# Water por Tomorrow

Working

Together

Water Efficiency

York Region

Ontario Rising Star Markhum Weighan - Blohmond Hill - Necembrie - Aarow Seorgram Weinshurch Smattelle - Last Stationhory King Introducing Water FOR

York Region Average Day Water Demand

Water for Tomorrow is York Region's water efficiency program. The goal: to save more than 19 million litres (4 million gallons) of water each and every day. In fact, the water that will be saved by Water for Tomorrow would supply a town of 50,000 people.

### **A** This savings target is

part of York Region's Long Term Water Strategy. The Region's population is projected to double by the year 2031, requiring new water supplies to meet peoples' needs. Water for Tomorrow will help to meet the new demand by "finding" water that is presently wasted or that is lost 1996 1998 2000 2002 2004 2006 2008 2010 Year Water Pow Tomorrow 1 ML =1 million litres through system leakage.

**Making wise use** of present supply capacity will reduce future capital costs for the Region. The \$10 million cost of the program represents only 1/4 of the cost required to deliver the same amount of water through new supply sources.

Projected demand

(no conservation)

Capital cost of capacity to supply 1 litre of water/day



Households and businesses that take part in the Water for Tomorrow program will benefit through savings on water and sewer bills. Using water wisely now also means that supplies will be secure for future generations.

Projected demand (with conservation)

Achieving water efficiency depends on everyone. Water for Tomorrow is working in partnership with Be a Partner in Water Efficiency

> households, business, industry and the 9 area municipalities of York Region.

320 ML

300 ML

280 ML

260 ML

240 ML

220 ML

200 ML

Water for Tomorrow will take 6 years to complete. During that time, every serviced household. school and small business in the Region will be offered free installation of water saving devices. Every section of the water distribution system will be tested for leakage. Elementary students will learn about water and water efficiency.

For more details on individual programs and how you can be a partner - read on.

Want to Know More .... 2223

Watch for A Yearly inserts in your water bill Public displays Check out our website www.yorkwater.on.ca (905) 771-7192 Call from Markham or Richmond Hill 1-800-215-4060 from other municipalities

#### Program Partners

Town of Markham City of Vaughan Town of Richmond Hill Town of Newmarket Town of Aurora Town of Georgina Town of Whitchurch-Stouffville Town of East Gwillimbury King Township



# In the Community

All water systems experience leakage. Watermain breaks that spill above ground are found and repaired immediately but other leaks are hidden underground. Small pinhole leaks also occur throughout the system. In York Region, hidden leakage is estimated to be 11.5 million litres a day at a cost of over \$1.5 million a year to the local area municipalities.

Water for Tomorrow's goal: save over 5 million litres a day by finding and repairing costly leaks.

By systematically measuring the water flows in each neighbourhood, Water for Tomorrow will track down costly, hidden leaks in the water distribution system.

Also, by carefully controlling system pressure, Water for Tomorrow will reduce water loss through the numerous pinhole leaks which are not detectable.



### Local Partners

Over the next 4 years, the leak detection program will be implemented in conjunction with the 9 local area municipalities. The result - Water for Tomorrow will reduce system leakage by half - with a saving of over \$800,000 annually.

## In the Workplace

Whether it is used for an industrial process, air conditioning, landscape irrigation or simply employee washrooms, businesses use water too -York Region Water Use sometimes lots of it. Using water wisely can help to reduce operating costs and improve profitability.

6% Misc. Water for Tomorrow's goal: help building owners and managers discover the water saving potential in their business.

Since every industrial process is different, there is no one-size-fits-all water efficiency solution. Water for

Tomorrow will provide free water audits to pinpoint where large volume users can save water. For small businesses, schools and institutions, Water for Tomorrow will provide free installation of low flow showerheads and earlyclosing toilet flappers.

#### Be a Partner at Work

Take advantage of Water for Tomorrow's offer of a free water audit or fixture upgrade. Then follow through on the audit recommendations; make water efficiency part of your business.

### At Home

On average, each person in York Region uses 250 to 300 litres of water a day or enough to fill more than 2 bathtubs. Where does it all go?

> Climate, fixtures and habits all determine how much water is used. Water demand goes up in hotter, drier summers. 5% System Older toilets and showerheads use twice as much water as newer models. Simply leaving a tap

dripping can waste up to 25 litres of water a day. Water for Tomorrow can't change the weather but it can change fixtures. Upgrading the toilets and showerheads in a household can save more than 150 litres of water a day.

Water for Tomorrow's goal: upgrade fixtures in all homes that now have inefficient fixtures for a savings of 13 million litres a day.

Leakage

63%

Residential

26%

**Business**, Industry

& Institutional

Water for Tomorrow will contact every homeowner and apartment building manager in York Region. With the homeowners' permission, a representative will check all fixtures in the home and install free low flow showerheads and early-closing toilet flappers where needed.

> Be a Partner at Home

Say yes to Water for Tomorrow's free upgrade of showerheads and toilets. And, don't stop there. Watch for other ways to save water in and around the home.

# **Changing Values**

Let's face it. Ultimately, people decide how water is used.

