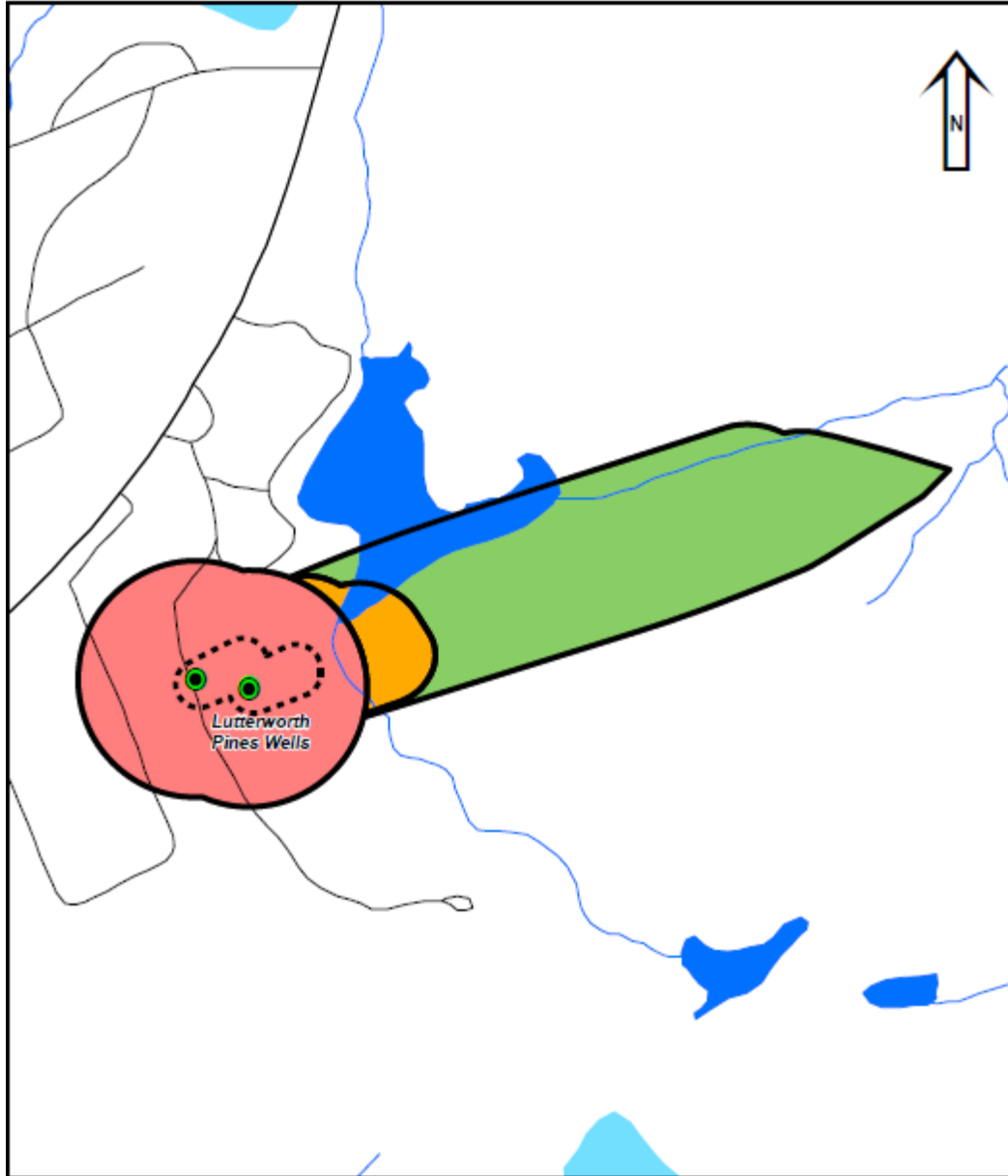




Revision of Vulnerability, Issues, and
Threats for Lutterworth Pines
Groundwater Municipal Drinking Water
System



Vulnerability delineation of the WHPAs and Scoring is HIGH (except WHPA-A).

