



Halton-Hamilton
Source Protection
Region

SPC Meeting

December 11, 2018

Diane Bloomfield, Manager

Agenda Item 7. - S.36 Work Plan Submission

SPC resolution - “That the Halton Region and Hamilton Region Source Protection Authorities will be advised that the Halton-Hamilton Source Protection Committee endorses the “Work Plan for a Comprehensive Review and Update of the Halton Region and Hamilton Region Source Protection Plans” as presented at the Source Protection Committee meeting held October 9, 2018 and revised based on comments received.”

- Comments Received from
 - Puslinch/Wellington
 - Halton Region
 - MECP
 - CH SPA Board
- SPA meetings November 1 and 22 – endorsed/approved submission of the work plan to the Ministry

S.36 Work Plan Comments Received

- Typo corrections
- Support for what was included in the work plan
- Clarification on who will do the work
- Clarification on policy amendments regarding geographic references and a user manual
- Text edit for the decommissioning of Walkers Line wellfield
- Clarification on the assessment of HVAs and SGRAs for possible threats
- Expanding the sharing of blue-green algae tracking to all Great Lakes
- Inclusion of Acton in discussion of Halton Hills

S.36 Work Plan Comments Received

- MECP considers policies T-16-S a. and T-23-S a. - requests for stewardship funding to be implemented because

“the Ministry has implemented its commitment to review and consider these policies and will continue to report on the actions resulting from the review of these policies. The Ministry continues to work with our partners to assess how and what funding is required to support activities that would ensure drinking water sources are protected.”

Text was revised to state the MECP considers the policies implemented -

“However, the source protection committee and our municipal stakeholders still desire to have funding available to assist the agricultural community.”

- Clarification on work required for pipeline and bulk fuel re-assessments
- Clarification on policy development for Guelph-Guelph/Eramosa WHPA-Q
- Clarification on date of submission of amended plan

Agenda Item 10. Communications

Hamilton Cable 14

- Bob and Glenn interview on City Matters – November 5, 2018

Hamilton Winter Maintenance

- Six Hamilton winter maintenance training sessions
- External contractors
- Part-time and full-time employees
- Approximately 275 person

- Key messages
 - optimize road salt use
 - Collect data

- What we heard
 - Operators know they use more salt than necessary
 - Due to Hamilton's level of service – bare residential roads
 - Highest level of service in the province

The 3Ps



Did you know?

Only the 3Ps (pee, poo and toilet paper) are safe to flush down your toilet. Help defend your throne with Richard the Turd, Sir Peeter and the Duchess of Swirl. Keep everything else out of your pipes.

Learn more at [hamilton.ca/OwnYourThrone](https://www.hamilton.ca/OwnYourThrone)