Water for Tomorrow's goal: promote water awareness and encourage every person in York Region to use water wisely.

Water for Tomorrow will provide information on water efficiency and keep people informed of

Showerhead

& toilet upgrade

Save 50 L/day

Average per person use

250-300 L/day

300

200

Litres

per day

100

progress. All 160,000 serviced households in York Region will be contacted through advertisements,

public displays, speaking engagements, a web site and yearly inserts in the water bill.

Through Water for Tomorrow, elementary students in York Region will learn about water and regional water issues. The new curriculum will be used as a focal point in teaching geography, science, math and english.

Community Partners

York Region's Public and Separate School Boards are partners in the school program. The broad public education program is being carried out in conjunction with the 9 local area municipalities.

December 20, 1996

Mr. Patrick Northey, President The Georgian Bay Association 19 Edgecombe Avenue Toronto, Ontario M5N 2X1

Dear Mr. Northey:

#### Re: York Region / Consumers Utilities Long Term Water Supply Project

Thank you for your December 5, 1996 submission regarding our project. On December 19, 1996, Regional Council adopted its Long Term Water Supply. Your submission, as requested, was brought to the attention of Council. The strategy recommended to and adopted by Council does not contemplate the use of Georgian Bay as a water supply for York Region. Copies of the media package and the report on Selection of the Preferred Solution are enclosed for your information.

As your submission reacts mainly to the premise that the Georgian Bay solution would be our Preferred Solution you may not feel a detailed response is necessary.

However, we do wish to comment on some of the main points you have raised.

1. We request an Individual Environmental Assessment for this project.

The Class Environmental Assessment for Municipal Water and Wastewater projects clearly contemplates the possibility that a proponent may determine, having initiated a project under the Class Environmental Assessment, that the nature of the preferred solution may dictate a re-evaluation.

17250 YONGE STREET BOX 147 NEWMARKET, ONTARIO 1.8Y 6Z1 TEL (905) 830-6900 1-888 YORK 1120 (905) 764-6344

DEC. 20 '96 14:35 LNG TRM WTR PROJ 9058309624

### The document states:

"The procedures outlined in Phase II will lead the proponent to the conclusion that

- approved (Schedule A) •
- approved subject to Screening (Schedule B)
- subject to the Full Five Phase Planning Process (Schedule C) or

should proceed through an Individual Environmental Assessment"

Our opinion is that we have successful completed Phase II of the Class Environmental Assessment as It pertains to Master Planning and will be seeking the concurrence of the Environmental Assessment Branch of the Ministry of Environment and Energy to that effect.

This does not mean that components of the preferred strategy will receive no further Environmental Assessment consideration. Rather, It means that each one can proceed according to its appropriate Schedule without repeating Phases I and II of the Class process.

Evaluation of Alternatives violates EA Act 2.

We feel that the preferred alternative that we have adopted does reflect an understanding of both actual and perceived environmental Impacts.

While further debate may not be needed, we do have to comment that we feel you have significantly overestimated the potential environmental impacts of the Georgian

9058309624

The genetic algorithm is simply a computer application that facilitated the development of technical solutions.

Use of the algorithm enabled us to significantly reduce the time to evaluate the myriad of potential combinations of selections available to us. We doubt that the replicability and traceability requirements of Environmental Assessment were intended to preclude the use of such advanced techniques.

3. York Region has not consulted adequately with the Public

Contrary to your impression, source communities within Peel, Metro, Durham and Simcoe were consulted on the development of the facility. Each and every municipality in the above areas was provided with a copy of our reports and invited to submit comments.

We debated the issue of Public Open Houses at considerable length. We concluded that the level of public Interest respecting a possible project would not justify Open Houses in all local areas at this time. We would fully expect to further involve the local Public with respect to our preferred solution.

We did, however, advertise our Public Open Houses widely. As well, we offered to make transportation arrangements for those outside York Region to attend.

With respect to formal question and answer sessions, the Open Houses were structured, and advertised, as opportunities to meet and converse with staff on an informal basis. We were not inclined to deviate from that format to accommodate the wishes of a minority. In the case of one Open House, however, where the audience unanimously was in favour of a formal question and answer session, such a session was held.

We did not envision that the purpose of the Open Houses was "to inform the public about how the alternatives were to be evaluated". Rather, we were seeking the opinions of the public on that very question.

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Most of the responses with respect to the quality of the Open Houses have been extremely positive.

We feel that we have, indeed, addressed the requirements of the Environmental Assessment Act in respect of public participation in the process to date.

4. The proponents have not fully considered all Federal and International Approvals.

We believe that we have indeed, acknowledged the need to obtain such approvals, and included an assessment of that in the selection of the preferred alternative.

After the December 19 Council meeting, we discussed the project with your Executive Director, John Birnbaum. We will be following up on that discussion with further correspondence in the near future.

Thank you for your submission.

Yours truly,

N. L. Embree, P. Eng. Joint Project Manager - York Region

NLE/an

c: Minister of Environment Canada Ontarlo Minister of Environment and Energy