-Limited technical data available for modeling

Figure 17
WHPA Delineation



TRENT CONSERVATION COALITION



Threats Assessment:

- Fourteen Prescribed Drinking Water Threats
- One parcel – storage of fuel, septic system
- Twelve parcels – each has a septic system

Prescribed Drinking Water Threat (PDWT)	Score to Trigger a Significant Threat	
	Affected Parcels	No. of PDWT
Establishment, operation or maintenance of a system that collects, stores, transmits, treats, or disposes of sewage	13	13
Handling and storage of fuel	1	1
Total	13	14

Staff Recommendation (SPC Report – 05/11):

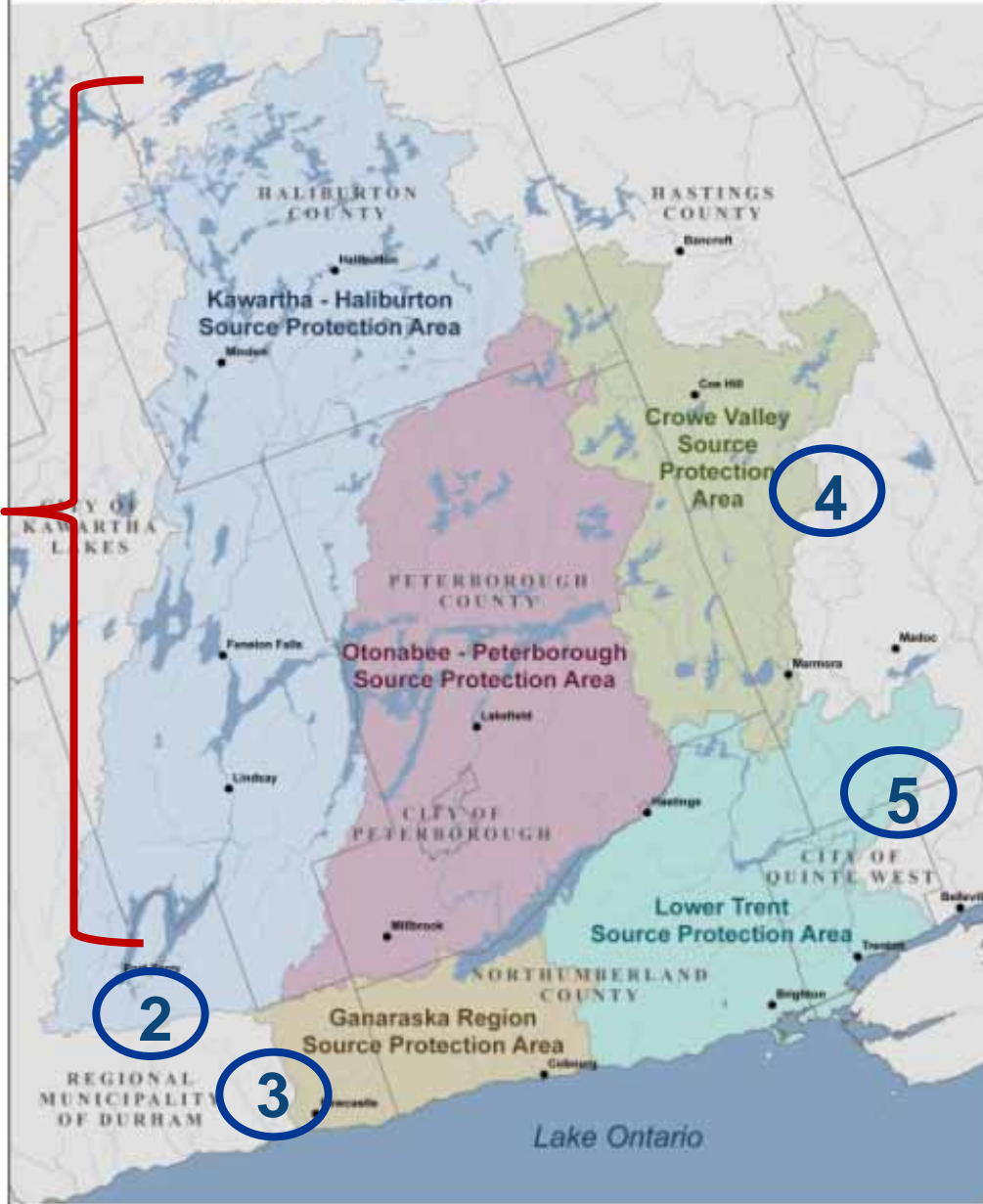
That the results of the vulnerability, issues, and threats assessment completed by XCG Consultants Ltd. be *accepted* by the Source Protection Committee for inclusion in the Updated Trent Assessment Report for the Kawartha-Haliburton Source Protection Area.