Richard the Turd



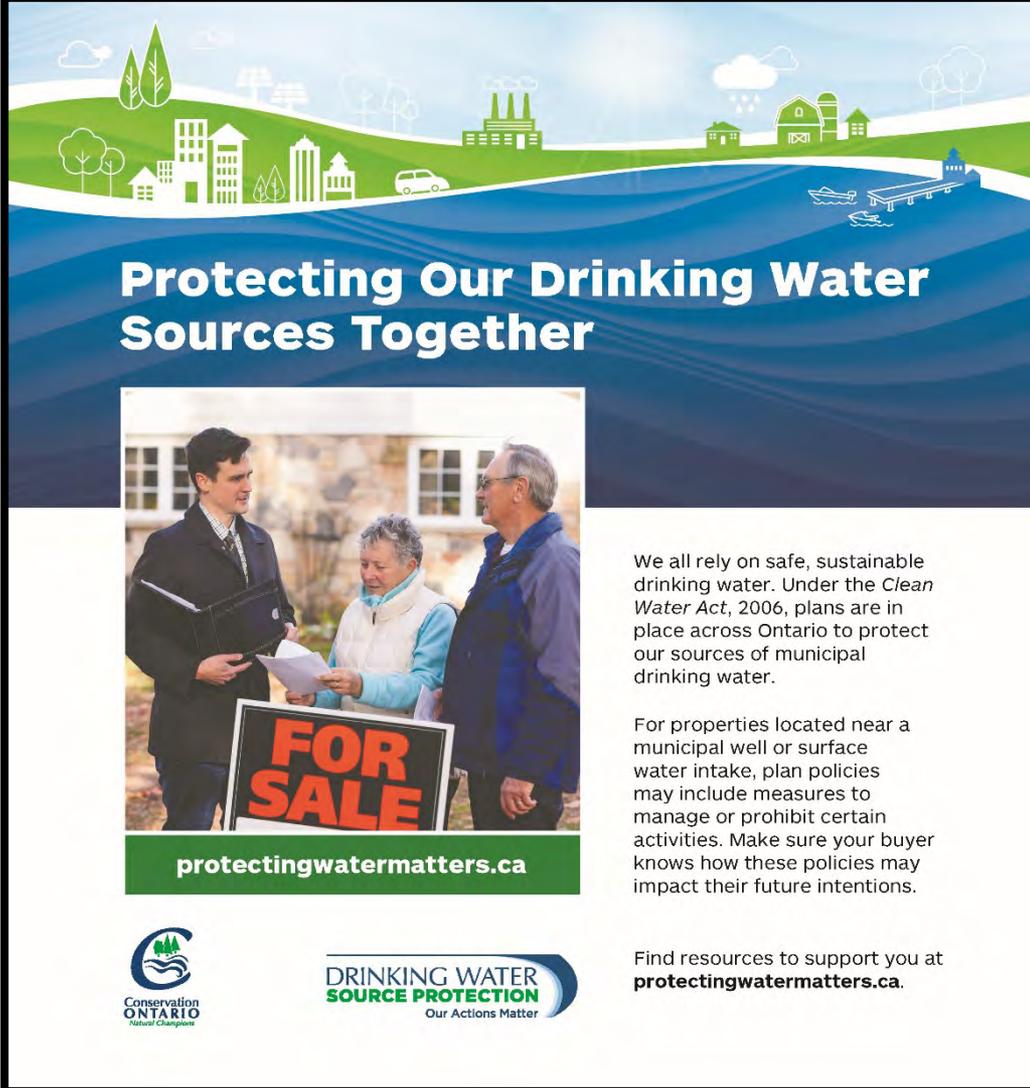
Sir Peeter



Duchess of Swirl

Conservation Ontario Outreach

- CO continues to produce advertisements, primers, infographics, etc. for CA and municipal use
 - Latest resources include
 - Aggregate factsheet
 - Municipal councillor primer
 - Real estate magazine ad
 - Spills Response
 - Drinking water source protection videos
- <https://bit.ly/2QhRj7q>



Protecting Our Drinking Water Sources Together

We all rely on safe, sustainable drinking water. Under the *Clean Water Act*, 2006, plans are in place across Ontario to protect our sources of municipal drinking water.

For properties located near a municipal well or surface water intake, plan policies may include measures to manage or prohibit certain activities. Make sure your buyer knows how these policies may impact their future intentions.

Find resources to support you at protectingwatermatters.ca.

protectingwatermatters.ca

 **Conservation ONTARIO**
Natural Champions

DRINKING WATER
SOURCE PROTECTION
Our Actions Matter

Agenda Item 11.

Source Protection News

Ontario Auditor General 2018 Report Highlights

Technical Safety and Standards Authority (TSSA)

- relies on the oil and natural gas pipeline operators to conduct their own inspections
 - every five years it audits the pipeline operators' inspection records
- does not periodically inspect other areas in the fuel sector such as ... private fuel-storage tanks that pose a threat to source water
- where a fuel storage site is abandoned and the owner cannot be located, whatever fuel contamination there is at the site remains
 - no one from whom to recover the cost
- TSSA is aware that some fuel-oil distributors are delivering oil into leaky tanks and tanks that pose a high risk of carbon monoxide release, but has done nothing to deal with this safety hazard

Environmental Commissioner of Ontario

2018 Environmental Protection Report – Clean Water: Back to Basics

- Chapter 1 – Protecting Ontario’s drinking water from pollution - effectiveness of the Clean Water Act
- Chapter 2 – Polluting our waters - gaps in provincial laws

What was reviewed?

