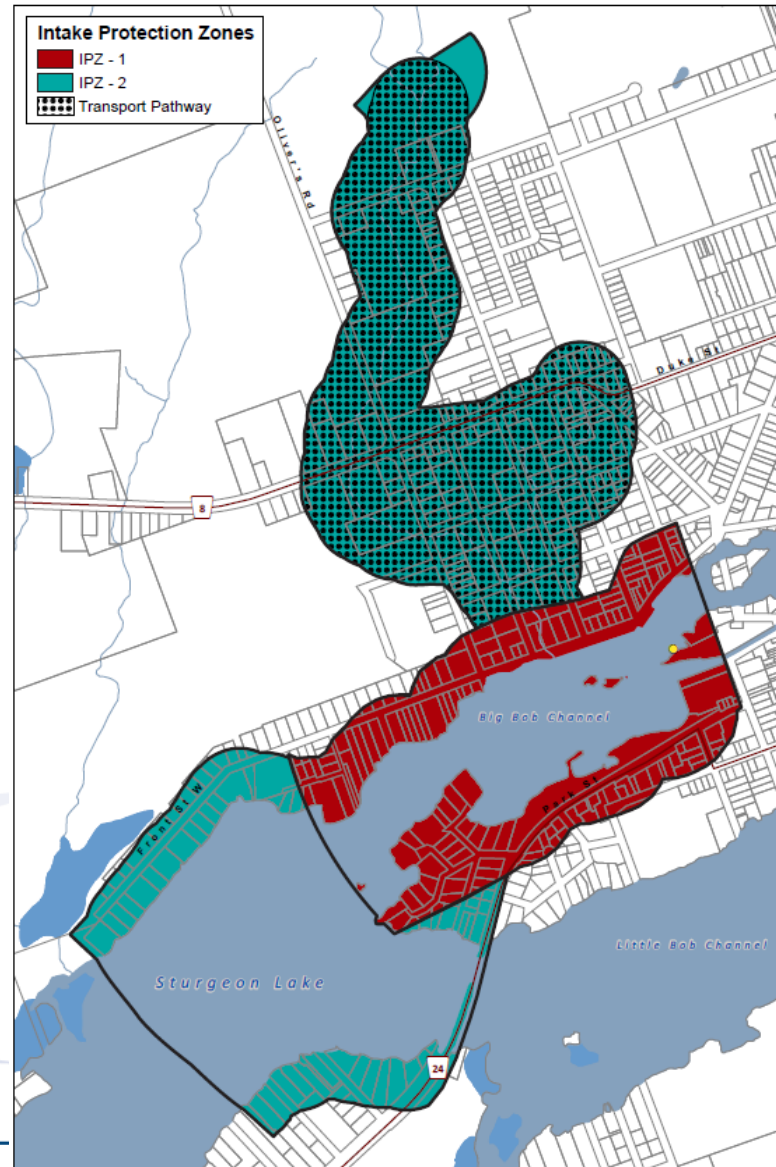
Bobcaygeon

City of Kawartha Lakes Kawartha-Haliburton SPA

Threat Summary*

- 2 ASM Application
- 1 Road Salt Application
- 1 Livestock Pasturing/ Confinement
- 3 Parcels Affected

* May 2, 2011 Assessment Report



Fenelon Falls

City of Kawartha Lakes
Kawartha-Haliburton SPA

Threat Summary*

- 1 Septic Systems
- 1 Parcel Affected

* May 2, 2011 Assessment Report



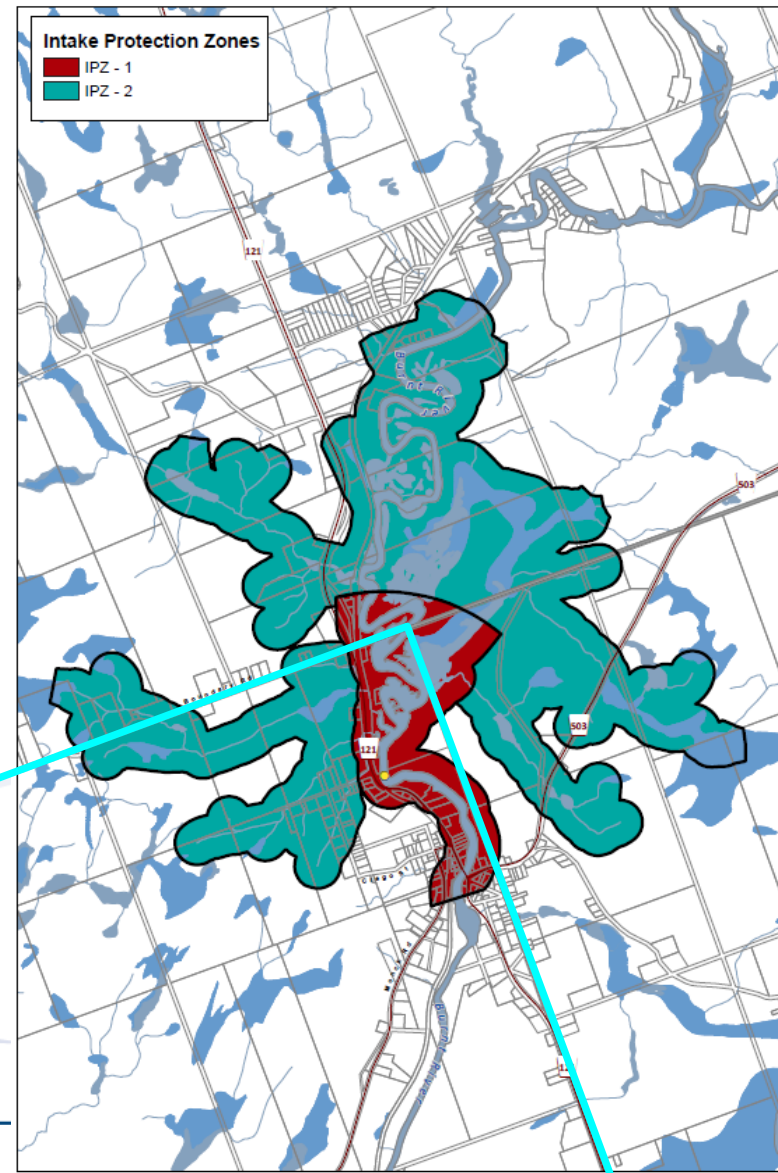
Kinmount

City of Kawartha Lakes
Haliburton County
Peterborough County
Kawartha-Haliburton SPA

Threat Summary*

- 61 (55) Septic Systems
- 25 (22) Road Salt Application
- 1 (1) Fuel Storage
- 62 Parcels Affected
- 56 of the 62 parcels affected are within City of Kawartha Lakes; 78 of the 87 threats

