



PWP 61-2004
November 9, 2004

THE REGIONAL MUNICIPALITY OF NIAGARA

REPORT TO: Chair and Members of the
Public Works and Utilities Committee

SUBJECT: Update on the Implementation of Follow-up Actions
Regarding Water and Wastewater Servicing Issues
Township of Wainfleet

RECOMMENDATION(S)

That this report be received for information.

PURPOSE

The purpose of this report is to advise members of Public Works and Utilities Committee of the steps taken and planned to gather additional information and address public concerns related to the Wainfleet Water and Wastewater Servicing Class Environmental Assessment.

BACKGROUND

Studies conducted by the Public Health Department (August 2001), Regional Public Works (June 2002) and the Ministry of the Environment (October 2003) concluded that a significant number of private wells located along the lakeshore area of Wainfleet Township are contaminated with water-borne bacteria. These studies concluded that residents utilizing raw groundwater resources are potentially at significant health risk due to related contamination, and failing septic systems are detrimentally impacting groundwater supplies and Lake Erie.

Following Council's direction (PWA 7-2003), a Class Environmental Assessment process was initiated to address the area of public health concern located along the northern shoreline of Lake Erie in Wainfleet Township. Three public information centers (PICs) were held in the Township on October 9 2003, April 22 2004 and August 26, 2004. These public events met and exceeded the provincial requirement to hold two mandatory public meetings during the EA process.

The three public information sessions were very well attended. Issues raised tended to focus on the following:

- Perceived exorbitant project costs and connection fees to be paid by benefiting property owners
- Validation of the representative sample size used in the MacViro survey of private wells and septic systems;
- Consideration of other private, on-site disposal options; the need to secure additional federal/provincial funding; and
- Exemptions for properties with fully functioning, approved water and septic systems.

At an October 12, 2004 joint meeting of the PWUC and PHS Committees, Public Works and Public Health staff provided committee members with a comprehensive summary of the Class EA background and status. Staff outlined proposed steps to be taken to address issues raised during the process. Staff also advised that a moratorium to allow further review and technical assessment, and include input from local citizens, be introduced into the Class EA process.

Members of the recently-formed, Wainfleet Lakeshore Water/Sewer Committee attended the October 12 joint PWUC/PHS Committee meeting and presented their concerns regarding issues that surfaced during the Class EA process. Prominent among their concerns were the following:

- High water and wastewater servicing costs;
- The need to consider private communal and on-site septic systems;
- Enforcement and policing of public health and building code requirements; and
- The experience and lesson learned from other communities in addressing similar public health concerns.

REPORT

Various public comments and enquiries were made at the three Public Information Centres. Based on residents' comments, editorial letters and local newspaper articles, Regional and Township staff recognized the need to clarify misunderstandings and/or miscommunication about various aspects of the EA process.

An outline of a preliminary Communications Plan addressing these matters was presented at the October 12 2004 joint Committee meeting. Staff advised that this preliminary plan would be co-operatively executed by Regional Public Health, Public Work and Township staff.

On November 5 2004, Public Works, Public Health and Wainfleet Township staff met to discuss key elements of the Communications Plan and additional work needed to supplement technical study requirements and fully address community concerns. This report is intended to provide Committee members with an outline of actions taken to date and an overview of subsequent steps, as summarized below:

Formation of Public Advisory Committee

At the October 12, 2004 joint PWUC/PHS Committee meeting, the idea was raised of forming a Public Advisory Committee (PAC) to represent the Wainfleet residents in the development of appropriate solutions to the identified public health issue. Subsequently, Wainfleet Council identified six representatives from the various hamlets and residential communities that comprise the lakeshore area to sit on a newly-formed Wainfleet PAC.

On November 10 2004, Township and Regional staff will meet with the Wainfleet PAC to present and discuss the proposed technical studies and draft communications strategy.

Phase II Water Quality Survey

In June 2002, Regional Public Works engaged MacViro Consultants to undertake a hydrogeological study to assess potential human health concerns associated with private water and wastewater services in the communities of Belleview Beach, Morgan's Point and Camelot Beach. The study also examined local geology, hydrogeology and land use.

The water well survey involved an examination of drinking water quality and septic systems, including voluntary inspection of some 128 residences. The survey sample size was designed to provide a spatial representation of groundwater quality within the three communities and potential human health concerns related to drinking water.

At PIC #3, participants questioned the validity of the representative sampling process and raised concerns about the need to collect water well data for additional properties not previously surveyed. The Phase II Water Quality Survey will provide additional information to fill these suggested data gaps in the 2002 MacViro survey and supplement the previously-obtained statistical results by adding a proposed additional 120 samples.

The Phase II survey is intended to scientifically and statistically validate initial water quality findings. Preparatory work is underway and field work is expected to commence during the week of November 15th. On the evening of November 10 2004, Regional and Township staff and consultants will meet with the Wainfleet PAC to discuss the consultant's proposed approach and methodology.

