



## CTC Source Protection Region

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## CTC Source Protection Region

### MEETING OF THE SOURCE PROTECTION COMMITTEE #2/11 March 1, 2011

The Source Protection Committee Meeting #2/11, was held at Black Creek Pioneer Village, North Theatre, on Tuesday, March 1, 2011. The Chair Susan Self, called the meeting to order at 10:00 a.m.

#### PRESENT

Doug Brown	Member
Wendy Burgess	Member
Bob Burnside	Member
Louise Foster	Member
Jessica Ginsburg	Member
Robert Goodings	Member
Irv Harrell	Member
Heather Laidlaw	Member
Laura McDowell	Member
Peter Miasek	Member
Lynne Moore	Member
Peter Orphanos	Member
Fred Ruf	Member
Mark Schiller	Member
Norine Schofield	Liaison, Medical Officer of Health
Susan Self	Chair
John Westlake	Liaison, Ministry of the Environment

#### STAFF

David Burnett	Planning & Development, TRCA
Sylvia Waters	Admin. Coord., CTC Source Water Protection
Kerry Mulchansingh	Technical Lead, CVSPA
Gayle Soo Chan	Technical Lead, CLOSPA
Don Ford	Technical Lead, TRSPA
Beverley Thorpe	Project Manager, CTC Source Water Protection
Deb Martin-Downs	Director, Ecology Division, TRCA

#### ABSENT

Brian Denney	Liaison
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**PROXY**

Andrea Bourrie  
Juli Abouchar  
Mike Garrett  
Michael D'Andrea  
John Presta  
David Kentner  
Howard Shapiro

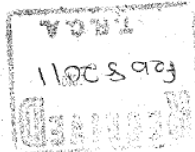
Member  
Member  
Member  
Member  
Member  
Member  
Member



## CORRESPONDENCE A



January 28, 2011



Ms. Susan Self, Chair  
CTC Source Protection Committee  
c/o Toronto and Region Source Protection Authority  
5 Shoreham Drive  
Downsview, ON M3N 1S4

The Regional  
Municipality  
of Durham

Clerk's Department

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Pat M. Madill, AMCT, CMM III  
Regional Clerk

**RE: NOMINATION/REAFFIRMATION OF MUNICIPAL  
REPRESENTATIVES ON DRINKING WATER SOURCE  
PROTECTION COMMITTEES (2011-J-3). OUR FILE: C14**

Ms. Self, the Joint Health & Social Services, Finance & Administration, Planning and Works Committees of Regional Council considered the above matter and at a meeting held on January 26, 2011 Council adopted the following recommendations of the Committee:

- a) THAT Regional Council supports the nomination from the Township of Brock of local Councillor Keith Shier as the new Durham municipal sector representative to the South Georgian Bay-Lake Simcoe Source Protection Committee and forwards this nomination to the Chair of the Lake Simcoe Source Protection Authority for consideration by the watershed municipalities;
- b) THAT Regional Council reaffirms that John Presta, (Director of Environmental Services Region of Durham Works Department) will continue as the Region's representative on the Credit Valley-Toronto-Central Lake Ontario (CTC) Source Protection Committee and that the Chair of the Toronto Region Source Protection Authority be so advised;
- c) THAT Regional Council reaffirms that Bruce Craig (President of Lakefront Utilities, Town of Cobourg) continue as the municipal sector representative from the Ganaraska Source Protection Area on the Trent Conservation Coalition (TCC) Source Protection Committee and that the Chair of the Lower Trent Source Protection Authority be so advised;
- d) THAT Regional Council supports the ongoing involvement of Regional staff in municipal, planning and technical working groups assisting the Source Protection Committees; and

- 2 -

- e) THAT a copy of Joint Report No. 2011-J-3 be forwarded to Durham Region area municipalities for their information.

P.M. Madill, AMCT, CMM III  
Regional Clerk

PMM/ff

- c) R.J. Clapp, Commissioner of Finance  
C. Curtis, Commissioner of Works  
A.L. Georgieff, Commissioner of Planning  
R.J. Kyle, Commissioner & Medical Officer of Health  
J. Presta, Director, Environmental Services  
C. Drimmie, Policy & Research Advisor

## CORRESPONDENCE E



## TOWNSHIP OF KING

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February 2, 2011

The Honourable John Wilkinson  
Minister of the Environment  
12<sup>th</sup> Floor, 135 St. Clair Avenue West  
Toronto, Ontario M4V 1P5

Sent via e-mail: [minister.moe@ontario.ca](mailto:minister.moe@ontario.ca)  
and 1<sup>st</sup> Class Mail

Honourable Sir:

**RE: Resolution – Request to extend the deadline for application for eligible projects under the Ontario Drinking Water Stewardship Program**

At its meeting of January 31, 2011, Council of the Township of King adopted the following Resolution to request extension of the Ontario Drinking Water Stewardship Program as created under the provisions of the *Clean Water Act* with the purpose of providing financial assistance to those persons whose activities or properties are affected by *the Act*:

**Whereas**, the Township of King supports the principles of Source Water Protection as outlined in the *Clean Water Act* and the activities of the Credit Valley Conservation Authority and Toronto Region Conservation Authority and Central Lake Ontario Source Protection Committee (CTC);

**Whereas**, the Township of King, in partnership with the Region of York, has undertaken the construction of a wastewater collection and treatment system in the community of Nobleton;

**Whereas**, the benefiting property owners in Nobleton are required to pay a capital charge for the construction of the local sanitary sewer system, and are required to decommission their private septic systems and connect to the municipal sanitary sewer system (King Township By-law #2010-38), at additional cost;

**Whereas**, on-site septic systems have been identified as a potential threat to source water;

**Whereas**, Ontario Drinking Water Stewardship Program was created under the provisions of the *Clean Water Act* with the purpose of providing financial assistance to those persons whose activities or properties are affected by *the Act*;

**Whereas**, a portion of the capital charge for construction of the sewers, and a portion of the costs to decommission private septic systems and connect to the municipal sanitary sewer are deemed as eligible projects related to eliminating a specific threat to source water;

**Whereas**, funding through this program was made available on a first-come, first-served basis for eligible projects, until all funds are allocated;

**Whereas**, to be eligible for funding, all projects must be completed and complete documentation submitted to the program administrator by December 31, 2010;

**Whereas**, property owners in Nobleton located within the approved two-year time of travel for a municipal wellhead protection were not able to connect to the newly constructed sanitary sewer system and decommission their septic systems prior to the December 31, 2010 deadline due to unforeseen delays in commissioning the sanitary sewer system;


**THEREFORE THE COUNCIL OF THE TOWNSHIP OF KING  
RESOLVES AS FOLLOWS:**

That notwithstanding that the deadline of December 31, 2010 for making application for funding through the Ontario Drinking Water Stewardship Program has passed, the Council of the Township of King requests that the Province of Ontario extend the deadline for application for eligible projects under the Ontario Drinking Water Stewardship Program until December 31, 2011 in order to allow a reasonable period of time for the residents of Nobleton to complete eligible projects and make application to the program administrator.

And that copies of this Resolution be circulated to; Minister John Wilkinson, Minister of the Environment; Paul Heeney, Manager, Source Protection Implementation, Ministry of the Environment; Helena Jaczek, MPP Oak Ridges-Markham; and Susan Self, Chair of the CTC Source Protection Committee;

Your favourable consideration of extending the Ontario Drinking Water Stewardship Program Funding Assistance Programs in high risk areas would be greatly appreciated.

Yours truly,



Chris Somerville  
Clerk

c.c. Paul Heeney, Manager, Source Protection Implementation, MOE  
Helena Jaczek, MPP, Oak Ridges-Markham  
Susan Self, Chair of the CTC Source Protection Committee  
Rob Flindall, Director of Engineering and Public Works

**RES.#233/11**

**CORRESPONDENCE**

- B. Letter to Source Protection Chairs/ Project Managers, dated February 15, 2011, from Saugeen, Grey Sauble, Northern Bruce Peninsula Source Protection Committee - regarding *Nutrient Management Act* and Environmental Farm Plan Program.
- C. MOTION #SPC 11-133 from Saugeen, Grey Sauble, Northern Bruce Peninsula Source Protection Committee.
- D. MOTION #SPC 11-134 from Saugeen, Grey Sauble, Northern Bruce Peninsula Source Protection Committee.