* May 2, 2011 Assessment Report



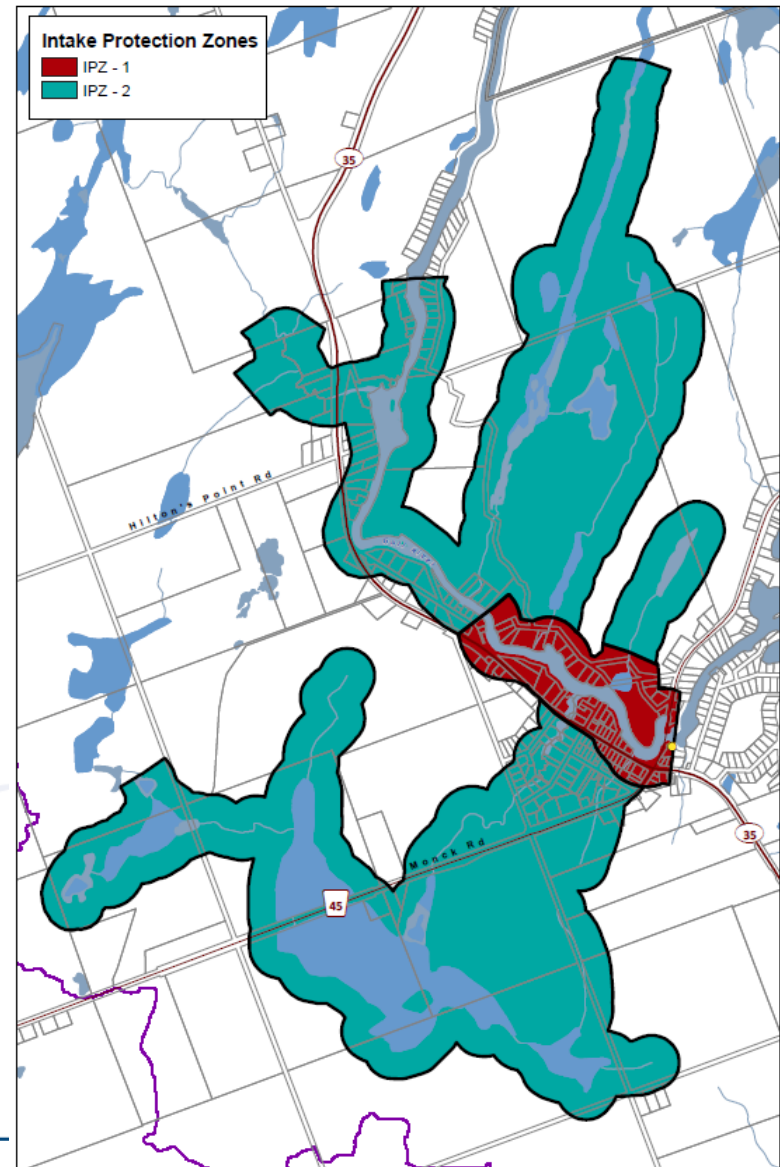
Norland

City of Kawartha Lakes Kawartha-Haliburton SPA

Threat Summary*

- 84 Septic Systems
- 84 Parcels Affected

* May 2, 2011 Assessment Report



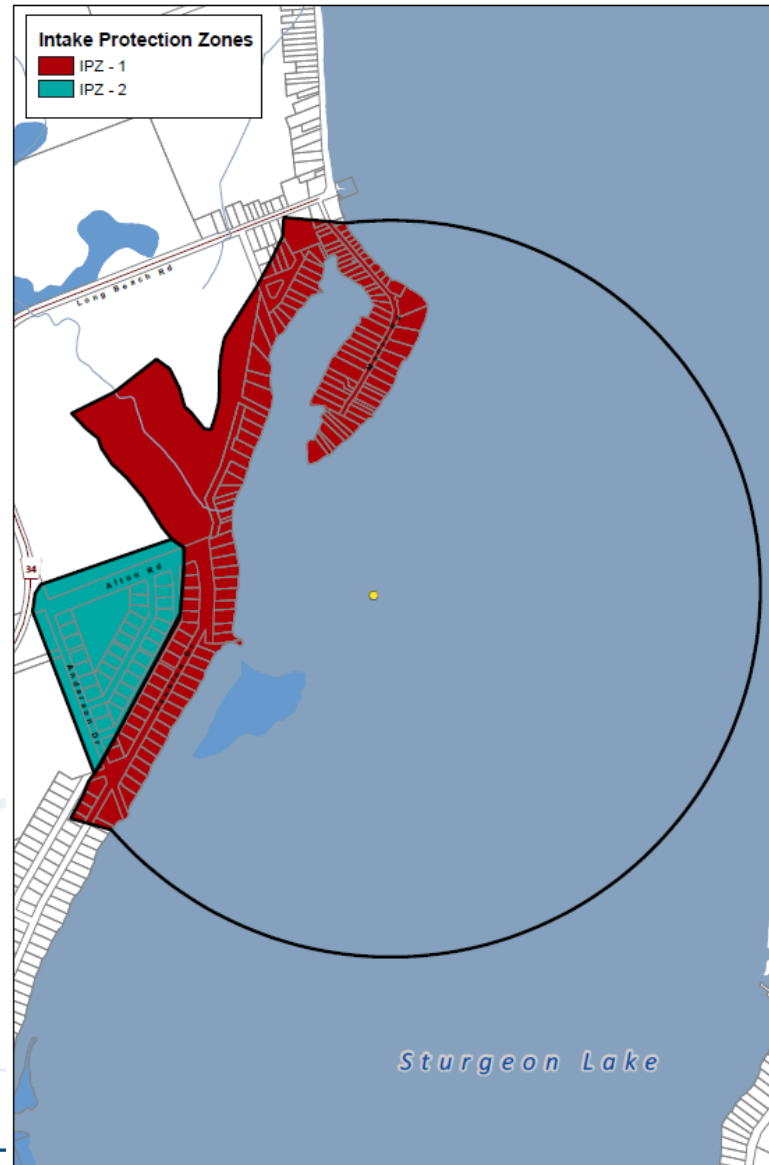
Southview Estates

City of Kawartha Lakes
Kawartha-Haliburton SPA

Threat Summary*

- 1 ASM Storage
- 1 Livestock Pasturing/ Confinement
- 1 Parcel Affected

* May 2, 2011 Assessment Report

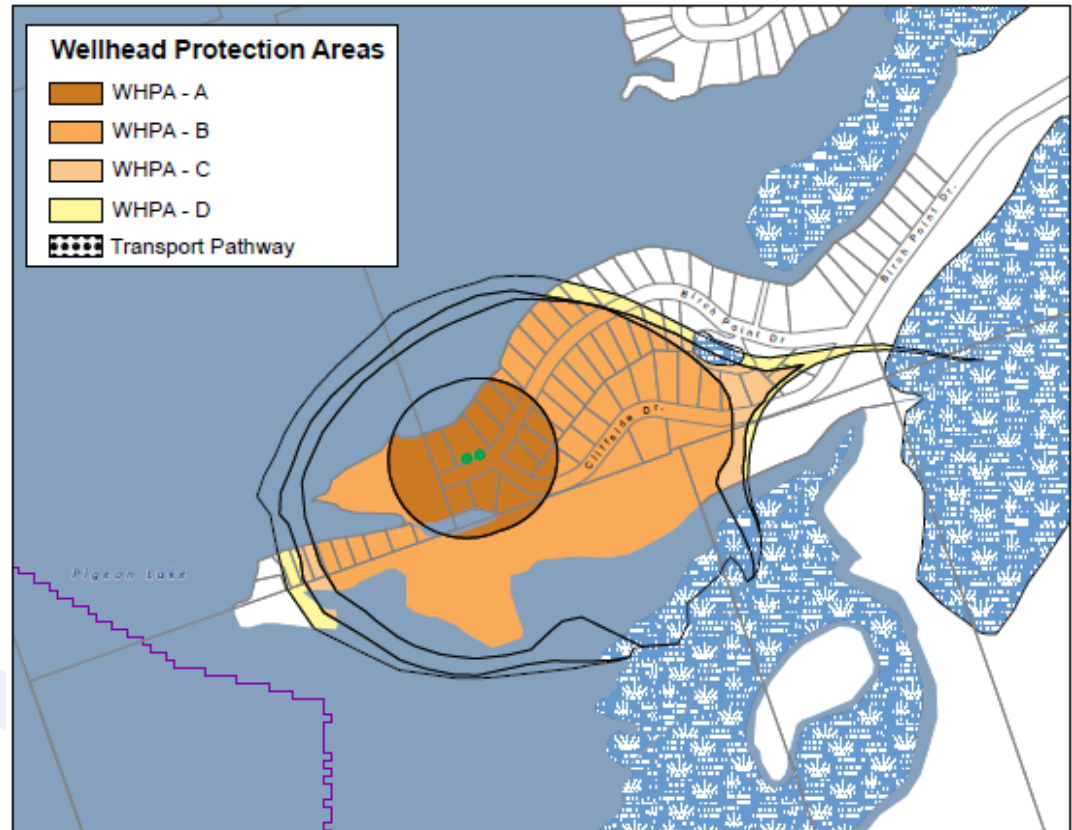


Birch Point

City of Kawartha Lakes
Otonabee-Peterborough SPA

Threat Summary*

- 41 Septic Systems
- 32 Fuel Storage
- 41 Parcels Affected



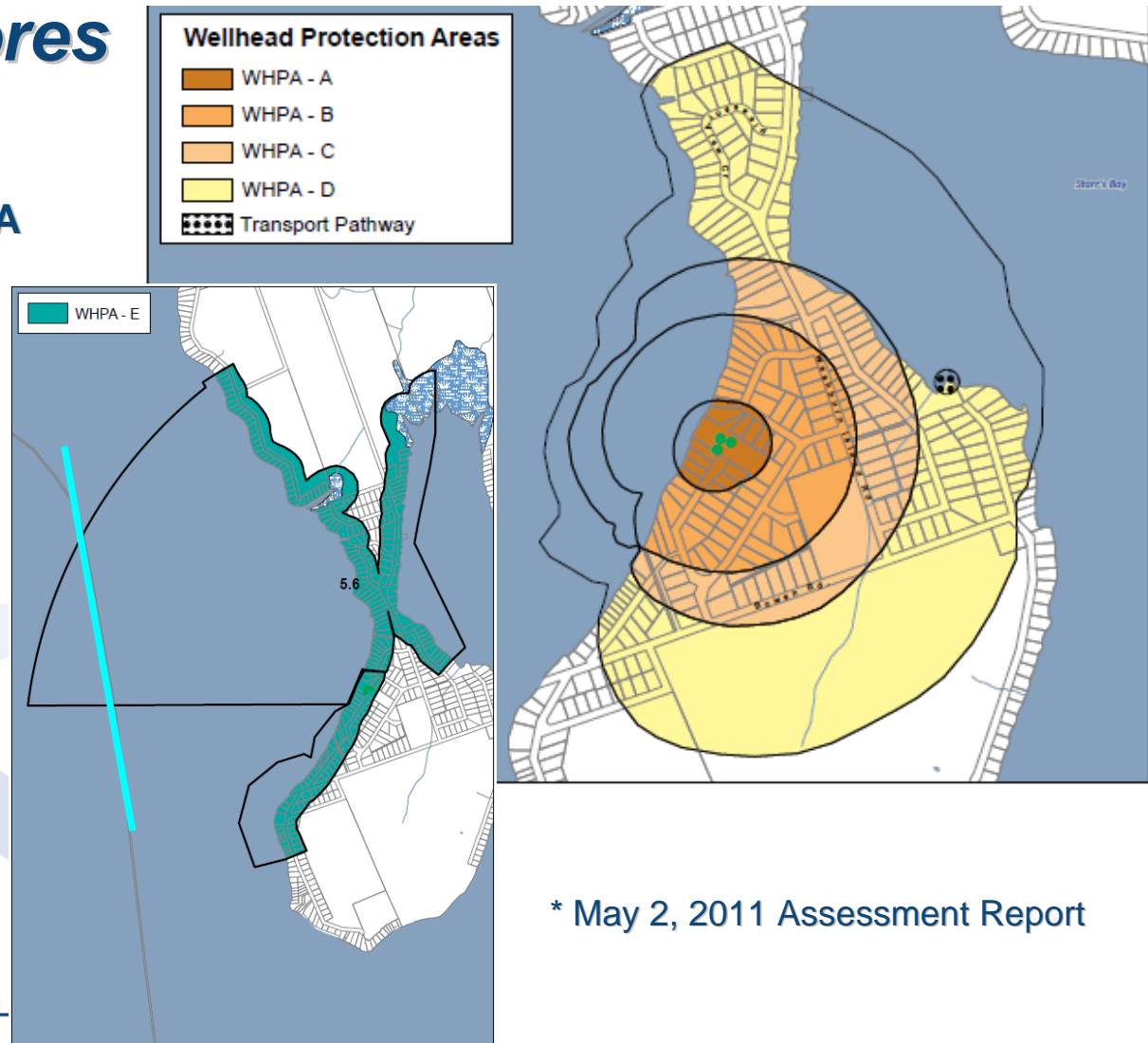
* May 2, 2011 Assessment Report

Canadiana Shores

City of Kawartha Lakes
Kawartha-Haliburton SPA

Threat Summary*

- 29 Septic Systems
- 27 Fuel Storage
- 29 Parcels Affected



* May 2, 2011 Assessment Report

Janetville

**City of Kawartha Lakes
Kawartha-Haliburton SPA**

Threat Summary*

- 15 Septic Systems
 - 1 ASM Application
 - 1 ASM Storage
 - 1 Fertilizer Application
 - 1 Pesticide Application
 - 1 Livestock Pasturing/ Confinement
-
- 15 Parcels Affected