- Eight representative source protection plans – urban, rural, across Ontario
- Three threats
 - manure and other agricultural source materials
 - waste disposal sites
 - Fuel
- Over 500 policies in detail out of 12,500 across Ontario
- Explanatory Documents for each plan reviewed
- Interviews – CA, municipal, MECP, OMAFRA

Chapter 1 – Clean Water Act

Review Questions:

1. Did the watershed planning approach work?
 - “SPCs proved to be committed and capable arbiters, creating policies that thoughtfully weighed the financial consequences of complying with more onerous policies without sacrificing the ultimate goal of drinking water safety.”
2. Is the Clean Water Act improving the safety of most Ontarians’ drinking water?
 - “...these actions should over time reduce the risk of spills and unsafe discharges to municipal drinking water sources...”
3. What’s missing?
 - Not all sources are protected
 - Some threats are not adequately addressed
 - Secure ongoing funding and resources

A few specific references to policies within the Halton-Hamilton plan were included for waste and fuel threats

- update emergency plans, instructions on spill response and stickers for fuel tanks

ECO Recommendations For Clean Water

MECP to:

- use source protection knowledge and tools to protect other water sources
- amend Technical Rules to include above-grade outdoor fuel storage tanks as significant threats
- add TSSA instruments related to liquid fuels to list of prescribed instruments under the Act
- take action to address historical conditions that are significant threats

OMAFRA to: amend nutrient management plans for farms within vulnerable area for compliance with source protection policies

Ontario government to: commit steady-state, multi-year funding for the source protection program

Chapter 2 – Polluting our waters

Examined – four significant sources of major pollutants

1. raw municipal sewage – a major source of pathogens like *E. coli*, that spoil some Ontario beaches
2. agricultural runoff – a major source of phosphorus, that contributes to algae blooms
3. industrial wastewater – a major source of metals and other toxic chemicals, that can harm aquatic animals and potentially humans
4. road salt – a major source of sodium and chlorides, that damage aquatic ecosystems and can render sources of drinking water undrinkable

Why they are significant:

- each discharges into Ontario waters in large quantities
- each causes major harm
- current Ontario laws and policies do not effectively control them

Compounded by population growth and climate change

ECO Recommendations to Stop Pollution

1. raw municipal sewage

- MECP - ECA obligation to adopt a Pollution Prevention Control Plan to eliminate combined sewer overflows
- MECP and MOI - achieve full-cost recovery for stormwater and sewage systems

2. agricultural runoff

- OMAFRA – monitor publically funded BMPs for use
- OMAFRA – in most impaired watersheds require farms to assess nutrient runoff risks and submit a plan to minimize that risk
- Ontario government – ban the spreading of manure and fertilizer on frozen, snow-covered or saturated ground
- Ontario government – adopt clear targets, effective monitoring and financial incentives for dramatic reductions in phosphorus runoff from farms

ECO Recommendations to Stop Pollution

3. industrial wastewater

- MECP – update regulatory and approval limits to require use of best available technology to minimize toxic substances discharged into waters, and eliminate discharges of persistent toxic substances

4. road salt

- MECP and MTO – compare cost-effectiveness of alternatives – cost of product and negative impacts on infrastructure, environment and drinking water supplies
- MECP and MMAH – require municipalities to adopt a salt management plan and review and publicly report on their effectiveness
- Ontario government – require winter maintenance contractors to be certified in the proper use of salt on publicly owned or open to the public lands
- Ontario government – adopt a law that provides liability protection for landowners and contractors who use up-to-date technologies and snow management practices to achieve road safety with the minimum amount of salt

A Made-in-Ontario Environment Plan

- ERO # 013-4208
- Comment period ends January 28, 2019
- Guiding Principles
 - Clear rules – strong enforcement
 - Trust and transparency
 - Resilient communities and local solutions
- Aim – to address four key environmental challenges
 1. Protecting our air, lakes and rivers
 2. Addressing climate change
 3. Reducing litter and waste in our communities and keeping our land and soil clean
 4. Conserving land and greenspace

