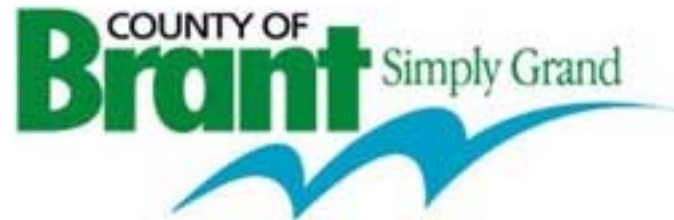


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## Class Environmental Assessment

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## PROVISION OF WATER AND SEWAGE SERVICING FOR THE COMMUNITY OF BURFORD

PUBLIC INFORMATION MEETING

MAY 14, 2003



## Introduction

*The County of Brant has initiated a Class Environmental Assessment (EA) for the Provision of Water and Sewage Servicing for the Community of Burford.*

*This project is being undertaken in accordance with The Environmental Assessment Act and the Class Environmental process, that allows for significant participation by the public, as well as all applicable government review agencies.*

*This public meeting is your first opportunity to learn about the project and to comment on the proposed problem/opportunity statement and alternative solutions. County staff, along with representatives from the Consulting Engineering firm of R.V. Anderson Associates Ltd. and hydrogeologist Lotowater Ltd. are available to answer questions you may have concerning the project.*

*The Class EA will assess alternatives to provide the Community with drinking water in compliance with the new Safe Drinking Water Act and Regulations, and also consider alternatives to resolve concerns with existing private sewage disposal systems.*

## Class Environmental Assessment Process

This undertaking is subject to the requirements of the Environmental Assessment Act, R.S.O. 1990, Chapter E.18. It is proceeding in accordance with the approved planning and design process known as the "Municipal Class Environmental Assessment." The key components of this approach include an identification of the problem/opportunity, consideration of alternative general solutions to the problem, selection of a Preferred Alternative and investigation of alternative design concepts to implement the preferred solution. All steps of the process take into account the natural, social and economic environments.

The Municipal Class Environmental Assessment process is designed to resolve the concerns of individuals and organizations affected by the project. If these concerns cannot be resolved, a person / party may request that the Minister of the Environment issue a "Part II Order" under the Environmental Assessment Act. The Minister of the Environment may rule on the request or may refer the matter to mediation.

Additional information about the Environmental Assessment process can be obtained from:

**Mr. Scott Hager, P.Eng**  
Public Works Engineer, County of Brant  
County Administration Building  
1249 Colborne Street West  
Hwy. 53, P.O.Box 160  
Burford, Ontario, N0E 1A0  
Phone: 519-449-2451 ext. 2206  
Fax: 519-449-3382  
E-mail: [scott.hager@county.brant.on.ca](mailto:scott.hager@county.brant.on.ca)

**Mr. Ken Campbell, P.Eng. (Project Director)  
or Mrs. Olena Gordiyenko (Project Manager)**  
R.V. Anderson Associates Limited  
2001 Sheppard Avenue East  
Toronto, Ontario  
M2J 4Z8  
Phone: 416-497-8600  
Fax: 416-497-0342  
E-mail: [ogordiyenko@rvanderson.com](mailto:ogordiyenko@rvanderson.com)

## What Is Your Role?

Your participation **throughout the Class Environmental Assessment process** is of utmost importance.

For this reason, you are being requested to provide input. Accordingly, you are invited to provide any written comments to the County of Brant (see attached comment sheet).

At this time, you are invited to provide input with respect to specific concerns related to the problem/opportunity statement, and alternative solutions. There will be more opportunities for public comment as the project progresses.

## How Does The Process Work?

The Class Environmental Assessment process adheres to the following steps, in accordance with the document entitled "Municipal Class Environmental Assessment" prepared by the Municipal Engineers Association:

1. Identify the problem or opportunity.
2. Identify alternative solutions.
3. Inventory natural, social, economic environment, and identify potential impacts.
4. Identify impacts of alternative solutions on the environment, and mitigating measures
5. Evaluate alternative solutions: identify preferred solution
6. First Public Consultation– May 14, 2003
7. Select preferred solution
8. The next steps will depend on the type of solution selected.

## Problem/Opportunity Statement

The community of Burford currently is serviced by private wells and septic sewage systems only.

This project is intended to address specific concerns identified in a series of groundwater studies done by the County of Brant over the past several years. The studies identified that the Burford upper aquifer, the source of most of the drinking water for the community, is vulnerable to microbial (i.e. bacteria and virus) and nitrate contamination from surface sources. In many cases, minimum separation distances between wells and septic tile fields do not exist. Nitrate concentrations were measured at levels above the Ontario Drinking Water Standards for nitrate (10 mg/L) in a significant part of the urban area as well as the recharge area to the south of the Community.

The existing private sewage disposal systems and fertilizer use (manure and chemical fertilizers) on agricultural lands near Burford are considered to be the most significant source of contamination affecting and degrading groundwater quality in the aquifer.

Groundwater contamination may lead to negative health impacts for residents of Burford. Furthermore, the County of Brant has placed some restrictions on further development in the Burford Urban area until this issue has been resolved.