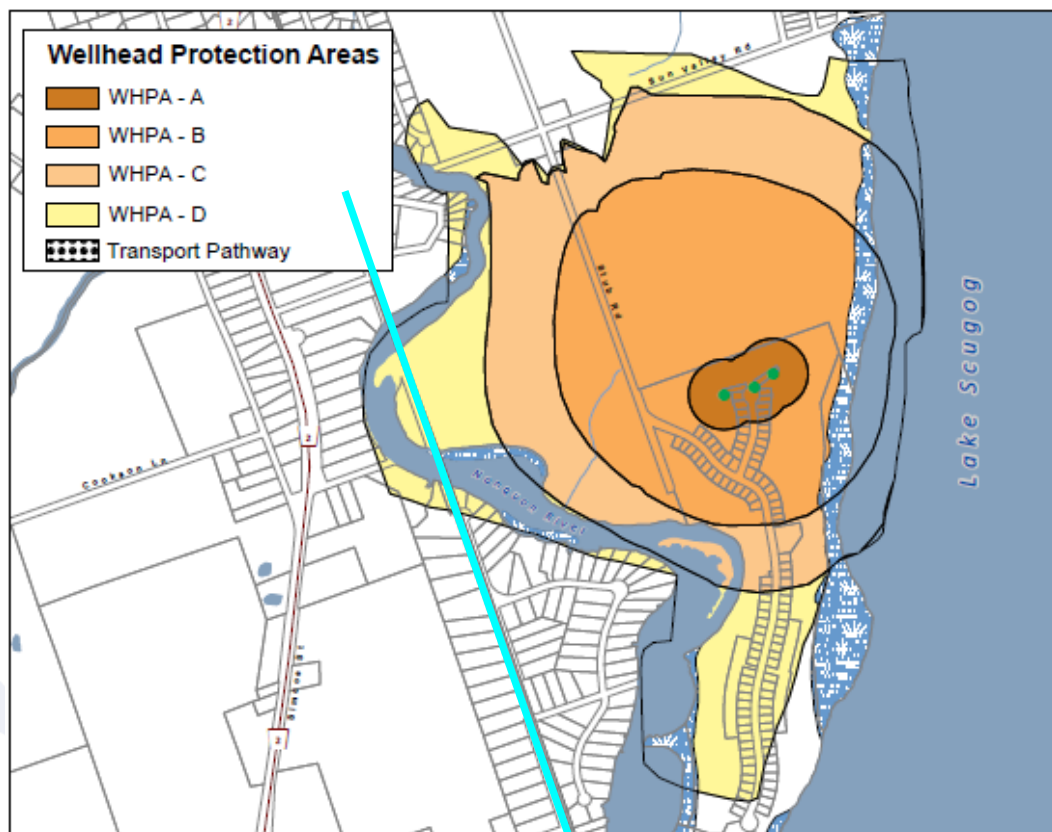
* May 2, 2011 Assessment Report

King's Bay

City of Kawartha Lakes
Region of Durham
Kawartha-Haliburton SPA

Threat Summary*

- 2 Septic Systems
- 2 ASM Application
- 2 ASM Storage
- 2 Fertilizer Storage
- 4 Pesticide Application
- 4 Pesticide Storage
- 21 Fuel Storage
- 2 Livestock Pasturing/ Confinement
- 23 Parcels Affected



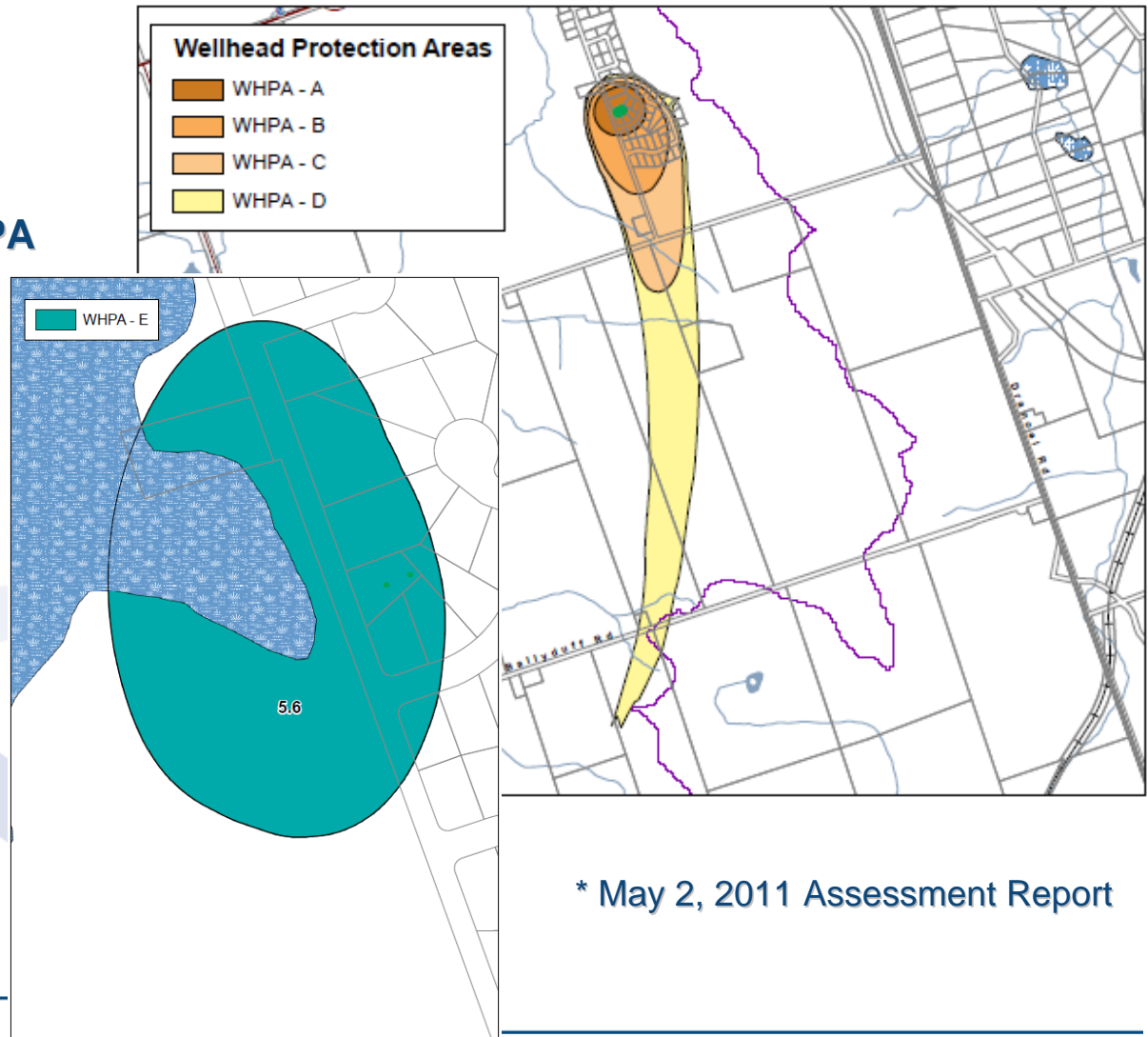
* May 2, 2011 Assessment Report

Manorview

City of Kawartha Lakes
Kawartha-Haliburton SPA
Otonabee-Peterborough SPA

Threat Summary*

- 34 Septic Systems
- 1 Pesticide Application
- 29 Fuel Storage
- 16 Parcels Affected

