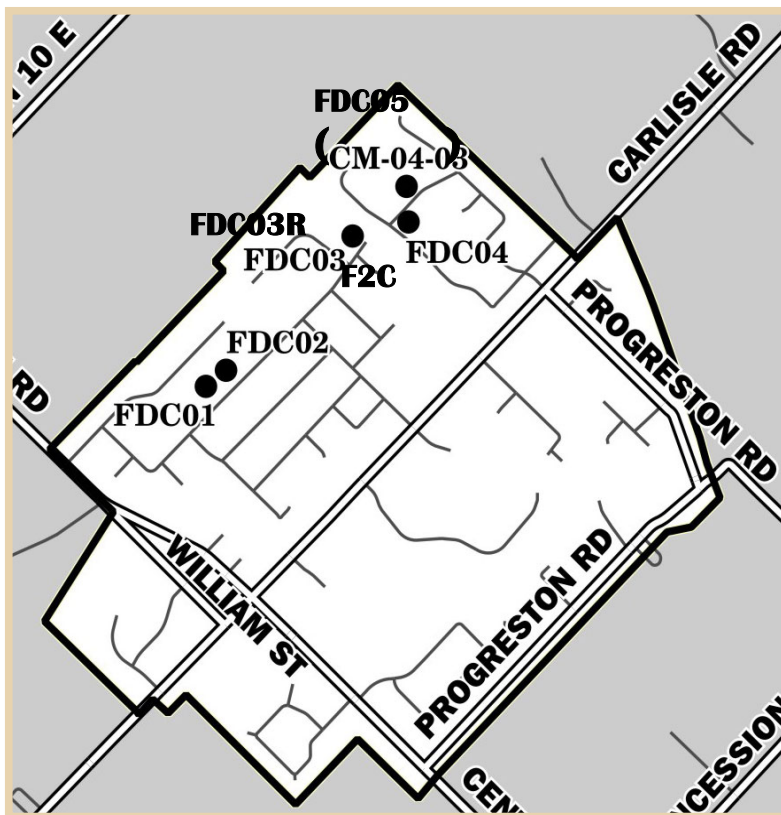


The majority of the community of Carlisle is serviced by a municipal water supply, with the remaining serviced by private wells. During the summer months, the water usage in Carlisle has been known to challenge the available supply.

The City of Hamilton recently completed a Water Supply Master Plan under the Class Environmental Assessment process (April 2004), and a Technical Addendum (June 2004) to evaluate the municipal water supply in Carlisle.

### CARLISLE WATER SUPPLY SYSTEM

The existing municipal water supply system for Carlisle includes a number of wells as follows:



*FDC01* and *FDC02* are located on the water tower site between Acredale Drive and Woodend Drive.

*FDC03* and *FDC03R* are located at the east end of Acredale Drive on the well house property. *F2C*, an abandoned well, has been identified on older drawings, as located in the wellhouse driveway and recent subsurface work may have located it. However, the well location and condition can not be confirmed without excavation.

*FDC04* is located on the south side of Oldenburg Road.

*CM-04-03* or *FDC05* (new designation) is located on the north side of Oldenburg Road.

A new wellhouse (*FDC03R*/*FDC05* wellhouse) is currently under construction on Oldenburg Road. It will treat water from both Well *FDC03R* and Well *FDC05*. This new wellhouse will increase the current municipal water supply in Carlisle and it is anticipated that it will be operational in May 2006.

**KEY RECOMMENDATIONS FROM THE MASTER PLAN INCLUDE:**

- Initiate a water conservation program;
- Develop a groundwater level monitoring program;
- Replace and Decommission Well FDC03;
- Convert the existing monitoring Well (CM-04-03) to production Well FDC05; and
- Decommission or maintain Well FDC04 as a backup supply.

A Technical Addendum to the Master Plan to evaluate the municipal water supply in Carlisle was completed. It was found through this work that FDC03R was capable of producing 25L/s. This is more than the capacity of Well FDC03 which it replaces. A Class EA Addendum to the Master Plan is currently being prepared, based on this work.

The Master Plan determined that well CM-04-03 is capable of producing capacity at 15 L/s, combined with the other wells, the total capacity of the well system is 43.3 L/s. When the Addendum to the Class EA is complete, the system could have a total capacity of up to 49.8 L/s.

The Water Supply Master Plan clearly stated that Well FDC03 will be decommissioned once replaced by the new Well FDC03R. However, the Master Plan did not completely address Well FDC04 or the associated treatment system and wellhouse on Acredale Drive. The City must now decide the most appropriate course of action for dealing with this well and infrastructure. An abandoned well (Well F2C) if confirmed, will also likely require decommissioning in accordance with provincial requirements.

***As decommissioning of water facilities requires the completion of a Class Environmental Assessment (Class EA), the City of Hamilton has initiated a Schedule B Class EA for the decommissioning of Well F2C and Well FDC04 and the treatment system and wellhouse.***

**A PUBLIC MEETING WILL BE HELD ON FEBRUARY 1, 2006 AT THE CARLISLE ARENA TO PRESENT THE EVALUATION OF THE ALTERNATIVE SOLUTIONS (See Back Page For More Info).**

The following provides more information about the water supply components that will be assessed as part of this Class EA.

