

Thames – Sydenham and Region Drinking Water Source Protection Source Protection Committee Discussion Paper

Report to Chair and members
Thames – Sydenham and Region
Source Protection Committee

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Cc SP Management Committee

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Prepared By Brad Glasman, Coordinator,
Conservation Services, UTRCA
Linda Smith, Drinking Water Source
Protection Stewardship

Re: Early Response Program – Ontario Drinking Water Stewardship Program

Background

The recently announced Early Response (ER) component of the Ontario Drinking Water Stewardship Program will financially assist landowners who volunteer to carry out:

- Projects and activities that address significant drinking water threats as identified in the assessment report, and/or,
- Well decommissioning to address systems in which transport pathways increase vulnerability scores, and/or,
- Interim Risk Management Plans (negotiated between landowners and municipalities)

Framework Laid Out by the Ministry of the Environment

The Ministry of the Environment (MOE) has laid out the framework for the ER Program. Within that framework there is some flexibility for the Program to be tailored to meet the needs of the specific Region.

Key Points of the MOE’s Framework:

1. The only eligible funding recipient is the lead Conservation Authority (CA) for a Source Protection Region, and that Region must have one or more of the Source Protection Areas’ (SPA) Proposed Draft Assessment Report(s) posted. The lead CA will manage the ER Program funds, providing them to the other CAs within the Region as required.
2. Projects cannot begin until the application has been approved by the MOE and the Agreement has been signed by both the MOE and the lead Authority. This will likely be in early 2011 (April). Projects must be completed by December 31, 2012.
3. The ER Program will only fund measures that address one or more of the 21 prescribed drinking water threats where they are determined to be significant. Measures to address

- “issues” or “conditions” identified in a draft or proposed assessment report will not be funded.
4. A project cannot be funded where the landowner is under regulatory order to undertake the activity.
 5. To ensure consistency, maximum grant rates and caps have been set by the MOE. For measures determined to have an equivalent Early Actions type activity, the grant rates and caps previously used in the Early Actions modules (Well Decommissioning and Upgrading, Septic System Inspections and Upgrades; Runoff and Erosion Protection and Additional Best Management Practices) will be used. Early Action grant rates and caps are listed below. Note, there is no measure in the ER Program that is equivalent to the activities in the Pollution Prevention Review module.

For measures determined **not** to have an equivalent Early Actions type activity, the ER Program will fund projects at the following levels:

- Landowners, farmers, small and medium sized businesses (less than 500 total employees) and small municipalities (less than 20,000 residents) are eligible for **80% of the total cost** of the ER project.
 - Large businesses (more than 500 total employees) or large municipalities (greater than 20,000 residents) are eligible for funding of **50% of the total cost** of the ER project.
6. Retroactive projects cannot be funded under the ER Program. The only exception will be for measures determined to be equivalent to Early Actions type projects that have been completed since September 19, 2006 and that address a significant drinking water threat that has been identified in a draft proposed assessment report and been prioritized for action by the source protection committee.
 7. The deadline for submitting the ER Program application to MOE is September 30, 2010. No extensions will be granted.

Discussion

Strategy for Delivery of Early Response Program in the Thames-Sydenham and Region:

In the case of the Thames-Sydenham and Region, the Upper Thames River Conservation Authority is the lead CA and as such, will submit the application for ER funding and manage the program. Draft Assessment Reports will have been posted for all three SPAs by the application submission date. The program will be implemented by technical staff from both the UTRCA and the LTVCA.

There are 1204 locations of potential significant threats to municipal drinking water in the Thames-Sydenham and Region. The Region intends to continue using a targeted approach to promote the

stewardship program by communicating with landowners and businesses that are eligible for this funding.

Each of the landowners owning property with potential significant threats has been sent a letter explaining that they may be engaged in activities which would be a significant threat to the municipal drinking water sources. These landowners will receive an information package explaining the Early Response program and grant opportunities.