**Moved by: Heather Laidlaw**  
**Seconded by: Fred Ruff**

**THAT the above-noted correspondence B, C and D be referred to the Source Protection Planning Working Group for consideration.**

**CARRIED**

## CORRESPONDENCE B



February 15, 2011

DELIVERED BY EMAIL

TO:

Chairs and Project Managers  
Ontario Source Protection Committees

Dear Chairs & Project Managers:

Re: Nutrient Management Act & Environmental Farm Plan Program

Please find attached two motions passed at a recent meeting of the Saugeen, Grey Sauble, Northern Bruce Peninsula Source Protection Committee.

The first motion requests that OMAFRA amend the *Nutrient Management Act* allowing for the requirement of an approved Nutrient Management Strategy/Plan for livestock operations with over 5 nutrient units in vulnerable areas (WHPAs and IPZs).

The second motion requests that the Ontario Soil and Crop Improvement Association and Environmental Farm Plan staff consult with the MOE and DWSP to make modifications to the Environmental Farm Plan program to make it an acceptable Assessment and Action Plan for agricultural operations in vulnerable areas (WHPAs and IPZs).

The Source Protection Committee for the Saugeen, Grey Sauble, Northern Bruce Peninsula requests that all Source Protection Committees consider endorsing these resolutions. These motions have also been forwarded to the Minister of the Environment, the Minister of Agriculture, Food and Rural Affairs, and the Ontario Soil and Crop Improvement Association.

Should questions arise, please do not hesitate to contact our Project Manager, Don Smith, at 519-470-3000 Extension 101 or [d.smith@waterprotection.ca](mailto:d.smith@waterprotection.ca).

Respectfully,

Mike Traynor,  
Chair  
Source Protection Committee

[www.waterprotection.ca](http://www.waterprotection.ca)    [www.svca.on.ca](http://www.svca.on.ca)    [www.greysauble.on.ca](http://www.greysauble.on.ca)    [www.northbrucepeninsula.ca](http://www.northbrucepeninsula.ca)  
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Fax 519-470-3005    RR# 4, 237897 Inglis Falls Road  
[mail@waterprotection.ca](mailto:mail@waterprotection.ca)    Owen Sound, ON N4K 5N6

## CORRESPONDENCE C



### SAUGEEN, GREY SAUBLE, NORTHERN BRUCE PENINSULA SOURCE PROTECTION COMMITTEE

#### MOTION

DATE: JANUARY 28, 2011

MOTION #: SPC-11-133

MOVED BY: MITCH TUDLAN

SECONDED BY: KEN FURLONG

**WHEREAS** the nineteen Source Protection Committees across Ontario are now developing policies to deal with the twenty-one prescribed threats to drinking water as specified in the Provincial Table of Drinking Water Threats;

**AND WHEREAS** six of those twenty-one threats deal with the application, storage or management of Agricultural Source Material (ASM) or Non-Agricultural Source Material (NASM) and/or the use of land as livestock grazing or pasture land;

**AND WHEREAS** the *Nutrient Management Act* (NMA) with its requirements for Nutrient Management Strategies/Plans was created following the Walkerton Water Crisis specifically to deal with minimizing the risk of agricultural contaminants impacting on source water;

**AND WHEREAS** it is an objective of the Source Protection policy development process to utilize existing legislation whenever possible to minimize threats to drinking water in vulnerable areas;

**AND WHEREAS** the present NMA under Reg. 267/03 Part IV limits requirements for approved Nutrient Management Strategies/Plans to operations requiring building permits for livestock facilities or/and operations over 300 nutrient units (NU) therefore minimizing the ability to deal with these agricultural threats in vulnerable areas;

**THEREFORE** the Source Protection Committee for Saugeen, Grey Sauble, Northern Bruce Peninsula requests that the Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) amend the *Nutrient Management Act* to allow for the requirement of an approved Nutrient Management Strategy/Plan for livestock operations with over five NUs in vulnerable areas within Wellhead Protection Areas and Intake Protection Zones;

[www.waterprotection.ca](http://www.waterprotection.ca)    [www.svca.on.ca](http://www.svca.on.ca)    [www.greysauble.on.ca](http://www.greysauble.on.ca)    [www.northbrucepeninsula.ca](http://www.northbrucepeninsula.ca)  
Tel 519-470-3000 1-877-470-3001    Office: Grey Sauble Conservation Authority  
Fax 519-470-3005    RRP 4, 237897 Ingis Falls Road  
mail@waterprotection.ca    Owen Sound, ON N4K 5N6



## CORRESPONDENCE D



### SAUGEEN, GREY SAUBLE, NORTHERN BRUCE PENINSULA SOURCE PROTECTION COMMITTEE

#### MOTION

DATE: JANUARY 28, 2011

MOTION #: SPC-11-134

MOVED BY: KEN FURLONG

SECONDED BY: LES NICHOLS

**WHEREAS** the nineteen Source Protection Committees across Ontario are now developing policies to deal with the twenty-one prescribed threats to drinking water as specified in the Provincial Table of Drinking Water Threats;

**AND WHEREAS** fourteen of those twenty-one threats involve activities that are carried out on farms across Ontario;

**AND WHEREAS** the Ontario Environmental Farm Plan (EFP) program is an excellent tool to evaluate these threats on Ontario farms;

**AND WHEREAS** the Ministry of the Environment (MOE) presently will not recognize EFP as a usable option because it is voluntary and confidential;

**AND WHEREAS** there will be some farm operations within designated vulnerable areas of Wellhead Protection Areas (WHPA) and Intake Protection Zones (IPZ) pursuant to the *Clean Water Act* that will be required to produce "Risk Assessment Plans";

**AND WHEREAS** the present EFP process could stay technically unchanged with the addition of a "sign-off" system that would allow those operations requiring "Risk Assessment Plans" to utilize their EFP as that "Risk Assessment Tool & Plan";

**AND WHEREAS** this would potentially greatly reduce the cost of creating the Risk Assessment Plan and utilize an existing, recognized, proven program developed specifically for agriculture;

**THEREFORE** the Source Protection Committee for Saugeen, Grey Sauble, Northern Bruce Peninsula requests that Ontario Soil & Crop Improvement Association (OSCIA) and EFP staff consult and negotiate with MOE/Source Water Protection staff to make modifications to the EFP

[www.waterprotection.ca](http://www.waterprotection.ca)    [www.svca.on.ca](http://www.svca.on.ca)    [www.greysauble.on.ca](http://www.greysauble.on.ca)    [www.northbrucepeninsula.ca](http://www.northbrucepeninsula.ca)  
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## SECTION I - ITEMS FOR COMMITTEE ACTION

**RES.#234/11** Ad Hoc Technical Working Group recommendation for the acceptance of AMEC report "Issues Evaluation and Threats Assessment Final Report – Drinking Water Quality, Acton and Georgetown Drinking Water Supply Wells, Region of Halton", dated December 1, 2010.

Acceptance of revised AMEC report "Issues Evaluation and Threats Assessment Final Report – Drinking Water Quality, Acton and Georgetown Drinking Water Supply Wells, Region of Halton", dated December 1, 2010.

**Moved by: Bob Burnside**  
**Seconded by: Doug Brown**

**THAT the CTC Source Protection Committee (SPC) accepts the recommendation of the Ad Hoc Technical Working Group as follows:**

**THAT the CTC SPC accepts the revised AMEC report "Issues Evaluation and Threats Assessment Final Report – Drinking Water Quality, Acton and Georgetown Drinking Water Supply Wells, Region of Halton" as a foundation report.**

**CARRIED**

### **BACKGROUND**

RES. #210/10, adopted at CTC SPC Meeting #7/10 directed staff to ensure that revisions to the AMEC report "Issues Evaluation and Threats Assessment Final Report - Drinking Water Quality Acton and Georgetown Drinking Water Supply Wells Region of Halton" version dated September 15, 2010, had been undertaken in a sound manner; and to ensure that the updated version of the report could be recommended to the Source Protection Committee as a foundation report.