Positive references to the source protection program

Environment Plan Actions – clean water

Continue work to restore and protect our Great Lakes

- Build on previous successes and continue efforts – RAP, Canada-Ontario Great Lakes Agreement
- Review and update Great Lakes Strategy – reduce excess algae and contaminants along shore and reduce salt entering waterways

Continue to protect and identify vulnerable waterways and inland waters

- Build on ministry's monitoring and drinking water source protection activities to ensure that environmental impacts from road salt use are minimized – BMPs, certification, alternatives
- Ensure sustainable water use and water security for future generations
 - Review water taking policies, programs and science tools ensure adequately protected and sustainably used
 - Enhance how we manage water takings – climate change and growth – exam approaches to assessing and managing multiple water takings, establish priorities for uses, prepare and respond to drought
- Ensure knowledge gained through DWSP program helps inform our water management programs

Environment Plan Actions – clean water

Help people conserve water and save money

- Water conservation planning, water use tracking and reporting, improving standards for household fixtures and appliances, profiling provincial and public sector leadership

Improve municipal wastewater and stormwater management and reporting

- Real-time monitoring of sewage overflows
- Update policies re municipal wastewater and stormwater to make them easier to understand – consider financing
- Encourage investment and innovation in managing wastewater that overflows into our lakes and rivers

Environment Plan - other

- Increase the redevelopment and clean-up of contaminated lands in Ontario to put land back into good use
- Make it easier and safer to reuse excess soil
- Improve management of hauled sewage

Commitments

- Regular reporting on progress – key indicators
- Review the environment plan every four years

Bill 66 - Restoring Ontario's Competitiveness Act

Schedule 10: MMAH

- Introduce a new economic development tool and remove planning barriers to expedite major business investments and speed up approvals by about two years.
 - Proposed open-for-business planning tool (ERO # 013-4125)
 - New Regulation under the Planning Act for Open-for-Business Planning Tool (ERO # 013-4239)

Schedule 5: MECP

- Repeal the Toxics Reduction Act, 2009 by 2021, remove the toxics reduction plan in 2019 and rely on the robust and science-based Federal Chemicals Management Plan
 - Repeal the Toxics Reduction Act, 2009 and all associated regulations by December 31, 2021 (ERO # 013-4234)
 - Planning and reporting changes under the toxics reduction program and Ontario Regulation 455/09 (ERO # 013-4235)

Bill 66 - Restoring Ontario's Competitiveness Act

- ERO Posting # 013-4293, comments due January 20, 2019 (45 days)
- No regulations yet that will explain the criteria and conditions under which a by-law would be approved
- By-laws do not have to comply with prescribed provisions in the *Clean Water Act*, *Greenbelt Act, 2005*, *Great Lakes Protection Act*, *Lake Simcoe Protection Act, 2008*, *Oak Ridges Moraine Conservation Act, 2001*, *Resource Recovery and Circular Economy Act, 2016* and other provincial statutes

Bill 66 and the *Clean Water Act*

- CELA – “In our view, the attempt in Bill 66 to oust the application of section 39 of the *Clean Water Act* to “open-for-business” zoning by-laws is particularly objectionable and risk-laden.”
- section 39 requires all *Planning Act* decisions to conform to policies in approved source protection plans that address significant drinking water threats
- “...we note that Mr. Justice O’Connor’s report on the Walkerton Inquiry identified overzealous provincial deregulation, budget cuts and staffing reductions as major contributing factors that resulted in the deaths of seven persons (and serious illnesses in thousands of other residents) after drinking contaminated municipal tap water.”
- “CELA is extremely disappointed to see that the lessons from the Walkerton Tragedy are being discounted or ignored by the current Ontario government.”
- Provincial legislature resumes sitting in February 2019