Follow up phone calls and site visits by local staff will be coordinated in order to maximize involvement. Public meetings will also be held in key areas based on where there is the greatest number of potential significant threats. The Ontario Farmers Association representatives will be involved to help engage local farmers. Media releases will be circulated to promote the program and highlight projects as they are completed.

Authority technical staff will collect and prepare all applications for review by the Clean Water Steering Committee which will include representatives from the Upper Thames River and Lower Thames Valley Source Protection Areas, the Source Protection Committee and the Ontario Soil and Crop Improvement Association.

Criteria for Prioritizing Threats

Threats to be addressed by the Early Response program must be prioritized by the Source Protection Committee. Technical staff from the Upper Thames River and Lower Thames Valley Conservation Authorities has developed a recommended approach to prioritizing threats for the Source Protection Committee's consideration using a number of criteria:

- 1) the number of locations that the significant threat is potentially occurring (what are the most prevalent types of threats, see chart provided below);
- 2) the type of actions that are available within the Early Response program to deal with the threat (is there a fundable activity that would address the threat);
- 3) how likely is the activity to be undertaken by landowners;
- 4) cost effectiveness; and
- 5) technical staff experience.

Significant Threats Across the Region:

Type of Threat	Number of locations for Potential Significant Threats		
	UTRCA	LTVCA	Region Total
The establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage	384	30	414

Type of Threat	Number of locations for Potential Significant Threats		
	UTRCA	LTVCA	Region Total
The handling and storage of a dense non-aqueous phase liquid	285	7	292
The handling and storage of fuel	203	49	252
The application of agricultural source material to land	68	5	73
The application of pesticide to land	40	2	42
The application of commercial fertilizer to land	36	4	40
The application of non-agricultural source material to land	26	5	31
The use of land as livestock grazing or pasturing land, an outdoor confinement area or a farm-animal yard.	11	2	13
The storage of agricultural source material	11	1	12
The handling and storage of commercial fertilizer	9	2	11
The handling and storage of pesticide	7	3	10
The establishment, operation or maintenance of a waste disposal site within the meaning of Part V of the Environmental Protection Act	7	-	7
The handling and storage of an organic solvent	5	2	7
Total	1092	112	1204

The technical staff reviewed the threats and threat subcategories for each of the drinking water systems where potential significant threats occurred in an effort to estimate the potential uptake of specific early response measures. In most cases, a visual survey was also undertaken.

Based on the criteria outlined above, staff recommends that the lead SPA apply for funding to the Early Response program to fund activities designed to address the following threats:

1. The establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage

- Activities to include inspection, flushing/ cleaning out lines and replacing / installing conventional and advanced systems in both farm/non-farm circumstances.
2. Transport Pathways
 - Activities include upgrading wellheads and properly decommissioning unused wells that will result in a decreased vulnerability score of the transport pathway.
 3. Handling and Storage of Fuel
 - Activities to include relocating tanks; installing double walled tanks and/or full enclosure at loading area, backflow prevention, and leak and spill prevention measures and equipment and construction of a storage facility.
 4. Handling and Storage of DNAPL
 - Activities to include hazardous waste and battery collection events and installation of temporary storage tanks.
 5. Application of Manure/Fertilizer & Pesticides to Land
 - Activities include the use of GPS units, installation of vegetative buffer strips, berms, and modifying equipment.

Early Actions Grant Rates and Caps

Module	Details	Grant Rate & Cap
Well Decommissioning & Upgrading	Grants are available to decommission old wells, to upgrade wells that are still in use or to connect to a municipal drinking water service line and decommissioning the old well.	80% \$4,000
Septic System Inspection & Upgrades	Grants are available for septic system inspections, repairs, upgrades, or replacing part or all of a faulty septic system.	80% \$7,000 for conventional systems \$12,000 for advanced systems
Runoff & Erosion Protection and Additional BMPs	Grants are available for a wide variety of projects including erosion control, nutrient management planning, farmyard runoff control, improved manure storage and handling and others.	Grants range from 25% - 70 % and have a maximum grant rate of \$1,000 - \$30,000