SGRA/HVA Edge Mapping

Western
Boundary
↓
GENIVAR

1



Eastern
Boundary
↓
TCC
Technical
Staff

Staff Recommendation (SPC Report – 06/11):

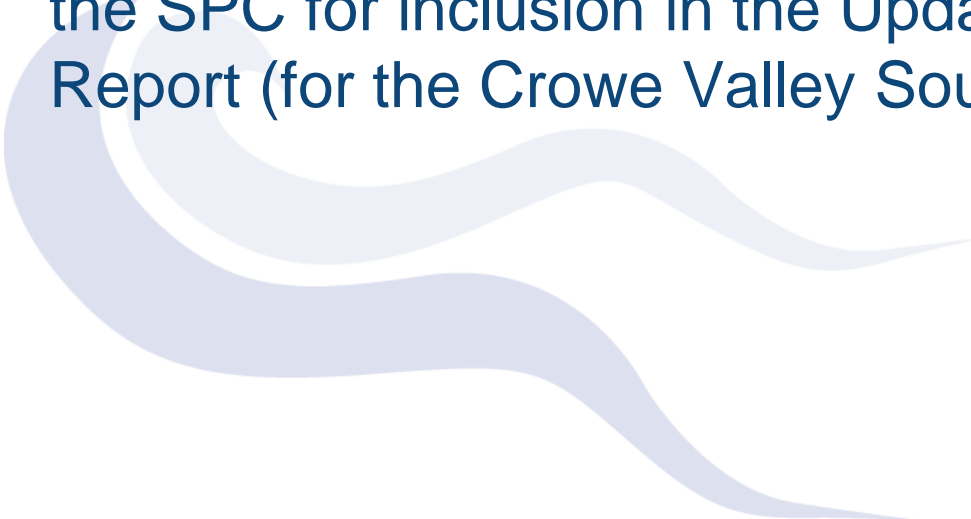
The observations of the Groundwater Vulnerability / Highly Vulnerable Aquifer and Significant Groundwater Recharge Area Edge Matching Review conducted on the western and southern boundary of TCC by *GENIVAR* and on the eastern boundary of TCC by *TCC technical staff*, be accepted by the Source Protection Committee for inclusion in the updated Trent and Ganaraska Assessment Reports.



**Revision of Tier 2 Water Budget for Havelock
Groundwater Municipal Drinking Water
System**

Staff Recommendation (SPC Report 04/11):

That the results of the Updated Tier 2 water quantity stress assessment indicating a low water quantity stress for the sub-watershed associated with the Havelock Municipal Wells, completed by XCG Consultants Ltd. be accepted by the SPC for inclusion in the Updated Trent Assessment Report (for the Crowe Valley Source Protection Area).

A decorative graphic consisting of several overlapping, wavy, light blue lines that flow from the left side of the page towards the right, positioned below the main text block.



**Incorporate Storm Sewershed Time of
Travel in IPZ-2 Delineation and Re-
assess Threats**

Staff Recommendation (SPC Report 03/11; 08/11):

That the results of the modified IPZ-2 delineations be accepted by the Trent Conservation Coalition Source Protection Committee for inclusion in the Updated Trent and Ganaraska Assessment Reports.

