

Current Situation

Message from the Mayor for the Region's Community Update

healthy water healthy environment

A Niagara Region publication for Wainfleet lakeshore residents/property owners, dedicated to the water/sewer issue.

Welcome to the inaugural edition of the Healthy Water - Healthy Environment newsletter. Niagara Region's Public Works and Public Health Departments have launched this publication to keep you up-to-date on the issues surrounding the public health and water and sewer servicing issues affecting the lakeshore residents/property owners of Wainfleet.

The Situation

As you know, municipal water and sewer services do not exist in the Township of Wainfleet. With the exception of the Long Beach area, all communities rely on private water wells and individual on-site septic systems for sewage disposal. In the Long Beach area, potable water is provided by a privately owned communal water supply system. Sewage disposal in that area is also provided by individual, on-site, septic systems.

The Findings

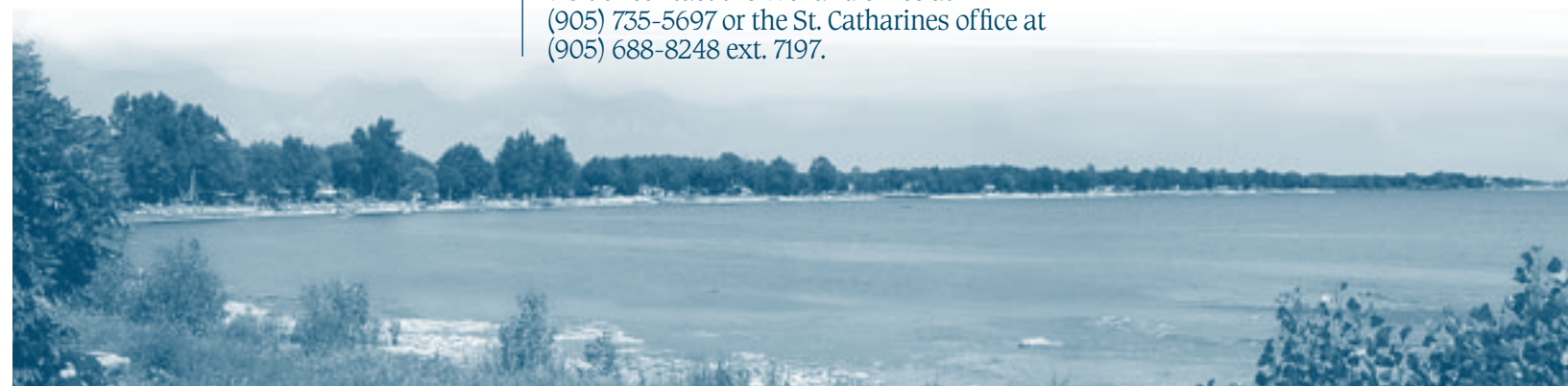
Studies conducted by Niagara Region's Public Health and Public Works Departments and the Ministry of the Environment concluded that a significant number of private wells are contaminated with water-borne bacteria. As a result, residents using raw groundwater resources are potentially at significant health risk due to contamination. The studies have also concluded that the failing septic systems are having a detrimental impact on groundwater supplies and Lake Erie itself.

If you are unsure of the quality of your drinking water, submit regular samples to the Public Health Department for testing. For free bottles and for more information, visit or contact the Welland office at (905) 735-5697 or the St. Catharines office at (905) 688-8248 ext. 7197.

The Solution

The conclusion drawn was that a community water and sewer solution is required to correct a problem that has evolved over the past 80 years. To explore various options and involve the Wainfleet lakeshore community, a Class Environmental Assessment (EA) was jointly undertaken by the Township of Wainfleet and Niagara Region's Public Works Department.

Based on the community request for additional information, the EA submission has been postponed for up to six months, to provide an opportunity to further consider options and the input received.



Our Goal

It is our goal to work with the community to find a solution that has their support and is acceptable and affordable. It is hoped that through the launch of this publication, as well as other activities, this remains an open and inclusive process; one that relies on valuable two-way communication.

Contact Us

There are a variety of ways to contact the Region to voice your opinion or share your thoughts/concerns over anything happening in your community related to the water and sewer issue, including the following:

www.regional.niagara.on.ca/wainfleetwater
 Bob Steele, Project Manager, Niagara Region
 (905) 685-4225 ext.3745

our next steps . . .