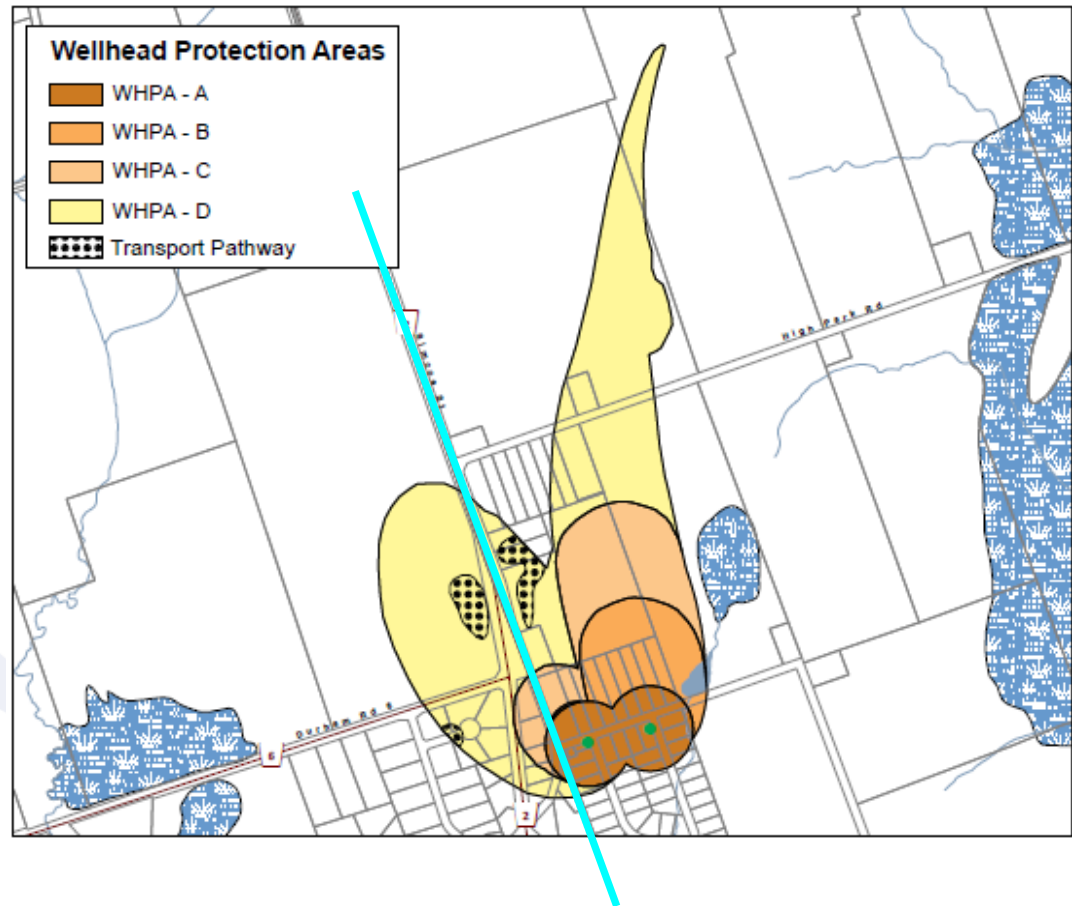


Mariposa Estates

City of Kawartha Lakes
Region of Durham
Kawartha-Haliburton SPA

Threat Summary*

- 21 Septic Systems
- 10 ASM Application
- 2 Pesticide Application
- 19 Fuel Storage
- 31 Parcels Affected



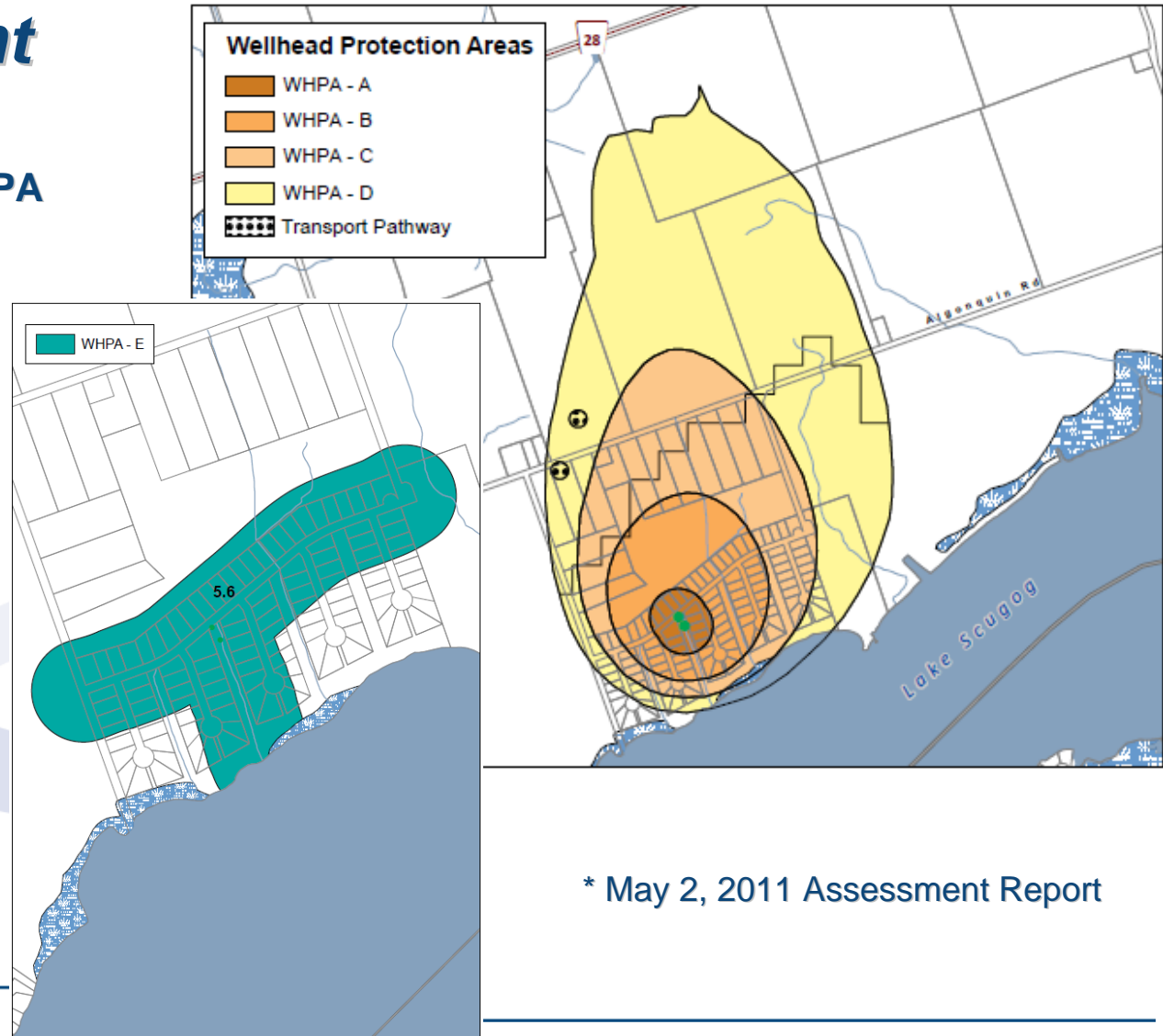
* May 2, 2011 Assessment Report

Pleasant Point

City of Kawartha Lakes
Kawartha-Haliburton SPA

Threat Summary*

- 20 Septic Systems
- 19 Fuel Storage
- 20 Parcels Affected



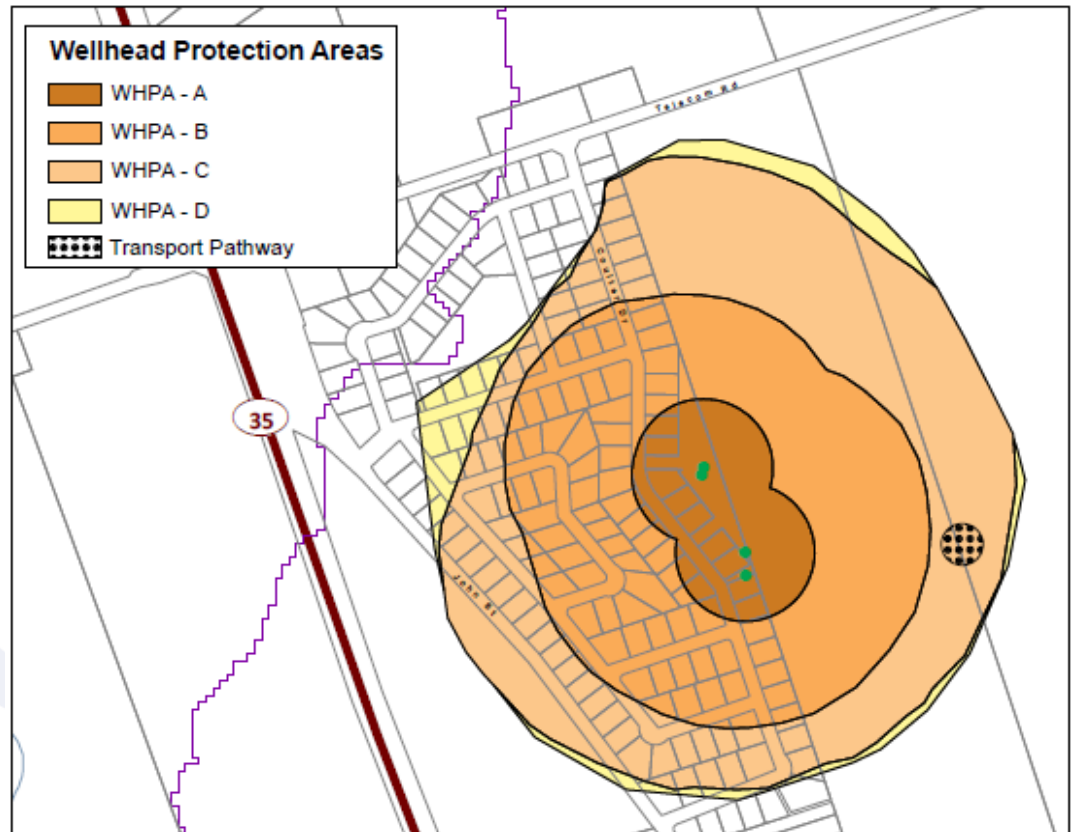
* May 2, 2011 Assessment Report

Pinewood

**City of Kawartha Lakes
Otonabee-Peterborough SPA**

Threat Summary*

- 25 Septic Systems
- 1 ASM Application
- 1 Pesticide Application
- 26 Parcels Affected



