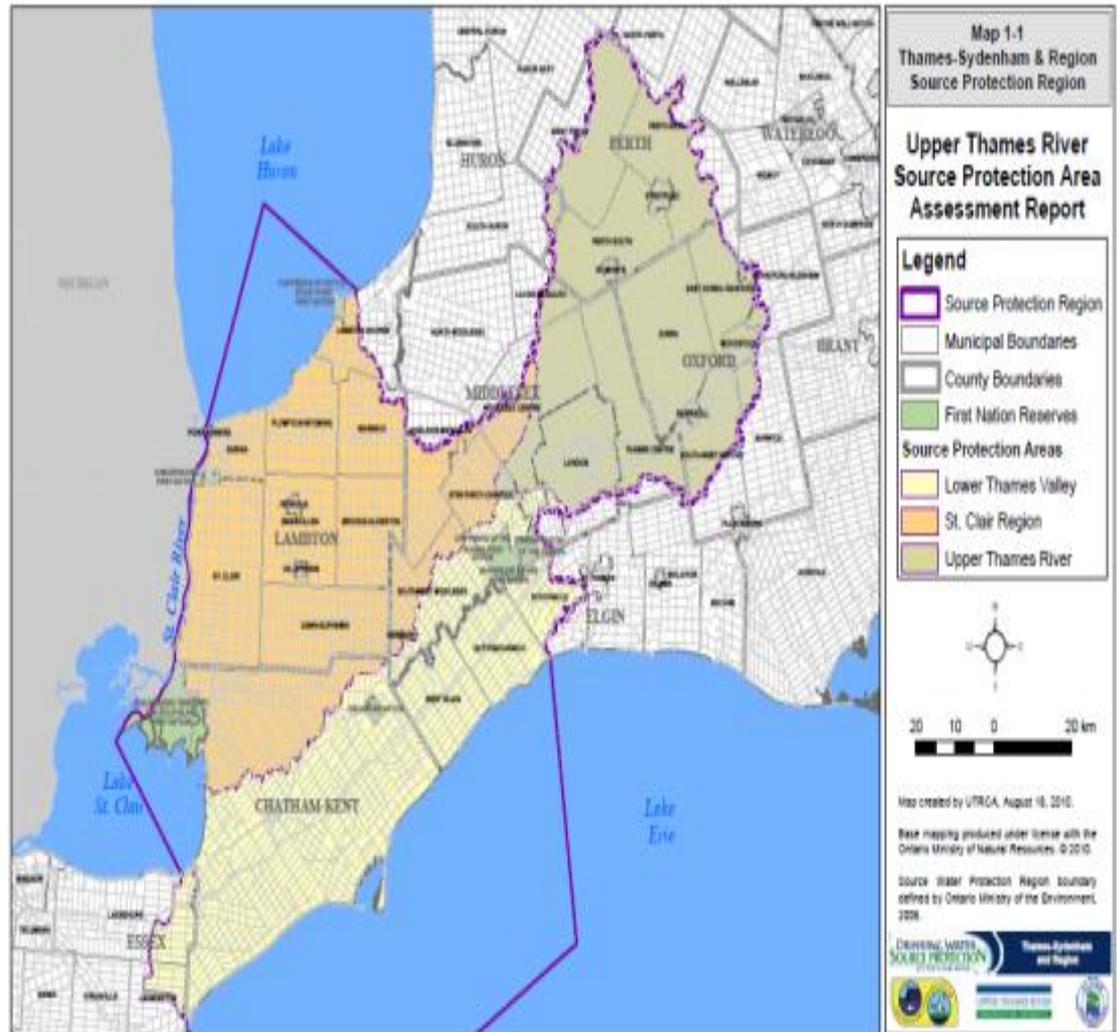# Source Water Protection

Clean Drinking Water for All

Background

The purpose of the Clean Water Act is to protect existing and future sources of drinking water. In this area, the Upper Thames River, Lower Thames Valley and St. Clair Region Conservation Authorities have partnered together to coordinate the development of Source Protection Plans for our watersheds. They are committed to work with our municipalities, other stakeholders and the public to develop Source Protection Plans that serve to protect our drinking water while taking into account the other needs of our communities.
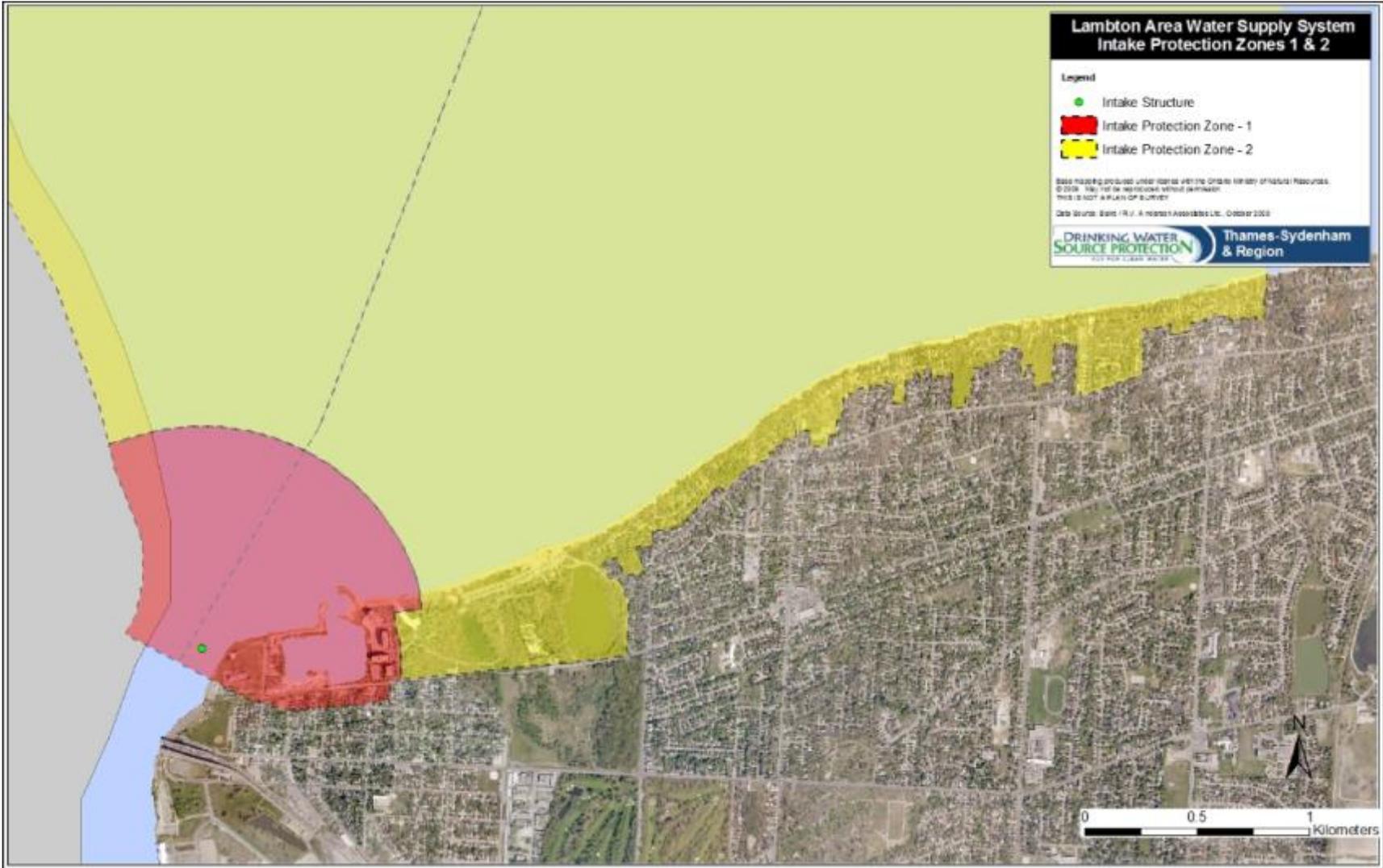

Map 1-1
Thames-Sydenham & Region
Source Protection Region

Upper Thames River
Source Protection Area
Assessment Report

Legend
- Source Protection Region
- Municipal Boundaries
- County Boundaries
- First Nation Reserves

Source Protection Areas
- Lower Thames Valley
- St. Clair Region
- Upper Thames River

Source Water Protection

What is a Drinking Water Threat?

- A drinking water threat is an *"activity or condition that adversely affects or has the potential to adversely affect the quality or quantity of any water that is or may be used as source of drinking water"*.

- As part of the study of the Lambton Area Water Supply System Intake Protection Zones, specific threats and areas where potential threats could occur were identified. It was found that there were no significant threats. Only low and moderate threats were identified in the vulnerable areas for this intake. The table below indicates the number of locations for which potential threats were identified.

Lambton Area Water Supply System
Intake Protection Zones 1 & 2

Legend

● Intake Structure

Intake Protection Zone - 1

Intake Protection Zone - 2

21 Drinking Water Threats – St. Clair Region

1. The establishment, operation or maintenance of waste disposal site within the meaning of Part V of the Environmental Protection Act.
2. The establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage.
3. The application of agricultural source material.
4. The management of agricultural source material to land.
5. The application of non-agricultural source material to land.
6. The handling and storage of non-agricultural source material.