Halton-Hamilton Land Use Policies

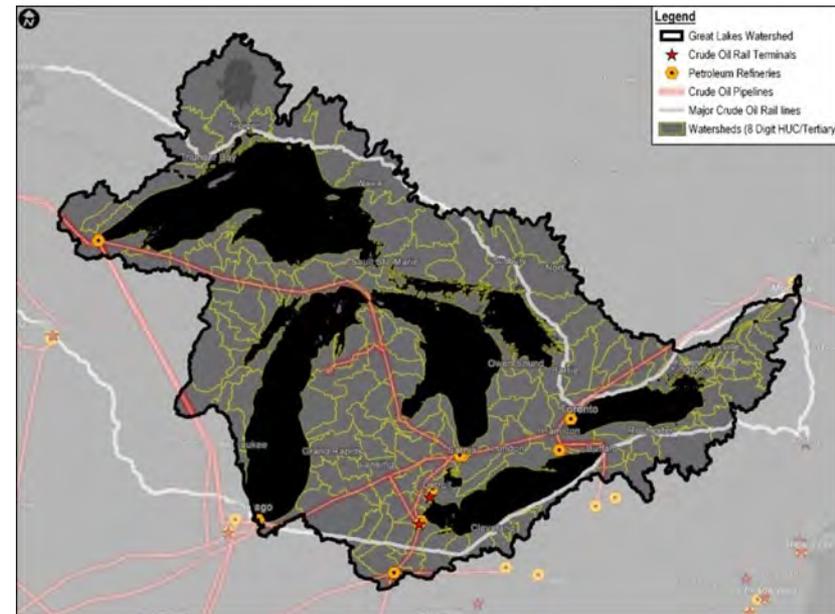
- source protection plan policies that use land use planning tools would not apply
 - 12 policies
 - Prohibit waste disposal sites, road salt storage, snow storage, and gas stations where significant
 - Manage locations of septic systems, stormwater ponds
 - Disclosure reports
 - Maintain recharge

How would oil spills affect the Great Lakes?

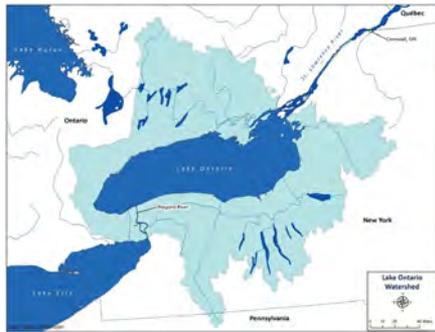
- From IJC Newsletter Great Lakes Connection, December 10, 2018
- Great Lakes Science Advisory Board report – released October 2018
- Observed and potential impacts of crude oil spills on Great Lakes water quality and ecosystem health, vulnerability to oil spills and potential responses
- Potential impacts from oil spills are affected by its density and viscosity
 - Will it spread, evaporate, disperse, dissolve or settle?
- Where it spills is also important
 - Move into larger lakes from connecting rivers
 - Spread due to complex currents
 - Seasonal obstacles, such as winter ice cover
- https://ijc.org/en/how-would-oil-spills-affect-great-lakes?utm_source=IJC+Newsletters&utm_campaign=78495d5fc6-EnglishEMAIL_CAMPAIGN_Dec18&utm_medium=email&utm_term=0_e942718880-78495d5fc6-375589117

Oil spill impacts - Findings

- All levels of the aquatic food chain would be impacted
- Risk of a spill affecting drinking water is significant
- 15 areas of ecological vulnerability to crude oil spills
 - Based on amount of exposure, sensitivity of the area, how resilient the area may be, type and amount of oil released
 - Sites near pipelines, rail corridors or refineries
- Adequate response to minimize damage is critical
 - Challenges due to ice, heavier crudes, sensitive habitats
- Report identifies science gaps and recommends research on impacts and improving siting and design