December, 2004

Update on Wainfleet Water and Sewage Treatment Project

During the public information session held this summer, residents requested additional information about the extent of potential contamination of private wells along the lakeshore. In response, the Phase II Survey has been initiated by Niagara Region and is being conducted by MacViro Consultants Inc. I encourage property owners in the lakeshore area to participate.

The results from the additional 120 well water samples collected in the Phase II Survey will address some residents' earlier concerns about information gaps in the first study that led, in part, to the current Environmental Assessment process.

I'm pleased that nine residents have taken on the job of sitting on a Public Advisory Committee (PAC). The group met in November with staff from the Township, Niagara Region and MacViro. After a presentation on the Phase II Survey, PAC members had an opportunity to ask questions and discuss the issues. The survey received the group's support.

MacViro staff will be expected to begin the survey in early December. Property owners along the lakeshore will receive a letter from Niagara Region explaining the additional sampling. If you didn't, and are interested, please call Bob Steele, Project Manager, Niagara Region, at (905) 685-4225 ext. 3745.

Participants will be notified of the results from the water samples taken from their homes. Group results will be shared in a final report which will be distributed to anyone interested.

It's only through participation in studies like this, that we'll get the best solution to our water and sewer system problems.

Gord Harry
 Mayor Gord Harry,
 Mayor of Wainfleet



direction of groundwater flow



Nutrient Loading causing algae growth

GROUNDWATER CONTAMINATION

Septic system effluent contaminating the underground water supply (aquifer) could introduce dangerous contaminants such as E. coli. into your water well, as well as to Lake Erie's lakeshore environment. This contamination could cause severe health-related impacts.



Our Next Steps

Niagara Region and the Township of Wainfleet are taking steps to improve community awareness and understanding of public health concerns and the Environmental Assessment process designed to address them. This includes the development and distribution of public education material (including this community newsletter), posting and updating information on the Region's website and meeting with local groups, including the newly formed Wainfleet Public Advisory Committee (PAC).

On November 10, 2004, the PAC met with Regional and Township staff to discuss matters of community interest related to public health and water/sewer infrastructure issues in the Wainfleet lakeshore area. Nine residents, representing a variety of interests from across the community, volunteered to participate in the Environmental Assessment process. Committee members are: Dr. Richard Corlett, Nancy Giles, Butch Kimber, Betty Konc, Kate Ostryhon-Lumsden, Colin Pilmer, Wayne Redshaw, John Thomson (alternate) and Joseph Zold.

Phase II Survey

As requested by residents, the Phase II Survey is comprised of further water well and septic system sampling. It is being conducted throughout the lakeshore area to better assess the risk hazards that exist to your health and the environment.

The Phase II Survey is required because the following conditions do not allow for proper septic system functionality:

- bedrock at shallow depths
- small or inadequate lot sizes for proper functioning of conventional septic systems
- local high density
- aged and/or aging septic systems

These conditions contribute to a situation where sewage effluent¹ is likely to contaminate the shallow groundwater and, in turn, the local drinking water supply. Sewage related contamination within a water supply can pose serious health risks to people.

At their first meeting, a presentation was made by MacViro Consultants Ltd., illustrating how the 2002 Water Well and Septic System Survey was carried out. The consultants provided information on the extent of property and groundwater contamination along the lakeshore.

Details on a proposed Phase II Survey were presented to the PAC. This survey was requested by Wainfleet residents who asked for additional water quality data for houses not previously tested. The survey will be carried out over the next few weeks (see Phase II Survey article below).

The Committee expressed their support for the survey and asked that the findings be reported back to the community to advise them of the extent of the problem. The PAC emphasized the need to develop an appropriate solution to the public health/ servicing problem that would be both affordable and acceptable to area residents. Also discussed were ways of improving communications with area residents regarding the public health and environmental issues facing the community, and how best to inform residents of new information gathered over the next few months.

The impact of contaminated groundwater doesn't end there. Ultimately, that contaminated water makes its way to Lake Erie where it can pose further health concerns to the recreational and natural environment (swimmers, boaters, fish and underwater plant life) – as the original study identified.

The additional information from the Phase II Survey will provide further details as to the nature and extent of the existing problem, and respond to concerns raised by residents at the public open houses about the first study.