Feasibility Assessment of On-site Sewage Disposal

During the Class EA process, on-site septic systems were evaluated based on previous studies and site visits. Since that time, residents have requested additional information regarding the ability of lakeshore lots to accommodate new or upgraded water and septic systems. In response, this study will determine the feasibility of on-site sewage disposal systems considering such physiographic parameters as soil, bedrock, topographic, surface water, groundwater and hydrogeological conditions.

This study will examine all lakeshore properties to ascertain if they are sufficiently large to accept the sewage generated. Lots will also be assessed to determine if they are producing more effluent than the soils and groundwater can assimilate without unacceptable levels of contamination. The potential impact of various individual systems will be examined for various sub-areas to understand the effects of critical contaminants, such as nitrates and phosphates.

This assessment is currently underway. Findings and conclusions will be synchronized with the Phase II Water Quality Survey. Overall, the aim of both studies is to present clear evidence of concerns regarding both the safety of the water supply and the inadequacy of sewage treatment and disposal systems serving the Wainfleet lakeshore community.

Value Analysis Exercise (VAE)

Public Works is currently undertaking preparatory work for a Value Analysis Exercise (VAE), focusing on alternative water and wastewater solutions for Wainfleet. The methodology will be consistent with the "Value Engineering" approaches carried out in accordance with certified standards and recently undertaken for the High Rate Treatment facility in Niagara Falls and the Welland Water Treatment Plant.

The scope of the VAE will be expanded to include participation from Public Health staff and will include selected members of the Wainfleet PAC and Township Council. The key element of the VAE will be a workshop that will include impartial experts to examine alternative servicing solutions.

The VAE workshop will include an intensive work session during which alternative servicing solutions and designs will be analyzed for optimization of costs, such as energy, operation, and maintenance. In this case, attention will also be paid to the Public Health Department's mandate, policies and concerns, as well as specific issues raised by Township participants.

The VAE will provide an organized approach to identifying community issues, legislative requirements and the technical feasibility of solutions. It will also provide the opportunity to fully address capital and life cycle costs and cost-sharing options.

In the VAE process, where essential functions are not addressed by various water and wastewater solutions, there is a lack of “value”. The VAE team will identify alternative approaches that provide the necessary “value”. Findings and conclusions will be fed back into the EA process and result in a final summary report.

Preparatory work for the VAE workshop began in October 2004. The first VAE session is scheduled for early December 2004 and is scheduled to be completed in by the end of February 2005.

Wainfleet Communications Plan

At the November 5, 2004 meeting, Public Works, Public Health and Wainfleet Township staff reviewed a draft Communications Plan, identifying various consultation and communications elements that would assist in moving the process forward to appropriately address Wainfleet’s serious public health and infrastructure servicing questions and concerns.

The draft Communications Plan sets out objectives, strategies, key messages, target audiences, tactics, and critical timelines to improve community awareness and understanding of the Class EA process and actions to be taken to address public health and infrastructure issues. Elements of the Communications Plan include:

- Development of educational and informational material,
- Updates posted to the website,
- Preparation of a community newsletter and updates
- On-going media relations
- Collaborative involvement with special interest groups (e.g. the Wainfleet PAC).

Budget Considerations

Funding for the above actions and tasks can be accommodated in the original budget allocated to the Wainfleet Water and Wastewater Class Environmental Assessment project. Authorisations will be based on specific scope and deliverables to meet the above objectives.

SUMMARY

This report, which was developed with input from Public Health staff, provides members of the Public Works and Utilities Committee with an update on recent and proposed actions to be implemented in connection with the Wainfleet Water and Wastewater Servicing Class Environmental Assessment. Proposed next steps will be carried out by a working group made up of Public Health, Public Works and Wainfleet Township staff.

These follow-up actions include:

- Additional water quality testing,
- A closer examination of the carrying capacity of properties for on-site sewage disposal based on physiographic factors,
- A re-examination of alternative servicing solutions,
- Meetings with public representatives (i.e. the Wainfleet PAC) and Township Council members
- Implementation of a comprehensive Communications Plan.

Finalisation of the Class Environmental Assessment will be postponed to accommodate these actions. We believe this will address the project needs as outlined at the joint PWUC/PHS Committee meeting of October 12, 2004.

Submitted by:

Approved by:

Ian Neville, MPA, P.Eng.
Commissioner of Public Works

Mike Trojan
Chief Administrative Officer

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This report was prepared by Bob Steele, Project Manager in collaboration with Bjorn Christensen, Director, Health and Protection Promotion, and reviewed by Chado Brcic, P. Eng. Director of Water and Wastewater, and Ian Neville, Commissioner, Public Works.