2017 Great Lakes Water Use Report



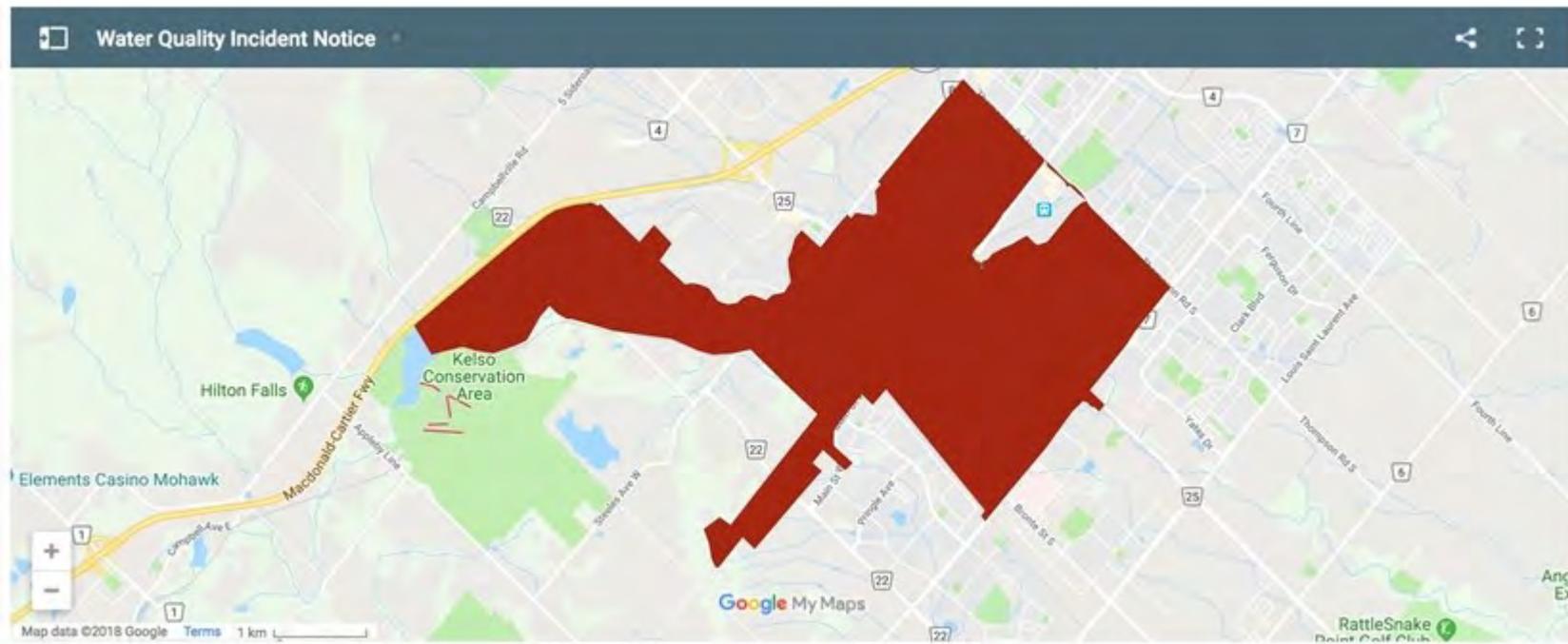
Annual Report of the Great Lakes Regional Water Use Database Representing 2017 Water Use Data by Great Lakes Commission

Table 9b. Lake Ontario Watershed 2017 Water Use Data Summary in mld

Sector	Withdrawals				Diversions		Consumptive Use
	GLSW	OSW	GW	TOTAL	Intrabasin	Interbasin	
Public Water Supply	2,771	761	50	3,582	6	37	445
Self-Supply Commercial & Institutional	0	158	3	161	0	0	32
Self-Supply Irrigation	0	25	8	33	0	0	30
Self-Supply Livestock	0	64	69	133	0	0	13
Self-Supply Industrial	1,412	788	148	2,348	0	0	272
Self-Supply Thermoelectric Power Production (Once-through cooling)	28,550	550	0	29,100	0	0	320
Self-Supply Thermoelectric Power Production (Recirculated cooling)	1,549	1	0	1,550	0	0	78
Off-Stream Hydroelectric Power Production	0	227	0	227	0	0	0
In-Stream Hydroelectric Water Use	155,745	372,973	0	528,718	0	0	0
Other Self Supply	3	2,838	0	2,841	-13,176	121	123
Total	190,029	378,385	278	568,692	-13,170	158	1,312

In millions of liters per day; Water Sources: Great Lakes surface water (GLSW), other surface water (OSW) and groundwater (GW); totals may not sum exactly due to rounding

Boil Water Advisory - Milton



- Boil water advisory – precautionary - Milton
- Friday, December 7 through Sunday, December 9
- Watermain break due to construction – 300 mm PVC pipe