Since that time staff has continued to work with the consultant to address concerns raised during the review of the *Proposed Assessment Report Credit Valley Source Protection Area (CVSPA AR)* in November 2010. While an updated threats count had been provided by the consultant prior to CTC SPC Meeting #8/10 held on November 15, 2010, at which time the Proposed CVSPA AR was received for approval, the revised AMEC report was not yet finished. Therefore at the CTC SPC Meeting #8/10 staff was directed under RES. #219/10 to review the revised report, to confirm that the proper methodology was followed, and that the resulting enumeration of threats were undertaken in an appropriate and acceptable manner and to bring the revised report to the Ad Hoc Technical Working Group for their consideration prior to bringing forward to seek CTC SPC acceptance as a foundation document that was used in the preparation of the CVSPA AR.

The threats tallies for Acton and Georgetown, from the September 2010 version of the AMEC report are shown in **Table 1**. Between that time and late November, 2010 the consultant undertook various activities aimed at ensuring that the threat tallies reflected the most precise scientific efforts:

- They worked with the consultant engaged by the CTC aggregate representative, to ensure that the threats mapping was accurate, and that the approach of the South Georgian Bay Lake Simcoe (SGBLS) Accord was appropriately adhered to, and that the work reflected the SGBLS recommendations, especially in the vicinities of pits and quarries. This effort yielded minor adjustments reducing the threat number relating to the storage of road salts and organic solvents,
- They worked carefully with staff from CVC, LSCA and Halton Region to ensure that the threats mapping met the SGBLS Accord. This effort culminated in a November 10, 2010 teleconference with CTC chair (Susan Self), CTC Project Manager (Beverley Thorpe), CTC Project Supervisor (Andrea Dube- Goss), CVC Lead (Kerry Mulchansingh) and Halton Region Source Protection Coordinator (John McIntosh), where the consultant provided a detailed explanation of the methodology utilized to undertake the threats enumeration process. Following this discussion, staff was confident that the SGBLS Accord had been appropriately applied; and that it was consistent with the approach undertaken elsewhere in CTC,
- They personally reviewed the threats database to apply more thorough *quality assurance and quality control (QA/QC) measures* to identify and rectify transcription errors. They explained that the discrepancies identified were not attributed to the improper interpretation of the SGBLS Accord, but were due to tabulation errors, errors committed in assignment of threats in the geodatabase, or as a result of duplicate entries being counted during the spatial analyses of the database. **In short, the threats database had not been subjected to adequate level of QA/QC, as should have been, prior to the release of the first version of the report in September 2010.** Subsequent to the November teleconference staff is fully satisfied that the SGBLS Accord had been appropriately applied and that none of the changes in threat enumerations can be attributed to misinterpretation of the SGBLS Accord,
- Further changes in the enumerated threats was undertaken at the request of CTC staff. They was asked to remove all threats from the tallies related to water softening related activities and septic systems in the issues contributing areas where they would not otherwise be significant threats pending the further review of issues contributing areas (see related agenda Item 7.2). These threats are mainly associated with land activity #2. This resulted in the reduction of 119 and 27 significant threats from the totals for Acton and Georgetown, respectively. The threats associated with issue contributing areas will be enumerated again by one consultant using consistent methodology for the whole CVSPA and included as part of the Updated Assessment Report.

The finalized AMEC report, dated December 1, 2010, was received by staff in mid-December 2010. The final threats tallies for Acton and Georgetown, are shown in **Table 2**.

Based on the aforementioned, staff is fully satisfied that the SGBLS Accord had been applied; consistent with the approach elsewhere in CTC, and that none of the changes in threat enumerations between the first version and final version of the report were attributed to misinterpretation of the SGBLS Accord.

On the foregoing basis, staff recommends that the final report "Issues Evaluation and Threats Assessment Final Report - Drinking Water Quality Acton and Georgetown Drinking Water Supply Wells Region of Halton" version dated December 1, 2010, be accepted as a foundation Source Protection report.

#### **RATIONALE**

Staff has reviewed the updated AMEC report "Issues Evaluation and Threats Assessment Final Report – Drinking Water Quality, Acton and Georgetown Drinking Water Supply Wells, Region of Halton", dated December 1, 2010, and is satisfied that:

- The threats enumeration process undertaken by the consultants is fully compliant with the methodology proposed through the South Georgian Bay Lake Simcoe (SGBLS) Accord,
- The quality assurance/quality control (QA/QC) measures have been thoroughly applied to the threats database to ensure the highest level of reliability; and
- The enumeration of drinking water threats in Acton and Georgetown have been revised to reflect the highest level of accuracy.

The Working Group members considered the report at their meeting on February 16, 2011 and concur with the staff recommendation to accept the revised AMEC report dated December 1, 2010. The report will be posted on the CTC website after acceptance by the CTC SPC, for reference as a foundation report to the *Proposed Assessment Report - Credit Valley Source Protection Area*.

	Acton Water Supply System				Georgetown Water Supply System			
	Threat Level			TOTAL	Threat Level			TOTAL
	Significant	Moderate	Low		Significant	Moderate	Low	
<b>Prescribed Drinking Water Threat</b>								
<b>Non-Managed Lands Threats</b>								
1. The establishment, operation or maintenance of a waste disposal	0	0	0	0	0	0	0	0
2. The establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage.	233	1	0	234	78	1	0	79
9. The handling and storage of commercial fertilizer.	14	23	0	37	1	8	0	9
11. The handling and storage of pesticide.	14	25	0	39	1	17	0	18
12. The application of road salt.	133	0	0	133	159	0	0	159
13. The handling and storage of road salt.	3	0	0	0	2	0	0	2
14. The storage of snow.	0	0	0	0	0	0	0	0
15. The handling and storage of fuel.	23	17	24	64	2	58	0	60
16. The handling and storage of a dense non-aqueous phase liquid.	4	23	37	64	40	28	2	70
17. The handling and storage of an organic solvent.	18	4	69	91	17	13	44	74
3. The application of agricultural source material to land.	82	15	23	120	10	21	11	42
4. The storage of agricultural source material.	59	18	0	77	9	26	0	35
5. The management of agricultural source material.	0	0	0	0	0	0	0	0
6. The application of non-agricultural source material to land.	0	0	0	0	0	0	0	0
7. The handling and storage of non-agricultural source material.	0	0	0	0	0	1	0	1
8. The application of commercial fertilizer to land.	31	18	79	126	0	64	18	82
10. The application of pesticide to land.	52	14	0	66	9	15	0	24
18. The management of runoff that contains chemicals used in the de-icing of aircraft.	0	0	0	0	0	0	0	0
21. The use of land as livestock grazing or pasturing land, outdoor confinement area or a farm-animal yard.	9	1	0	10	4	0	0	4
<b>Total Threats</b>	<b>675</b>	<b>157</b>	<b>232</b>	<b>1064</b>	<b>332</b>	<b>252</b>	<b>75</b>	<b>659</b>
<b>Total Parcels</b>	<b>199</b>	<b>32</b>	<b>110</b>	<b>343</b>	<b>112</b>	<b>83</b>	<b>41</b>	<b>236</b>

Table 1: Threats Tallies – Acton and Georgetown: September 15 Report

	Acton Water Supply System				Georgetown Water Supply System				
	Threat Level			TOTAL	Threat Level			TOTAL	
	Significant	Moderate	Low		Significant	Moderate	Low		
<b>Prescribed Drinking Water Threat</b>									
<b>Non-Managed Lands Threats</b>									
1. The establishment, operation or maintenance of a waste disposal	0	0	0	0	0	0	0	0	0
2. The establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage.	43	62	6	131	1	26	0	27	
9. The handling and storage of commercial fertilizer.	24	13	0	37	1	8	0	9	
11. The handling and storage of pesticide.	14	25	1	40	1	17	0	18	
12. The application of road salt.	135	0	0	135	156	0	0	156	
13. The handling and storage of road salt.	1	0	0	1	1	0	0	1	
14. The storage of snow.	0	0	0	0	0	0	0	0	
15. The handling and storage of fuel.	23	16	27	66	4	66	1	93	
16. The handling and storage of a dense non-aqueous phase liquid.	4	0	39	43	39	41	0	80	
17. The handling and storage of an organic solvent.	18	4	70	92	16	14	43	73	
3. The application of agricultural source material to land.	66	22	24	132	10	20	11	41	
4. The storage of agricultural source material.	59	20	0	79	9	25	0	34	
5. The management of agricultural source material.	0	0	0	0	0	0	0	0	
6. The application of non-agricultural source material to land.	0	0	0	0	0	0	0	0	
7. The handling and storage of non-agricultural source material.	0	0	0	0	0	0	0	0	
8. The application of commercial fertilizer to land.	32	26	83	143	0	64	19	83	
10. The application of pesticide to land.	52	15	0	67	10	15	0	25	
18. The management of runoff that contains chemicals used in the de-icing of aircraft.	0	0	0	0	0	0	0	0	
21. The use of land as livestock grazing or pasturing land, outdoor confinement area or a farm-animal yard.	9	1	0	10	4	0	0	4	
<b>Total Threats</b>	<b>500</b>	<b>226</b>	<b>250</b>	<b>976</b>	<b>252</b>	<b>318</b>	<b>74</b>	<b>644</b>	
<b>Total Parcels</b>	<b>202</b>	<b>95</b>	<b>130</b>	<b>427</b>	<b>141</b>	<b>148</b>	<b>62</b>	<b>351</b>	

