DRINKING WATER SOURCE PROTECTION

ACT FOR CLEAN WATER

UPPER THAMES RIVER CONSERVATION AUTHORITY

Your property is in an Intake Protection Zone

What is an Intake Protection Zone?

Intake Protection Zones are the areas of land and water around municipal water intakes where special care must be taken in the use and handling of potential contaminants.

A spill or a leak in this area may threaten the drinking water supply so quickly that there may not be enough time to warn the system's operator to shut down the water intake.

South Chatham-Kent Water Treatment Plant

The intake at Erie Beach on Lake Erie feeds the Chatham Water Treatment Plant (WTP) which supplies treated water to Chatham and Thamesville as well as central and northern parts of Chatham-Kent. The maximum flow rate capacity of the Chatham WTP is 68,190 m3/day and population served is 60,000 . The same intake also provides raw water to the South Chatham-Kent WTP which supplies water to the lower portion of the Municipality of Chatham-Kent. This plant has a capacity of 22,800 m3/day and service a population of 10,500.

Open House

Monday, November 9,
or Tuesday, November 10, 2009
3:00 p.m. – 7:00 p.m.

Merlin Agricultural Hall
150 Aberdeen St., Merlin, ON

Plan to attend one of these Open Houses to learn about your local Intake Protection Zone and see detailed maps showing what properties are within the zone.

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 Chatham 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 threats were identified in the vulnerable areas for these intakes. The tables below indicate the number of potential threats identified.

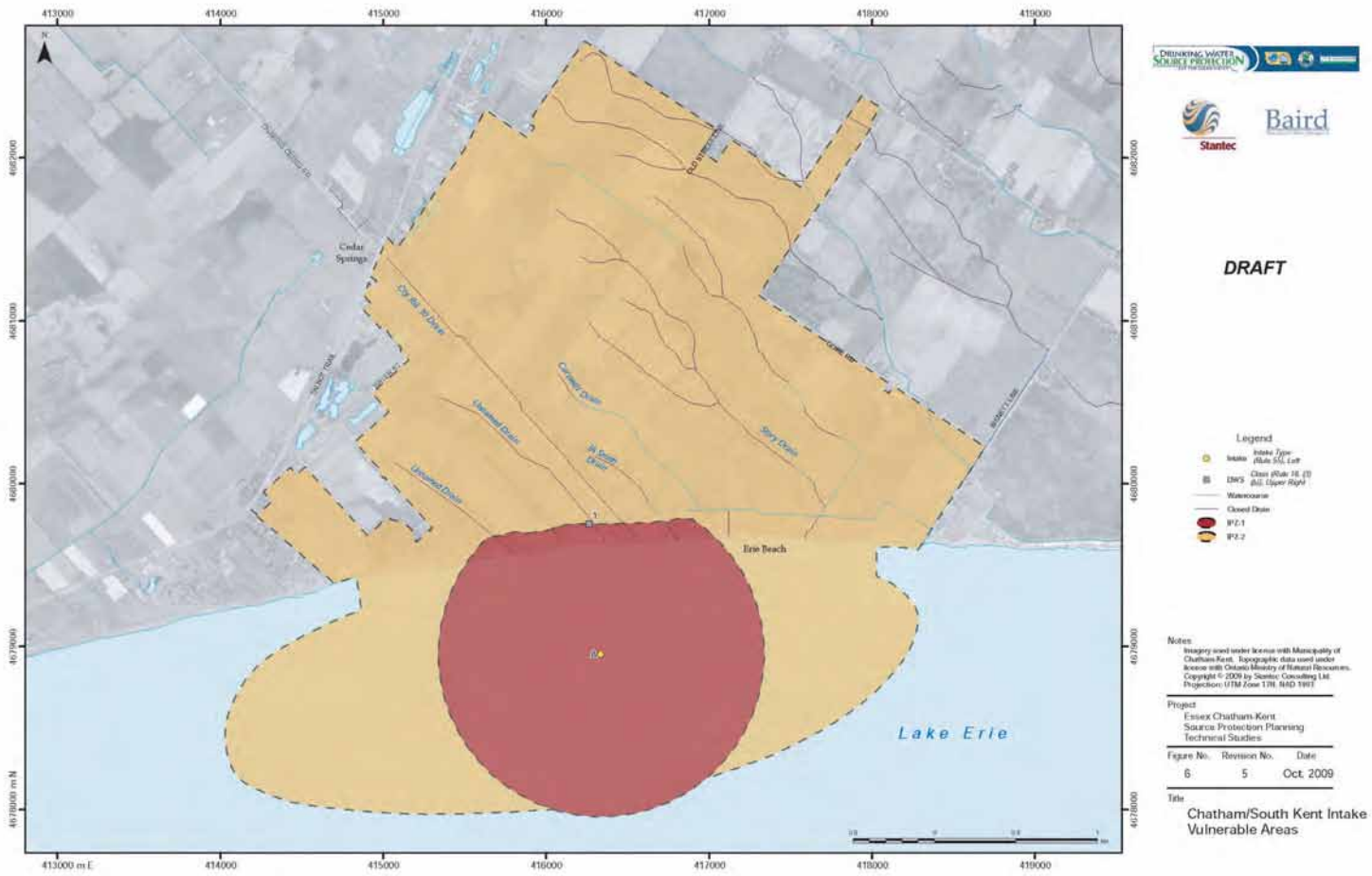
Chatham/South Kent Water Treatment Plant	Significant Threats	Moderate Threats	Low Threats
Intake Protection Zone 1	0	0	570
Intake Protection Zone 2	0	0	0

What is a Drinking Water Issue?

Under the Clean Water Act, drinking water quality issues must be identified. A drinking water quality issue is defined to be a physical, chemical, radioactive or microbial (eg. bacteria) parameter or other pathogenic (disease causing) organisms shown to deteriorate, or trends towards a deterioration, of raw (untreated) water quality for the purposes of drinking. The parameters which can be considered are identified in the Safe Drinking Water Act. The area and the activity contributing to a drinking water quality issue must also be identified.

Identifying issues is a key step in the overall process of protecting drinking water quality. Should an issue be identified, the activities that contribute to this issue become a significant risk and must be dealt with through the source protection plan. Identifying issues involves a review of raw (untreated) water quality data, consideration of existing water treatment plant capabilities to deal with any potential problems and discussions with the plant operating authority.

At the Chatham and South Kent Water Treatment Plants, which share the same intake, turbidity, aluminum, organic nitrogen and hardness were identified as a potential drinking water quality issues. The causes of turbidity, aluminum and organic nitrogen may be natural or man made. The cause of hardness is believed to be natural.



Intake Protection Zone 1 (red)

Intake Protection Zone 1 (IPZ1) is considered the most vulnerable to any contaminant of concern that may be released, because of its close proximity to the intake. Any contaminants released in this zone have the greatest likelihood of adversely affecting the raw (untreated) water and the intake.

Intake Protection Zone 2 (yellow)

Intake Protection Zone 2 (IPZ2) accounts for the influence of shore, streams, and rivers that are known or have the potential to directly impact the water quality at the intake. This area is considered high risk as any contaminant that is spilled in this zone has a high probability of reaching the intake and adversely affecting the water quality. This zone was determined based on a two-hour travel time. This means that a contaminant could reach the intake in two hours should a spill or leak occur in this zone.

For more information contact your local Conservation Authority or visit our website

519-354-7310 519-245-3710 519-451-2800

www.sourcewaterprotection.on.ca

Ontario

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