An additional study is also underway to investigate the feasibility of on-site sewage disposal. Lots along the lakeshore will be examined to determine whether they are large enough to accept the sewage generated by the houses on them. Lots will also be assessed to see if they are producing more effluent than the soils and groundwater can assimilate. This study is being conducted by AMEC, Earth & Environmental Ltd.

The Committee will meet with Regional and Township staff over the winter months to monitor the results of the additional technical work and convey information back to lakeshore area residents.

Members of PAC can be contacted as follows:

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Nancy Giles
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(905) 899-0121
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Wayne Redshaw
(905) 834-0738
redshaw@itcanada.com
Joseph Zold
(905) 834-4449
jzold@interpc.ca
John Thompson (alternate)

ALSO PART OF THE PAC ARE:

Gord Harry
Mayor, Township of Wainfleet
Micheal Benner
Clerk/Planner,
Township of Wainfleet
Dean Ostryhon
Director of Operations,
Township of Wainfleet
Bill Hunter
Manager, Health Protection
and Promotion, Niagara Region
Chado Bric
Director, Water and Wastewater
Services Division, Niagara Region
Bob Steele
Project Manager, Niagara Region

If you have any questions regarding the Phase II Survey, please contact: Muin Husain, Ph.D, P.Geo., of MacViro at (905) 475-7270 ext. 276 Alternatively, you may contact Bob Steele, Project Manager, Niagara Region (905) 685-4225 ext. 3745

Dr. Robin Williams, Medical Officer of Health, writes:

Improving the Quality of the Environment to Protect Your Health

Seeping sewage in bedrock doesn't respect property lines, and a failing septic system is not just one where sewage ponds on the surface of a property. For these reasons, although many residents have said that they have proper and effective sewage systems, the private well water supplies in this community are still at risk of contamination, as has been shown through the testing.

Faulty septic systems have been a reality in Wainfleet for decades. In 1995, the Township completed the Wainfleet Community Strategic Plan that, based on extensive community input, outlined the long-term development strategy for the Township. Timely resolution of sewage disposal and water supply problems were identified as a priority and led, in part, to the start of the Environmental Assessment process.

Niagara Region's Public Works Department has announced that they will not finalize the Environmental Assessment document until other servicing options are reviewed, including ways of lowering servicing costs. The two new studies described in this publication are part of this review.

Studies conducted since 2000 have come to similar conclusions: private sewage systems are aging and failing, polluting the aquifer (which is a shared groundwater supply for the entire lakeshore community) and contaminating well water supplies, and ultimately the lake, with nitrates and fecal bacteria, especially E. coli. All septic systems have a limited lifespan (generally no more than 20 years) and many systems in Wainfleet exceed this time frame. Other factors contributing to public health concerns include population increases, conversion of summer cottages to year-round occupancy and significant increases in water consumption related to lifestyle.

I support the review of options, the two studies that are currently under way and every effort to reduce infrastructure and servicing costs. Clearly, to protect the public's health, the status quo is no longer acceptable and a community solution is required to correct this problem that has evolved over an 80 year period of lakeshore development and cottage conversion. The Board of Health and the Public Health Department look forward to an affordable, health solution for all.

Robin Williams

*Dr. Robin Williams
Medical Officer of Health
Niagara Region*



Niagara Region

INFRASTRUCTURE FUNDING SOURCES

Approval has been granted under the SuperBuild (Millennium Initiative) Program for \$7.3 million toward servicing costs in the Wainfleet lakeshore area.

Township of Wainfleet and Niagara Region are preparing a submission under the newly announced COMRIF (Canada-Ontario Municipal Rural Infrastructure Fund) Program to seek additional federal and provincial funding.

"I think the formation of the Community Advisory Committee is a major step forward. Hopefully it will resolve the problems that exist or at least help in finding a solution or an alternative not only to water servicing but to wastewater servicing as well."

*Wayne Redshaw,
Member of the newly formed
Wainfleet PAC*

Studies conducted have come to the same conclusion: **Aging and leaking septic beds are causing health concerns over drinking water.**

2001 Long Beach Sanitary Survey – Niagara Region Public Health Department
2002 Water Quality on the Lake Erie Shores of Wainfleet Township – Ontario Ministry of the Environment
2002 Wainfleet Groundwater Impact Assessment Water Well and Septic System Survey – MacViro Consultants Inc.

¹ DEFINITION OF EFFLUENT: *waste material discharged into the environment.*