Table 2: Threats Tallies – Acton and Georgetown: December 1 Report

Report prepared by: Kerry Mulchansingh, 905-670-1615 extension 383  
 Emails: kmulchansingh@creditvalleyca.ca  
 For Information contact: Kerry Mulchansingh, 905-670-1615 extension 383  
 Emails: kmulchansingh@creditvalleyca.ca Date: January 26, 2011

RES.#235/11

**Ad Hoc Technical Working Group recommendation for the acceptance of delineation of Issue Contributing Areas for Orangeville, Acton and Georgetown water systems, dated February 18, 2011.**

Acceptance of delineation of Issue Contributing Areas for Orangeville, Acton and Georgetown water systems, as presented in the Proposed Assessment Report Credit Valley Source Protection Area, and to include discussion and mapping in the Updated Assessment Report for the Credit Valley Source Protection Area.

**Moved by: Irv Harrell**  
**Seconded by: Lynne Moore**

**THAT the CTC Source Protection Committee (SPC) accepts the recommendation of the Ad Hoc Technical Working Group as follows:**

**THAT the CTC SPC accepts Genivar's Memorandum "Peer Review – Issues Contributing Area, CTC Source Protection Area", dated February 18, 2011 as the rationale for mapping these areas and inclusion in the Updated Assessment Report for the Credit Valley Source Protection Area (CVSPA).**

**CARRIED**

#### **BACKGROUND**

During the November, 2010 public consultation period, for the *Draft Assessment Report Credit Valley Source Protection Area*, it was recommended that the sodium and chloride Issues Contributing Areas at Georgetown be re-evaluated. This comment was made in respect of the fact that although the Lindsay Court Well showed no evidence of exhibiting a sodium and chloride issue, the Issues Contributing Area for sodium and chloride were delineated to include the full extent of WHPA-D for this well.

In considering this comment, a decision was made by CTC that all Issues Contributing Areas be re-evaluated by an independent third party for all the municipal drinking water systems where issues had been identified. This additional review would ensure not only that the most defensible science was utilized, but that it was consistently applied throughout the CVSPA. The decision also recognized the fact that the Issues Contributing Areas for Orangeville and Halton Hills (Acton and Georgetown) were originally delineated by different consultants with different assumptions and outcomes.

Staff contracted Genivar Consultants to review the delineation of Issue Contributing Areas for Orangeville, Acton and Georgetown. After the review they have concluded that the Issues Contributing Areas should be delineated to include the full extent of the WHPA –A to E to protect the wells from both existing and future sources of the contaminants of concern. Genivar Consultants infer that this area represents the appropriate protection from these highly mobile contaminants in groundwater considering both current and future sources of nitrate, sodium or chloride respectively. In addition they concluded that with respect to sodium and chloride issues, it is believed that the major contributor at present is salt applied in winter de-icing

programs. Further work is still required to undertake a more thorough assessment of the sources of each contaminant in each well field and to rank the sources, since any activity which can be a source of the contaminant within the Issue Contributing Area is a significant drinking water threat. This work will be part of the Updated Assessment Report.

With regards to the Lindsay Court well in Georgetown, the consultant cautions that although no issue has been inferred, the well does show evidence of increasing trends in chlorides since being installed in 1996. Furthermore, since the WHPAs of all of Georgetown's wells are superimposed on one another, the Lindsay Court WHPAs are subsumed by the rest. Therefore the sodium and chloride Issues Contributing Areas currently delineated in the report are appropriate and no modification is possible to isolate the WHPA-A to D for the Lindsay Court well.

With regards to the nitrate Issue Contributing Area for the Davidson wells, further analyses was undertaken to confirm with the consulting firm who did the WHPA delineation that there was no need to extend the Issue Contributing Area up-gradient to include the WHPA-E for the Fourth Line well as this is a separate capture area (note - there is no nitrate issue at the Fourth Line well). Therefore staff is satisfied that the Issues Contributing Area delineation for nitrate at the Davidson well in Acton contained in the *Proposed Assessment Report Credit Valley Source Protection Area*, is appropriate and should not be changed.

## **RATIONALE**

Staff was directed to review the delineation of Issue Contributing Areas for Orangeville, Acton and Georgetown water systems, presented in the *Proposed Assessment Report Credit Valley Source Protection Area*, and to update the delineation where deemed necessary;

Staff contracted Genivar Consultants to independently review the delineation of Issue Contributing Areas for Orangeville, Acton and Georgetown. The conclusion of the peer review was as follows:

- The Issue Contributing Area should be delineated as the full extent of the WHPA –A to E for each water system,
- The Issue Contributing Area for sodium and chloride in the Orangeville water system are appropriate as presented in the *Proposed Assessment Report Credit Valley Source Protection Area*,
- The Issue Contributing Area for sodium and chloride in the Acton water system are appropriate as presented in the *Proposed Assessment Report Credit Valley Source Protec*

- The Issue Contributing Area for sodium and chloride in the Georgetown water system are appropriate as presented in the *Proposed Assessment Report Credit Valley Source Protection Area*,
- The Issue Contributing Area for nitrate in the Acton water system are appropriate as presented in the *Proposed Assessment Report Credit Valley Source Protection Area*,

These recommendations were presented to the Ad Hoc Technical Working Group on February 16, 2011 for review in the form of a presentation and Memorandum "Peer Review – Issues Contributing Area, CTC Source Protection Area", by Genivar Consultants (being provided separately).

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**Date: January 26, 2011**

**RES.#236/11**

**Ad Hoc Technical Working Group recommendation for the acceptance of AquaResource report “Orangeville, Mono, and Amaranth Tier Three Water Budget and Local Area Risk Assessment, Final Report”, dated January 2011.**

Acceptance of AquaResource report “Orangeville, Mono, and Amaranth Tier Three Water Budget and Local Area Risk Assessment, Final Report”, dated January 2011 and to include results in the Updated Assessment Report for the Credit Valley Source Protection Area (CVSPA).

**Moved by: Mark Schiller  
Seconded by: Bob Burnside**

**THAT the CTC SPC accepts the recommendation of the Ad Hoc Technical Working Group;**

**THAT the CTC Source Protection Committee accepts the final AquaResource report “Orangeville, Mono, and Amaranth Tier Three Water Budget and Local Area Risk Assessment” as a foundation report and that the results be included in the Updated Assessment Report for the Credit Valley Source Protection Area (CVSPA)'.  
Assessment Report for the Credit Valley Source Protection Area (CVSPA)'.  
Assessment Report for the Credit Valley Source Protection Area (CVSPA)'.  
Assessment Report for the Credit Valley Source Protection Area (CVSPA)'.**

**THAT staff take the necessary action to develop policy options to address the significant drinking threats that have been identified for the consideration of the CTC Source Protection Planning Working Group (SPPWG);**

**AND FURTHER THAT the SPPWG report back to the CTC SPC at a future meeting on the recommended planning options and next steps.**

**AMENDMENT #1  
RES.#237/11**

**Moved by: Mark Schiller  
Seconded by: Bob Burnside**

**THAT paragraph three of the main motion be followed by an additional recommendation and read as follows:**

**THAT future demands on Permits to Take Water be reviewed to minimize the overall impact identified in the Tier Three Assessment.**