### **WELL F2C**

F2C, an abandoned well, has been identified on older drawings, as located in the driveway to the wellhouse and recent geophysical (subsurface) survey work may have located F2C. However, the well location and its condition can not be confirmed without excavation. Due to the anticipated age of the well, it is likely that the well has not been properly decommissioned in accordance with Ontario Regulation (O.Reg) 903, as amended.

Alternative Solutions for Well F2C - Decommissioning Well F2C is the only alternative as it is not connected to a treated system, does not have the necessary approvals and as a result, cannot serve as a back-up supply.

### **WELL FDC04, ASSOCIATED FDC03 WELLHOUSE AND TREATMENT FACILITIES**

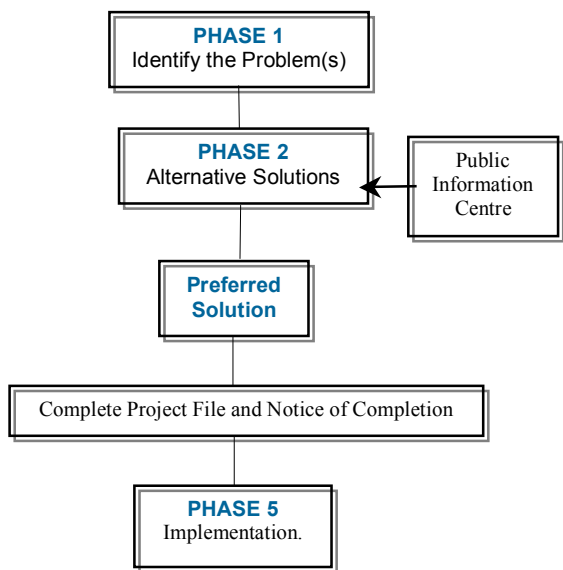
As part of the Master Plan, the City undertook pump tests for Wells FDC03R, FDC04 and FDC05 and found that these wells interfere with each other at a hydrogeological (groundwater) level. This means that when operated together they do not provide the capacity that would be expected from adding the total capacity of the three wells. Due to the interference, well FDC04 could only be used as a backup

well. If used as a back-up system, the continued operation of the wellhouse and treatment system on Acredale Drive (the FDC03 wellhouse) or connection to FDC03R/FDC05 wellhouse would be required. Alternately, well FDC04 could be decommissioned. This Class EA will confirm which approach is more appropriate for the City.

FDC03, which is located in this wellhouse, must be decommissioned as required by the current Certificate of Approval. The decommissioning of FDC03 requires at a minimum the partial dismantling of the wellhouse. If it is determined that Well FDC04 should be used as a back-up supply, the wellhouse would need to be reconstructed once Well FDC03 is decommissioned or piping to FDC03R/FDC05 wellhouse would be required to treat the raw water. Should the City decide, through this Class EA, that FDC04 will also be decommissioned, then the wellhouse and the treatment facilities would no longer be required as the raw water from FDC03R will be treated at the new FDC03R/FDC05 wellhouse being constructed on Oldenburg Road.

Alternative Solutions for Well FDC04, Associated FDC03 Wellhouse and Treatment Facilities

- **Do-nothing**, continue to operate FDC04, keep the FDC03 wellhouse in operation.
- **Back-up supply**, continue to operate FDC04, keep FDC03 wellhouse in operation or connect to the currently under construction FDC03R/FDC05 wellhouse.
- **Decommission** FDC04 in accordance with provincial regulations.



**MUNICIPAL CLASS ENVIRONMENTAL ASSESSMENT PROCESS**

The Class EA process is a decision making process to ensure that municipal infrastructure decisions consider the potential for effects on the natural, socio-cultural, and economic environments. The process requires public involvement at a number of points.

The City is following a “**Schedule B**” Municipal Class EA process for this project. The Project File will be placed on the Public Record for the required 30-day review period.

**WATER CONSERVATION**

A key component of the Water Supply Master Plan is water conservation. Existing per capita maximum day water use in Carlisle exceeds typical municipal water use in other parts of the City of Hamilton. As described in the City’s “A Guide to Wise Water Use” brochure, the following techniques can be used to reduce water consumption:

**REDUCE** – Be aware of the amount of water you and your family use and look for ways to use less wherever possible.

**REPAIR** – Most leaks are easy to locate and inexpensive to repair. A leak of one drop per second wastes about 10,000 litres per year.

**RETROFIT** – Install water saving devices on existing fixtures and look for water efficient appliances and devices when replacing your older fixtures or appliances.

*Thank you for your participation in the conservation program!*

## NOTICE OF STUDY COMMENCEMENT AND PUBLIC INFORMATION CENTRE

### CARLISLE WATER SYSTEM WELLS FDC04, F2C, FDC03 AND ASSOCIATED WELL SYSTEM INFRASTRUCTURE

#### THE STUDY

The City of Hamilton recently completed a Water Supply Master Plan and Class Environmental Assessment (EA) for the municipal water supply in Carlisle. To meet the maximum anticipated water demand in Carlisle, the Master Plan recommended the construction of a replacement well for Well FDC03 and the conversion of an existing monitoring well (Well CM-04-03) to a production well (see map below for location of water wells).