As a result, the following problem statement is proposed: "*The community of Burford needs a cost-effective and reliable long-term water supply that is in compliance with Ontario's Safe Drinking Water Act and Regulations.*"

## Questionnaire Results

To gain a better understanding of the current situation, a questionnaire was distributed to the residents of Burford, along with business and institutional owners. Key results of the questionnaire were as follows:

- 700 issued with 180 responses received
- 163 (90%) of respondents test their water
- 32 (18%) have UV treatment or filtration
- 19 (10%) use bottled water
- 162 (90%) drink tap water
- 19 (10%) felt that there were problems with their tap water
- 60 (33%) indicated they had septic systems older than 30 years
- 4 (2%) were aware of any septic system problems in their neighbourhood

## Evaluation of Alternative Servicing Concepts

The proposed screening criteria identified for the evaluation of alternatives includes the following:

Health Protection – Does the alternative meet the requirements of the Safe Drinking Water Act and Regulations, and provide environmental protection in accordance with MOE guidelines?

Environmental Impacts – How does the alternative affect the terrestrial and aquatic environment?

Costs – What are the capital and operating costs of the alternative?

Practicality and Feasibility – Will the alternative be practical and reliable for the long term?

Community Planning (Social Impact) - How does the alternative affect community planning issues, including new development?

## Alternative Solutions

Five general alternatives have been identified, as follows.

1. Do nothing
2. Private System Upgrades
3. Communal System
4. Combination of Private/Communal
5. Partial Communal (for new developments, and/or “downtown” only)

Preliminary findings about each alternative is presented below.

### 1. DO NOTHING

- does not meet drinking water regulations – public health concerns not addressed
- no immediate impacts to terrestrial and aquatic environment
- no capital costs – only ongoing private system maintenance costs
- will continue to limit new development
- nutrient management could be added to “do nothing” to possibly reduce nitrates caused by agriculture
- public education could be improved to reduce risks of consuming private well water

#### 2a. PRIVATE SYSTEM UPGRADES - WATER

- will depend on private home owner to implement – safety will be responsibility of owner
- Bottled Water (\$0.50/L)
- Reverse Osmosis (\$2000/house)
- Ultraviolet Disinfection (\$1500/house)
- no immediate impacts to terrestrial and aquatic environment
- will require on-going maintenance and repair or payment by homeowner
- relatively easy to implement
- will continue to limit new development

#### 2b. PRIVATE SYSTEM UPGRADES – SEWAGE

- would not have immediate impact on drinking water safety. With time, nitrate concentrations in well water should be reduced. No impact on microbiological safety.
- considerable temporary impacts during construction of additional tankage at every property, along with tile field upgrades at many properties
- Upgraded septic system (such as biofilter or Nitrex) (\$20,000/house on average)
- installing advanced treatment systems in many lots may be difficult
- practicality of this as an overall system is questionable
- new developments will still be restricted

#### 3a. COMMUNAL SYSTEM – WATER

- assuming safe well can be located, will address all safety concerns
- would include major well head protection plan
- construction impacts associated with new well pumphouse and water main installation
- communal well, chlorine disinfection, fire protection (hydrants) \$16,000/house
- cost without fire protection \$13,000/house
- water rates \$670/year (average, based on 20,000 L/month)
- practical, reliable system used all over province
- would assist in removing development restrictions

#### 3b. COMMUNAL SYSTEM – SEWAGE

- would eliminate or reduce negative impacts on aquifer
- would have positive impact on aquatic environment – downstream discharge of aquifer
- capital costs of \$18,800 - \$19,800/house, operating costs will vary depending on type of system selected
- practical, reliable systems used all over province
- would assist in removing development restrictions

#### 4. COMBINATION OF SYSTEMS

This alternative would simply consist of some combination of the above solutions. For example, it could include full communal water and sewage, or communal water with “do nothing” for sewage disposal. Costs and impacts would be based on the selected approach.

## 5. PARTIAL OR PHASED COMMUNAL

Partial or phased systems could also be considered. For example, communal systems could be required for all new development. Private system upgrades could be used for existing homes. Alternatively, the “downtown core” could be serviced with communal systems, in conjunction with new development, while other areas of the town could be left with private upgrades, or phased in over time.

### **Funding**

Private system upgrades would need to be covered by private owners, and would generally be voluntary. Unless there is direct evidence of a failed septic system, for example, the municipality does not generally have the authority to require a home or business owner to make a private system upgrade.

Communal system upgrades could be covered under the Local Improvements Act, in which case home and business owners would be required to connect up, and cover costs through their property taxes. Typically, these would be spread out over a number of years.

If a communal system is selected as the preferred alternative, government funding programs could also be applied for, as these become available.

All costs associated with new developments would be covered by the property developers.

### **Next Steps**

Your comments are very important to this process. Please complete the attached comment sheet, or provide your comments by letter or e-mail to one or both of the addresses noted.

Once we have received your comments, along with comments from governmental agencies, we will move to the identification of the preferred alternative or alternatives.

The County of Brant will inform the public about the next steps in this Class EA process through newspaper advertisements, public notices, and mailings.

We appreciate your participation in this important process.