**AMENDMENT #1 WAS CARRIED**

**THE MAIN MOTION, AS AMENDED, WAS CARRIED**

**THE RESULTANT MOTION READS AS FOLLOWS:**

**THAT the CTC SPC accepts the recommendation of the Ad Hoc Technical Working Group;**

**THAT the CTC Source Protection Committee accepts the final AquaResource report “Orangeville, Mono, and Amaranth Tier Three Water Budget and Local Area Risk Assessment” as a foundation report and that the results be included in the Updated Assessment Report for the Credit Valley Source Protection Area (CVSPA)'.**

**THAT staff take the necessary action to develop policy options to address the significant drinking threats that have been identified for the consideration of the CTC Source Protection Planning Working Group (SPPWG);**

**THAT future demands on Permits to Take Water be reviewed to minimize the overall impact identified in the Tier Three Assessment;**

**AND FURTHER THAT the SPPWG report back to the CTC SPC at a future meeting on the recommended planning options and next steps.**

**CARRIED**

## **BACKGROUND**

The *Technical Rules* (2009) requires that a Tier 3 Water Budget Assessment be undertaken where moderate or higher water quantity stress in subwatersheds that are used as a source of municipal drinking water has been identified. In the CVSPA the Tier 2 Water Budget Study identified subwatersheds with municipal water wells serving all or parts of the Towns of Orangeville, Mono, Halton Hills and for the Township of Amaranth, as having moderate groundwater quantity stress. A Tier 3 Water Budget study has been completed for the Orangeville, Mono and Amaranth area under the direction of the Ministry of Natural Resources as a pilot project which not only assesses the drinking water quantity threats in the study area but also serves as a basis to develop the technical rules to govern other Tier 3 water budget studies. At the SPC meeting, members will receive a presentation from Mike Garraway the project lead from the Ministry of Natural Resources on the project.

Municipal drinking water supplies of Orangeville, Mono and Amaranth are sourced from within Subwatershed 19, in the headwaters area of the CVSPA, while those of Halton Hills are drawn from within Subwatersheds 10 and 11, respectively. The Tier 3 Water Budget Study for the Halton Hills area is still under development by the Region of Halton.

### **Overview Purpose and Requirements of Tier 3 Water Budgets**

The overall objective of the Tier 3 Water Budget Assessment is to determine whether a municipality is able to meet its planned water quantity requirements, considering increased municipal water demand to serve planned population growth, future land development which could reduce recharge, drought conditions, and other major water uses. There is no assessment of the ability to meet current demands as this is considered to be addressed through the current permit to take water.

The Tier 3 Water Budget Assessment is to:

- Estimate the likelihood that a municipal drinking water source is able to sustain its allocated (existing plus committed or planned) pumping rates, while maintaining the requirements of other water uses (e.g., ecological requirements); and
- Identify water quantity threats on the drinking water sources that may influence the

municipality's ability to meet their allocated pumping rates. A drinking water quantity threat is defined (*Technical Rules (2009)*) as any consumptive water demand or any activity that reduces recharge to an aquifer. These include municipal and non-municipal demands as well as changes in land use.

The two major components of the Tier 3 Water Budget Assessment are:

- The Tier 3 Water Budget Model - Developed using numerical groundwater and surface water models, which are used to evaluate localized hydrogeologic or hydrologic conditions at a water supply well or surface water intake. The Tier 3 Water Budget represents a better understanding compared to the Tier 2 Water Budget, in terms of the model simulation and representation of groundwater movement between and across subwatershed boundaries. This is made possible by refinements in the geological conceptualization and subsurface characterization of the Study Area, particularly in the vicinity of municipal wellheads and surface water intakes. The refinements in the conceptual model are then incorporated into the Tier 3 numerical models.
- The Local Area Risk Assessment - The evaluation of a series of risk scenarios within the Local Areas. Local Areas are the vulnerable areas that are delineated to protect the quantity of water required by a municipality to meet their current or future water needs. The Tier 3 Water Budget Model was used to delineate the Local Area for municipal groundwater wells in the Study Area.

Once the Tier 3 Water Budget Models have been calibrated and validated, and the Local Areas delineated, the Local Areas Risk Assessment are undertaken within them. The Local Area Risk Assessment involves evaluation of risk scenarios within the Local Areas. A series of risk scenarios were derived to represent existing and allocated pumping rates as well as current and planned land uses. The scenarios were used to simulate the response of groundwater and surface water fluxes and levels, to variations in pump rates (demand) and in land use (impact of reducing recharge through increased impermeable areas); and in so doing, allow for an assessment of the future sustainability of the municipal water source. The risk assessment scenarios also consider the water demands of other uses, particularly those that must be maintained by provincial or federal law such as wastewater assimilation flows and the ecological flow requirements of coldwater fish habitats and wetlands.

The risk scenarios used the calibrated surface water and groundwater flow models to estimate changes in water levels in the municipal supply aquifer, and to estimate the impacts to groundwater discharge and baseflow under average and drought climate conditions.

The *Technical Rules (2009)* define a drinking water quantity threat as any consumptive water demand or any activity that reduces recharge to an aquifer. These include municipal and non-municipal demands as well as changes in land use. As such, a detailed characterization of water demand, available drawdown (level of water that must be maintained in the aquifer so that the pump in the well can operate at the designated pumping rate as identified by the municipality), consumptive usage, and planned land use change are undertaken within the Local Areas.

Where the scenarios identify the potential that a well will not be able to supply their allocated rates, the Local Area is assigned a 'moderate' or 'significant' water quantity risk level. Once the risk level is assigned to the Local Area, activities within the Local Area, that reduce recharge to

the aquifer, or that remove water from an aquifer without returning it to the same aquifer (consumptive) are identified as drinking water threats.

The drinking water threats within the Local Area are classified as low, moderate or significant depending on the risk level assigned to the Local Area. If the risk level is significant, then all consumptive water uses and reductions in recharge are classified as significant drinking water threats within that Local Area.

Part IX.1 to Part IX.4 of the *Technical Rules (2009)* and MOE and Ministry of Natural Resources Bulletin (MOE and MNR, 2010) set the requirements and deliverables for the Local Area Assessment and Risk Level.

### *Tier 3 Methodology*

The major steps completed for Tier 3 Water Budget and Local Area Risk Assessments, were:

- 1) Develop and calibrate Tier 3 Water Budget Model – Numerical surface water and groundwater models created to simulate the movement of surface water and groundwater in the Study Area.
- 2) Characterization of Municipal Wells and Intakes - detailed characterization of wells and intakes, specifically identifying the low water operating constraints of those wells and intakes.
- 3) Estimation of Allocated Quantity of Water – assessment of existing, committed, plus planned demand (pumping rates) for municipal wells.
- 4) Characterization of Other Water Uses – identification of other uses that might be influenced by municipal pumping and identify water quantity constraints according to those other uses.
- 5) Characterization of Future Land Use - this typically involves a comparison of Official Plans with current land use and incorporates assumptions relating to additional imperviousness from future developments.
- 6) Characterization of Drinking Water Quantity Threats – consumptive demand, land use change.
- 7) Delineation of Water Quantity Vulnerable Areas (WHPA-Q1 and WHPA-Q2), and the Local Area – these areas are delineated using the Tier 3 Water Budget Model.
- 8) Evaluation of the Risk Scenarios within the Local Area- assessed in terms of the municipalities’ ability to pump water at each well along with the impact to other water uses.
- 9) Assignment of Risk Level - a risk ranking (low, moderate, and significant) is assigned to each of the vulnerable areas based on the results of the scenarios.
- 10) Identification of Drinking Water Quantity Threats and Areas Where They Are Significant and Moderate.

### **Findings of Tier 3 Water Budget Assessment for Orangeville, Mono and Amaranth Wells in CTC Source Protection Region**

Four Local Areas were delineated within the Study Area based on assessing the potential interactions amongst clusters of wells and drinking water threats were assessed for each of them (map being provided separately). Based upon the results of the Risk Assessment Scenarios, only Local Area A was assigned a 'Significant' risk level based on the following circumstances:

1. The allocated quantity of water for Orangeville Well 5/5A was not met in Scenario G(1) (**Table 1**). Most of the drawdown impact in this scenario is due to recharge reduction;
2. The allocated quantity of water for Orangeville Wells 5/5A, Well 6, Wells 9A/9B and Cardinal Woods Well 3 is not met in Scenario H(1) (Drought, Table 1). Drawdown at Wells 5/5A and Well 9 is impacted primarily due to recharge reductions. Well 6 and Cardinal Woods Well 3 are influenced more by planned pumping rates;
3. The allocated quantity of water for Orangeville Well 6 and Cardinal Woods Well 3 is not met in Scenario H(2) (Drought, Planned Pumping, Table 1); and
4. Groundwater discharge to Mill Creek, a designated cold-water stream, is reduced by more than 20% in Scenario G(2) (Average Climate, Planned Pumping, Table 1).