7. The application of commercial fertilizer to land
8. The application of pesticides to land.
9. The handling a and storage of pesticides.
10. The application of road salt.
11. The handling and storage of road salt.
12. The storage of snow.
13. The handling and storage of fuel.
14. The handling and storage of a dense non-aqueous phase liquid (such as the common solvent trichloroethylene, are more dense than water and they tend to sink)
15. The handling and storage of an organic solvent.
16. The management of runoff that contains chemicals used in the decicing of aircraft.
17. An activity that takes water from an aquifer or a surface water body without returning the water taken to the same aquifer or surface water body.
18. An activity that reduces the recharge of an aquifer.
19. The use of land as livestock grazing or pasturing land, an outdoor confinement area or a farm-animal.

WE NEED YOUR HELP!

<u>What are you concerned about?</u>

What are your fears or concerns about our water system?	What do you think about our drinking water?
Over the years, how have our drinking water changed?	Do you have a preference ? Bottle water vs. Tap water
How have things changed over the years?	Traditional Knowledge?
Best management practices?	Traditional Territory?

What you can do to help protect our water system

- Use non-toxic products for cleaning and environmentally-friendly soaps, shampoos and personal care products.

- Prevent pollutants from entering into runoff by reducing or eliminating the use of pesticides, fertilizers, sidewalk salts and by not over-watering your lawn.

- Dispose of hazardous waste properly

- Conserve your water. Not only is conserving water helpful to maintaining a constant supply of drinking water, too little water in a source can mean contaminants are more concentrated and, therefore, may be above acceptable levels.

- Clean up pet waste which contains nutrients and pathogens that can run into storm sewer during a rain storm

- Take care when refueling gas tanks for cars, lawn mowers, other machinery to avoid spilling fuel on the ground. Also take care when changing engine oil. One litre of gas or oil can contaminate a million litres of groundwater.

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All life depends on water to live – protect it!