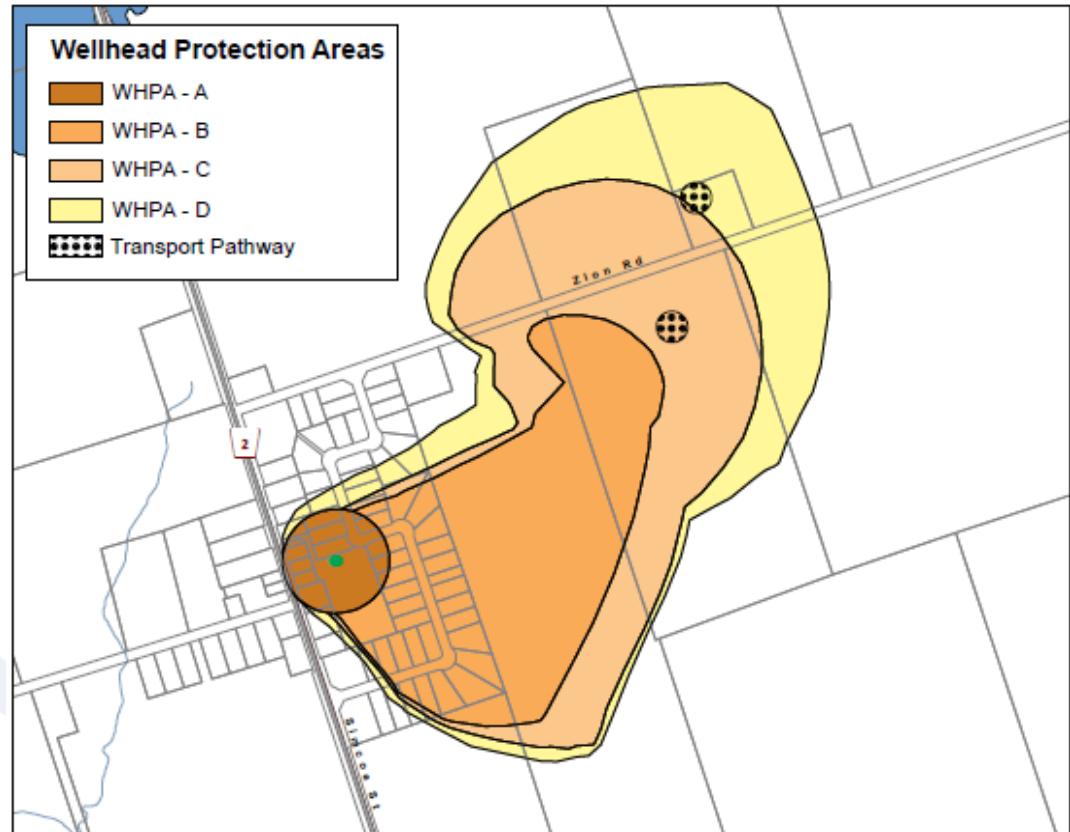
* May 2, 2011 Assessment Report

Sonya

City of Kawartha Lakes Kawartha-Haliburton SPA

Threat Summary*

- 15 Septic Systems
- 8 Fertilizer Application
- 14 Fuel Storage
- 15 Parcels Affected



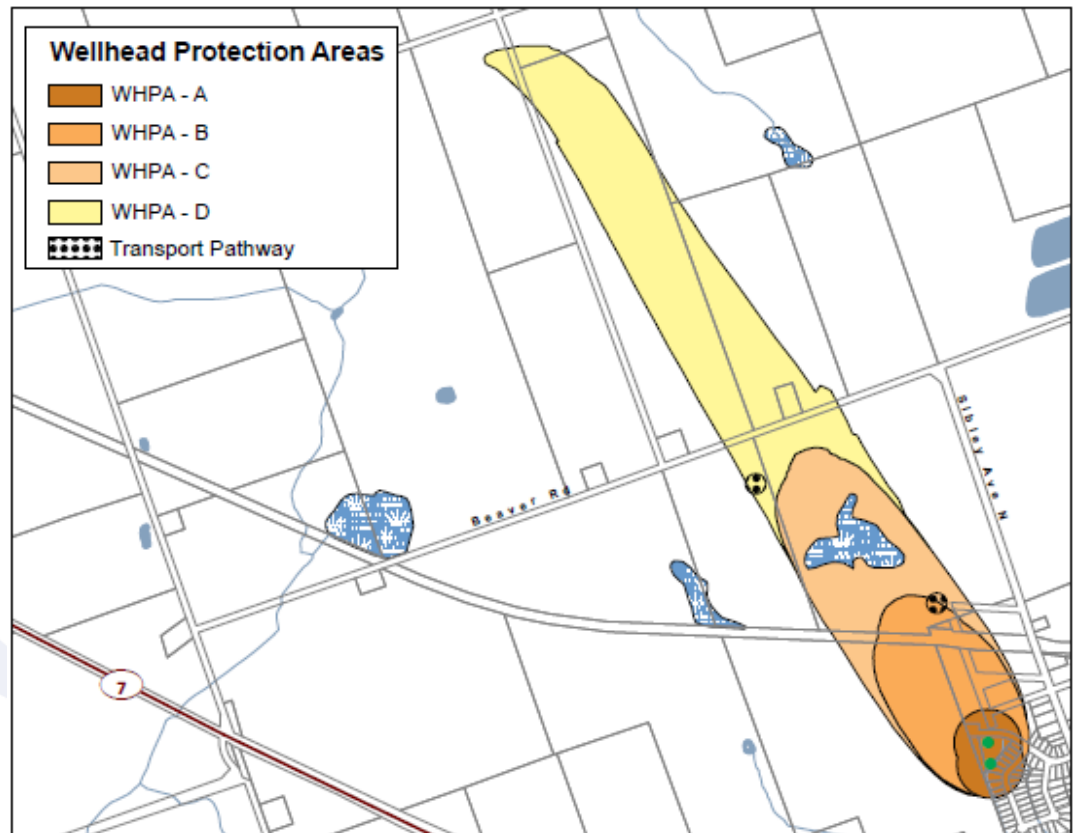
* May 2, 2011 Assessment Report

Victoria Glen

**City of Kawartha Lakes
Kawartha-Haliburton SPA**

Threat Summary*

- 3 ASM Application
- 3 Pesticides Application
- 1 Livestock Grazing/ Confinement
- 3 Parcels Affected



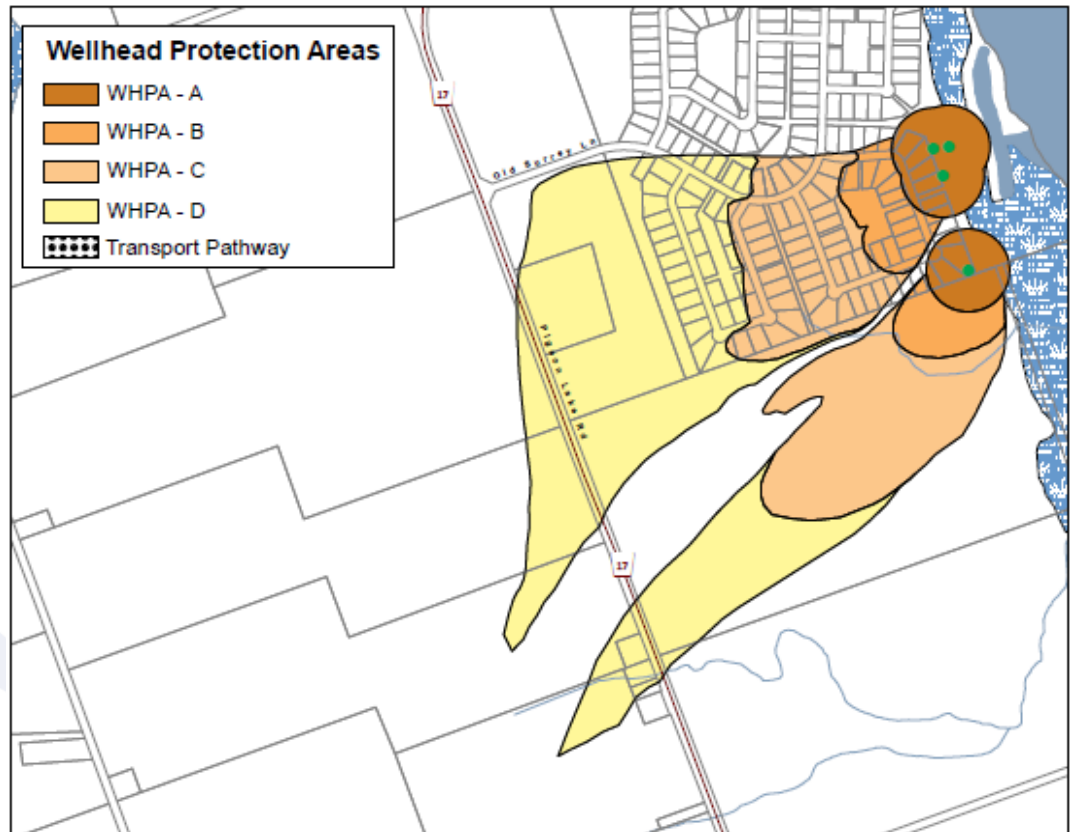
* May 2, 2011 Assessment Report

Victoria Place

**City of Kawartha Lakes
Kawartha-Haliburton SPA**

Threat Summary*

- 29 Septic Systems
 - 1 ASM Application
 - 1 Pesticides Application
 - 12 Fuel Storage
 - 1 Livestock Grazing/ Confinement
-
- 30 Parcels Affected