A new well, FDC03R, was constructed in 2004 to replace Well FDC03. Currently, Well FDC05 (the converted monitoring well) and a new wellhouse designed to treat water from both FDC03R and FDC05 is under construction on Oldenburg Road. Once completed, these two new wells, along with the existing wells FDC01 and FDC02 will increase the municipal water supply in Carlisle to meet community needs. Construction is scheduled to be completed by the end of May 2006.

The Water Supply Master Plan clearly stated that Well FDC03 is to be decommissioned once replaced by the new Well FDC03R. However, the Master Plan did not completely address the decommissioning of Well FDC04, or the associated treatment system and wellhouse. The City must now decide the most appropriate course of action for dealing with this well and infrastructure. An abandoned well (Well F2C) may also have been located and will require decommissioning in accordance with provincial requirements.

As the decommissioning of water facilities requires the completion of a Class EA, the City is currently completing a Schedule B Class EA for the decommissioning of Well F2C and Well FDC04 together with the treatment system and wellhouse.

Generally, the alternative solutions that are being considered are as follows:

Well F2C - Decommissioning this well is the only reasonable alternative solution. Currently this well does not likely meet provincial regulations and it cannot be used since it is not connected to a treatment system and has no Permit to Take Water or Certificate of Approval to operate.

Well FDC04, treatment system and wellhouse - There are three alternative solutions for this well; a) "do-nothing" which involves continuing to operate this well and its treatment system contained in the existing wellhouse on Acredale Drive, b) maintaining the well as a back-up supply only which would also require the continued operation of the treatment system and wellhouse; or c) decommissioning the well and the associated infrastructure.

#### THE PROCESS

This study follows the planning and design process for Schedule "B" projects as defined in the Municipal Engineers Association (MEA) Municipal Class EA document (June 2000). Upon completion of the study, a Project File Report will be available for public review and comment. Another advertisement will be published at that time, indicating where and how the public can have access to the report.

#### PUBLIC INFORMATION CENTRE

A Public Information Centre will be held to present details of this project.

DATE: February 1, 2006

TIME: 7 p.m. to 9 p.m.

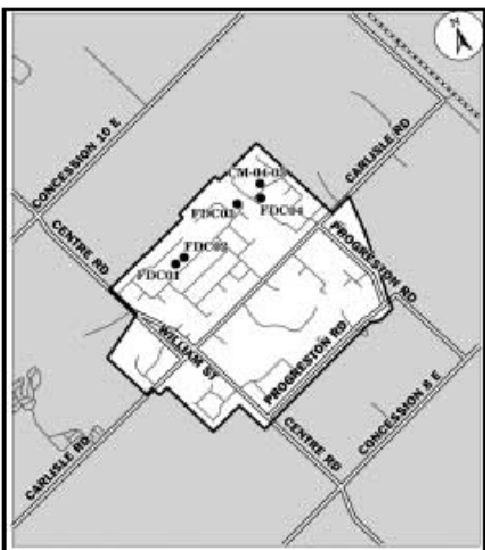
LOCATION: Carlisle Arena (Upstairs meeting room) 1496 Centre Rd., Flamborough

#### PUBLIC COMMENTS INVITED

There is an opportunity at any time during this process for interested persons to submit written comments to the attention of the Project Manager. If you have questions or comments, or wish to be added to the study mailing list, please contact:

Ms. Janet Haynes, Project Manager, Capital Works, Water and Wastewater Division  
Public Works, City of Hamilton  
55 John Street North, Hamilton, ON L8R 3M8  
Phone: 905-546-2424 x6025 Fax: 905-546-4491  
Email: [jhaynes@hamilton.ca](mailto:jhaynes@hamilton.ca)

Information will be collected in accordance with the Freedom of Information and Protection of Privacy Act. With the exception of personal information, all comments will become part of the public record.



## COME TO THE PUBLIC INFORMATION CENTRE

**Date:** February 1, 2006

**Time:** 7 pm to 9 pm

**Location:** Carlisle Arena  
(upstairs meeting room)  
1496 Centre Road,  
Flamborough

## WE WANT YOUR FEEDBACK

Your involvement in this project is important to us. If you are unable to attend the public meet and would like to send comments, ask questions or be added to the mailing list, contact:

Ms. Janet Haynes  
Project Manager, Capital Works  
Water and Wastewater Division  
Public Works, City of Hamilton  
55 John Street North  
Hamilton, ON L8R 3M8  
Phone: 905-546-2424 x 6025  
Fax: 905-546-4491  
Email: [jhaynes@hamilton.ca](mailto:jhaynes@hamilton.ca)

Information will be collected in accordance with the *Freedom of Information and Protection of Privacy Act*. With the exception of personal information, all comments will become part of the public record.



Hamilton