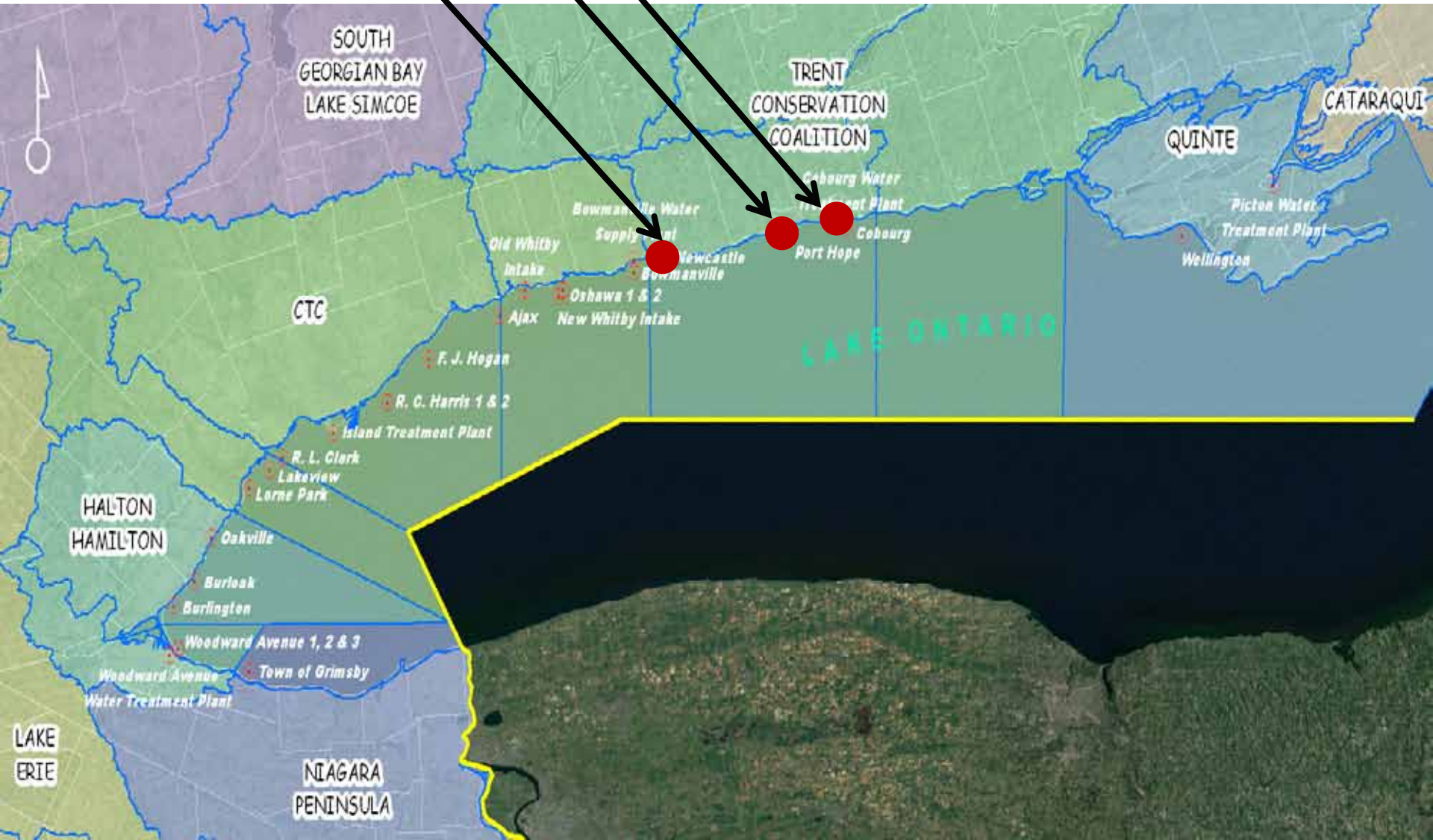





***Update on the Lake Ontario
Collaborative Study***

Cobourg
Port Hope
Newcastle

All 3 intakes in Ganaraska
Source Protection Area



Status as of Oct 2010 – Proposed AR

- Ø Delineation of IPZ-1
 - Ø Delineation of IPZ-2
 - Ø Assignment of Vulnerability Scores to IPZ-1 and IPZ-2
 - Ø Issues Evaluation & Threats Assessment
 - Ø Uncertainty Analysis
- 
-

THREATS ASSESSMENT

- Vulnerability Scoring Methodology for IPZ-1 and IPZ-2 for a Great Lakes Intake can only result in *low or moderate threats*;
- The only way to get a Significant Drinking Water Threat for a Great Lakes Intake is by identification of a drinking water issue as per Rule 114 **or** through Spill Scenario Modelling in accordance with Rule 130, for a land use activity.

Status Update (for March 2011 SPC Meeting:

- Upland portions of IPZ-2s being reviewed and revised (compatibility between Bowmanville & Newcastle Intakes, Incorporation of Storm Sewershed Time of Travel Analysis)
- Spill Simulation, IPZ-3 Delineation, and Threats Assessment

What are some of the upstream risks to drinking water?

- Discharges from tributaries during storm events
- Spills into tributaries upstream



What are some of the lake-side risks to drinking water?

Direct Discharges and Spills to Lake Ontario

- Petrochemical facilities
- Wastewater Treatment Plants & Storm Water
- Industrial Activities, including Bulk Fuel Storage
- Nuclear Power Stations



Initial Spill/Discharge Scenarios

Ontario Power Generation Pickering Nuclear Facility:

-Simulate a discharge of *tritium* from the Pickering site, emulating the release volumes and activity associated with the 1992 and 1996 spills.

Transport/ Conveyance of Petroleum:

- Trans Canada Pipeline (gasoline) rupture @ Ganaraska River
- Trans Canada Pipeline (gasoline) rupture @ Cobourg Creek
- Trans Canada Pipeline (gasoline) rupture @ Wilmot and Graham Creeks

Results anticipated mid-February