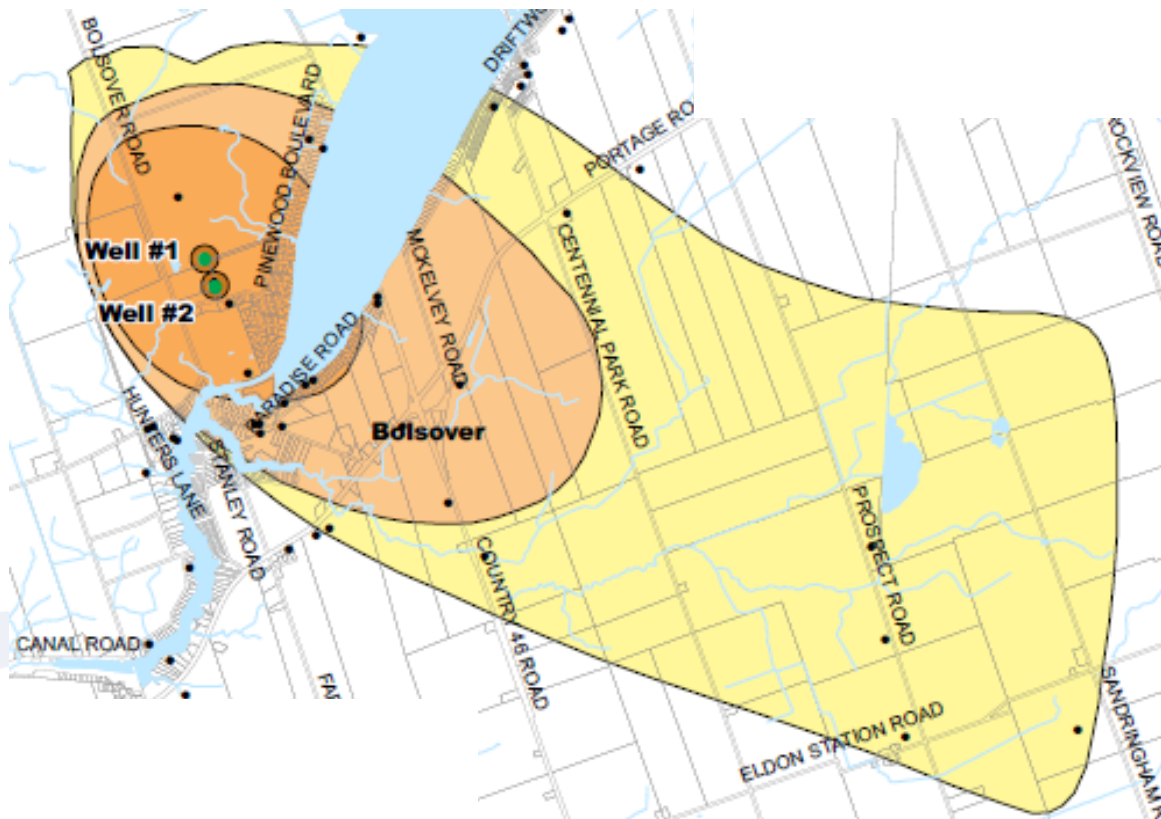
* May 2, 2011 Assessment Report

Western Trent

City of Kawartha Lakes Lake Simcoe SPA

Threat Summary*

- 168 Septic Systems
 - 3 ASM Application
 - 4 Pesticide Application
 - 1 Pesticide Storage
 - 1 Fuel Storage
 - 1 DNAPL Storage
 - 1 Livestock Pasturing/ Confinement
-
- 174 Parcels Affected



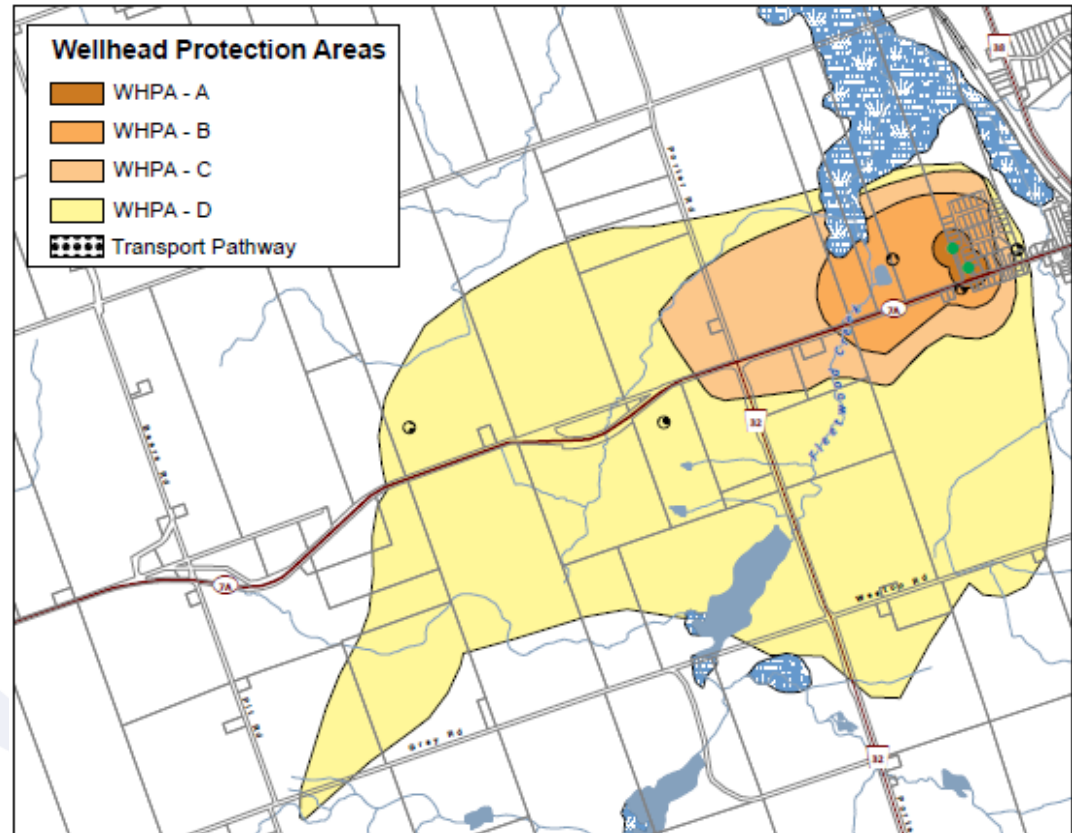
* June 2011 Assessment Report

Woodfield

City of Kawartha Lakes
Kawartha-Haliburton SPA

Threat Summary*

- 15 Septic Systems
 - 1 ASM Application
 - 1 ASM Storage
 - 1 Pesticide Application
 - 14 Fuel Storage
 - 1 DNAPL Storage
 - 1 Livestock Pasturing/ Confinement
-
- 16 Parcels Affected



* May 2, 2011 Assessment Report

Woods of Manilla

City of Kawartha Lakes
Kawartha-Haliburton SPA
Lake Simcoe SPA

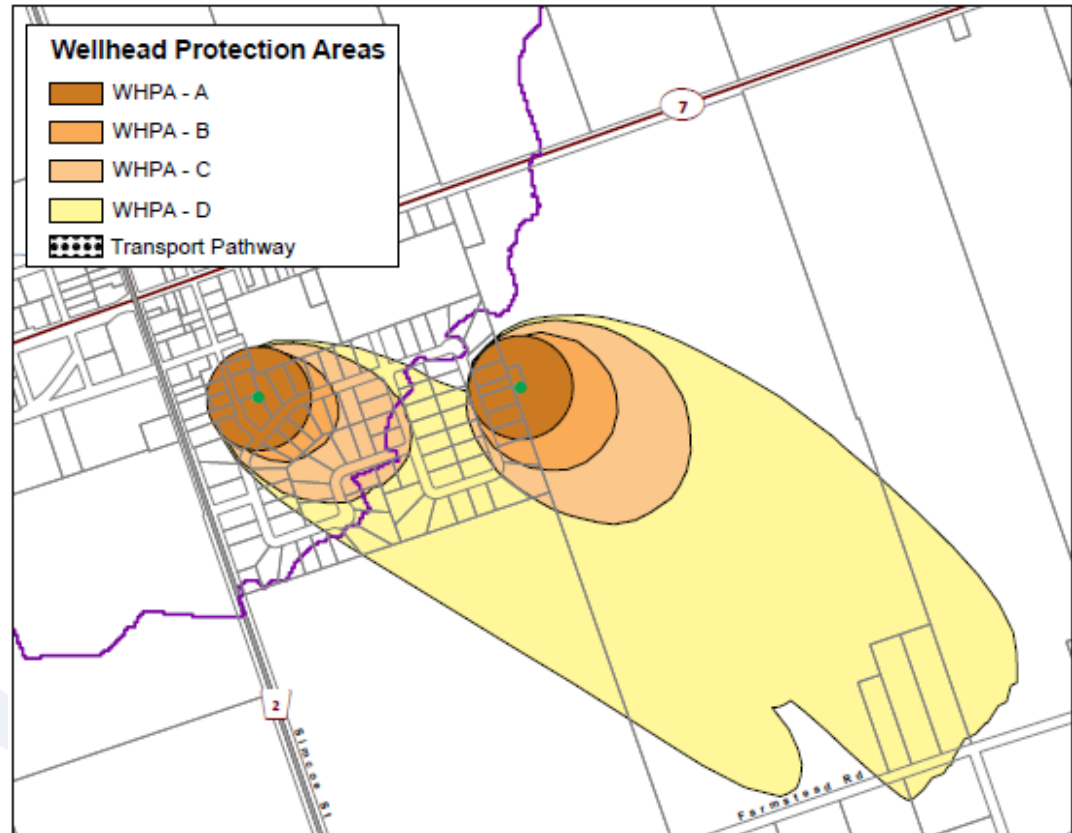
Threat Summary

Well #1(SGBLS)*

- 14 Septic Systems
- 1 Fuel Storage

Well 2 (TCC)**

- 5 Septic Systems
 - 1 Application of ASM
 - 1 Application of Pesticides
-
- 21 Parcels Affected (Total)