The Local Areas B, C, and D were assigned a 'Low' Risk Level as the well systems in each area are simulated to be able to meet their allocated quantity of water without impacting other uses or being impacted by reduction in recharge from current approved growth plans or from drought simulations.

The Towns of Orangeville and Mono have never historically had problems meeting required pumping rates, even during periods of higher water demand prior to the implementation of water conservation measures. The risk level categories do not indicate a problem associated with current municipal wells and their current pumping rates; rather, they reflect a need to manage the drinking water resources in the Local Areas to protect against future problems.

Furthermore, the results indicate a need to manage the drinking water as a regional resource shared by the Towns of Orangeville and Mono, and the Township of Amaranth.

Based on the provisions of the Technical Rules (2009), four Local Areas, - A, B, C, and D, were delineated. The risk assessment scenarios undertaken in the Local Areas are shown in Table 1.

Scenario	Time Period	Model Scenario Details			Model Simulation
		Land Cover	Municipal Pumping		
C	Period for which climate and stream flow data are available for the Local Area (2008)	Existing	Existing		Steady-state, Average Annual Recharge
D	10 year drought period	Existing	Existing		Transient (1960-2006); Monthly recharge rates (HSP-F)
G(1)	Period for which climate and stream flow data are available for the Local Area	Planned or existing plus committed (Official Plan)	Planned plus Existing plus Committed		Groundwater Recharge Reduction and Increase in Demand
G(2)		Existing	Planned plus Existing plus Committed		Groundwater Discharge Reduction from Increase in Demand
G(3)		Planned or existing plus committed (Official Plan)	Existing		Groundwater Recharge Reduction from Land Cover
H(1)	10 year drought period	Planned or existing plus committed (Official Plan)	Planned plus Existing plus Committed		Groundwater Recharge Reduction and Increase in Demand
H(2)	10 year drought period	Existing	Planned plus Existing plus Committed		Groundwater Discharge Reduction from Increase in Demand
H(3)	10 year drought period	Planned or existing plus committed (Official Plan)	Existing		Groundwater Discharge Reduction from Increase in Demand

Table 1: Risk Assessment Model Scenarios

## Significant Water Quantity Threats

### Water Demands

Since Local Area A was assigned a Risk Level of Significant, all consumptive demands lying within this Local Area are classified as Significant Water Quantity Threats. These are shown in **Table 2**. The consumptive water users include the permitted water demands (e.g. municipal pumping) and non-permitted water demands (e.g. domestic water wells).

As the Risk Level in the Local Areas B, C and D is Low, there are no moderate or significant water quantity threats in those areas.

### Recharge Reduction

The *Technical Rules (2009)* also specify reduction in groundwater recharge as a potential water quantity threat within the Local Area. The Tier 3 Scenarios considered the impact of existing and future land development on groundwater recharge and the resulting impact on water levels in the municipal aquifer at the wells. All Reductions in groundwater recharge within Local Area A are also classified as Significant water quantity threats. The proposed land use developments include residential subdivisions, employment areas, industrial and institutional areas, and undifferentiated suburban lands.

Local Area	Local Area Risk Level	Permitted Consumptive Demand (Threat)	Threat Classification
A	Significant	Well 2A	Significant
		Wells 5/ 5A	Significant
		Well 6	Significant
		Well 7	Significant
		Well 8B	Significant
		Well 8C	Significant
		Wells 9A/ 9B	Significant
		Well 11	Significant
		Well 12	Significant
		Pullen Well	Significant
		Cardinal Woods Well 1	Significant
		Cardinal Woods Well 3	Significant
		Cardinal Woods Well 4	Significant
		B	Low
Island Lake TW1	-		
C	Low	Coles Wells 1	-
		Coles Wells 2	-
D	Low	Orangeville Well 10	-

Table 2: Consumptive Water Uses

## **RATIONALE**

The *Technical Rules* (2009) require that a Tier 3 Water Budget Assessment be undertaken for the Towns of Orangeville, Mono, Halton Hills and for the Township of Amaranth, since their municipal water supplies are drawn from within subwatersheds identified in the Tier 2 Water Budget Study, as having moderate groundwater quantity stress. The Tier 3 Water Budget Assessment for Orangeville, Mono and Amaranth under the supervision of the Ministry of Natural Resources (MNR), was contracted to AquaResources, Inc. The work was subject to extensive expert peer review by Dr. Rick Gerber and Chris Neville on the groundwater side, and Kevin MacKenzie for surface water aspects. The the final report is currently being reviewed by the peer reviewers to confirm that they are satisfied with the way their final comments have been addressed.

Knowledgeable CVSPA staff have reviewed and are satisfied that the report "Orangeville, Mono, and Amaranth Tier Three Water Budget and Local Area Risk Assessment, Final Report" provides a solid technical foundation to identify drinking water quantity threats and will use the report as a basis to prepare the relevant portions of the updated assessment report.

Mike Garraway presented the findings and answered the questions of the Ad Hoc Technical Working Group on February 16, 2011. Mr. Garraway will be making the same presentation to the CTC SPC as a whole at the request of the Ad Hoc Technical Working Group. Municipal technical representatives have been involved throughout the study and were present at the February 16, 2011 meeting. Affected municipalities will receive a full technical briefing on the final results and implications from Ministry of Natural Resources staff and consultants on March 23, 2011.

The Ad Hoc Technical Working Group recommends to the CTC Source Protection Committee that the report "Orangeville, Mono, and Amaranth Tier Three Water Budget and Local Area Risk Assessment, Final Report" be accepted as a foundation report.

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**Date: February 16, 2011**

**Attachments:** Map being provide separately as part of the presentation material.



- Runoff and erosion control which included Agricultural Beneficial Management Practices including fencing for livestock restriction, buffer planting and manure management; and
- Pollution Prevention Reviews covering the cost of an environmental audit and action plan for small and medium businesses with 200 or fewer employees.

In the first phase of the **Early Actions Program** (2007-2008), the province allocated money to the 19 SPRs. The CTC Source Protection Region (SPR) received \$253,179. Although initial uptake was slow for the first year, mailings to property owners and 295 site visits were conducted to inform landowners of the program. **Attachment #1** outlines the 63 projects that were completed with the first phase of funding. Unallocated funding from 2007-2008 was carried forward into 2009.

In 2009-2010 the CTC applied for further **Early Actions Program** funding and received \$501,000. To date we have funded 119 projects (**Attachment #2**). A total of \$96,000 in unallocated funds will be carried forward to be disbursed through an extension to our Early Actions Program agreement.

### **Early Response Program**

With the submission of the Proposed Assessment Reports to the province, the focus of the ODSWP shifted, and became more targeted to threats identified in the reports. This program has been renamed **Early Response**, and is still a voluntary program for landowners.

At meeting SPC #7/10, held on September 27, 2010, RES. 212/10 directed stewardship staff to apply for funding for **Early Response Program**, with priority on the following threats:

- The establishment, operation, or maintenance of a system that collects, stores, transmits, treats, or disposes of sewage;
- The application of commercial fertilizer to land;
- The handling and storage of commercial fertilizer;
- The application of pesticide to land;
- The handling and storage of pesticide;
- The application of road salt;
- The handling and storage of road salt;
- The storage of snow;
- The handling and storage of fuel;
- The handling and storage of a dense non-aqueous phase liquid (such as TCE, Mercury or other Chlorinated Solvent); and/or
- The handling and storage of an organic solvent.

As outlined above, stewardship staff were directed to apply for Early Response Program funding for a number of priority significant threats. Activities that contribute to increasing chloride, nitrates and sodium concentrations in "Issue Contributing Areas" have been identified as the first priority by the SPC for funding support.

For the Early Response Program, \$124,492 has been awarded to the CTC and is being shared in a 60/40 split between the Credit Valley Source Protection Area (CVSPA) and the Toronto and Region Source Protection Area (TRSPA), respectively. The Central Lake Ontario Source Protection Area (CLOSPA) did not identify any significant groundwater drinking water threats in their Assessment Report, and thus is ineligible to receive Early Response Program funding. Administration of these funds is on a first come, first serve basis to assist eligible landowners with approved projects that meet the priorities of the SPC. The CTC will focus on three funding categories in 2011-2012, including septic systems, Agricultural Beneficial Management Practice and a water softener rebate program.

The priority area for septic funding is in parts of the community of Acton. Project funds will assist in reducing nitrate levels in groundwater. Priority lands will be identified to focus the limited amount of grant funding on those parcels that could contribute to a municipal well with a nitrate issue.

The priority for Agricultural Beneficial Management Practice projects will be in the community of Acton. It will focus on owners of agricultural lands with confirmed threat activities as listed above. Project funds will assist in reducing nitrate levels in groundwater. The suite of projects eligible for funding will include:

- nutrient management planning;
- manure storage or composting structures;
- barnyard runoff collection/ prevention systems;
- washwater storage or treatment;
- silage storage and leachate collection/ prevention;
- synthetic fertilizer storage or leak/ spill prevention;
- drainage water management systems; and/or
- soil erosion control measures, fencing and alternative watering systems to restrict livestock access to water sources.

The water softener rebate program is a new category that was developed by stewardship staff at the CVSPA. This program is for homeowners who have upgraded their existing low efficiency water softener to reduce sodium and chloride loading to groundwater. Property owners near certain wells in the communities of Orangeville, Acton and Georgetown that are on a septic system will be eligible for the water softener rebate.

The priority in the TRSPA will be those applicants in a vulnerable area around a well that has been ranked as having a high vulnerability to surface activities. Priority parcels will be identified in Caledon East and Whitchurch-Stouffville. The Agricultural Beneficial Management Practices and the septic projects will be the priority in these two communities.

**Application and Approval Process**

CTC **Early Response Program** applications will be reviewed by a Technical Review Committee (consisting of Beverley Thorpe, Don Ford and Kerry Mulchansingh) to assess the projects based on the priorities established by the CTC SPC.

The schedule for Technical Review Committee meetings will be posted on the CTC web site at [www.ctcswp.ca](http://www.ctcswp.ca) and updated as required based on the remaining funding available. Also, all application forms and an application guide(s) will be posted on the web site.

In order to receive funding, applications must be approved by the Technical Review Committee, completed, paid in full, and all documentation requested submitted to conservation authority staff by December 1, 2012.

**NEXT STEPS**

Staff are working to develop communication materials and strategy around the new Early Response Program and are anticipating an April 1, 2011 launch of the program.

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**Date: February 22, 2011**

**Attachments: 2**

**Attachment #1 - 2007-2008 Funded Projects**

Area	Well Projects	Septic Projects	Pollution Prevention Reviews	Runoff Protection
Acton		1		
Alton		2		
Erin			2	1
Hillsburgh		2		
Orangeville	2	4	1	
Caledon		1		
King City	1	44		
Nobleton		1		
Stouffville		1		

**Attachment #2 - 2009-2010 Funded Projects**

Area	Well Projects	Septic Projects	Pollution Prevention Reviews	Runoff Protection
Acton	1			
Alton	1	5		
Erin	16	5		1
Georgetown	1	11		
Hillsburgh		1		
Orangeville	1	2		
Caledon		4		
King City	1	67		
Nobleton		1		

**RES.#240/11 Source Protection Plan Working Group (SPP WG) Update.**

Follow-up from Source Protection Plan Groundwater Policy Options Workshop #1– Waste and Sewage; and Update on Workshop #2 – Agricultural Source Material, Non-Agricultural Source Material, Commercial Fertilizer, Pesticide and Livestock, held on February 22, 2011 at Black Creek Pioneer Village.

**Moved by: Doug Brown**  
**Seconded by: Bob Burnside**

**THAT the SPC receive this report for information.**

**CARRIED**

**BACKGROUND**

At SPC Meeting #1/11 held on January 25th staff brought forward a report (Item 7.1) detailing the format of Workshop #1 – Waste and Sewage and identified successes and shortcomings of the process. This was also discussed at the same SPC meeting by SPC members who were in attendance at the workshop. SPC members noted a number of issues from the workshop that needed to be addressed:

- participants had not read the materials in detail beforehand;
- the policy options presented in the Discussion Paper required more expert input before being discussed at the workshop;
- the evaluation criteria process was not as effective as planned;
- more technical expert resource people were required; and
- greater effort was needed to ensure subject matter experts from the SPC were allotted sufficient time to speak.

Staff are aware of these issues and a number of changes were made to the workshop process to deal with them. The changes to address these concerns have been described further below.

As part of the Workshop #1 deliverables, a Workshop Report detailing the proceedings of Workshop #1 was prepared by the workshop note-takers and approved for distribution by CTC staff. The report was made available for download from the CTC Source Protection web portal on February 9th, 2011, and all workshop attendees were given two weeks to provide comments on the accuracy of the report. Comments were due February 23rd, 2011 with comments being received from one SPC member. The revised final Workshop Report #1 is expected to be posted to the CTC Source Protection web portal imminently.

The content of the report includes summaries of the presentations made, a record of general comments made during break-out discussions, a summary table of comments and considerations for each potential policy discussed during the break-out sessions, and a short list of policy options based on the discussions by the break-out groups. Policies were developed using all of the policy tools available except for *Clean Water Act (CWA) Part IV* tools regarding s.57 Prohibition, s. 58 Risk Management Plans, and s. 59 Restricted Land Uses as these policy tools are not allowed to be applied to waste and sewage threats. Please see Workshop Report #1 for details on the specific policy options recommended for future consideration by the SPC.

## **WORKSHOP #2**

The second of five facilitated workshops to formulate Source Protection Plan (SPP) Groundwater Quality policy options was held on February 22, 2011 at Black Creek. A total of 80 people were invited to attend the workshop from various stakeholder groups with 52 people actually attending (participant list included as **Attachment 1**).

The second workshop dealt with five related threat activities - the application, handling and storage of: 1) Agricultural Source Material (ASM); 2) Non-Agricultural Source Material (NASM); 3) Commercial fertilizer; 4) Pesticides; and 5) the use of land as Livestock grazing or pasturing lands and farm-animal yards/outdoor confinement areas. One week prior to the workshop all invitees were advised by email that the workshop materials, as prepared by the consultants and approved for distribution by CTC staff, were available for download from the CTC Source Protection web portal. These materials included a Workshop Agenda, Discussion Paper #2: ASM, NASM, Commercial Fertilizer, Pesticide and Livestock, and four Ministry of Environment (MOE) Bulletins pertaining to the threats. Members who did not attend the workshop will receive copies at the March 1st SPC meeting to insert in the Planning Workshop binders previously distributed to all workshop attendees and SPC members.

Similar to Discussion Paper (DP) #1, DP #2 provides information including: specific details for each of the ASM, NASM, Commercial Fertilizer, Pesticide and Livestock significant drinking water threats (SDWT), including definitions; where and why it is a DWT; the local scale of the threat; existing relevant legislation, policies and programs; and examples of potential policies to address the threat for both existing threats and possible future threats. (See DP #2 Table #s 4, 5, 11, 12, 15, 16, 20, 21, 26 and 27 for the specific policy options presented for discussion purposes to address existing and future SDWT).

DP #2 is different from DP #1 in two ways: 1) there is no policy evaluation table; and 2) unlike for Waste and Sewage threats where CWA part IV tools are not permitted to be used, all of the policy tools are permitted to be used for ASM, NASM, commercial fertilizer, pesticide and livestock, including the Part IV policy tools regarding s.57 Prohibition, s. 58 Risk Management Plans, and s. 59 Restricted Land Uses.

Workshop #2 followed a similar format as Workshop #1 (see previous report to the SPC) with the following adjustments based on the lessons learned from the first workshop.

### **Presentations on the policy tools and options**

After Workshop #1 it was apparent that many participants did not read the background material fully prior to the workshop. To overcome this problem presentations on the policy tools and options, in addition to the nature of the threats, were included in Workshop #2 and will be included in the remainder of the workshops. The evaluation sheets returned at the conclusion of the workshop showed some improvement in this area as most respondents felt the plenary and break-out group presentations were beneficial to their understanding of the topic area. A total of five threat categories were discussed at this workshop, which one participant felt were too many to thoroughly understand. A few participants also felt that the presentations should contain more detailed or specific information on the existing regulatory regime governing the threat categories. While this may be possible to add in future discussion papers, this additional background material was also provided by the invited resource people.