* June 2011, Assessment Report

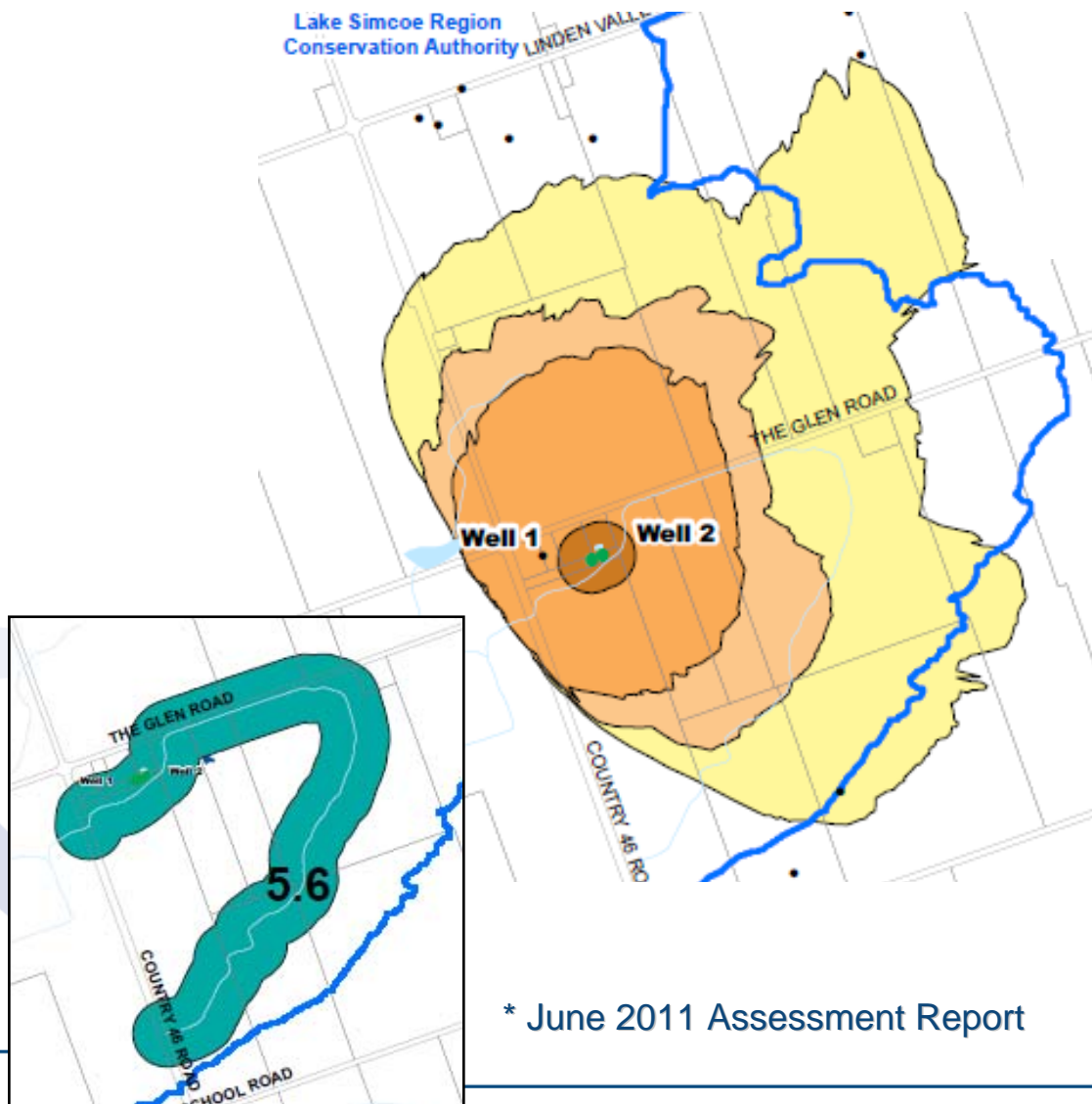
** May 2, 2011 Assessment Report

Woodville

City of Kawartha Lakes
Lake Simcoe SPA
Kawartha-Haliburton SPA

Threat Summary*

- 25 Septic Systems
- 1 ASM Application
- 1 Pesticide Application
- 26 Parcels Affected



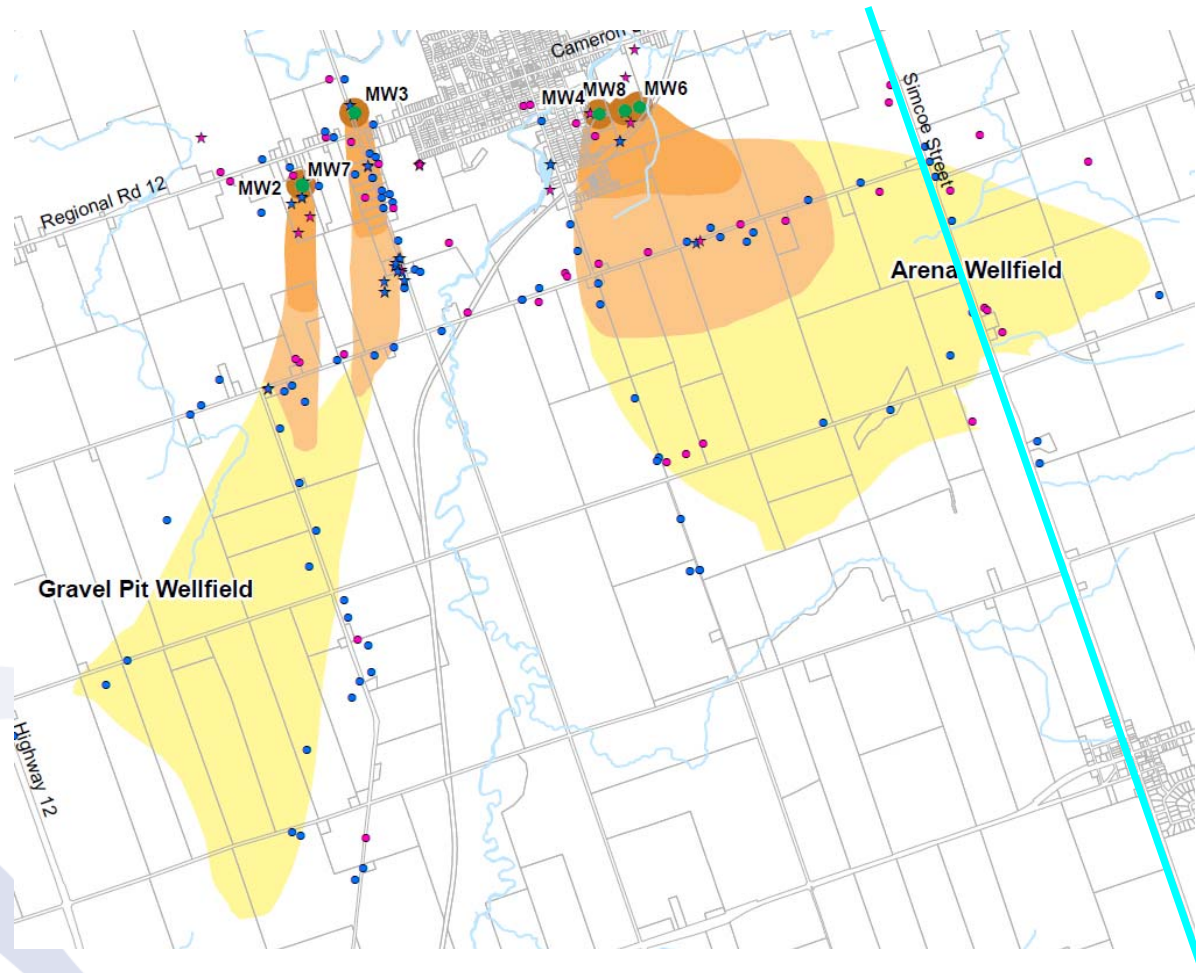
* June 2011 Assessment Report

Cannington

City of Kawartha Lakes
Region of Durham
Lake Simcoe SPA

Threat Summary*

- 0 Threats in CKL
- 0 Parcels Affected in CKL



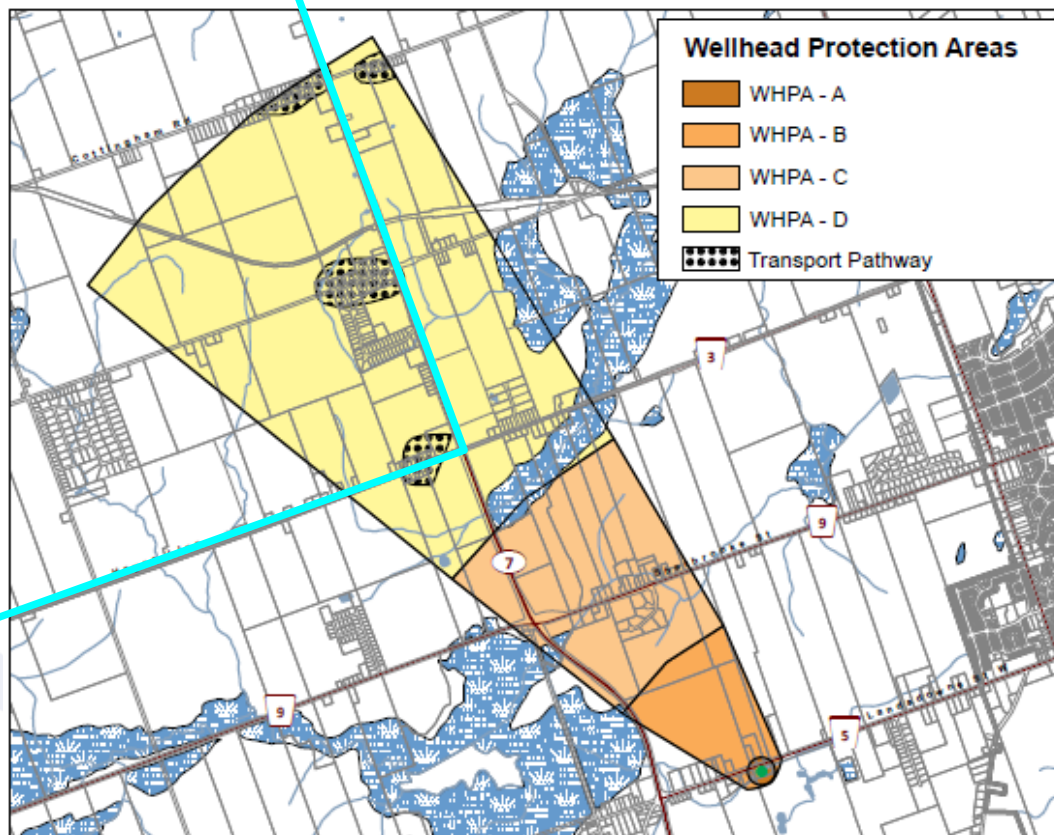
* June 2011 Assessment Report

Fraserville

City of Kawartha Lakes
Peterborough County
Otonabee-Peterborough SPA

Threat Summary*

- 0 Threats in CKL
- 0 Parcels Affected in CKL



* May 2, 2011 Assessment Report

City of Kawartha Lakes Systems Summary

- **23 systems (6 surface water & 17 groundwater)**
- **910 Significant Drinking Water Threats***
- **663 Parcels Affected***

System Threat Types*

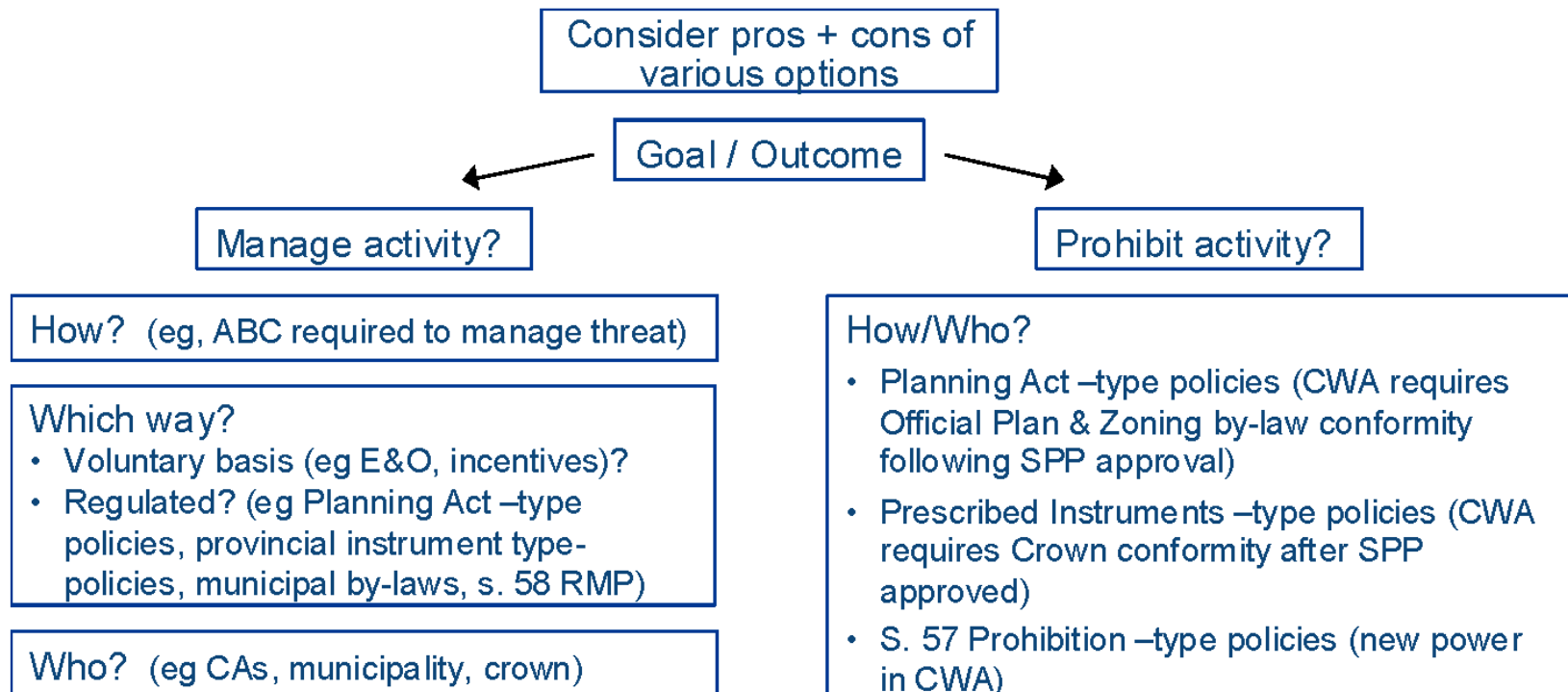
- **599 Septic Systems**
- **32 ASM Application**
- **6 ASM Storage**
- **9 Fertilizer Application**
- **2 Fertilizer Storage**
- **28 Pesticide Application**
- **4 Pesticide Storage**
- **25 Road Salt Application**
- **192 Fuel Storage**
- **2 DNAPL Storage**
- **10 Livestock Pasturing or Confinement**

*** Information from Trent Conservation Coalition Updated Proposed Trent Assessment Report (May 2, 2011) & Updated Draft Assessment Report: Lake Simcoe and Couchiching- Black River Source Protection Area (June, 2011) . All of the listed threats are within City of Kawartha Lakes.**

Source Protection Plans

- A source protection plan must contain a policy for every area where an activity could be a significant drinking water threat as identified in an assessment report
- The policy must meet the objectives in Section 22(2) and (6) of the *Clean Water Act*—a threat to drinking water ceases to be / does not become significant (i.e. adequately managed)
- However, this does not mean that the activities must stop!
 - *May mean some changes to how an activity is carried out*
 - *May mean that a regular inspection needs to take place*
 - *May mean no change (it may be determined that satisfactory risk management activities are already occurring)*

Policy Approach



GOAL: Threat ceases to be / does not become significant (i.e., sufficiently managed)

Range of Policy Approaches/Tools

The *Clean Water Act* and regulations authorize a spectrum of approaches / tools to implement policies to address threats to source water:

- Education and Outreach
 - Incentive Programs
 - Planning Approaches (e.g. Official Plan, Zoning, Site Plan Control)
 - Provincial Instruments
 - S. 58 Risk Management Plans
 - S. 57 Prohibition
 - S. 59 Restricted Land Uses*
 - Other (including relying on other existing legislative authority previously granted to the implementing body (Municipal Act) or section 38 obligations of *Clean Water Act*)
- } Enabled through regulation

*Note: not the same meaning as under the *Planning Act*.

Areas Affected by Policy

**Existing Assessment Report
Threats Map**



Table that lists activities that *can be* significant threats (*no reference to circumstances*)

Area	Activities that can be SIGNIFICANT threats
	Application of ASM to land
	Application of Commercial Fertilizer to land
	Application of NASM to land
	Application of Pesticide to land
	Application of Road Salt
	Waste Disposal Sites
	Handling & storage of Fuel
	Aircraft De-Icing
	Livestock Grazing & Pasturing
	Sewage Systems
	Handling & storage of Pesticide
	Storage of ASM
	Handling & storage of an Organic Solvent
	Handling & storage of Commercial Fertilizer
	Handling & storage of NASM
	Handling & storage of Road Salt
	Storage of Snow
	Handling & storage of DNAPLs

Consultation and Pre-Consultation

Notice of Plan preparation (s. 19 of O. Reg. 287/07)

- Complete - Spring 2011

Pre-consultation (s. 37, s. 38, s. 39)

- TCC: September/ October 2011
- SGBLS: Mid October 2011 – January 2012* (*SPC to approve)

Draft plan (s. 41)

- Spring 2012

Proposed Plan (s. 42)

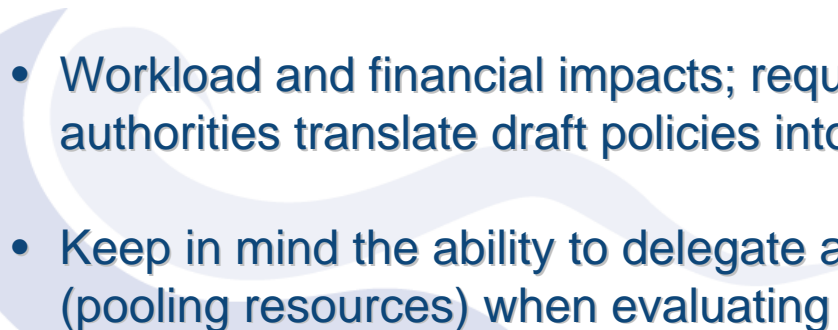
- Late Spring - Summer 2012, No changes are made
- Submitted with all comments and any municipal resolutions received (s. 25)

Submission to Minister, August 20, 2012

Consultation and Pre-Consultation

Providing Feedback on Draft Policies

Consider:

- The protection of your community's drinking water sources
 - Workload and financial impacts; request that source protection authorities translate draft policies into a work plan
 - Keep in mind the ability to delegate and share responsibilities (pooling resources) when evaluating options
- 

Municipal Roles & Responsibilities

Identify

- Select municipal reps for source protection committees
- May work with CAs to develop assessment reports

(2006-2011)

Plan

- Provide input on development of source protection policies and plans
- Use information from assessment reports in planning decisions

(2011-2012)

Implement & Monitor

- Implement certain policies of the source protection plan
- Inspect and Enforce
- Monitor and Report

(2013 & beyond)

Key Messages – Municipal Implementation

- Identify Risk Management Officials and internal processes
 - Land use planning decisions must consider the protection of drinking water sources to be consistent with the PPS
 - Decisions on planning matters must conform to significant threat policies (and have regard to moderate and low threat policies)
 - Municipalities responsible for implementation of policies under other legislation: *CWA-Part IV, Municipal Act*, etc.
 - Legal effect applies to all approval authorities, including the OMB
-

Key Contacts

Jennifer Stephens, Trent Conservation Coalition SPR

Mark Majchrowski, Kawartha-Haliburton SPA

Meredith Carter, Otonabee-Peterborough SPA

Mark Peacock, Ganaraska Region SPA

Don Goodyear, South Georgian Bay Lake Simcoe SPR

Reminder

TCC SPC Municipal Forum

September 20th

Waterfront Holiday Inn, Peterborough

QUESTIONS?