### **Formulation of more robust, creative and comprehensive policy options**

It was determined the suite of policy options in the discussion paper needed to be expanded to include more diverse tools and options, while also highlighting the key approaches of addressing threats by “managing, phasing out or prohibiting”. To address this concern a small-group policy development working session was held prior to the scheduled SPP Working Group (WG) and SPP Steering Committee (SC) meeting on February 8th, 2011 in order to provide technical expertise input to the discussion paper at an earlier stage. The small group met from 9am-2:30pm and included CTC staff, the consultants and invited SPC members with subject matter expertise on the threats. The group worked through each threat to refine the policies the consultants had compiled prior to the meeting, which resulted in policies that were further simplified and consolidated. The vast majority of workshop evaluation sheet responses rated the overall structure of the workshop and the break-out discussion groups as effective. Several specific comments provided characterized the discussions as "frank, informative and collaborative - a good opportunity for learning". From this, staff conclude that the extra work spent up front by the small-group policy development team was effective and will continue for the remainder of the workshops prior to the SPP WG and SPP SC meetings. Based on the threats for the workshop topic, subject matter experts from the SPC will be invited to participate.

### **Spend more time on policy options rather than evaluation criteria**

During the break-out group sessions at Workshop #1 it became clear that the time the group spent on evaluating the various policy options was not the best use of their time. It was agreed that the break-out groups should spend more time on discussing and developing policy options instead of evaluating them against criteria, as the evaluation process was seen as a task for the SPC to work through at their three-day CTC SPC Working Session on Policy from June 20-23, 2011. At Workshop #2, the evaluation process was removed altogether which proved to be a more effective use of participants time. Verbal comments from attendees at the workshop indicated their agreement with this change. No written comments were provided on the workshop evaluation sheets that disagreed with this approach.

### **More resource people required**

After Workshop #1, many participants commented that it would be beneficial to have subject matter experts available throughout the day to help the group consider all of the implications. Subject matter experts were present at Workshop #1, but only for the afternoon due to their schedules. More than twice as many subject matter experts (eight not counting SPC members) attended Workshop #2 and they were in attendance for the full amount of time their topic was being discussed. The majority of evaluation sheet comments indicated that it was very beneficial to the discussions to have these folks in attendance, as they provided detailed knowledge on the existing regulatory regime, operational best management practices and possible gaps that SPP policies could address. However, several respondents felt that some of the invited, outside (i.e. non-SPC member) agricultural resource people crossed the line from information provider to lobbyist. While staff were aware that this could happen prior to inviting these specific resource people to the workshop, staff never-the-less felt that they provided excellent technical background material as well as possible policy options that should be considered by the SPC.

### **Ensure SPC members with subject matter expertise are given more time to speak**

As discussed at the January 12th SPC meeting, SPC members who attended the workshop felt the break-out group conversations were dominated by planners while other participants with expertise weren't given a fair chance to speak. The consultants were made aware of this concern and at Workshop #2 the consultants made a conscious effort to ensure participants spoke in turn, stayed on topic and specifically called upon SPC participants with subject matter expertise to provide their views and advice. Staff hold the opinion that consultants achieved the objective of ensuring the discussion was not dominated by any one person or interest group and that SPC members in particular were able to voice their opinions without constraint. Several comments on the evaluation sheets specifically commended the consultant facilitators for conducting the discussions in an even-handed manner.

### **POST-WORKSHOP EVALUATION AND NEXT STEPS**

16 workshop evaluation sheets were returned from participants. The vast majority were mostly positive in their assessment of the utility and effectiveness of the Toolkit and Discussion Paper, the break-out discussion groups, the presentations provided by the consultants to introduce the workshop and threat topic areas, as well as the overall structure of the workshop. Staff believe that the changes made to the workshop format, as described above, have been successful and will be continued into subsequent workshops. No additional changes to the structure of the workshops are being proposed by staff at this time.

Similar to Workshop #1, two documents are being produced by the consultants following Workshop #2. Workshop Report #2 will be compiled similar to that of Workshop Report #1 (see BACKGROUND section above for content information) and will be produced in time for its discussion at the March 10 meeting of the SPP WG & SPP SC. It will be made available to SPC members afterwards, via the portal.

The second document will not be a new document, but rather an updated Discussion Paper #2, that incorporates any comments submitted after the workshop to address factual errors or omissions from the original paper. New or revised policy options will be included in the Workshop Report #2, as described above, as well as incorporated into the final policy options paper that will be the key deliverable from the consultants to the SPC as part of the overall final Policy Options Discussion Paper for May, 2011.

As the above documentation for Workshop #2 is being compiled, planning for Workshop #3 is underway. Workshop #3 will deal with SDWT from the handling and storage of fuel, dense non-aqueous phase liquids (DNAPLs), organic solvents, salt and snow. Draft Discussion Paper #3 will be provided to SPP WG and SPP SC members for their review one week prior to their next meeting on March 10. A revised DP #3 will be available to all workshop invitees one week prior to the workshop date on March 29. The format of the workshop will once again be revised where possible to address comments from participants. Resource people are being invited from several organizations to attend the workshop. SPC members with subject matter expertise will be invited to contribute their expertise to the small group policy development working sessions prior to the SPP WG & SPP SC meeting on March 10.

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**Date: February 18, 2011**

**Attachments 1:**

Workshop Invitees and Participants		
CTC Groundwater Quality Policy Options		
Workshop #2 - ASM, NASM, Commercial Fertilizer, Pesticide and Livestock		
February 22, 2011		
<b>Source Protection</b>	Doug Brown	✓
<b>Committee Members</b>	Wendy Burgess	✓
	Bob Burnside	✓
	Michael D'Andrea	x
	Louise Foster	x
	Michael Garrett	x
	Robert Goodings	✓
	Irv Harrell	x
	Laura McDowell	x
	Peter Miasek	✓
	Lynne Moore	✓
	John Presta	x
	Fred Ruf	✓
	Mark Schiller	x
	Norine Schofield	x
	Howard Shapiro	x
	John Westlake	✓
<b>SPC Working Group</b>	Juli Abouchar	x
<b>Members</b>	Andrea Bourrie	x
	Jessica Ginsburg	✓
	Dave Kentner	✓
	Heather Laidlaw	✓
	Peter Orphanos	x
	Susan Self	✓
<b>Steering Committee</b>	Laura Atkins-Paul (York Region)	x
<b>Members</b>	Rodney Bouchard (Peel Region)	x
	Richard Clark (Credit Valley Conservation)	x
	Chris Darling (Central Lake Ontario Conservation Authority)	✓
	Mark Head (Peel Region)	✓
	Chi Izirein (Town of Caledon)	✓
	John Linhardt (Town of Halton Hills)	✓
	Greg Lymer (Durham Region)	✓
	Tammy Silverstone (York Region)	✓
	James Siver (Town of Orangeville)	✓
<b>Municipal</b>	Sarah Cannon (Halton Region)	✓
<b>Representatives</b>	Gary Cousins (County of Wellington) - Aldo Salis as sub	✓
	Mark Early (Town of Mono)	x
	Christine Gervais (Township of Amaranth)	✓
	Tony Iacobelli (City of Vaughan)	✓
	Stephen Kitchen (Township of King)	x
	John McIntosh (Halton Region)	✓
	Andrew McNeely (Town of Whitchurch-Stouffville)	x
	Robert Muir (Town of Markham)	x
	Shelley Partridge (Halton Region)	✓
	Nancy Rutherford (Durham Region)	x
	Frank Smedley (Town of Erin)	x
	Margaret Smith (Halton Region)	✓
	Sally Stull (Town of Erin)	✓
	Richard Vandezande (Township of Uxbridge)	✓
<b>Project Managers</b>	Diane Bloomfield (Halton-Hamilton SPR)	x

## 11. NEW BUSINESS

**TERMINATION**

**ON MOTION, the meeting terminated at 2:30, on Tuesday March 1, 2011.**

**TERMINATION**

**ON MOTION, the meeting terminated at 2:30., on Tuesday March 1, 2011.**

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